

# A Separate Consumer Price Index for the Elderly?

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# Summary

The federal government, in an effort to protect the purchasing power of social security benefits, indexes those benefits to increases in the consumer price index for urban wage earners and clerical workers (CPI-W). There is concern, however, that the CPI-W may not accurately reflect the inflation experience of the elderly population. On average, the elderly spend relatively more on health care, whose price has tended to rise faster than overall prices. Other things being equal, that would suggest that the CPI-W tends to understate the inflation experience of the average elderly household. The Bureau of Labor Statistics (BLS) has developed an experimental price index to track inflation for the population aged 62 and older. The average annual rate of change between December 1982 and December 2006 for the experimental index was 3.3%; over the same period, the CPI-W rose at a 3.0% rate. No inflation measure for a large population group will exactly account for the experience of each member of that group. Differences in spending patterns, in combination with different rates of price change for all of the various goods and services included in the CPI, mean that individual inflation rate experiences may range significantly above or below the measured average. This report will be updated if economic or legislative developments warrant.

# Background

The federal government, in an effort to protect the purchasing power of social security benefits, indexes those benefits to increases in the consumer price index for urban wage earners and clerical workers (CPI-W). There is concern, however, that the CPI-W may not accurately reflect the inflation experience of the elderly population. It has been asserted that the elderly face a higher inflation rate because they tend to spend a larger share of their household budget on goods and services whose prices have been rising faster than average. More to the point, it is argued that increases in social security benefits have not kept pace with increases in the prices of those goods and services purchased by the elderly, and that some other index might be more appropriate. As Congress takes up the issue of social security reform, one item of consideration may be

the way in which benefits are indexed. Some may call for a change in the index, which is used to determine cost-of-living adjustments (COLAs) for benefits.

The CPI-W is published monthly by the Bureau of Labor Statistics of the Department of Labor (BLS). It is designed to measure changes in the prices of goods and services purchased by those who earn more than half of their income from clerical or wage occupations, and have been employed at least 37 weeks in the previous year.<sup>1</sup> This group accounts for about 32% of the total non-institutional population. But it only tracks the employed. To the extent that retirees' purchasing patterns differ, the effect of inflation on their standard of living may be different from what is indicated by the CPI-W.

#### Expenditure Patterns of the Elderly

To establish the composition of the marketbasket of goods and services whose prices are gathered in calculating the CPI, BLS collects data regularly concerning how households spend their money via the Consumer Expenditure Survey. **Table 1** presents some of these data on total dollar expenditures and how those expenditures were allocated across different categories of goods and services. In the survey, a *consumer unit* refers primarily to households. It may be a family, an individual, or a group that pools its income for consumption purposes. The figures show the distribution of expenditures in 2005 for the population as a whole as well as for the elderly population.

The largest differences in spending patterns between the elderly and the general population are found in the shares of expenditures accounted for by health care.<sup>2</sup> Those aged 65 and older spent more than twice as large a share of their total outlays on health care than did the overall population. Three other expenditure categories differed by more than 2 percentage points: transportation; insurance and pensions, which includes life insurance premiums and contributions to social security and other pension plans; and cash contributions, which are payments to persons outside the household and include alimony, child support, and care of students outside the home.

With respect to the population aged 75 and older, the differences are larger. The share of their spending allocated to health care was close to three times as large as that of the total population.

<sup>&</sup>lt;sup>1</sup> Specifically, clerical workers, craft workers, operatives, service workers, or laborers.

<sup>&</sup>lt;sup>2</sup> In the CPI, expenditure shares for health care are based on health insurance premiums and outof-pocket outlays. The CPI does not include health benefits paid by employers or federal government programs. Health care expenditure shares in the CPI marketbasket are consequently smaller than is the case in the national income and product accounts. See U.S. Department of Labor, Bureau of Labor Statistics, *Measuring Price Change for Medical Care in the CPI*, Summary 97-9, June 1998 (Revised), available at [http://www.bls.gov/cpi/cpifact4.pdf].

