Panel Study of Income Dynamics
Technical Paper Series

Accurately Measuring the Trend in Poverty In the United States Using The Panel Study of Income Dynamics

Lloyd D. Grieger
Populations Studies Center
Gerald R. Ford School of Public Policy
Department of Sociology
University of Michigan

Robert F. Schoeni
Survey Research Center - Institute for Social Research
University of Michigan

Sheldon Danziger
National Poverty Center
Gerald R. Ford School of Public Policy
Populations Studies Center
University of Michigan

September 2008

Technical Series Paper #08-04

Accurately Measuring the Trend in Poverty in the United States Using the Panel Study of Income Dynamics

Lloyd D. Grieger[a,*], Sheldon Danziger[b] and Robert F. Schoeni[c]

[a] Population Studies Center, Gerald R. Ford School of Public Policy, Dept. of Sociology, Univ. of Michigan

[b] National Poverty Center, Gerald R. Ford School of Public Policy, Population Studies Center, Univ. of Michigan

[c] Institute for Social Research, Gerald R. Ford School of Public Policy, Dept. of Economics, Univ. of Michigan

We describe how to accurately estimate poverty rates using data from the Panel Study of Income Dynamics (PSID) because changes in the PSID over its 40-year history have created confusion for researchers. We benchmark a new PSID poverty estimate with published rates from the U.S. Census Bureau's Current Population Surveys (CPS). We demonstrate that our PSID poverty estimates comprise a consistent time series that is similar to the Census Bureau's official time series. For example, the correlation between the PSID and Census poverty rates using one of the two currently available PSID thresholds is only 0.46 over the 1967-2004 period, and 0.73 when made comparable to the Census following PSID guidelines. Our new PSID threshold has a correlation of 0.83 over this period. The second PSID threshold is only available from 1989 onwards; it yields poverty rates that have a correlation of 0.96 with Census rates, about the same as the correlation when our new methods are used for these years.

Keywords: Poverty Rates, Panel Study of Income Dynamics, Current Population Survey

*Direct correspondence to Lloyd Grieger, Population Studies Center, University of Michigan, 426 Thompson Street, Ann Arbor, MI 48106-1248. Telephone: +1 734 355 4534; Fax: +1 734 763 1428. E-mail: lgrieger@umich.edu.

Accurately Measuring the Trend in Poverty Using the Panel Study of Income Dynamics

1. Introduction

Social scientists and policy makers consider a nation's poverty rate an important indicator of the wellbeing of its most disadvantaged residents. Each year, the U.S. Census Bureau reports the official poverty rate that is based on data from the March Current Population Survey (CPS). This official poverty rate and the thresholds on which it is based are also used as guidelines for determining eligibility for some public programs.

Since 1968, the Panel Study of Income Dynamics (PSID) has collected economic, demographic, and social data on a national sample of the U.S. population, making it the longest running nationally representative panel study. Because the PSID was designed to examine the dynamics of economic life, it has followed the same individuals and their offspring for four decades. However, changes in the way the data are provided to users have led to confusion among some users about how to consistently estimate poverty rates over all years of available data.

This paper has two goals. First, we describe how to calculate the poverty rate from the PSID on a consistent basis for each year from 1968 to the present. Although much of this information is accessible from a careful reading of the PSID documentation, we point out that the PSID does not now include a consistent poverty threshold for all years. We document how we developed consistent poverty thresholds that produce a time series for the poverty rate that is highly correlated with the official Census Bureau rate. Second, we compare the level and trend in PSID poverty rates (including the trend based on our procedures) to those of the U.S. Census Bureau.

The next section discusses two key issues associated with poverty estimation in general and in the PSID specifically—choice of the poverty thresholds and the measure of total family income. In Section 3, we present our methodology for consistently calculating poverty rates using the PSID and explain the benchmarking exercise. In Section 4 we present the benchmarking results; Section 5 concludes.

2. Examining Poverty Using the PSID

Begun in 1968, the PSID began with a sample of about 4,800 households and has sought to re-interview these household members and their offspring annually ever since, following them as they move into new households and form new families. A complex sample design determines who has the "PSID gene" (i.e., who becomes a permanent sample member) so that as original sample members form new households and/or have children the survey maintains its representativeness [2, 8]. The PSID has allowed many researchers to study the dynamics of economic and social life. There are 420 publications on the topic of "poverty" listed in the PSID bibliography as of September 2008.

