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Assessing the PSID t-2 Income Data

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I. BACKGROUND

In 1997, partly because of budget constraints and partly because of an interest in extending the PSID into new content areas, a plan, including switching to biennial data collection, was implemented. There was a great interest in preserving a few core economic measures for the calendar year (CY) two years prior to the survey year (SY) in addition to the traditional "prior CY" income data. The CY data two years prior have come to be referred to as 't-2' measures and the measures from one year prior have come to be referred to as 't-1' measures. Since 1999, five waves of 't-2' income data have been collected. What is the value of income data in the "off" year or 't-2' year? The objective of this memo is to document the quality of these t-2 data in order to evaluate the utility of these questions to date and as an input into the assessment of future directions of the PSID instrument, for 2009 and beyond.

In contrast to the t-1 income module that is traditionally placed in Section G of the instrument and consists of many detailed questions included on income components (such as labor income from each job, asset income from different sources, components of transfer income) from family head, wife/"wife" and Other family members (OFUM), the t-2 module contains a set of more summarized measures and is placed in the last section of the core instrument (section R). For example, the t-2 module includes a global question about the family head/wife's labor income, a global question about the total family income and global questions about whether anyone in the family received a component of the transfer income, and the total amount received by all family members in many transfer components such as SSI.

As background, we have Table 1 with the timings of the t-2 module based on a CY reference which implies the data were collected in an SY +2 year – or about two years later. (Table 1 about here)

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In the first three waves, the t-2 module averaged about 2 to 2.6 minutes, with some variation in contents. For the 2005 and 2007 waves (collecting t-2 income in 2003 and 2005), an effort was made to have a more comprehensive t-2 sequence to more closely mirror the t-1 module (particularly adding more details for income of OFUM) to replace the global total family income question and this has led to the much longer module that took about 3 and a half minutes, (see Section R of the application at <u>ftp://ftp.isr.umich.edu/pub/src/psid/questionnaires/q2005.pdf</u> (p170-178) for the 2005 version of questionnaire) and many interviewers regard it as burdensome material.

Observation from the Field

Feedback from the interviewers suggests that these t-2 questions seem to have posed a challenge to the field activity. This has been reflected in the field comments on the content of the CATI application from some respondents who mentioned the recall challenges, confusion between t-2 with t-1 income modules, or burden of repetition particularly when the t-2 module is at the end of the core instrument. Interviewers commented that respondents often need more probing on t-2 questions than on those in t-1 module and appear to have put little effort in providing an accurate answer to the t-2 questions. Interviewers further indicated that this is especially true when the respondent is asked to report, as a proxy, other family members' t-2 income. As a result, a general impression from the interviewers is that the quality of t-2 data gathered is low.

Purpose of this Report

In this report we assess the quality of t-2 income data collected since 1998 based on analyses that provide comparisons of income distributions and annual changes in income during the period when PSID interview was conducted annually versus when the PSID interview was collected every other year. These assessments, coupled with the information regarding the extent to which these t-2 data have been used, and how they have been used, by the research community, will serve as a basis for our decisions on future course of action. The PSID will need to decide whether to (1) stop collecting the t-2 income data entirely, (2) collect only some t-2 income data that have reasonably high quality and that are most frequently used by researchers, and/or (3) improve the methodology of collecting the t-2 income data.

The following sets of analysis are presented in this report:

- (1) We first compare a time series using cross-sectional data of family head's and wife's labor income, and total family income in 1995 to 2004 (collected in 1996, 1997, 1999, 2001, 2003, and 2005 waves). Here we take data in years before the PSID started to collect t-2 income (data in the 1996 and 1997 waves) as the "gold standard" base line for comparison, and taking into account documented changes in income during the period as estimated with the Current Population Surveys. We also compare the t-1 and t-2 reports within a same survey year.
- (2) Then we present an analysis of between-year changes of family head's labor income and total family income measures over time.
- (3) Finally, we also examine the quality of family asset income, several components of the transfer income including public assistance, SSI, Social Security, and income from

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other sources such as Veteran Administrations, unemployment compensation, worker's compensation, and pension.

These comparisons are based on income data with no imputations. As the field work for 2007 is just being completed, only very limited information from the 2007 data is included in this evaluation. As little cleaning or processing has been done to the t-2 income to date, and some of the data required for more detailed analysis are not yet available, analyses presented

Publications Based on the PSID

A search in the major social science data bases indicates that very few articles have utilized data collected in the t-2 module to date. Of the articles that use some data from the survey years of 1999, 2001, or 2003, only 3 used the t-2 data, specifically total family income and/or earnings from family heads and partners (see Appendix Table 2). Although this is likely an undercount, it is clear that there has not been a great demand for the t-2 income data. Anecdotal information we gathered from users also suggests that some PSID users have chosen not to include the t-2 income data in their time series analysis on the ground of the different measures used and a potentially greater recalling error in the t-2 measures.

The PSID staff has utilized t-2 welfare income to generate long-term welfare receipt trends for an ASPE report. In these tabulations, information on whether or not the family unit received any welfare income, but not the amount of welfare income, was used. On the basis of data usage, our assessments in this report focuses on t-2 measures of total family income, the labor income of the family heads and the wife/"wife", transfer income, and assets income.

II. THE EVALUATION

A. Cross-sectional Comparisons

Head's Labor Income

To begin, in Table 2 we present the labor income of the family head using the basic data with family weights, with no imputations or inflation adjustments. Labor income for t-2 is intended to be a comprehensive measure as can be seen by the wording of the Section R question below in contrast to the more detailed t-1 sequence.

t-2 labor income:

R.* Earlier you reported that [you were/Head was/Wife/"Wife" was] working in 1997/1999/2001. Thinking now about all the work for money that [you/he/she] did during[year], including jobs, businesses, self-employment and part-time work, about how much did [you/he/she] earn altogether in (t-2) year?[Last asked in 2003]

(Note: Question wordings vary slightly in these years, see details in Appendix)

t-1 labor income:

Head's Labor income is the sum of several labor income components from the raw data, including, in addition to wages and salaries (ER27913*), any separate reports of bonuses (ER27915), overtime (ER27917), tips (ER27919), commissions (ER27921), professional practice or trade (ER27923), market gardening (ER27925), additional job income (ER27927), and miscellaneous labor income (ER27929). Note that farm income (ER27908) and the labor portion of business income (ER27910) are NOT included here.

^{*}variable names in 2005 wave

Figure 1 simply plots the percentile distribution for income in each year from 1995 to 2004, combining the curves for t-1 and t-2. Table 3 converts the values from Table 2 to 2005 dollars using the CPI-U, and Figure 2 presents these results graphically. T-2 data are highlighted in yellow in the tables.

(Tables 2 & 3 & Figures 1 & 2 about here)

As noted earlier, in these analyses we take data in years before the PSID started to collect t-2 income (data collected in the 1996 and 1997 waves) as the "gold standard" base line for comparison. We also compare the t-1 and t-2 reports within a same survey year. As can be seen, t-2 labor income of the head appears to be quite good in the sense of general alignment with the t-1 distributions. The number of observations with a missing value in the t-2 year is about 25% higher than that in the t-1 year (except for 2003 wave when the number of missing cases was about 10% higher in the t-2 year). It may still be less than ideal to use t-2 labor income for panel changes or to compare the basic distribution from t-1 to a t-2 measure as the basis for describing short run changes in the cross-sectional distribution or the year to year dynamics, because the error in t-2 may differ from that in t-1 and the change measure would be affected in unknown ways. For comparing cross-sections, even small systematic differences in the errors in t-2 and t-1 could lead to an apparent change in the distribution which could be partly erroneous. For those comparisons it would be advisable to compare income levels or changes from successive t-1 reports. The t-2 labor income could be used to study income paths. For example the t-2 labor income of the head could be used to see if the 'off year' income was dramatically higher, or lower. For an estimate of permanent labor income over, say, a 10 year period constructed including five values from t-2 reports, there would be reason to feel confident about the approach.