	All Consumer Units	65 and Older	65 to 74	75 and Older
Average annual expenditures	\$46,409	\$32,866	\$38,573	\$27,018
		Percent of Avera	ge Expenditures	
Food	12.8	12.6	12.7	12.5
Alcoholic beverages	0.9	0.8	0.8	0.6
Shelter	19.0	17.8	16.7	19.4
Utilities	6.9	8.6	8.0	9.4
Household operations	1.7	2.0	1.8	2.3
Housekeeping supplies	1.3	1.6	1.7	1.5
Household furnishings	3.8	3.7	4.3	3.0
Apparel and services	4.1	2.9	3.4	2.2
Transportation	18.0	15.7	17.0	13.9
Health care	5.7	12.8	10.8	15.6
Entertainment	5.1	4.8	5.6	3.8
Personal care	1.2	1.4	1.3	1.6
Reading	0.3	0.4	0.4	0.5
Education	2.0	0.6	0.7	0.6
Tobacco	0.7	0.5	0.6	0.4
Miscellaneous	1.7	2.6	2.7	2.4
Cash contributions	3.6	5.7	5.0	6.9
Insurance and pensions	11.2	5.4	6.7	3.5

#### Table 1. Expenditures by Age, 2005

Source: Department of Labor, Bureau of Labor Statistics.

Health care costs have consistently risen more rapidly than the average price level. Between December 1982 and December 2006, the CPI-W increased at an annual rate of 3.0% compared to a 5.4% rate of increase for the medical care component of the CPI-W. Transportation prices have been rising less rapidly than the average price level in recent years. Over the same period, the transportation component rose at an annual rate of 2.4%.

In one case, the elderly consume a greater than average share of a good whose price has tended to rise faster than overall prices, and in another they consume a smaller than average share of a good whose price has tended to rise more slowly than overall prices. Other things being equal, these two factors may lead the CPI-W to understate the inflation experience of the *average* elderly household.

#### Averages and Individuals

As noted above, the argument is often made, and not without justification, that the CPI does not represent the average inflation experience of the elderly population. But, just as the inflation experience of the elderly population may differ from that of the population at large, so too are there differences within the elderly population itself.

No summary inflation measure for a large population group will exactly account for the experience of each member of that group. Differences in spending patterns, in combination with different rates of price change for all of the various goods and services included in the CPI, mean that individual inflation rate experiences may range significantly above or below the measured average. If there is a great deal of variation in both the general population and within subgroups such as the elderly, a small difference in average inflation rates between groups may not be significant.<sup>3</sup>

Suppose the average inflation rate of the elderly population is slightly higher than the rate for the overall population, but that the distribution of individual inflation rates among the elderly is widely dispersed. In this case all of the elderly would be better off if their benefits were indexed to an inflation measure based on the average elderly household.

However, within the elderly population there would be several different consequences. First, there would be some elderly whose inflation rates would be understated by the overall rate, but exaggerated by the elderly inflation measure. Second, there would be those elderly whose inflation rates were higher than either the overall measure or one based on elderly consumption patterns. Finally, there would be a number of elderly whose actual inflation rates would be lower than either the overall measure or one based on the elderly.

One study of the distribution of inflation rates across the population found, with regard to inflation rates, that differences between demographic groups were small in comparison with the variation within those groups. Further, it was found that differences between groups tended not to be stable over time. This study argued that no one group suffered disproportionately from inflation.<sup>4</sup>

If the variation in consumption patterns is great among the elderly and if the average inflation rate of the elderly is not dramatically different from the average rate of the overall population, then arguments for a separate index for the elderly population might be less compelling.

<sup>&</sup>lt;sup>3</sup> See Department of Labor, Bureau of Labor Statistics, *The Consumer Price Index* — *Why the Published Averages Don't Always Match An Individual's Inflation Experience*, Fact Sheet available at [http://www.bls.gov/cpi/cpifact5.htm].

<sup>&</sup>lt;sup>4</sup> Robert T. Michael, "Variation Across Households in the Rate of Inflation," *Journal of Money, Credit and Banking*, vol. 11, issue 1 (Feb. 1979), pp. 32-46.