Many articles assess the quality of PSID data, including many that assess the quality of PSID income concepts. These articles typically use the CPS income and poverty data as the "gold-standard" for benchmarking the PSID data [1, 3, 5, 7, 11, 14, 15, 16]. For example, a recent study found that PSID family income quantiles are consistently higher than CPS estimates, but follow the same general pattern over time [7]. Other data quality studies assess the accuracy of education and health information in the PSID [4,6]. Despite the frequent use of the PSID in poverty dynamics research, there are no recent studies focusing on poverty measurement. Accurate measurement of poverty is the subject of a number of articles in this and

other publications. For example, recent articles featured in this journal have found that poverty rates are sensitive to questionnaire design and the ways in which a "family" or "household" is conceptualized [9, 10]. The current study contributes to the literature on accurately measuring poverty with one of the most widely-used data sources for examining poverty over periods as long as four decades.

The official poverty rate is based on a comparison of a family's total money income to its official poverty threshold, which is primarily determined by family size and composition. Because the official poverty rate receives so much attention from researchers and policy-makers, it is important to determine if the PSID data produce consistent estimates of the trend in poverty.

Currently, the PSID data file includes two different "needs" (poverty) thresholds, and documentation that provides guidance for determining whether an individual is poor. However, the thresholds that have been in the PSID file since its inception are not comparable to the Census Bureau's thresholds. A second threshold was added to the PSID data file in 1990 that does closely mirror the official thresholds. Thus, there is no consistent threshold comparable to the Census thresholds in the data file that can be used for all PSID years. More detailed discussion about these thresholds follows in Section 3.

Since 1968, many changes have been made to the PSID. Data were collected with an in-person interview until 1972 and by a telephone interview in subsequent years. Paper and pencil questionnaires were used until computer assisted interviewing was adopted in 1993. Until an immigrant refresher sample was added in 1997/1999, the PSID was not representative of individuals arriving in the U.S. after 1968. In 1997, due to budgetary constraints, roughly two-thirds of the low-income Survey of Economic Opportunity sample was dropped from the study. After 1997, respondents were interviewed biennially instead of annually.

Moreover, cumulative selective attrition over almost 40 years, particularly selection not captured by sample weights, may have biased PSID estimates of poverty. Poverty rates in the first few years of the PSID were benchmarked to Census rates in a 1975 article by Lane and Morgan [12]. Because so much has changed in the PSID since 1975, this contemporary comparison of the PSID and CPS trends in poverty is overdue. Also, many users have difficulty measuring poverty consistently in the PSID despite the very detailed documentation freely provided to users. Even experienced users frequently contact PSID staff members with requests for clarification about the measurement issues we address here.

3. Accurately Deriving Poverty Rates Using the PSID and Benchmarking to the CPS

A person is counted as poor if the total money income of all of his/her family members is less than or equal to the family's poverty threshold. The PSID provides multiple ways to estimate poverty rates, and we discuss each below. We provide a method for estimating poverty rates that are consistent with Census Bureau methods for the entire PSID study period (1968-present) and show that the rates from our method are highly correlated with the official poverty rates. The official poverty rates based on data from the annual March Current Population Survey can be found at: http://www.census.gov/hhes/www/poverty/histpov/hstpov2.html.

3.1. PSID Poverty Thresholds

When the PSID began, the staff decided to use poverty thresholds based on the "low-cost" food budget of the U.S. Department of Agriculture rather than the "economy" food budget, which forms the basis of the official Census Bureau thresholds. The "economy" budget is 80 percent of the "low cost" budget. The 1968 PSID documentation states that the decision to use

the more generous "low-cost" food budget reflected "…the opinion of Faith Clark of the Department of Agriculture that the latter standard (i.e., economy level) was too spartan" [12]. [1]

We refer to the "low-cost" thresholds on the PSID data file as PSID-1. The data file also includes another variable – family income divided by the PSID-1 threshold, also known as the income-to-needs ratio. The income-to-needs ratio on the PSID data file, available for most years until the mid-1990s, is family income divided by PSID-1 except for families living on farms where the income-to-needs is equal to 1.25 times family income divided by PSID-1. Because of the low (and decreasing) prevalence of farm families, the difference in the poverty rates using the income-to-needs variable vs. PSID-1 is negligible, so we do not report results based on the income-to-needs variable. The PSID thresholds – and the associated income-to-needs variable – used to calculate PSID-1 are listed in the files in each year in 1967 dollars, leaving it to users to choose the appropriate inflation adjustment. Some researchers might not recognize this important fact. In our calculations, we use the official consumer price index, CPI-U (all items using current methods, series CUUR0000SA0, available at: http://data.bls.gov/cgi-bin/surveymost?cu), to correct PSID-1 for inflation.