Note that in going from 1995 to 1996 (Table 2) there is a general upward shift in the percentile distribution of head's labor income, reflecting modest real wage growth and wage inflation. When the percentiles for 1997 income (the first t-2 report) are compared to those for 1996 and 1998 (t-1) income, the t-2 values generally fall in between the adjacent t-1 values. Another aspect of t-2 labor income of the head is that most respondents are willing to provide a dollar value. The number of cases reporting drops from 5,978 in 1995 to 4,502 in 1996, a result of sample suspension in SY 1997. For 1998 we have 5,042 heads, but for 1997 there are 4,811. In this comparison, the 4.5% difference is a consequence of a number of respondents unable to offer a dollar value of labor income two years prior.¹ As a result of high reporting rates on dollar values, the distribution is not conditional on a much reduced percent of families reporting a t-2 labor income of the head compared to t-1 reports.

Wife/"Wife"'s Labor Income

(Tables 4 & 5 & Figures 3 & 4 about here)

We see from Tables 4 and 5 and Figures 3 and 4 that wife's t-2 labor income reports again show a reasonably good alignment with the her t-1 labor income (note that these are proxy reports provided by family heads, if the heads are the respondent). As with head's labor income, within the same survey year, we also see more missing data in the t-2 than the t-1 reports.

¹ Beyond 1998 these comparisons can not be made since the data are restricted to unprocessed t-1 reports while for t-2 the data are 'respondent processed' – so more observations are there for t-2 than t-1.

Total Family Income

As noted earlier, in the t-2 module, one question is asked about the total family income as opposed to t-1 income which is computed from numerous separate income components as described below.

t-2 total family income:

R23 (LAST ASKED IN 2003). What was [your/the total] income from all sources [for you and your family living there,] in 2001? (IF NECESSARY: Please give me your best estimate.)

t-1 total family income:

The t-1 income is the sum of the five variables below: Taxable Income of Head and Wife (ER27953*), Transfer Income of Head and Wife (ER28002), Taxable Income of Other Family Unit Members (ER28009), Transfer Income of OFUMs (ER28030), and Social Security Income from Head, Wife/"Wife" and OFUM (ER28031, ER28033, ER28035). Note that this variable can contain negative values which indicate a net loss occurred as a result of business or farm losses which in waves prior to 1999 were bottom-coded at \$1.

* variable names in 2005 questionnaire

(Tables 6 & 7 & Figures 5 & 6 about here)

As seen in Table 6, total family income reports share the properties of a high percent reporting and greater, but not huge, deflections from the t-1 based time path (except for 2001 t-2

income). Note that the deflections – such as the dip in the median total family income of 338,000 in 1998 to 330,000, and then back up to 42,6125 in 2000 – is likely caused by a de facto underreporting of t-2 components *other than* labor income of the head or wife. Also, the number of missing observations is almost twice as high in the t-2 year as in the corresponding t-1 year.

To summarize, these cross-sectional comparisons show that the family head's t-2 labor income (which is based on a global question) look fairly plausible, the family income (also based on a global question) shows clear deflection downward in the off years (and it includes heads' labor income which is a better behaved component). In both cases the percentile distributions are plausibly spread out. It does not seem that they regress to some normal means significantly. The numbers of valid observations for t-2 total family income are also notably lower. We believe the t-2 total family income can not realistically be used as part of the same series as t-1 for what most analysts would want - either in panel models or cross-sectional inequality reports. It is not advisable to use in a change model but sufficient for knowing approximately where the family was in t-2. The numbers based on the short t-2 income question sequence in 2001 and 1999, before we expanded greatly in 2003 and 2005, look as reasonable as those collected in 2003 and 2005.

B. Panel Comparisons

In this section, we rely on year-to-year transition tables. Even if our cross sections lined up, the implied transitions are not bounded by that information alone. Tables 8 and 9 are transition patterns, by deciles, first for head's labor income in 1995 to 1996, where both years are based on t-1 measures and then for transition from 1996 to 1997 where the 1997 measure is from t-2, recorded in SY 1999, the first round of biennial data collection. Table 10 shows the transition from 1997 to 1998 labor income (t-2 and t-1 income reported both in 1999 SY). The notable aspect of these tables is that the transitional patterns are quite similar, both on the diagonals and off the diagonals. Within the same survey year (Table 10), there is a larger concentration on the diagonal (less volatility from t-2 to t-1 income) for head's labor income.

(Tables 8-13 about here)

Tables 11-13 present corresponding information for total family income. Comparing transitions from 1995 total family income (t-1 income reported in 1996) to 1996 income (t-1 income reported in 1997) and transitions from 1996 income (t-1 income reported in 1997) to 1997 income (t-2 income reported in 1999), there is somewhat more "regression to the mean" in the transition from t-1 to t-2 income (Table 12) than in the t-1 to t-1 transition (Table 11), having a larger percentage around the middle deciles, and particularly a greater proportion of people transitioning to a level lower from t-1 to t-2 reports.

C. Transfer Income and Assets Income

We investigate the quality of t-2 data on several other key components of family income in this section. Case counts for Supplementary Security Income (SSI), and TANF/other welfare for t-1 and t-2 data, from 1996 – 2007 waves are presented in Table 14, again using the original unprocessed data.

We first examine the pattern for SSI, for which we do not expect to find large year-toyear fluctuations. The numbers of families that responded to the question that someone in the family received SSI is lower in t-2 years than in t-1 year in the same survey year. This is particularly true in the first two waves of biennial data collection (1999 and 2001 waves) when both R and interviewers were not familiar with the new t-2 module; less than half of the families reported receiving SSI in the t-2 year than in the t-1 year within the same survey year. This discrepancy is much smaller in 2003 and 2005 waves to a plausible level, perhaps as respondents and interviewers become more familiar with the t-2 module. Among those who reported having received SSI in a year, the number and proportion of families that reported a valid amount is also consistently lower in t-2 than in t-1 year, with even larger between-year discrepancies (with the exception of 2001 wave). For example, as seen in Table 14, for SSI income, 70 families provided a valid 1997 SSI income in 1999 (t-2), and 195 families provided a valid 1998 SSI income in 1999 (t-1). The corresponding numbers in 2001 are 92 (t-2) vs. 215 (t-1). In the subsequent three waves, the gaps in the numbers of families who provided a valid amount for the t-2 reports, compared to t-1 reports in the same survey year, are visibly smaller - 292 (t-2) vs. 337(t-1), 270 (t-2) vs. 368(t-1), and 351 (t-2) vs. 248 (t-1) in the most recent wave.

These patterns suggest that the t-2 SSI data collected in the first two waves are of poor quality but the data quality have improved in more recent waves presumably because interviewers and R have become more familiar with this module and more data checks are programmed into the instrument to prevent R from progressing to the subsequent question unless an amount (or "Don't Know") is provided. A higher response rate by itself, of course, does not guarantee high data quality. More work on the distribution of data needs to be done when the data are available for analysis. That said, respondents seem to be able to provide reasonable data on "whether received SSI income in t-2 year" in recent waves.

TANF or other public assistance. Between 1995 and 2004, we expect to see a declining number of families who received TANF or other public assistance because of well-documented declines in welfare caseloads. We do observe this general trend in the time series in Table 14. However, within the same survey year, in three of the 4 pairs, there are more families reporting receiving such income in the t-2 than in the t-1 year. The reason why this pattern is observed is not clear, perhaps reflecting respondent's inability to recall, adding t-1 and t-2 incidences together when attempting to respond to the t-2 module. It could represent a true decline from the t-2 to the t-1 year in the same survey year. However, the higher N in the t-1 year of the subsequent wave does not quite fit this hypothesis of a declining time trend. Again, this between-year discrepancy is much smaller in the most recent two waves.