## **BLS' Experimental CPI for the Elderly**

In 1987, Congress amended the Older Americans Act of 1965 to direct BLS to develop an experimental price index to track inflation in the population age 62 and older. BLS has calculated estimates of such an index that go back to December 1982.<sup>5</sup>

**Table 2** presents those estimates alongside actual data for the CPI-W and the consumer price index for all urban consumers (CPI-U). The CPI-U measure is based on a larger population than the CPI-W and, unlike the CPI-W, takes the elderly population into account. The CPI-U is the measure of inflation most often cited in press reports. The figures show that there was only one year (1983) in which one of the two official indexes rose more rapidly than the experimental one. The average annual rate of change between December 1982 and December 2006 for the experimental index was 3.3%. Over the same period, the CPI-W rose at a 3.0% rate and the CPI-U rose at a 3.1% rate. That the CPI-U was closer to the experimental index than the CPI-W was due, at least in part, to a larger weight given to health care outlays because its marketbasket is influenced by the spending patterns of the elderly.

Although the differences in the three indexes are in the direction that might be expected, there are a number of considerations to keep in mind. Because this is an experimental index, fewer resources were used in its development. For example, the survey on which its marketbasket is based was considerably smaller than the surveys used for the CPI-W and CPI-U and so is subject to greater sampling error. Further, no additional survey was conducted to determine if the elderly shop in different outlets than the population as a whole. If BLS were to initiate an official CPI for the elderly program, it would involve more resources and might yield different results from those presented here.

The experimental index shown here is based on different weights assigned to different categories of goods and services. However, there may also be substantial differences in consumption patterns within those categories that could also change the figures shown in **Table 2**. A study by BLS looked, in particular, at spending by the elderly on prescription drugs.<sup>6</sup> Among other things, this study found that there was considerable variation in the types of drugs purchased, by age. However, the study found no strong evidence that there were significant age-related differences in prescription drug inflation.

### **Policy Considerations**

Aside from the practical considerations, such as how much of a difference having a separate price index for the elderly would make, there are a number of other things to consider. For example, if the primary purpose of developing a separate index is for social security cost of living adjustments, it should be kept in mind that not all social security

<sup>&</sup>lt;sup>5</sup> Nathan Amble and Ken Stewart, "Experimental price index for elderly consumers," *Monthly Labor Review*, May 1994, pp. 11-16.

<sup>&</sup>lt;sup>6</sup> Ernst R. Berndt, et al., "Prescription drug prices for the elderly," *Monthly Labor Review*, Sept. 1998, pp. 23-34.

recipients are elderly. Thus, the elderly population might not be the appropriate one to measure in adjusting social security benefits.

	Experimental CPI for the Elderly	CPI-W	CPI-U
1983	3.7	3.3	3.8
1984	4.1	3.6	3.9
1985	4.1	3.6	3.8
1986	1.8	0.6	1.1
1987	4.5	4.5	4.4
1988	4.5	4.4	4.4
1989	5.2	4.5	4.6
1990	6.6	6.1	6.1
1991	3.4	2.8	3.1
1992	3.0	2.9	2.9
1993	3.1	2.5	2.7
1994	2.7	2.7	2.7
1995	2.8	2.5	2.5
1996	3.4	3.3	3.3
1997	1.8	1.5	1.7
1998	1.9	1.6	1.6
1999	2.8	2.7	2.7
2000	3.6	3.4	3.4
2001	1.9	1.3	1.6
2002	2.6	2.4	2.4
2003	2.1	1.6	1.9
2004	3.4	3.4	3.3
2005	3.6	3.5	3.4
2006	2.7	2.4	2.5

 Table 2. Consumer Prices and the Elderly

(percentage change from previous December)

Source: Department of Labor, Bureau of Labor Statistics.

Having a separate price index may introduce a number of complications in other areas. If it is appropriate to have a separate elderly price index for adjusting social security benefits, should that new index be used to adjust income tax brackets of elderly taxpayers, which are currently indexed to the CPI-U? Finally, because there is substantial variation in inflation rates among individuals and between different groups of individuals, any single measure of inflation is going to over- or understate the inflation actually experienced by many.