
Social Security Abroad

Consumer Price Indexes for the Elderly: British Experience*

Legislation enacted in 1972 introduced an automatic benefit increase provision into the Old-Age, Survivors, and Disability Insurance (OASDI) program of the United States.¹ Present law calls for the adjustment of benefits for those already on the rolls to keep pace with inflation whenever the Consumer Price Index (CPI) rises by 3 percent or more from the first quarter of one year to the first quarter of the next year.

For some time, the question of whether the CPI is the appropriate measure for computing cost-of-living adjustments to benefits has stirred lively debate in the United States. On one hand, it is argued that the present CPI—developed to track movements in the economy as a whole—understates the rise in the cost of living for the elderly because of the differences in consumption habits of the elderly and the younger population. The former allocate a greater proportion of their budget to food, medical care, and utilities than do the latter. The rapid rise in prices of these types of goods and services presumably has led to an erosion of the elderly's benefit-purchasing power in the 1970's.

On the other hand, the CPI is believed to overstate the effects of inflation on the elderly because of its sensitivity to home purchase costs and to mortgage interest rates. Since the elderly do not purchase homes as often as the average consumer, some believe that benefit increases might have been higher than actually required to keep up with the true cost of living for Social Security beneficiaries.

The National Commission on Social Security, in its final report (1981), recommended continuing research to determine how a special index to measure price changes for the elderly might be constructed and subsequently used in indexing all Social Security benefits.² The creation of a special index would address the above

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¹ For a detailed discussion of automatic adjustment features of various types of benefits in both public and private plans, see Robert J. Myers, *Indexation of Pension and Other Benefits*, Richard D. Irwin, Inc., Homewood, Ill., 1978; and, more recently, Congressional Research Service, *Indexation of Federal Programs*, Committee on the Budget, U.S. Senate, U.S. Government Printing Office, Washington, D.C., May 1981.

² Legislation in 1977 created the 9-member bipartisan National Commission on Social Security for the purpose of conducting a comprehensive study of the Social Security program, including Medicare. For the final report of the National Commission, see *Social Security in America's Future*, Office of Public Information, Social Security Administration, March 1981.

questions by taking into account the particular expenditure patterns of older individuals.

In light of the National Commission's recommendations, this note assesses the experience of one European country in operating special consumer price indexes for the elderly in addition to the general consumer price index.³ The United Kingdom produces two special indexes to monitor the impact of inflation on the purchasing power of one- and two-person elderly pensioner households. The indexes are, however, not used to adjust social security benefits for inflation.

In the United Kingdom, information collected through a continuing consumer spending survey helps ensure that all three indexes reflect recent expenditure patterns of the various groups. Health care expenditures are not considered in any of the British indexes since the national health insurance program provides health services with little out-of-pocket expense. Unlike the general index, the special pensioner indexes do not track price rises in housing because of problems in estimating housing costs for the elderly, many of whom receive housing subsidies.

This study shows roughly parallel movement in 1970-80 between the general index, excluding housing, and the special pensioner indexes, with the pensioner indexes advancing though at a slightly faster pace. During this decade, the one- and two-person pensioner indexes increased at average annual rates of 14.2 percent and 14.1 percent, respectively, compared with 13.7 percent for the general index.⁴ The chief reason for this trend is that the sharpest price rises have occurred in the index categories of food and utilities, areas in which pensioners in the United Kingdom spend proportionately more of their consumption budget than does the general population.

General Price Index

The United Kingdom has collected retail price data on a continuous basis since 1914, when the official "Cost of Living Index" was introduced. Its objective was to measure movements in the cost of maintaining the pre-1914 living standard of a worker with a family.

The present general consumer price index—known officially as the General Index of Retail Prices and started after World War II—relates to the expenditure practices of most households.⁵ This index tracks the

³ Although the Federal Republic of Germany also produces a special consumer price index for retired persons, data constraints do not presently permit an evaluation of that country's experience with such an index.

⁴ In this note, average annual rates of change for a period of years are expressed as the arithmetic mean of the annual rates of exchange.

⁵ See "The unstatistical reader's guide to the Retail Prices Index," *Department of Employment Gazette*, Department of Employment, United Kingdom, vol. 83, No. 10, October 1975, pages 971-978, for a complete discussion of the construction of this index.

monthly movements in the general level of retail prices. Because the index is so broadly based, it has come to serve as a general measure of domestic price inflation.

General Index Households

The index is aimed at reflecting the average spending pattern of the great majority of British households, including those of virtually all wage earners and most salary earners. Consequently, the consumption patterns of those at the upper and lower ends of the income scale are excluded—pensioners of at least retirement age (65 for men; and 60, for women) with limited means and households with before-tax income above a specified limit. The former represents about 12 percent of British households; the latter, 3-4 percent. These consumers are excluded because their spending behavior differs significantly from that of most British households.