From data in 2003 and 2005 waves, we see that the number of families who provided a valid amount of income from TANF/other welfare is slightly lower in t-2 than what it is in t-1. In the 2003 interview, 176 (t-2) vs. 185 (t-1) families reported a valid amount of welfare income. The corresponding numbers in the 2005 interview are 162 vs. 182. (Data from the 1999 and 2001 SY are currently not available for this analysis). Thus, the pattern for TANF and other welfare income is similar to the one we observe for SSI income in that the data quality in the first two biennial waves are poorer than in recent waves. Based on data from the 2003 and 2005 waves, families seem to be able to provide a reasonable response to the "whether received in t-2" question though there are more missing data in the "amount" questions in t-2 than in t-1 reports. This discrepancy, though, becomes much smaller in the 2007 survey year. When compared to earlier years in 1996 and 1997 waves, more families responded "Don't Know/Refuse" in recent waves. Tables 15 and 16 show the distribution for the SSI and TANF/other welfare income in t-

1 and t-2 years based on data from the 2005 wave (data from other years are currently not available for such distribution analysis).

(Tables 15-18 about here)

Social Security Income

Table 17 shows the pattern for t-2 and t-1 Social Security income (which we do not expect large between-year changes) reported in the 2005 wave. Again, the number of families providing a valid amount is lower in t-2 (n=1275) than in t-1 year (n=1470).

Asset Income

Table 18 shows the pattern for asset income which we also do not expect to see large between-year fluctuations. Here we see a pattern of high non-response on the valid amounts of asset income in t-2 compared to t-1 year (1,377 vs. 2,537 families with valid amount).

(Table 19 about here)

Veteran Administration, Worker's Compensation, and Pension

Table 19 presents the corresponding comparisons for income from several other sources, i.e., Veteran Administration, worker's compensation, pension, and unemployment compensation based on the 2005 data. Again, we see fewer numbers of families reported a valid amount of income from that particular source in the t-2 than in the t-1 year. As we expect that the number of families receiving the VA benefits is fairly stable from one year to the next, the discrepancy of 43 families (141 vs. 184, or 22% lower) can be seen largely as a result of respondents' inability

or unwillingness to recall the amount of income in the t-2 year. Despite a higher level of missing data in t-2 reports, the distributions of the t-2 VA benefits are closely aligned to the t-1 reports. The higher number of families that reported receiving retirement pensions annuities in t-1 than in t-2 (814 vs. 639 families) may partly reflect the number of new retirees in 2004 than in 2003 and partly reflecting the difficulty in recall the t-2 income. Again, the overall distribution of the t-2 pension annuities lines up very well with that in t-1. We expect to see a greater between-year fluctuation in the worker's compensation and unemployment compensation , thus it is difficult to determine the accuracy of the t-2 income from these sources.

What is interesting is the rather good alignment in some years of the percentiles of amounts in t-2 versus t-1 income components, despite the large percent of families unwilling to offer a dollar value (as shown in Tables 14-18). The means and medians of the t-2 income are generally lower than the t-1 income in the same survey year, except in the case of assets income (Table 18), where almost half of the families provided a valid t-2 assets income. The differences in the amount of income between in t-2 and t-1 year in the same SY range from several hundreds (for SSI and TANF/other welfare income) to about a thousand dollars (for Social Security income) apart.

The above exercise shows that there is generally a higher non-response rate in t-2 income components than in t-1, particularly when the respondent is asked to provide a valid amount (about 10-15% missing data based on data from the most recent two waves which we take as the best-case scenario). This can be especially problematic when the respondent is expected to provide a proxy report for other family members. Thus, even though the t-2 family head's labor income appears quite good and "whether received" data appear reasonable for other income components, the "amount" portion of these components appear of poor quality. Thus, it is

unlikely that a high quality t-2 total family income measure can be created from these t-2 income components.

(Table 20 about here)

Data on Month Strings

In the 2005 and 2007 t-2 modules, we also collected the full details on the following components of *who* in the FU rec'd the source, *how much* was it, and for *which months* was it received in t-2: OFUM Income; Rents, trust funds, interests, dividends, royalties; TANF; SSI; Other Welfare; SSN; VA; Retirement Pay Pensions, Annuities; Unemployment Compensation; Workers Compensation; Child Support, alimony, separate maintenance; relatives, friends; and any other income. To gain a sense of the quality of these details, here we only examine the proportion of families among those who provided a valid amount of income who also provided information about which months they received those income.

As shown in the top panel of Table 20, the 2005 data show that 70% of the families who had income from OFUM assets in t-2 year gave a valid amount, and of these families, 20% did not report which months they received that income. Thus, only about half (56%) of those who reported having some OFUM assets income provided the month string data. This percentage is slightly higher for income received from relatives and friends and for social security (both about 65%), about 75% for worker's compensation and TANF, about 85% for SSI, social security, pension, worker's compensation and child support, and finally 93% for VA benefits.

Based on the 2007 data (bottom panel of table 20), there is a higher proportion of families who gave us a valid amount for these income components, with the proportion with a missing valid amount range from 12% to 5% in these components. Of these families, only 1-5% did not

provide some month string data (except for income from unemployment which had 9% missing data and income from relatives and friends which had 16% missing data). It is not clear to us what factors explain the improved response rate in 2007 at this point.

We have no basis to judge how accurate these reported months data are. However, we do know that even the t-1 monthly data suffer from seam bias, with the majority of reported transitions occurring between December and January (unpublished tabulations conducted by PSID staff). Therefore, we do not have great confidence in the quality of the t-2 month string data.

III. RECOMMENDATION

Based on analyses presented in this report, how frequently the t-2 data are utilized, and observations from interviewers, we recommend that we collect only limited t-2 income data in future waves to reduce the burden for respondents and/or allow room for other new questions. Our proposed course of action is the following:

 Labor income of the head and of the wife – As these data appear to have been used frequently by the research community and the quality for these data appear to be reasonably high, we recommend that the t-2 global assessment of labor income of the head and of the wife (R2 below) be continued, but moved from the end of the questionnaire (Section R) to sections G where it has been covered for t-1 income.

R2 (LAST ASKED in 2007). Earlier you reported that [you were/Head was/Wife/"Wife" was] working in 2005. Thinking now about all the work for money that [you/he/she] did during 2005, including jobs, businesses, self-

employment and part-time work, about how much did [you/he/she] earn altogether in 2005? Please include any income from: bonuses, overtime, tips or commissions.

 Total family income – As the quality of data obtained from the global question (R23 below) of t-2 total family income is shown to be poor with a clear deflection, we recommend that we do not ask this question again.

R23 (LAST ASKED IN 2003). What was [your/the total] income from all sources [for you and your family living there,] in 2001? (IF NECESSARY: Please give me your best estimate.)

3. Transfer income – We recommend that we collect data in t-2 income from SSI, TANF, other public assistance, social security, unemployment compensation, retirement annuity/pension, Veteran Administration benefit, workers compensation, and child support/alimony. Since the information about whether a family received such income is most frequently used by the research community in previous literature and the data quality on the amount of income received appears to be low (as suggested by the higher nonresponse rate and the discrepancies between t-1 and t-2 income), we recommend that data be collected only on whether the family received income from these sources in t-2 but not the amounts.

- 4. Asset income As our analysis suggests that the quality of t-2 asset income is low and we do not expect year-to-year large fluctuations in family assets from for most families (granted this becomes more problematic given current housing and financial market performance), we recommend that t-2 asset income not be collected at all. Respondents seem to be unwilling or unable to offer dollar fields, producing poor estimates and burden as they fail to comply with the request for such information.
- 5. Based on a low confidence in respondents' ability to provide details for the t-2 income components and the fact that it is not possible to construct a high quality t-2 total family income from these components, we recommend that we cut entirely for each of the following sections that asks the full detail of *who* in the FU rec'd the source, *how much* was it, and for *which months* was it received in t-2: OFUM Income; Rents, trust funds, interests, dividends, royalties; relatives, friends; and any other income.
- 6. A related, though outside of the t-2 module, change in the instrument that we recommend is to delete the t-2 Event History Calendar job-specific income questions in sections B and C that we have used since 2003.

BC49. About how much did [you/he] make at this in 2005?

Historically, data from the t-1 job-specific sequence have been used to impute t-1 total family income. Since we will not attempt to impute t-2 total family income and will not be processing or releasing these data, there is no justification for keeping these data.

Estimated Time Saving

Based on the above recommendations, these modifications will reduce the average interviewing time by approximately 2 minutes, one and a half minute from the changes in t-2 module, and about half a minute from deleting the EHC job-specific t-2 income from sections B and C.

