

Description of the Split Panel Test of the Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Income Redesign and Time Series Guidance

The 2014 CPS ASEC utilized a probability split panel design to test a redesigned set of income questions. The Census Bureau conducted an initial nationwide test of a redesigned set of income questions by telephone in March 2013.¹ Based on the results of that initial test, a second, more comprehensive test was conducted in 2014. The second test was administered to three-eighths of the total 2014 ASEC production sample.² There were approximately 98,000 addresses in the 2014 CPS ASEC sample; a subsample of about 30,000 addresses were randomly assigned to be eligible to receive the redesigned income questions, the remaining sample (approximately 68,000 addresses) were eligible to receive the set of ASEC income questions that have been in use since 1994, referred to here as the traditional income questions.³

The Census Bureau used the two subsamples to evaluate the effects of the redesign and sought out experts to review and provide feedback on our efforts. Based on the results of our evaluation, we fully implemented the redesign in 2015.

¹ For more details of the March 2013 content test and more specific details on all the changes to the ASEC redesigned income questions see, Semega and Welniak, "Evaluating the 2013 CPS ASEC Income Redesign Content Test," presented at the November 2013 meetings of the Federal Committee on Statistical Methodology, <www.census.gov/library/working-papers/2013/demo/semega-01.html>.

² All 2014 ASEC sample addresses were eligible to receive a new set of health insurance questions.

³ Each address in sample was assigned a random number to determine if the address would receive the traditional or redesigned ASEC questionnaire. One caveat is that all month- in-sample-one addresses received the traditional ASEC. Census field representatives did not know in advance if the household they were interviewing would receive the traditional or redesigned income questions until they began the interview. All CPS ASEC interviewers were trained to conduct both sets of questions.

The income questions were redesigned in order to improve income reporting, increase response rates, reduce reporting errors by taking better advantage of an automated questionnaire environment, and update questions on retirement income and the income generated from retirement accounts and all other assets. The following were components of the redesigned instrument:

- Tailoring the order of income questions to match those sources most likely received by respondents given certain known characteristics of the respondent focusing on households with a householder aged 62 and older, lower income households, and a default for all other household types.
- Using a dual-pass identifying all sources of income received first and then ask amounts for those sources the respondent indicated receiving.
- Using income ranges as a follow-up for “don’t know” or “refused” income amount questions.
- Removing the family income screener for determining which households to ask low-income sources (such as Temporary Assistance for Needy Families [TANF]).
- Changing the disability questions to eliminate confusion between disability from Social Security and SSI.
- Collecting lump sum back-payments for disability benefits.
- Using a new strategy to collect property income by asking separately about income from retirement accounts and other assets.
- Collecting the value of assets that generate income if the respondent is unsure of the income generated.
- Asking about retirement account withdrawals and distributions.

Making time series comparisons across the 2013 bridge.

To assist users in gauging the impact the questionnaire changes had on income and poverty estimates, *Income and Poverty in the United States: 2014*, included Appendix D

showing estimates for 2013 by selected demographic characteristics for both the traditional and redesigned questions.⁴ In addition, the full set of detailed tables showing estimates for 2013 using the redesigned and traditional questions are available on-line.⁵ When making historical income and poverty comparisons, users should consult these tables.

For income, there were statistically significant differences for many key measures between the redesigned and traditional questions. For example, median household income calculated by using the redesigned questions was 3.2 percent higher than the median income found using the traditional questions. As a result, income differences from comparisons across the 2013 bridge (for example comparing 2007 to 2015) may be due to an actual change in income or an artifact of changes to the survey questions. However, the earnings questions were not changed in the redesign and the difference in earnings across the two subsamples was not statistically significant. Therefore it is appropriate to compare earnings over the entire length of the time series.

There were major changes to the questions concerning retirement income, interest income, dividends, disability income and public assistance. Estimates for these income sources should be compared with caution to pre-2013 estimates.

For poverty, our research found that for the total population and for most major demographic subgroups, the differences in poverty rates across the two subsamples were not statistically significant. Therefore, it is possible, with caution, to make

⁴ See <<https://www.census.gov/library/publications/2015/demo/p60-252.html>>.

⁵ See <<https://www.census.gov/topics/income-poverty/income/data/tables.2014.html>>.

comparisons to earlier years. For specific demographic groups for whom the differences were statistically significant, such as Blacks and children, comparisons may not be appropriate.