Another common user mistake is failing to distinguish between "interview year" and "income year" concepts. For example, information from interview year 1990 corresponds to income year 1989 because respondents in any given survey year report income received during

[1] See page 82 of the 1990 documentation--(http://psidonline.isr.umich.edu/Data/Documentation/pdf_doc/psid90w23.pdf). Also, see page 39 of the 1974 documentation--(http://psidonline.isr.umich.edu/Data/Documentation/pdf_doc/psid74w7.pdf).

the prior calendar year. It is important to match the appropriate inflation adjustment or poverty threshold to the correct year.

The PSID documentation warns that poverty rates using PSID-1 are not directly comparable to the Census poverty rates, but does provide guidance on how to achieve comparability. Our second threshold, PSID-2, follows this guidance by multiplying the PSID-1 threshold by 0.8, transforming the PSID-1 from a threshold based on the "low-income" food budget to one based on the official "economy" food budget. By definition, the poverty rate must be lower under PSID-2 than PSID-1.

Beginning in survey year 1990, the PSID data file includes the official Census Bureau threshold, which we refer to as PSID-3. This threshold is discussed in greater detail on page 82 of the 1990 documentation (http://psidonline.isr.umich.edu/Data/Documentation/pdf_doc/psid90w23.pdf). Because PSID-3 is not currently available before 1990, we developed PSID-4 (discussed below), a simplified version of the official Census poverty threshold for the *entire* PSID study period 1968-present.

The thresholds in the PSID data file (PSID-1, PSID-2, and PSID-3) account for partial year co-residence for family members who do not reside in the household during each month of the year. Family membership is determined for each month during the calendar year prior to the interview, creating a separate threshold for each of the 12 months. For each family, the 12 thresholds are averaged to determine the threshold for that family for the calendar year. In contrast, the Census poverty measure and PSID-4 are based only on those family members residing in the home at the time of the interview, and it assumes that all of these people spent the entire calendar year in that home.

3.2. A New PSID Poverty Threshold Consistent with the Census Thresholds

Over the last four decades, the Census thresholds have operated under two different regimes. Before 1980, the threshold was determined by the number of people related by blood, marriage or adoption who resided in the same housing unit, the number of children in the family, the gender of the family head, the age of the family head, and whether the family lived on a farm. Pre-1980 Census thresholds are presented in four matrices per year (each matrix includes separate thresholds by total family size and the number of children present in each family), one each per male/female headed by farm/non-farm family. After 1980, distinctions between families headed by males and females and between farm and non-farm families were dropped, requiring only one threshold matrix per year. For all years, thresholds also differ between families headed by a person less than 65 years of age and families headed by an elderly person.

Since 1980, there is only one matrix of official poverty thresholds, which is available at http://www.census.gov/hhes/www/poverty/threshld.html. The matrices for the pre-1980 years are published in the Bureau's series of annual poverty reports (P-60 series). Note, however, that only the reports from 1972 onward contain detailed matrices. Detailed matrices are available for some years before 1980 at the previously mentioned website. The P-60 reports are available at http://www.census.gov/hhes/www/poverty/publications.html. For every year dating back to 1959, the weighted average poverty threshold for a non-farm family of a given size is available at http://www.census.gov/hhes/www/poverty/histpov/perindex.html.

Our new threshold, PSID-4, incorporates the weighted average poverty threshold for all non-farm families of size *n;* we do not assign the specific poverty threshold for a family of size *n*, with *x* family members over age 65 and *y* children under 18. PSID-4 thresholds do not differ between elderly and non-elderly unrelated individuals, by number of related children under 18,

or by family size greater than 9, as is the case for the official Census thresholds and PSID-1, PSID-2, and PSID-3. It is possible to match individuals in the PSID to their specific poverty threshold from the detailed Census matrix for each year after 1972. However, because detailed matrices are not consistently available from the Bureau before 1972, we use the weighted averages to derive a consistent threshold for all PSID years. The differences between the thresholds of families of the same size but different composition are relatively small and hence have only a very small effect on the poverty rate for all persons. For example, in 2003, the weighted average for a four person family was $18,810 compared to $18,660 for a married couple with 2 children and $18,725 for a single parent with three children.