Year (t-2) and Timing (Average Minutes per Respondent)

<u>Survey</u> <u>Year</u>	<u>t-2 income</u> Calendar Year	<u>Timing</u> (interview minutes)	<u>Notes</u>
1999	1997	2.0	First time t-2 income data collected A short initial sequence in "Section R"
2001	1999	2.6	
2003	2001	1.9	
2005	2003	3.6	More detailed questions, attempt to better cover the same components as the t-1 sequence
2007	2005	3.3	Attempt to better cover the same components as in t-1

Table 2:

	1995(t-1)	1996(t-1)	1997(t-2)	1998(t-1)	1999(t-2)	2000(t-1)	2001(t-2)	2002(t-1)	2003(t-2)	2004(t-1)
Ν	5978	4502	4811	5042	5277	5820	5643	5669	5680	5830
Missing	402	705	536	422	539	388	691	596	769	528
Mean	31798	34095	35719	36912	39548	40760	45794	45387	47192	47518
Median	24998	27000	27000	29100	30000	30170	35000	35000	35000	36000
Percentile										
5%	2000	2050	4800	4000	5000	5000	6000	5000	5000	4600
10%	5999	6000	8000	8000	9100	9000	10400	9000	9500	8686
20%	11999	13000	14000	14000	15000	15600	18000	16500	16000	16000
30%	15999	18001	18000	19000	20000	21300	24000	23000	23000	23000
40%	20198	22000	23000	24000	25000	26538	29409	29000	29000	29000
50%	24998	27000	27000	29100	30000	30170	35000	35000	35000	36000
60%	29999	32001	32000	35000	35000	36000	41000	41544	42000	43000
70%	35998	38241	40000	41000	41000	43000	50000	50000	51000	52000
80%	44798	47051	49700	51000	51044	54000	64000	63000	65000	65000
90%	59997	65002	65000	70335	72000	75000	87000	86000	90000	93000
95%	76797	85002	85000	90329	99000	100250	115000	115000	120000	124000

Comparing Family Head's Labor Income, 1995 to 2004 (reported in 1996-2005)

Note: only family heads with annual labor income greater than \$1 are included in this analysis

Figure 1



Comparing Family Head's Labor Income after Adjusting for Inflation

	1995(t-1)	1996(t-1)	1997(t-2)	1998(t-1)	1999(t-2)	2000(t-1)	2001(t-2)	2002(t-1)	2003(t-2)	2004(t-1)
Ν	5978	4502	4811	5042	5277	5820	5643	5669	5680	5830
Missing	402	705	536	422	539	388	691	596	769	528
Mean	39501	41487	41873	43271	43612	44948	48607	48174	47192	47518
Median	31116	32854	31651	34113	33083	33270	37149	37149	35000	36000
Percentile										
5%	2489	2494	5627	4689	5514	5514	6368	5307	5000	4600
10%	7467	7301	9378	9378	10035	9925	11039	9553	9500	8686
20%	14936	15819	16412	16412	16542	17203	19105	17513	16000	16000
30%	19915	21904	21101	22273	22055	23489	25474	24413	23000	23000
40%	25141	26770	26962	28134	27569	29265	31215	30781	29000	29000
50%	31116	32854	31651	34113	33083	33270	37149	37149	35000	36000
60%	37341	38940	37513	41029	38597	39700	43518	44095	42000	43000
70%	44808	46533	46891	48063	45213	47419	53071	53071	51000	52000
80%	55762	57800	58262	59786	56290	59549	67930	66869	65000	65000
90%	74681	79096	76197	82452	79399	82708	92343	91282	90000	93000
95%	95592	103432	99643	105890	109174	110552	122063	122063	120000	124000

Figure 2



Comparing Wife/"Wife" Labor Income, 1995 to 2004 (reported in 1996-2005)

	1995(t-1)	1996(t-1)	1997(t-2)	1998(t-1)	1999(t-2)	2000(t-1)	2001(t-2)	2002(t-1)	2003(t-2)	2004(t-1)
Ν	3339	2486	2467	2528	2706	3156	2854	3010	2991	3052
Missing	1288	945	1319	1258	1500	1050	1237	1081	1212	1151
Mean	20766	22025	23025	24054	27799	26351	29764	30426	32308	32309
Median	17110	18001	19000	20000	22000	22000	24800	25000	25000	26900
Percentile										
5%	1499	1299	2500	2000	3000	2512	3000	2800	2000	2200
10%	3500	3200	5000	4000	5000	5000	5280	5000	5000	5000
20%	7599	7000	8000	8000	10000	10000	10000	10000	10000	10400
30%	10999	11000	11000	12000	14000	14000	15000	15000	15000	15000
40%	14499	14595	15000	16000	18000	18000	20000	20000	20000	21000
50%	17110	18001	19000	20000	22000	22000	24800	25000	25000	26900
60%	20999	22000	22900	24000	27000	25000	30000	31000	30000	32160
70%	24998	27000	27540	30000	32000	30000	35000	36000	36000	38000
80%	29999	33001	33000	35000	40000	37000	42000	44000	44500	46000
90%	39998	42001	43000	46000	53000	50000	59000	60000	60000	61200
95%	48998	53135	56000	58000	70000	65000	75000	76000	80000	80000

Note: only wives with annual labor income greater than \$1 are included in the analysis and \$0 labor income included in the "Missing"



