Impact of Alternative Inflation Adjustments on Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) Income Statistics

Census Scientific Advisory Committee (CSAC) March 18, 2022

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Background: Income and Poverty Report



- Provides annual income and poverty estimates
- Most downloaded Census report
- Released along with CPS ASEC public use datasets
- Scheduled for release Tuesday, September 13, 2022

Background: Inflation Adjustment



- Income and Poverty Report provides income and earnings statistics in current dollars
- Historical data provided two ways
 - Adjusted estimates for cost-of-living changes to current dollars (inflation adjustment)
 - Unadjusted estimates
- Currently use CPI index for inflation adjustment (R-CPI-U-RS from BLS)

Background: Interagency Technical Working Group Report (ITWG 2021)

- ITWG charged with studying consumer inflation measures
- ITWG comprised of representatives from several agencies (e.g. Census, BLS, BEA, SSA, CEA, USDA, HHS)
- Primary focus on adjustment of official poverty thresholds no consensus recommendation from the group
- Recommendation: Census change index used for inflation adjustment of median income and earnings statistics to chained-type price index
 - Chained-type index allows for consumer basket to change with consumer spending patterns as prices change

Background: Interagency Technical Working Group Report (ITWG 2021)

- Currently two major chained indices produced by federal agencies
 - Chained Consumer Price Index for Urban Areas C-CPI-U (BLS)
 - Personal Consumption Price Index PCEPI (BEA)
- ITWG recommended use of the C-CPI-U
 - Only available after 2000
 - Prior to 2000, ITWG recommended use of PCEPI
 - Use preliminary C-CPI-U for current year estimates
- Two alternatives to Current Method (R-CPI-U-RS)
 - C-CPI-U + PCEPI (prior to 2000)
 - C-CPI-U + Current Method (prior to 2000)

Comparing Price Index Values: 1959 to 2020



Index values relative to 2000

Year over year percent change



Note: Published values are indexed to different years. These index values are all normalized to 2000 for comparison. Source: U.S. Bureau of Labor Statistics

Impact on Household Median Income: 1967 to 2020



Note: Households as of March of the following year. The data for 2017 and beyond reflect the implementation of an updated processing system. The data for 2013 and beyond reflect the implementation of the redesigned income questions. Inflation-adjusted estimates may differ slightly from other published data due to rounding. Information on confidentiality protection, sampling error, nonsampling error, and definitions are available at <https://www2.census.gov/programs-surveys/cps/techdocs/cpsmar21.pdf>.

Source: U.S. Census Bureau, Current Population Survey, 1968 to 2021 Annual Social and Economic Supplements (CPS ASEC).

Real Median Household Income Growth Using Alternative Price Indices Over the Decades: 1970 to 2020

Real income growth (percentage)



Source: U.S. Census Bureau, Current Population Survey, 1971 to 2021 Annual Social and Economic Supplements (CPS ASEC).

Impact on Median Earnings: 1974 to 2020



Full-time, year-round workers

Notes: Workers aged 15 and older as of March of the following year with earnings. The data for 2017 and beyond reflect the implementation of an updated processing system. The data for 2013 and beyond reflect the implementation of the redesigned income questions.

Source: U.S. Census Bureau, Current Population Survey, 1975 to 2021 Annual Social and Economic Supplements (CPS ASEC).

Real Earnings Growth of Full-time, Year-round Workers Using Alternative Price Indices Over the Decades: 1974 to 2020

Real earnings growth (percentage)



Source: U.S. Census Bureau, Current Population Survey, 1975 to 2021 Annual Social and Economic Supplements (CPS ASEC).

Public Engagement Soliciting Feedback

- Special Report Appendix (September 2020 and September 2021)
 - No comments from public
- Future Engagements
 - Census Scientific Advisory Committee (March 18, 2022)
 - Expert Meeting (Webinar) (March 22, 2022)
 - Presentations by BLS and Census experts
 - Rob Cage (Assistant Commissioner, BLS) and Greg Kurtzon (Research Economist, BLS)
 - Charles Hokayem (Census) and Mathew Unrath (Census)
 - Facilitated discussion by Bob Sivinski (OMB and ITWG co-chair)
 - Society of Government Economists Annual Conference (April 1, 2022)
 - Joint Statistical Meetings (August 6-11, 2022)

Implementing ITWG Recommendation

- Need to make a decision by early April 2022 contingent on feedback from public engagement
- Adopt chained-type price index in this year's Income and Poverty Report using CPS ASEC (Released September 2022)
 - Report would include an appendix adjusting income with old index to allow users to understand the impact of the change
 - Internet tables will contain unadjusted estimates so that researchers can make their own choices about inflation adjustment
 - Income inequality statistics will not be impacted by this change
- Adopt chained-type price index in ACS income data and income data products (2023/2024)
 - Other ACS inflation-adjusted variables (housing costs) will likely follow suit

Questions for CSAC

- Are there any disadvantages to choosing a chain-type price index for inflation adjustment of income and earnings statistics?
- What are the pros and cons of using the PCEPI for the years prior to 2000?
- Given heightened public attention on inflation this year, are there any special considerations or actions we should take as/if we move to implementing this change?