Thus, we analyze the trend in poverty using four different PSID poverty thresholds. The attributes of each threshold and the Census threshold are summarized in Table 1.

3.3. Income

In addition to a threshold, one must choose an income measure to determine poverty status. Family income in the PSID is defined as the sum of all labor, asset, and government transfer income (cash welfare, Social Security, etc.) for the head, spouse, and all others living in the family unit at any point during the calendar year. While the PSID collects data on food stamp and other non-cash government benefits, these benefits are not included in total family income because the Census Bureau uses total money income to calculate the official poverty rate. As mentioned, PSID income is adjusted for partial year co-residence of family members. The names for the PSID variables that we use to compute poverty rates are provided in Table 2.

There are differences between how family income is measured and how "family" is defined in the PSID and the Census. First, PSID family income reflects the income of all persons living in the family unit during calendar year *t*, regardless of whether that person was

living in the family at the time of the interview in year *t+1*. Income for each family member includes only the amount accrued during the months that the person resided with the other family members. In contrast, the Census measures family composition at the time of the March CPS interview. Annual family income for the previous calendar year is measured as the total for all persons residing in the family unit in March, regardless of where they lived during that year.

For example, consider a couple with a small child and assume that total family income in calendar year *t* was comprised solely of the husband's earnings. Assume the man earned $5000 per month but died on November 30. The PSID would consider this three-person family not to have been poor in that year since the husband is counted in the threshold for 11 months and the total income over those months ($55,000) greatly exceeds the poverty threshold. However, in March *t+1*, the CPS would interview the widow who had no income at all in the previous year and count her and her child as a poor two-person family.

The PSID and the Census also differ in how each defines family membership. The Census "family" includes people who are related by blood, marriage or adoption and reside together. Individuals living alone and unrelated individuals residing with others are treated as "one person families." The PSID defines "family" more broadly and includes unrelated people who live together and share resources (like cohabiting partners).

The Census and the PSID also differ in their treatment of related subfamilies. For example, consider a grown child in a PSID family who moves away from her parents and marries. There are now two PSID families: the parents' family and the grown child's own family. After some time, assume that the now-married child and her family return to live in the original household with her parents. The PSID would count this household as having two families, each with its own poverty threshold, whereas the Census would count only one family

with four related members as it treats related subfamilies as part of the primary family. These situations are not very common, but they are more common among lower-income than higher-income families [7].

3.4. The PSID Weights

The Census Bureau poverty rates are computed for all persons; we use the PSID individual weights for comparability. The PSID data file includes several individual weights that account for sample design and selective attrition. The core PSID sample includes both the original 1968 Survey Research Center sample, a nationally representative cross-section, and the Survey of Economic Opportunity over-sample of low income households. In 1990, a Latino sub-sample was introduced. Because this sample was discontinued after 1995, we do not include these respondents. In 1997/1999 an immigrant sub-sample was added and has been included in every subsequent wave. We include these respondents because they are now part of the PSID core sample and will continue to be interviewed. Separate weights for the core sample without the immigrant sub-sample are not available. Thus, the poverty rates reported below for 1968 through 1996 include only 1968 core sample members and use the core sample individual weights. From 1997 onwards, we use the combined immigrant and core samples and associated weights. The variable names for the weights are listed in the 5th column of Table 2. For more information on the sub-samples or the sampling frame, see http://psidonline.isr.umich.edu/Guide/ug/stdydsgn.html. The PSID staff recently developed additional weights: a "new" longitudinal weight and a cross-sectional weight. The new weights are intended to address concerns with the "old" longitudinal weights and maximize sample size. We use the longitudinal weights (the "new" weights) currently available on the PSID website for

this analysis. Results from the analysis using other available weights are not shown, but do not differ substantively from the findings presented below.