Figure 3

Comparing Wife/"Wife" Labor Income after Adjusting for Inflation

Wire's Eabor moothe (Without Imputation) - Alter adjustment to 2000 Donars									
1995(t-1)	1996(t-1)	1997(t-2)	1998(t-1)	1999(t-2)	2000(t-1)	2001(t-2)	2002(t-1)	2003(t-2)	2004(t-1)
3339	2486	2467	2528	2706	3156	2854	3010	2991	3052
1288	945	1319	1258	1500	1050	1237	1081	1212	1151
26612	26801	26991	28265	28132	29059	31592	32295	32308	32309
21926	21904	22273	23445	22055	24261	26323	26535	25000	26900
1921	1581	2931	2462	3308	2770	3184	2792	2000	2200
4485	3894	5861	5275	5514	5514	5604	5307	5000	5000
9738	8518	9378	9743	11028	11028	10614	10641	10000	10400
14095	13385	12895	14067	14336	15439	15921	15921	15000	15000
18580	17760	17584	18756	18526	19850	21228	21228	20000	21000
21926	21904	22273	23445	22055	24261	26323	26535	25000	26900
26910	26770	26845	28134	27569	27569	31842	32904	30000	32160
32035	32854	32284	35168	33083	33083	37149	38211	36000	38000
38444	40156	38685	41029	39700	40802	44579	46702	44500	46000
51257	51108	50408	52752	54036	55138	62623	63685	60000	61200
62791	64656	65647	67992	66166	71680	79606	80667	80000	80000
	1995(t-1) 3339 1288 26612 21926 1921 4485 9738 14095 18580 21926 26910 32035 38444 51257 62791	1995(t-1) 1996(t-1) 3339 2486 1288 945 26612 26801 21926 21904 1921 1581 4485 3894 9738 8518 14095 13385 18580 17760 21926 21904 26910 26770 32035 32854 38444 40156 51257 51108 62791 64656	1995(t-1) 1996(t-1) 1997(t-2) 3339 2486 2467 1288 945 1319 26612 26801 26991 21926 21904 22273 1921 1581 2931 4485 3894 5861 9738 8518 9378 14095 13385 12895 18580 17760 17584 21926 21904 22273 26910 26770 26845 32035 32854 32284 38444 40156 38685 51257 51108 50408 62791 64656 65647	1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 3339 2486 2467 2528 1288 945 1319 1258 26612 26801 26991 28265 21926 21904 22273 23445 1921 1581 2931 2462 4485 3894 5861 5275 9738 8518 9378 9743 14095 13385 12895 14067 18580 17760 17584 18756 21926 21904 22273 23445 26910 26770 26845 28134 32035 32854 32284 35168 38444 40156 38685 41029 51257 51108 50408 52752 62791 64656 65647 67992	1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 3339 2486 2467 2528 2706 1288 945 1319 1258 1500 26612 26801 26991 28265 28132 21926 21904 22273 23445 22055 1921 1581 2931 2462 3308 4485 3894 5861 5275 5514 9738 8518 9378 9743 11028 14095 13385 12895 14067 14336 18580 17760 17584 18756 18526 21926 21904 22273 23445 22055 26910 26770 26845 28134 27569 32035 32854 32284 35168 33083 38444 40156 38685 41029 39700 51257 51108 50408 52752 54036 62791	1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 2000(t-1) 3339 2486 2467 2528 2706 3156 1288 945 1319 1258 1500 1050 26612 26801 26991 28265 28132 29059 21926 21904 22273 23445 22055 24261 1921 1581 2931 2462 3308 2770 4485 3894 5861 5275 5514 5514 9738 8518 9378 9743 11028 11028 14095 13385 12895 14067 14336 15439 18580 17760 17584 18756 18526 19850 21926 21904 22273 23445 22055 24261 26910 26770 26845 28134 27569 27569 32035 32854 32284 35168 33083 33083	1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 2000(t-1) 2001(t-2) 3339 2486 2467 2528 2706 3156 2854 1288 945 1319 1258 1500 1050 1237 26612 26801 26991 28265 28132 29059 31592 21926 21904 22273 23445 22055 24261 26323 1921 1581 2931 2462 3308 2770 3184 4485 3894 5861 5275 5514 5514 5604 9738 8518 9378 9743 11028 11028 10614 14095 13385 12895 14067 14336 15439 15921 18580 17760 17584 18756 18526 19850 21228 21926 21904 22273 23445 22055 24261 26323 26910 26770 26845 28134 27569 27569 31842 32035 32854 </td <td>1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 2000(t-1) 2001(t-2) 2002(t-1) 3339 2486 2467 2528 2706 3156 2854 3010 1288 945 1319 1258 1500 1050 1237 1081 26612 26801 26991 28265 28132 29059 31592 32295 21926 21904 22273 23445 22055 24261 26323 26535 1921 1581 2931 2462 3308 2770 3184 2792 4485 3894 5861 5275 5514 5514 5604 5307 9738 8518 9378 9743 11028 11028 10614 10641 14095 13385 12895 14067 14336 15439 15921 15921 18580 17760 17584 18756 18526 19850 21228 21228 21926 21904 22273 23445 22055 24261 26323 265</td> <td>1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 2000(t-1) 2001(t-2) 2002(t-1) 2003(t-2) 3339 2486 2467 2528 2706 3156 2854 3010 2991 1288 945 1319 1258 1500 1050 1237 1081 1212 26612 26801 26991 28265 28132 29059 31592 32295 32308 21926 21904 22273 23445 22055 24261 26323 26535 25000 1921 1581 2931 2462 3308 2770 3184 2792 2000 4485 3894 5861 5275 5514 5514 5604 5307 5000 9738 8518 9378 9743 11028 11028 10614 10641 10000 14095 13385 12895 14067 14336 15439 15921 15921 15000 18580 17760 17584 18756 18526 19850 21228 2</td>	1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 2000(t-1) 2001(t-2) 2002(t-1) 3339 2486 2467 2528 2706 3156 2854 3010 1288 945 1319 1258 1500 1050 1237 1081 26612 26801 26991 28265 28132 29059 31592 32295 21926 21904 22273 23445 22055 24261 26323 26535 1921 1581 2931 2462 3308 2770 3184 2792 4485 3894 5861 5275 5514 5514 5604 5307 9738 8518 9378 9743 11028 11028 10614 10641 14095 13385 12895 14067 14336 15439 15921 15921 18580 17760 17584 18756 18526 19850 21228 21228 21926 21904 22273 23445 22055 24261 26323 265	1995(t-1) 1996(t-1) 1997(t-2) 1998(t-1) 1999(t-2) 2000(t-1) 2001(t-2) 2002(t-1) 2003(t-2) 3339 2486 2467 2528 2706 3156 2854 3010 2991 1288 945 1319 1258 1500 1050 1237 1081 1212 26612 26801 26991 28265 28132 29059 31592 32295 32308 21926 21904 22273 23445 22055 24261 26323 26535 25000 1921 1581 2931 2462 3308 2770 3184 2792 2000 4485 3894 5861 5275 5514 5514 5604 5307 5000 9738 8518 9378 9743 11028 11028 10614 10641 10000 14095 13385 12895 14067 14336 15439 15921 15921 15000 18580 17760 17584 18756 18526 19850 21228 2

Wife's Labor Income (Without Imputation) - After adjustment to 2005 Dollars

Note: only wives with annual labor income greater than \$1 are included in the analysis and \$0 labor income included in the "Missing"

Figure 4



Comparing Total Family Income, 1995-2004 (reported in 1996-2005)

	1995	1996	1997 (t-2)	1998	1999 (t-2)	2000	2001 (t-2)	2002	2003 (t-2)	2004
Ν	8055	6000	5931	6525	6427	7352	6663	7274		7447
Missing(D	456	747	1066	472	979	54	1159	548		555
Mean	42923.17	47054.01	47079.03	52402.22	39548.25	59402.45	69472.21	56961.99		63174.9
Median	31999	35001	35000	38000	30000	42612.5	40000	42000		45000
Percentiles	:									
5%	4583	5479	5500	6491	6144	6720	6000	6720		7188
10%	6947	8401	9000	9900	10000	11328	10000	11000		11304
20%	12377	14676	15000	16511.5	17000	19000	18000	18240		19000
30%	18354	20887.5	21600	23400	23666	26100	25000	25950		26700
40%	24999	27474	28000	30043.5	30000	34000	31904	33680		35044
50%	31999	35001	35000	38000	37000	42612.5	40000	42000		45000
60%	40416.5	44001	42000	47093	46000	52200	50000	51900		56670
70%	49998	54602	52000	59100	58000	65000	61000	65000		70200
80%	62989	69002	67000	75447	73000	81900	79000	82060		89040
90%	85995	94401.5	90000	104000	100000	114160	106000	112200		121600
95%	112193	123127	120000	135500	130000	153000	136000	144660		160690

Total Family Income (Without imputation)

Note: In 2005, the global question for t-2 total family income was removed from the questionnaire and replaced with greater details of income components.





Total Family Income after Adjusting for Inflation

	1995	1996	1997 (t-2)	1998	1999 (t-2)	2000	2001 (t-2)	2002	2003 (t-2)	2004
Ν	8055	6000	5931	6525	6427	7352	6663	7274		7447
Mean	53428.27	57256.37	55189.28	61429.63	56838.84	65507.05	73738.71	60460.2		63174.9
Median	39830.5	42590	41029.41	44546.22	40802.37	46991.65	42456.52	44579.35		45000
Percentile	IS:									
5%	5704.65	6666.97	6447.48	7609.2	6775.4	7410.59	6368.48	7132.7		7188
10%	8647.22	10222.53	10550.42	11605.46	11027.67	12492.14	10614.13	11675.54		11304
20%	15406.17	17858.09	17584.03	19355.92	18747.04	20952.57	19105.43	19360.17		19000
30%	22845.99	25416.38	25321.01	27431.09	26098.08	28782.21	26535.33	27543.67		26700
40%	31117.3	33430.98	32823.53	35219.06	33083	37494.07	33863.32	35748.39		35044
50%	39830.5	42590	41029.41	44546.22	40802.37	46991.65	42456.52	44579.35		45000
60%	50308.11	53541.4	49235.29	55205.66	50727.27	57564.43	53070.65	55087.34		56670
70%	62234.6	66440.94	60957.98	69281.09	63960.47	71679.84	64746.2	68991.85		70200
80%	78405.05	83963.18	78542.02	88444.17	80501.98	90316.6	83851.63	87099.55		89040
90%	107041.6	114869.9	105504	121916	110276.7	125891.9	112509.8	119090.5		121600
95%	139651.3	149823.7	140672.3	158842.4	143359.7	168723.3	144352.2	153544		160690

Figure 6



1995 to 1996 (t-1 to t-1) Transition for Head's Labor income, Matched Panel

(N=5837)

