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Why does BLS provide both the CPI-W and CPI-U?

By Stephen B. Reed and Kenneth J. Stewart

The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. The CPI currently tracks the spending patterns of two population groups: *all urban consumers* and *urban wage earners and clerical workers*. For 64 years, the U.S. Bureau of Labor Statistics (BLS) tracked the buying habits of only one population group. BLS then made several refinements to the CPI, one of which included broadening the population group. This move sparked controversy and has had a lasting influence on the CPI. This **Beyond the Numbers** article



briefly looks at the history and evolution of the CPI, explains the reasoning behind the creation of two main indexes, and describes the debate surrounding this development.

BLS has calculated the CPI as far back as 1913. From 1913 through 1977, BLS focused on measuring price change for groups of urban wage earners and clerical workers, or what BLS now calls the CPI-W.¹ The Consumer Price Index for Urban Wage Earners and Clerical Workers is based on the expenditures of households in which more than one-half of the household's income comes from clerical or wage occupations, and at least one of the household's earners has been employed for at least 37 weeks during the previous 12 months. The CPI-W population represents about 28 percent of the total U.S. population.

In 1978, several improvements were made to the CPI. As part of the 1978 revision, BLS planned to introduce a broader target population, covering all urban consumers (the CPI-U). The all urban consumer group represents about 88 percent of the total U.S. population. It is based on the expenditures of almost all residents of urban or metropolitan areas, including professionals, the self-employed, the poor, the unemployed, and retired people, as well as urban wage earners and clerical workers.²

There were two primary factors behind the change toward an expanded population group. First, the influential 1961 Stigler Report—which suggested several improvements to the calculation of the CPI—recommended broadening the CPI target population.³ Second, the passage of Social Security legislation in 1972, tying annual Social Security cost-of-living adjustments (COLAs) to increases in the CPI, meant the CPI was being used by an ever-increasing share of Americans.

BLS initially announced in April 1974 its intention to replace the urban wage earner and clerical worker definition of the CPI population (the CPI-W) with the broader CPI-U population. That decision, however, was criticized by some labor union leaders, members of Congress, and members of other organizations who were CPI data users. Some users did not oppose the new index, but did object to discontinuing the older index. These users were worried that the broader index would no longer be "firmly grounded in the experience of low- and middle-income workers," and they promoted the creation of a separate index covering additional workers. It was suggested that BLS continue to calculate and publish both indexes for at least 3 more years, and Congress provided an increased appropriation for the additional work.⁴

As a result, when BLS introduced the CPI-U in 1978, it continued the traditional measure of consumer inflation (the CPI-W) as well. Of course, the CPI-W was not discontinued after 3 years after all—but the funds for conducting an independent survey of prices for both official populations were. As a result of these budget cuts and because little difference was seen



between the CPI-U and CPI-W measures during this period, BLS discontinued the separate but overlapping samples of individual items and outlets maintained from 1978–1980 for the CPI-U and CPI-W.

Because maintaining two independent samples was not sustainable, BLS economists track spending and prices by using the CPI-U sample of geographic areas, outlets, items, and prices. The CPI-W is then derived by adjusting the weights for various spending categories, reflecting that the spending habits of the wage earner population differ somewhat from the all urban consumer population.

In addition to adjusting the spending weights, for a time the indexes had different treatments for measuring changes in shelter costs. In 1983, a rental equivalence approach for measuring changes in shelter costs was introduced into the CPI-U. The rental equivalence method was not introduced to the CPI-W until 1985.

As a result, since 1985, the two indexes have differed only in the expenditure weights assigned to item categories and geographic areas. While the CPI-W is used to calculate Social Security cost-of-living adjustments, most other COLAs cited in federal legislation, such as the indexation of federal income tax brackets, uses the CPI-U.

Current price trends: Overall inflation modest in 2013

All items

The U.S. all-items index rose 1.5 percent in 2013, following an increase of 1.7 percent in 2012.⁵ Aside from a 0.1-percent increase in 2008 and another 1.5-percent rise in 2010, the 2013 increase was the smallest increase in consumer inflation since 1986. Lower inflation for food, medical care, and tuition contributed to the slight moderation in overall inflation.