4. Results

Table 3 reports the PSID poverty rates using each of the four thresholds in columns 3-6, and the official poverty rates in the next-to-last column. The five time series are plotted in Figure 1, and the correlations between these series are reported in Table 4. According to PSID-1, the poverty rate was 17.98 percent in 1967; the rate then fell to 11.40 percent in 1973. Following an increase in 1974 and 1975, PSID-1 fell to 10.53 percent in 1979, rose to 13.80 percent in 1983, and then fell to 11.91 percent in 1989. The recession of the early 1990s increased the poverty rate to 14.91 percent in 1993; the economic expansion of the mid- to late 1990s reduced it to 10.45 percent in 2000, the lowest rate in the series. Poverty then rose to 11.69 percent in 2004.

PSID-2 uses the economy instead of the low-cost food budget and yields a lower poverty rate in every year: in 1967 the rate was 12.20 instead of 17.98. However, the patterns of PSID-1 and PSID-2 are very similar, with a simple correlation of 0.88 over the 1967-2004 period.

Prior to 1973, the trends in PSID-1 and PSID-2 differ significantly from the official Census series, with PSID-1 and PSID-2 showing greater declines in poverty. The correlation between PSID-1 and the CPS rate over the 1967-2004 period is only 0.46; the correlation rises to 0.82 for 1973 to 2004. The correlations for PSID-2 and the CPS are higher: 0.73 for the entire period and 0.90 after 1972.

PSID-3, currently available only since survey year 1990, yields a time series of poverty rates that is highly correlated with the official series – the correlation is 0.96 – because it

incorporates the Census thresholds. The bottom panel of Table 4 shows that all four measures have a correlation of at least 0.91 for years after 1989. The top panel of Table 4 shows that our new PSID-4 rates have the highest correlation with the official series over the 1967-2004 period – 0.83.

In sum, the PSID can be used to estimate a time series of poverty rates that is similar to the published series. However, the used PSID-1 series has the lowest correlation with the official rates. Thus, until the PSID staff extends the PSID-3 back from 1990 to 1968, PSID-4 should be used. The PSID-4 thresholds can be found at http://simba.isr.umich.edu/help/UgenVars.aspx.

Lane and Morgan (1975) were the first to identify that the level of poverty in any year differs between the PSID and the Census: "The Panel Study finds somewhat fewer people poor. Whether the Panel Study or the Census is more accurate is uncertain. Unearned and irregular income – which is important to low-income people – tends to be underreported in surveys. It is possible that reporting improved through repeated interviews. This would suggest that the Panel Study data are more accurate. On the other hand, the Census samples are much larger. Furthermore, very poor people may be among those most likely to drop off a panel study, and this loss may not be completely compensated for by adjustments which have been made for non-response. These considerations would suggest that Census is more accurate." [12]

If Lane and Morgan's hypothesis that income reporting improves as respondents are repeatedly interviewed is correct, then this might explain why the PSID poverty rates show greater declines than the official rates prior to 1973. After having answered the PSID income questions for a few years, PSID respondents may have become more accurate reporters.

5. Conclusion and Recommendation to Users

There has been some confusion among users about the appropriate way to calculate poverty rates using the PSID. This paper guides users through this process, identifying common pitfalls and describing alternative ways to calculate poverty rates. An important lesson is that if users want estimates that are comparable to the CPS poverty rate, they should use PSID-3 for the period 1990 onwards; if they want to examine earlier years, then PSID-4 is currently the best available option. In the near future, the PSID staff will create the PSID-3 version of the thresholds for years prior to 1990.

The annual poverty rates derived from the PSID are lower than the rates in the CPS in most years, an observation that was made in the 1970s. Most importantly, the gap between the PSID and the CPS that existed in the mid-1970s has remained steady through the most recent period, and, as a result, the PSID rate shows trends quite similar to the official rates.

Acknowledgements

Rebecca Blank, Johanne Boisjoly, Greg Duncan, Peter Gottschalk, Ann Huff-Stevens, and Kate McGonagle provided helpful comments on previous versions of this paper. This project was supported in part by funds provided by the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, #5 U01 PE000001-05 and #1 U01 AE000002-01. Any opinions and conclusions expressed are solely those of the authors and should not be construed as representing the opinions or policy of any agency of the Federal government.

References

[1] Becketti, Sean, William Gould, Lee Lillard, and Finis Welch, The PSID After Fourteen Years: an Evaluation, *Journal of Labor Economics* **4** (1988), 472-492.

[2] Duncan, Greg, The PSID and Me, in *Landmark Studies of the 20th Century in the US*, Erin Phelps, Frank Furstenberg, and Anne Colby, ed., Russell Sage, 2002.