		1996 Earnings from 1997 IW									
1995 Earn 1996 IW	ings from	\$0	\$1-\$3 500	\$3,600- \$13 999	\$14,000- \$19 999	\$20,000- \$25,999	\$26,000- \$32,099	\$32,100- \$42,000	\$42,001- \$60,000	\$60.001+	
Dollar	Percentile	ΨŪ	\$ 1 \$ 0,000	<i>Q</i> 10,000	<i>Q</i> 10,000	<i>Q_0,000</i>	<i>Q02,000</i>	ф. <u></u> ,	<i>Q</i> CC , CCC	<i>\\</i> 00,0011	
Range	Range	p < 20	p 20-30	p 30-39	p 40-49	p 50-59	p 60-69	p 70-79	p 80-89	p 90+	
\$0	p < 20	82.48	5.96	2.94	1.61	1.05	2.45	0.77	1.19	1.54	
\$1- \$4,499	p 20-30	26.85	35.49	18.83	7.72	3.09	4.63	1.23	0.93	1.23	
\$4,500- \$12,998	р 30-39	11.82	9.09	42.18	21.27	7.64	4.91	0.73	1.27	1.09	
\$12,999- \$19,497	p 40-49	4.54	3.57	10.53	43.76	21.88	10.21	2.92	1.94	0.65	
\$19,498- \$24,997	p 50-59	4.67	2.14	5.06	13.04	35.8	30.16	5.84	2.53	0.78	
\$24,998- \$31,497	р 60-69	4.13	3.06	2.76	4.9	9.49	45.94	21.59	7.2	0.92	
\$31,498- \$39,997	p 70-79	4.17	1.33	1.33	1.14	1.71	14.04	47.06	26.94	2.28	
\$39,998- \$56,997	р 80-89	3.47	0.95	1.26	1.26	1.58	4.89	9.62	60.41	16.56	
\$56,998+	p 90+	3.72	0.68	1.35	0.68	0.85	3.21	1.86	8.12	79.53	

Table 9

1996 to 1997 (t-1 to t-2) Transition for Head's Labor income Matched Panel,

(N=5,250)

10/30/2007		1997 Earnings from 1999 IW: T-2											
1996 Earning s Dollar Range	s from 1997 IW Percentile Range	\$0 p < 20	1- \$5,999 p 20-29	\$6,000- \$14,999 p 30-39	\$15,000- \$21,999 p 40-49	\$22,000- \$28,449 p 50-59	\$28,450- \$34,999 p 60-69	\$35,000- \$44,999 p 70-79	\$45,000- \$59,999 p 80-89	\$60,000+ p 90+			
\$0	p < 20	77.76	4.04	3.19	3.03	1.87	1.94	2.64	2.1	3.42			
\$1-\$4,500	p 20-29	35.07	29.17	17.01	9.03	2.43	3.13	2.08	0.69	1.39			
\$4,500- \$14,205 \$14 205 5-	p 30-39	15.4	9.89	43.54	19.96	5.7	2.47	0.76	1.14	1.14			
\$20,999 \$21,000	p 40-49	7.44	1.91	15.46	48.47	18.7	4.39	2.1	1.15	0.38			
\$26,271 \$26,272-	p 50-59	7.22	1.52	4.37	19.58	44.87	13.12	6.27	1.52	1.52			
\$33,000 \$33,001-	p 60-69	5.11	0.59	1.38	7.07	23.18	37.52	19.45	3.93	1.77			
\$42,000 \$42,000	р 70-79	3.7	0.58	1.36	2.92	5.45	18.87	49.61	13.81	3.7			
\$42,001- \$60,000	p 80-89	3.89	0.74	0.56	0.74	1.48	4.63	19.81	52.41	15.74			
\$66,001+	p 90+	4.1	0.93	0.93	0.56	0.56	0.37	2.05	10.61	79.89			

Note: Head's labor income must be 0+ in both years, with family weights and no inflation adjustment used in this analysis

					1998 Ear	nings from	1999 IW			
1997 Earnir 1999 IW (T-	ngs from 2)	\$0	1-\$7.293	\$7,294- \$15.098	\$15,099- \$21.999	\$22,000- \$28.179	\$28,180- \$34,999	\$35,000- \$44,999	\$45,000- \$64,499	\$64.500+
· ·	,	• -	<i>• ,</i>	. ,	. ,	. ,	. ,	. ,		. ,
Dollar Rang	e Percentile I	p < 20	p 20-29	p 30-39	p 40-49	p 50-59	p 60-69	p 70-79	p 80-89	p 90+
\$	0 p < 20	73.03	8.97	5.39	3.15	2.42	2.55	1.64	1.39	1.45
\$1-\$4,999	p 20-29	13.58	50.21	19.75	5.76	3.29	1.65	3.7	0.82	1.23
\$5,000- \$12,999	р 30-39	7.12	21.2	51.13	10.68	4.85	2.43	1.13	0.49	0.97
\$13,000- \$19,999	р 40-49	4.91	2.89	19.8	49.57	16.62	3.32	1.45	0.87	0.58
\$20,000- \$24,999	p 50-59	4.64	1.16	3.29	17.02	55.51	11.8	5.22	1.16	0.19
\$25,000- \$31,999	р 60-69	4.97	1.07	2.55	3.49	25.23	39.19	17.72	4.83	0.94
\$32,000- \$40,999	p 70-79	4.42	1	1.43	1.28	1.71	13.55	57.63	16.12	2.85
\$41,000- \$59,999	p 80-89	4.19	0.78	1.09	0.62	0.78	2.02	12.87	65.58	12.09
\$60,000+	р 90+	7.85	0.77	0.46	0.15	0.62	0.46	1.23	10.77	77.69

1997 to 1998 (t-2 to t-1) Transition for Head's Labor income, Matched Panel (N=6,461)

Note: Head's labor income must be 0+ in both years, with family weights and no inflation adjustment used in this analysis

The 1995 to 1996 (t-1 to t-1) Transition for Total Family Income Matched Panel (N=5,831)

1996 Family Income from 1997 IW												
1995 Fam from 1996	ily Income IW	\$0	\$1- \$8,411	\$8,412- \$14,998	\$14,999- \$21,599	\$21,600- \$28,265	\$28,266- \$36,201	\$36,202- \$45,300	\$45,301- \$55,435	\$55,436- \$70,199	\$72,200- \$95,552	\$95,553+
Dollar Range	Percentile Range		p < 10	p 10-20	p 20-30	p 30-40	p 40-50	p 50-60	p 60-70	p 70-80	p 80-90	p 90+
\$0		7.41	51.85	18.52	7.41	3.7	0	0	3.7	3.7	3.7	0
\$1- \$7,999 \$8000-	p < 10	3.06	58.2	19.28	7.93	3.6	3.06	1.8	0.72	0.54	0.9	0.9
\$14,178	р 10-20	1.54	17.84	47.68	19.38	5.49	3.6	1.89	1.37	0.34	0.34	0.51
\$14,179- -\$20,497 \$20,498	p 20-30	0.86	6.86	16.3	39.45	21.44	6.86	3.43	1.89	1.03	0.86	1.03
- \$27,798 \$27,700	p 30-40	0.34	3.77	8.06	16.12	36.36	20.58	7.2	3.43	2.23	0.86	1.03
\$27,799- \$34,998	p 40-50	0.53	2.63	2.45	6.48	16.99	34.68	20.32	8.93	3.15	2.28	1.58
\$34,999- \$43,641	р 50-60	0.34	0.84	3.36	4.53	6.71	16.44	32.72	22.48	7.38	2.18	3.02
\$43,642- \$53,295 \$53,296-	p 60-70	0.17	1.37	1.03	2.92	4.12	8.75	17.67	34.99	20.75	5.66	2.57
\$66,996 \$66,007	p 70-80	0	0.69	0.69	1.38	2.6	2.6	9.17	15.57	44.29	19.72	3.29
\$91,576	p 80-90	0.17	0.17	0.51	1.02	2.21	2.89	4.08	7.31	14.63	51.7	15.31
\$91,577+	p 90+	0.17	0.68	0.34	0.86	1.03	1.03	1.54	2.91	5.65	15.07	70.72