Food

The food index rose 1.1 percent in 2013, the lowest increase since a 0.5-percent drop in 2009, and less than half its 2.6-percent average annual rate of the past 10 years. Prices in grocery stores rose 0.4 percent in 2013, with drops in 4 of the 6 major food store groups. Nonalcoholic beverages fell 1.4 percent in 2013, with coffee prices down 7.6 percent. Fruit and vegetable prices fell 0.1 percent, with apples down 6.1 percent. Dairy and related products fell 0.5 percent in 2013, its first drop since 2009, while a 7.5-percent decline in peanut butter in 2013 contributed to a 0.4-percent drop in the index for other food at home.

Two of the six major grocery store food groups rose in 2013. Cereals and bakery products rose 0.5 percent in 2013, with bread prices up 0.7 percent. The index for meats, poultry, fish, and eggs rose 2.9 percent, with bacon prices up 9.6 percent.

Prices for food away from home rose 2.1 percent, with modest increases in prices at both full and limited service restaurants.

Energy

Energy prices rose only 0.5 percent in 2013, the same as in 2012, well below its 5.9-percent average annual rate over the past 10 years. The small increase in energy prices in 2013 was due entirely to a 3.2-percent increase in electricity prices. The increase in electricity prices was its sharpest since an 8.6-percent increase in 2008.

The other three major energy components fell in 2013. Gasoline prices fell 1.0 percent overall in 2013. Prices at the pump in 2013 were as high as \$3.79 a gallon in March, but had fallen to \$3.33 a gallon by December.

Fuel oil prices fell 1.8 percent in 2013, its first December-to-December drop since a sharp 34.2-percent decline in 2009. Natural gas fell 0.1 percent in 2013, its fifth straight yearly decline.



All items less food and energy

The index for all items less food and energy rose 1.7 percent, its smallest increase since a 0.8-percent increase in 2010, and slightly below its 2.0-percent average annual rate over the last decade. While shelter inflation accelerated in 2013, inflation for medical care and college tuition was lower in 2013 than in the recent past.

Shelter prices rose 2.5 percent in 2013, its largest advance since a 3.1-percent rise in 2007, as rental markets continued to recover from the recent recession. Rents rose 2.9 percent, while owners' equivalent rent rose 2.5 percent.

Other indexes within all items less food and energy rose as well. New vehicle prices rose 0.4 percent, while prices for used cars and trucks rose 2.0 percent. Apparel prices rose 0.6 percent in 2013. Alcoholic beverages rose 1.8 percent, while tobacco products rose 3.2 percent.

Other items showed low rates of inflation in 2013, or even fell in price. The index for medical care rose only 2.0 percent in 2013, its lowest December-to-December increase since 1949. A deceleration in inflation for both medical care commodities and medical care services contributed to the lower rate of inflation for medical care. Medical care commodities rose only 0.3 percent, due in part to the the availability of more generic brands. Medical care services rose 2.5 percent, its smallest 12-month increase since September 1972.

College tuition rose 3.9 percent in 2013. This increase, along with an identical increase of 3.9 percent in 1998, was the lowest rate of inflation for college tuition since this index began publication in December 1977.

The index for household furnishings and supplies fell 2.2 percent in 2013, led by a decline in prices for major appliances. Recreation commodities fell 1.9 percent; within this component, televisions fell 13.9 percent.

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NOTES

¹ For a complete history of how the CPI target population has changed over time, see Appendix 1 of chapter 17 of the *BLS Handbook of Methods* at http://www.bls.gov/opub/hom/pdf/homch17.pdf.

- ³ George Stigler, "The Price Statistics of the Federal Government," *Report to the Office of Statistical Standards, Bureau of the Budget* (National Bureau of Economic Research, 1961). The Stigler Committee report recommended broadening the target population to all Americans.
- ⁴ Joseph P. Goldberg and William T. Moye, *First Hundred Years of the Bureau of Labor Statistics*, Bulletin 2235 (U.S. Bureau of Labor Statistics, September 1985).
- ⁵ Price movements described in this text reflect December-to-December changes, unless stated otherwise.

² Not included in the CPI are the spending patterns of people living in rural nonmetropolitan areas, farm families, people in the Armed Forces, and those in institutions, such as prisons and mental hospitals.





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RELATED ARTICLES

More BLS articles and information related to the Consumer Price Index are available online at the following links:

The Consumer Price Index and the "Median" CPI, Beyond the Numbers: Prices and Spending.

Measures of gasoline price change, Beyond the Numbers: Prices and Spending.

Comparing new final-demand producer price indexes with other government price indexes, Monthly Labor Review.

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