[3] Duncan, Greg and Daniel Hill, Assessing the Quality of Household Panel Survey Data: The Case of the PSID, *Journal of Business and Economic Statistics* **7** (1989), 441-451.

[4] Falaris, Evangelos and Elizabeth Peters, Survey Attrition and Schooling Choices, *The Journal of Human Resources* **2** (1998), 531-554.

[5] Fitzgerald, John, Peter Gottschalk, and Robert Moffit, An Analysis of Sample Attrition in Panel Data, *The Journal of Human Resources* **33** (1998), 300-344.

[6] Gouskova, Elena and Robert Schoeni, Analysis of the Quality of the Health Data in the PSID, (2002), Available at the PSID web site: http://psidonline.isr.umich.edu/Guide/Quality/report_on_health_qsv2.pdf

[7] Gouskova, Elena, and Robert F. Schoeni, Comparing Estimates of Family Income in the Panel Study of Income Dynamics and the March Current Population Survey, 1968-2005 (2007). Available at the PSID web site: http://psidonline.isr.umich.edu/Publications/Papers/Report_on_income_quality_v3.pdf

[8] Hill, Martha, *The Panel Study of Income Dynamics: A User's Guide*, Volume 2, 1991.

[9] Iceland, John, The Family/Couple/Household Unit of Measurement in Poverty Estimation, *Journal of Economic and Social Measurement* **26** (2000), 253-265.

[10] Jolliffe, Dean, Measuring Absolute and Relative Poverty: The Sensitivity of Estimated Household Consumption to Survey Design, *Journal of Economic and Social Measurement* **27** (2001), 1-23.

[11] Kim, Yon-Seong and Frank Stafford, The Quality of PSID Income Data in the 1990s and Beyond (2000), Available at the PSID website: http://psidonline.isr.umich.edu/Guide/Quality/q_inc_data.html

[12] Lane, Jonathan, and James Morgan, Patterns of Change in Economic Status and Family Structure, in: *Five Thousand American Families: Patterns of Economic Progress*, Volume III, Greg Duncan and James Morgan, ed., 1975.

[13] Morgan, James, and James D. Smith, *Study Design, Procedures, and Forms: 1968 Interviewing Year (Wave I)*, (1969). Available at the PSID web site: http://psidonline.isr.umich.edu/Data/Documentation/pdf_doc/

[14] Rodgers, Willard, Charles Brown, and Greg Duncan, Errors in Survey Reports of Earnings, Hours Worked and Hourly Wages, *Journal of the American Statistical Association* **88** (1993), 1208-1218.

[15] Zabel, Jeffrey, An Analysis of Attrition in the Panel Study of Income Dynamics and the Survey of Income and Program Participation with an Application to a Model of Labor Market Behavior, *The Journal of Human Resources* **33** (1998), 479-506.

[16] Ziliak, James and T.J. Kniesner, The Importance of Sample Attrition in Life Cycle Labor Supply Estimation, *The Journal of Human Resources* **33** (1998), 507-530.

Table 1

Attributes of PSID and Census Poverty Thresholds

	PSID-1	PSID-2	PSID-3	PSID-4	Census (CPS)
Survey years available	1968-present	1968-present	1990-present	1968-present	1959-present
Uses official Census threshold?	No	No	Yes	Yes*	Yes
Adjusts for age of family members?	Yes	Yes	Yes	No	Yes
Adjusts for gender of family members?	Yes	Yes	No	No	Before 1980
Adjusts for part-year co-residence?	Yes	Yes	Yes	No	No
USDA food budget utilized	Low-Cost	Economy	Economy	Economy	Economy

All thresholds expressed in current dollars using the CPI-U.

*Uses weighted average Census threshold for family of a given size.

