

Money Income in the United States: 2002 - Comparison of Trends in Income Using the CPI-U-RS and CPI-U-X1 - Detailed Tables

In order to accurately assess changes in economic well-being, an adjustment for inflation is required. Incomes from different years need to be compared in dollars with the same purchasing power. In order to adjust for inflation, the Census Bureau uses the Consumer Price Index for urban consumers (CPI-U) provided by the Bureau of Labor Statistics (BLS). This is an index of the cost of a market basket of goods and services representing the average consumption of the urban population.

In 1983, the BLS began using a revised method to calculate the CPI-U. This method uses estimates of the cost of renting equivalent housing to measure home ownership costs. As a result, it is less sensitive than the earlier measure to changes in housing prices and mortgage rates. The official CPI-U time series reflects the old methodology prior to 1983 and the new methodology from 1983 to the present.

In order to create a consistent series over time, the BLS also created an experimental series (the CPI-U-X1) based on the new methodology for the 1967 to 1982 period. Until recently, the Census Bureau used the CPI-U-X1 for the historical series of income from 1967 to the present, and for years prior to 1967, extrapolated the X1 based on its ratio to the CPI-U in 1967.

In 1999, the BLS released a new series, the Consumer Price Index Research Series Using Current Methods (CPI-U-RS)¹. The CPI-U-RS is an index of inflation from 1978 to the present that incorporates most of the improvements in methodology made to the CPI-U over that time span into the entire series. Among other improvements, the CPI-U-RS makes quality adjustments for the aging of housing units and for the prices of used cars, personal computers, and televisions, and it employs a geometric mean formula to account for consumer substitution within CPI-U item categories. Although the research series has some limitations, including being subject to annual revisions, the BLS states that it is the most detailed and systematic estimate available of a consistent CPI series.

Currently, the Census Bureau uses the CPI-U-RS as the inflation adjuster for historical income statistics from 1978 to the present. For years before 1978, the Census Bureau extrapolates the CPI-U-RS. For 1967 through 1977, the extrapolation uses the ratio of the CPI-U-RS to the CPI-U-X1 in 1978. For 1947 through 1966, the extrapolation uses the ratio of the CPI-U-RS to the CPI-U in 1967.

Footnotes:

1. See Kenneth J. Stewart and Stephen B. Reed, "CPI Research Series Using Current Methods, 1978-98," *Monthly Labor Review*, June 1999.