Table 12

The 1996 to 1997 (t-1 to t-2) Transition for Total Family Income Matched Panel, (N=4,869*)

	1997 Family Income from 1999 IW (T-2)											
1996 Fam from 1997	ily Income ' IW	\$0	\$1-\$9,798	\$9,799- \$17,232	\$17233- \$24,201	\$24,202- \$30,998	\$30,999- \$39,019	\$39,020- \$48,000	\$48,001- \$58,001	\$58,002- \$72,900	\$72,901- \$98,952	\$98,9533+
Dollar	Percentile											
Range	Range		p < 10	p 10-20	p 20-30	p 30-40	p 40-50	p 50-60	p 60-70	p 70-80	p 80-90	p 90+
\$0		5.56	58.33	13.89	5.56	5.56	0	2.78	5.56	0	2.78	0
\$1-												
\$8,999	p < 10	2.33	62.33	17.91	7.67	2.79	3.02	1.63	0.93	0.47	0.7	0.23
\$9000-												
\$16,999	p 10-20	1.07	20.82	45.28	20.17	6.65	2.79	1.72	0.64	0.43	0.43	0
\$17.000-	•											
\$23,999	p 20-30	0.6	5.61	22.04	34.67	20.84	8.42	3.21	1.8	0.8	1.2	0.8
\$24,000												
-												
\$29,999	p 30-40	0.25	3.04	7.85	23.8	34.43	14.94	7.34	4.3	1.77	1.27	1.01
\$30,000-												
\$37,999	p 40-50	0.17	3.05	4.74	8.8	22.84	31.47	15.23	8.12	3.21	1.35	1.02
\$38,000-												
\$44,999	p 50-60	0.48	1.19	2.38	3.81	6.67	22.62	32.62	15.95	9.52	3.33	1.43
\$45.000-	-											
\$56,999	p 60-70	0.18	0.53	0.88	2.12	4.07	7.96	21.42	34.69	19.82	5.49	2.83
\$57 000-	•											
\$69,999	p 70-80	0	0.25	1.52	0.76	2.03	4.56	10.63	22.53	38.48	15.7	3.54
\$70,000-	P	•										
\$94,999	n 80-90	0	0.71	0.35	0 71	0.88	2 48	4 96	7 43	22 12	45 31	15.04
<i>\$</i> 0.,000	P 00 00	5	0.7 1	0.00	0.77	0.00	2.10				.0.01	10.01
\$95.000+	p 90+	0	0.39	0.79	0.79	0.39	0.59	1.58	1.97	4.54	19.72	69.23

Note: Family income must be 0+ in both years, with family weights and no inflation adjustment used in this analysis

The 1997 to 1998 (t-2 to t-1) Transition for Total Family Income, Matched Panel (N=5,	,995)
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				19	998 Family	Income fro	m 1999 IW					
1997 Family from 1999	y Income IW Percentile	\$0	\$1-\$10,799	\$10,800- \$18,599	\$18,600- \$25,740	\$25,741- \$32,637	\$32,638- \$40,699	\$40,700- \$49,999	\$50,000- \$61,859	\$61,860- \$78,289	\$78,290- \$105,999	\$106,000+
Dollar Rang	e Range		p < 10	p 10-20	p 20-30	p 30-40	p 40-50	p 50-60	p 60-70	p 70-80	p 80-90	p 90+
\$	60	10	47.14	20	7.14	1.43	4.29	4.29	2.86	2.86	0	0
\$1-\$7,999 \$8000-	p < 10	2.04	64.36	16.7	6.72	4.07	2.24	2.04	0.81	0.41	0.2	0.41
\$14,999 \$15,000-	p 10-20	0.51	25.3	43.97	14.94	6.28	4.75	1.7	1.19	1.02	0	0.34
\$20,999 \$21.000 -	p 20-30	0.31	3.91	25.51	35.68	15.81	7.51	5.01	2.97	2.03	0.78	0.47
\$26,999 \$27.000-	p 30-40	0.18	2	6.36	28.36	32.36	16.18	7.82	3.45	2	0.91	0.36
\$34,999 \$35.000-	p 40-50	0.31	1.68	2.91	6.73	26.15	30.58	17.74	6.73	3.67	2.45	1.07
\$41,999 \$42.000-	p 50-60	0.17	2.2	1.18	3.21	7.77	25.51	31.42	15.71	7.94	3.38	1.52
\$51,999 \$52.000-	p 60-70	0.17	0.67	1	1.5	4.01	5.51	25.04	37.56	15.69	6.51	2.34
\$65,999 \$66.000-	p 70-80	0.33	0.66	0.99	2.3	1.97	2.63	3.45	24.96	41.54	15.93	5.25
\$89,999	p 80-90	0	0.35	0.7	0.35	1.05	2.45	1.75	4.9	22.2	50.7	15.56
\$90,000+	p 90+	0	0.32	0.63	0.32	0.63	0.79	1.75	2.38	3.33	19.52	70.32

Note: 1997 income is t-2 income and 1998 income is t-1 income collected in 1999 wave

Family income must be 0+ in both years, with family weights and no inflation adjustment used in this analysis

	1996	1997	1999		2001		2003		2005		2007	
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Calendar year	(t-1)	(t-1)	(t-2)	(t-1)								
SSI												
# Received	410	277	112	259	113	280	334	354	316	385	386	335
Valid amount	313	205	70	195	92	215	292	337	270	368	351	248
DK/RF	97	72	42	64	21	65	42	17	46	17	35	87
% DKRF	24%	26%	38%	25%	19%	23%	13%	5%	15%	4%	9%	26%
TANF/other												
welfare												
# Received	459	376	324	247	274	196	223	238	201	187	170	189
Valid amount	443	371	NA	239	NA	192	176	185	169	182	152	183
DK/RF	16	15		8		4	47	53	32	5	18	6
% DKRF	3%	4%	NA	3%	NA	2%	21%	22%	16%	3%	11%	3%

AFDC/TANF Reports and Amounts, 1995-2006 collected in 1996-2007

Note: Unit of analysis is a family

NA denotes that data for that year have not been released/processed yet.

"Whether received ADC/AFDC & valid amount" data are based on Head's ADC/AFDC, Head's other welfare, Wife's ADC/AFDC & Wife's other welfare, reported from 1996, 1997, 1999 t-1, 2001 t-1 and 2003 t-1 sequence; data from 1999 t-2, 2001 t-2, and 2003 t-2 information are obtained from a global "family state/local welfare receipt" question.

"Whether received SSI" is based on Head's SSI and Wife's SSI income from 1996, 1997, 1999 t-1, 2001 t-1 and 2003 t-1 sequence; data from 1999 t-2, 2001 t-2, and 2003 t-2 information are obtained from a global "family SSI receipt" question.

Comparison of t-1 and t-2 SSI Income Reported in 2003 and 2005 Waves

	200	03 SY	2005	SY
	<mark>2001 (t-2)*</mark>	2002 (t-1)	<mark>2003(t-2)</mark>	2004 (t-1)
N Receiving	<mark>292</mark>	337	<mark>270</mark>	368
Mean	<mark>5198.20</mark>	5404.76	<mark>5430.32</mark>	5941.73
Median	<mark>5976.00</mark>	6240.00	<mark>6000</mark>	6330
Percentiles:				
5%	<mark>525</mark>	408	<mark>546</mark>	606
10%	<mark>890</mark>	864	<mark>1000</mark>	1032
20%	<mark>2016</mark>	2040	<mark>1932</mark>	2172
30%	<mark>3500</mark>	3600	<mark>3490</mark>	3600
40%	<mark>4848</mark>	5436	<mark>5020</mark>	5652
50%	<mark>5976</mark>	6240	<mark>6000</mark>	6330
60%	<mark>6000</mark>	6540	<mark>6480</mark>	6768
70%	<mark>6480</mark>	6624	<mark>6720</mark>	6948
80%	<mark>6600</mark>	6948	<mark>6912</mark>	7527
90%	<mark>7440</mark>	8760	<mark>9210</mark>	11040
95%	<mark>8700</mark>	9600	12000	13812