Table 2
Names of Key PSID Variables

Survey Year	Family Income	Poverty Threshold:*		Individual Longitudinal Weight	Family Size
		PSID-1	PSID-3		
1968	V81	V32		ER30019	V30
1969	V529	V495		ER30042	V493
1970	V1514	V1170		ER30066	V1167
1971	V2226	V1871		ER30090	V1868
1972	V2852	V2471		ER30116	V2468
1973	V3256	V3020		ER30137	V3017
1974	V3676	V3440		ER30159	V3437
1975	V4154	V3840		ER30187	V3837
1976	V5029	V4349		ER30216	V4346
1977	V5626	V5257		ER30245	V5254
1978	V6173	V5758		ER30282	V5755
1979	V6766	V6364		ER30312	V6361
1980	V7412	V6962		ER30342	V6959
1981	V8065	V7554		ER30372	V7551
1982	V8689	V8252		ER30398	V8249
1983	V9375	V8854		ER30428	V8851
1984	V11022	V10225		ER30462	V10222
1985	V12371	V12374		ER30497	V11364
1986	V13623	V13626		ER30534	V12763
1987	V14670	V14673		ER30569	V13867
1988	V16144	V16147		ER30605	V14889
1989	V17533	V17535		ER30641	V16389
1990	V18875	V18882	V18884	ER30686	V17798
1991	V20175	V20182	V20184	ER30730	V19098
1992	V21481	V21488	V21490	ER30803	V20398
1993	V23322	V23325	V23326	ER30864	V22405
1994	ER4153	ER4154	ER4155	ER33119	ER2006
1995	ER6993	ER6994	ER6995	ER33275	ER5005
1996	ER9244	ER9245	ER9246	ER33318	ER7005
1997	ER12079	ER12219	ER12220	ER33430	ER10008
1999	ER16462	ER16426	ER16427	ER33546	ER13009
2001	ER20456	ER20372	ER20373	ER33637	ER17012
2003	ER24099	ER24139	ER24140	ER33740	ER21016
2005	ER28037	ER28038	ER28039	ER33848	ER25016

*CPI-U listed in Table 3 is used to express thresholds in current year dollars.

Table 3

Poverty Rates for all People: CPS and PSID Using Various Thresholds

Survey Year	Income Year	Poverty Rate Using Different Thresholds: PSID-1	PSID-2	PSID-3	PSID-4	Number of Observations	CPS-based Poverty Rate	CPI-U 82-84=100
1968	1967	17.98	12.20		13.16	18230	14.2	33.4
1969	1968	16.02	11.16		11.18	16674	12.8	34.8
1970	1969	15.43	9.77		10.95	16358	12.1	36.7
1971	1970	14.85	9.80		10.83	16242	12.6	38.8
1972	1971	14.22	9.72		10.02	16280	12.5	40.5
1973	1972	12.44	7.81		8.72	16152	11.9	41.8
1974	1973	11.40	7.17		7.52	16065	11.1	44.4
1975	1974	12.41	7.35		8.13	16024	11.2	49.3
1976	1975	13.29	8.36		9.60	15933	12.3	53.8
1977	1976	11.48	7.48		8.70	15894	11.8	56.9
1978	1977	11.32	7.11		8.45	15829	11.6	60.6
1979	1978	11.05	6.92		7.83	15888	11.4	65.2
1980	1979	10.53	6.43		7.87	15913	11.7	72.6
1981	1980	12.12	7.89		9.54	15894	13.0	82.4
1982	1981	12.48	9.04		10.18	16005	14.0	90.9
1983	1982	13.59	9.70		10.80	16006	15.0	96.5
1984	1983	13.80	9.78		11.29	15983	15.2	99.6
1985	1984	12.63	9.07		10.23	16020	14.4	103.9
1986	1985	13.12	9.50		10.81	15777	14.0	107.6
1987	1986	12.24	8.86		10.14	15750	13.6	109.6
1988	1987	12.14	8.71		9.91	15687	13.4	113.6
1989	1988	12.01	9.10		10.16	15560	13.0	118.3
1990	1989	11.91	8.63	9.53	9.93	15622	12.8	124.0
1991	1990	12.46	8.72	10.38	10.48	15603	13.5	130.7
1992	1991	12.59	9.30	10.49	10.75	15750	14.2	136.2
1993	1992	13.47	10.36	11.63	11.73	16119	14.8	140.3
1994	1993	14.91	11.24	12.33	12.65	18156	15.1	144.5
1995	1994	14.02	10.70	11.75	11.84	17703	14.5	148.2
1996	1995	13.19	9.97	11.00	11.01	17591	13.8	152.4
1997	1996	12.12	8.95	10.14	10.12	13392	13.7	156.9
1998	1997						13.3	160.5
1999	1998	12.35	8.83	9.75	10.09	15317	12.7	163.0
2000	1999						11.9	166.6
2001	2000	10.45	7.46	8.22	8.24	15646	11.3	172.2
2002	2001						11.7	177.1
2003	2002	11.83	8.62	9.47	9.38	16011	12.1	179.9
2004	2003						12.5	188.9
2005	2004	11.69	8.37	9.37	9.40	16619	12.7	195.3

Table 4
Correlation Between CPS-Based and PSID-Based
Poverty Rates Using Different Thresholds

Time period: 1967-2004

	PSID-1	PSID-2	PSID-3	PSID-4	CPS
PSID-1	1.00				
PSID-2	0.88	1.00			
PSID-3	--	--	--		
PSID-4	0.82	0.96	--	1.00	
CPS	0.46	0.73	--	0.83	1.00

Time period: 1973-2004

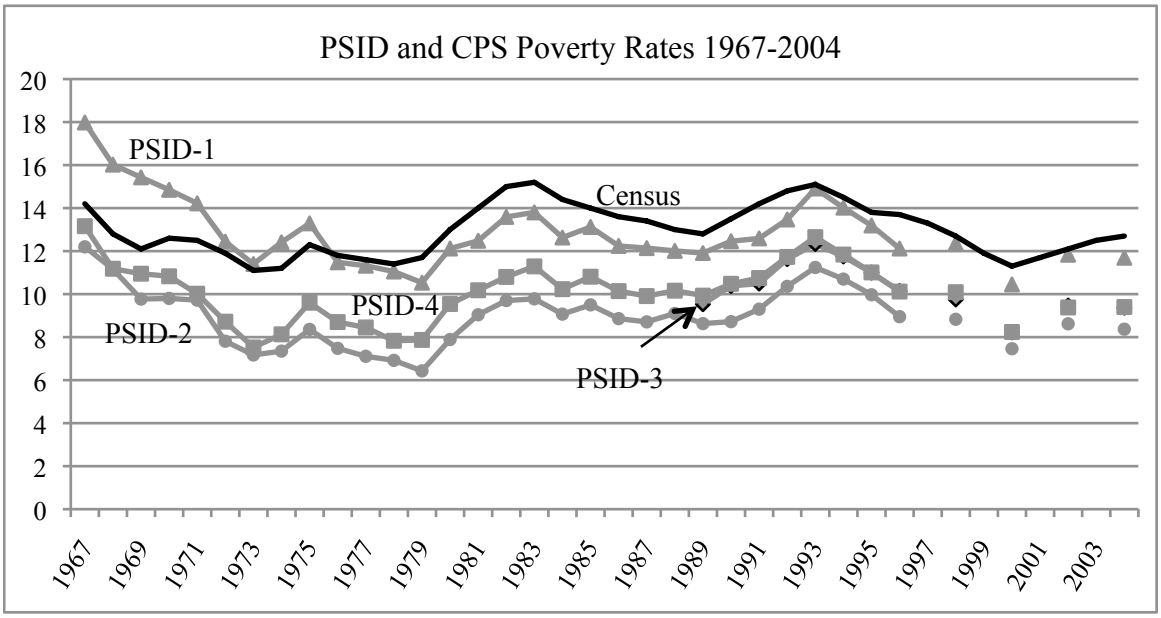
	PSID-1	PSID-2	PSID-3	PSID-4	CPS
PSID-1	1.00				
PSID-2	0.89	1.00			
PSID-3	--	--	--		
PSID-4	0.88	0.98	--	1.00	
CPS	0.82	0.90	--	0.93	1.00

Time period: 1989-2004

	PSID-1	PSID-2	PSID-3	PSID-4	CPS
PSID-1	1.00				
PSID-2	0.98	1.00			
PSID-3	0.98	0.98	1.00		
PSID-4	0.99	0.98	0.99	1.00	
CPS	0.91	0.92	0.96	0.96	1.00

Fig. 1. This figure shows the CPS poverty rates and the poverty rates derived from the PSID using different needs thresholds. The PSID poverty rates based on the economy food budget (PSID-2, PSID-3, and PSID-4) are lower than the CPS and similar in pattern. The PSID poverty rates using the official poverty thresholds from the U.S. Census Bureau (PSID-3 and PSID-4) are lower than the CPS by a consistent amount, especially after 1973.

Fig.1.


PSID and CPS Poverty Rates 1967-2004
20
18
16
14
12
10
8
6
4
2
0
PSID-1
Census
PSID-4
PSID-2
PSID-3
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003