Comparison of t-1 andt-2 Family TANF/ Other Public Assistance Reported in 2005

	2003 (t-2)	2004 (t-1)
	Family TANF/other welfare	Family TANF/other welfare
N Receiving	<mark>162</mark>	182
Mean	<mark>3336.24</mark>	3710.76
Median	<mark>2222</mark>	2400
Percentiles:		
5%	<mark>149</mark>	226
10%	<mark>470</mark>	468
20%	<mark>1000</mark>	972
30%	<mark>1209</mark>	1212
40%	<mark>1704</mark>	1800
50%	<mark>2222</mark>	2400
60%	<mark>2808</mark>	3336
70%	<mark>3600</mark>	4548
80%	<mark>4800</mark>	6030
90%	<mark>7000</mark>	7296
95%	<mark>8616</mark>	8688

Note: amounts have not been imputed. 1999, 2001 and 2003 data have not been annualized yet, thus not included in this analysis

Comparison of t-1 and t-2 Family Social Security reported in 2005

	<mark>2003 (t-2)</mark>	2004 (t-1)
	Family Social Security	Family Social Security
N		
Receiving	<mark>1275</mark>	1470
Mean	<mark>11434.81</mark>	12290
Median	<mark>10200</mark>	11280
Percentiles:		
5%	2000	2600
10%	<mark>3600</mark>	4366.5
20%	<mark>5989</mark>	6360
30%	<mark>7056</mark>	7758
40%	<mark>8498</mark>	9600
50%	<mark>10200</mark>	11280
60%	<mark>11932</mark>	13000
70%	<mark>13000</mark>	15000
80%	<mark>15474</mark>	17892
90%	<mark>19200</mark>	21600
95%	<mark>22800</mark>	25200

Note: amounts have not been imputed. 1999, 2001 and 2003 data have not been annualized yet, thus not included in this analysis

Comparison of t-1 and t-2 Head/Wife Assets Income Reported in 2005

	2003 (t-2)	2004 (t-1)
	Head/Wife Assets	Head/Wife Assets
N has assets	<mark>1377</mark>	2537
Mean	<mark>7781.48</mark>	6249.07
Median	<mark>1200</mark>	550
Percentiles:		
5%	<mark>20</mark>	10
10%	<mark>50</mark>	20
20%	<mark>105</mark>	50
30%	<mark>260</mark>	125
40%	<mark>543</mark>	300
50%	<mark>1200</mark>	550
60%	<mark>2500</mark>	1214
70%	<mark>5000</mark>	2800
80%	<mark>8400</mark>	6000
90%	<mark>16000</mark>	12900
95%	<mark>30000</mark>	25000

Note: amounts have not been imputed. Assets income combines income from rent, dividends, interest, and royalties for family head and wife/"wife".

1999, 2001 and 2003 data have not been annualized yet, thus not included in this analysis

Table 19: Comparison of t-1 and t-2 Veteran's Administration Benefits, Retirement/Annuities, and Worker's Compensation, Unemployment Compensation Reported in 2005

	Fami	ly VA		Family W	orker's	Unemployment			
	Ben	efits	Retirement	/Annuities	Con	np	Comp		
	2003	2004	2003	2004	2003	2004	2003	2004	
	(t-2)	(t-1)	(t-2)	(t-1)	(t-2)	(t-1)	(t-2)	(t-1)	
N Receiving	141	184	639	814	70	113	310	492	
Mean	9278.72	9567.65	16654.56	17122.46	7526.6	8418.33	4092.16	3558.65	
Median	6000	6000	12000	12000	4670	5000	2500	2717	
Percentiles:									
5%	732	1000	1000	1000	600	200	290	350	
10%	1200	1272	1652	1700	777.5	400	542.5	600	
20%	1296	2184	3324	3852	2000	1200	1000	1000	
30%	2400	2640	6000	6000	2750	2200	1500	1500	
40%	4000	4000	9252	9579	3350	3540	2000	2011	
50%	6000	6000	12000	12000	4670	5000	2500	2717	
60%	7248	8000	15179	15780	7422	7200	3350	3349	
70%	11000	12000	19200	21048	9000	9030	5000	4260	
80%	14772	15600	26400	28000	13700	13840	6000	6000	
90%	25200	24000	36000	38848	17700	20000	9000	7794	
95%	28800	30000	46500	50700	22668	30096	10119	9840	

Note: 2005 data without imputation

Table 20: Level of Response for Various t-2 Income Components Based on the 2005 and 2007 Data

t-2 income in 2005 SY (n=8002 families)

	Yes, received income	DK/RF Amount	Valid amount Given	% Give an amount if answer "Yes"	N months string missing when amount given	% of those with a valid amount but had MD on month strings	% have month string data when amount given
OFUM Assets	43	13	30	0.70	6	0.20	0.56
TANF	201	32	169	0.84	12	0.07	0.78
SSI	316	46	270	0.85	3	0.01	0.84
Other Welfare	63	19	44	0.70	3	0.07	0.65
Social Security	1535	254	1281	0.83	12	0.01	0.83
Veterans Admin	152	10	142	0.93	0	0.00	0.93
Retirement/Pensions	727	86	641	0.88	5	0.01	0.87
Unemployment comp	401	53	348	0.87	46	0.13	0.75
Workers Comp	92	12	82	0.89	5	0.06	0.84
Child Support	563	56	507	0.90	39	0.08	0.83
Relatives/Friends	627	79	548	0.87	151	0.28	0.63

t-2 income in 2007 SY (n=8332 families)

	Yes, received income	DK/RF Amount	Valid amount Given	% Give an amount if answer "Yes"	N months string missing when amount given	% of those with a valid amount but had MD on month strings	% have month string data when amount given
Assets (family)	1443	179	1264	0.88	25	0.02	0.86
TANF	170	18	152	0.89	3	0.02	0.88
SSI	386	35	351	0.91	3	0.01	0.90
Other Welfare	74	9	65	0.88	2	0.03	0.85
Social Security	1562	211	1351	0.86	2	0.00	0.86
Veterans Admin	205	19	186	0.91	0	0.00	0.91
Retirement/Pensions	846	78	768	0.91	4	0.01	0.90
Unemployment	317	35	282	0.89	26	0.09	0.81
Workers Comp	75	9	66	0.88	2	0.03	0.85
Child Support	561	39	522	0.93	24	0.05	0.89
Relatives/Friends	681	55	626	0.92	98	0.16	0.78
Other Income	332	16	316	0.95	15	0.05	0.91

Appendix Table 1

Question text for head's labor income in t-2 module

<u>Survey</u> year	<u>t-2</u> year	
1999	1997	R25: Did you work at a job or business at any time in 1997 – including self-employment and part-time work? R26: About how much did you earn altogether from working at that job/those jobs in 1997?
2001	1999	R25: Did you work at a job or business at any time in 1999 - including self-employment and part-time work? R26: About how much did you earn altogether from working at that job/those jobs in 1999?
2003	2001	R26: Earlier, you reported that you were working in 2001. Thinking about all the work for money that you during 2001, including jobs, businesses, self-employment and part-time work, about how much did you earn altogether?
2005	2003	R2: Earlier you reported that you were working in 2003. Thinking now about all the work for money that you did in 2003, including jobs, businesses, self-employment and part-time work, about how much did you earn altogether in 2003?

Appendix Table 2

t-2 Income Data Bibliography

Confirmed Articles that used t-2 Variables

1) Conley, Dalton. Quick Read Synopsis: Family Background, Race, and Labor Market Inequality. Conley, Dalton and Glauber, Rebecca. The ANNALS of the American Academy of Political and Social Science. 2007; 609(233):240-241.

2) Chen, Yuanyuan. Two Essays on Selection Models and One Essay on Income Inequality in Rural China. (Dissertation) Massachusetts: Boston College; 2005.

3) DiPrete, Thomas A. Is This a Great Country? Upward Mobility and the Chance for Riches in Contemporary America. Research in Social Stratification and Mobility. 2007; 25(1):89-95.