Price Indicators and Index Weights

Items priced in the market basket are most regular goods and services people in the United Kingdom buy, such as food, clothes, housing, utilities, household goods, transportation, and services. (Medical care expenditures do not figure in this shopping basket.)⁶ Also omitted are various forms of savings, insurance premiums, and income taxes.

The price of each item included is "weighted" so that the monthly movement in the index reflects the correct relative importance of each article in the market basket. The use of weights, based on recent findings from a continuing consumer survey of the index households, is a key feature of the price index.⁷ Most weights assigned are based on consumer survey expenditure data recorded continuously over a 1-year period, ending in June before the year in question. By picking up this recent information, the index is better able to account for continuous changes in consumer buying habits, usually by reducing purchases of items for which prices increase rapidly, and replacing the items, if possible, with less costly choices.

⁶ For an outline of the health insurance and other social security programs in the United Kingdom, see **Social Security Programs Throughout the World, 1979** (Research Report No. 54), Office of Research and Statistics, Office of Policy, Social Security Administration, 1980.

⁷ In 1953-54, a large-scale Household Expenditure Enquiry was conducted to find out how people actually spend their money. This was followed by the Family Expenditure Survey (FES) carried out continuously since 1957, though on a somewhat smaller scale, to monitor the spending patterns of a sample of households. (Presently cooperating are approximately 7,000 households geographically distributed throughout the United Kingdom.) For a description of the FES, see "Family Expenditure: A plain man's guide to the Family Expenditure Survey," **Department of Employment Gazette**, Department of Employment, United Kingdom, vol. 86, No. 2, February 1978, pages 137-147.

Pensioner Price Indexes

The need to monitor personal spending patterns and effects of inflation on older pensioners led to the construction of two special consumer retail price indexes in 1968.⁸ The first index was to cover "one-person" pensioner households, the second, "two-person" pensioner households.

The intent was not to tie adjustments in pension levels to movements in the special indexes but to obtain knowledge about the impact of inflation on older pensioners' purchasing power comparable to that obtained for population groups considered in the general index. The patterns reflected in the pensioner and general price indexes are of considerable importance to the national government in policy formulation—for example, on changes in benefit programs or in tax structure. Other primary users of this information include local governments, market research firms, employers, trade unions, and researchers.

Pensioner Index Households

In these indexes, pensioner households are defined as household units in which at least 75 percent of total income comes from national old-age and similar pensions or allowances, including benefits paid in addition to, or in place of, such pensions. Benefits counted as income for this purpose, other than old-age pensions, are general disability and war-related disability pensions and their supplements, as well as unemployment, cash sickness, and work-injury benefits.

By definition, therefore, most households in which a retired person receives a sizable private pension or earns a considerable amount of money are not covered by these indexes. The consumption patterns of pensioners who are members of households otherwise covered by the general index and whose standard of living depends on the income of the household and not on the pension level *per se* are reflected in the weights of the general index.

Besides meeting the income requirements described above, the head of the household, if a man, must be aged 65 or over, or if a woman, at least aged 60. These age limits correspond to the statutory retirement ages under the British old-age pension program. In this way, persons who have stopped working primarily because of age and whose chief income source is from the government can be identified.

⁸ The construction of these indexes followed a recommendation of the Retail Prices Advisory Committee—a group of representatives from trade unions, consumer and trade groups, academicians, and statisticians from the Department of Employment and other governmental departments. See **A Report of the Cost of Living Advisory Committee, United Kingdom**, Cmnd. 3677, HMSO, 1968.

Price Indicators and Index Weights

As indicated, older pensioners with limited means fall outside the scope of index households of the general index on the grounds that their consumption habits vary considerably from that of the general population. The drop in income and the change in life styles brought about by retirement leads to differences in spending practices.

To cope with the lower income, pensioners may adjust their expenditures downward and possibly do without certain less-essential purchases or substitute lower-priced items. This situation is especially acute for the pensioner in the United Kingdom, due to the modest earnings replacement rates of old-age benefits.⁹ A greater proportion of their consumption budgets, therefore, tend to be allocated to basics such as food and utilities. Though increased consumption of medical care is associated with old-age, pensioners in the United Kingdom do not generally pay for such services, as pointed out. The change of living associated with retirement also leads to spending modifications; for example, transportation costs would likely be reduced since work commuting is no longer required. Furthermore, child-rearing expenditures may have diminished considerably or be nonexistent for older pensioners whose children have become independent.

Consequently, the pensioner's market baskets of goods and services are made up of articles on which they spend their money. The pensioner indexes, unlike the general index, do not cover housing, as pointed out earlier. (Many pensioners receive a means-tested allowance, live in low-cost municipal housing, or may have paid off their mortgages.) Interestingly, the pensioners' indexes give consideration to collecting prices for smaller sizes of canned or packaged foods and also for prepared meals.¹⁰

Each article included in the pensioners' indexes is weighted to reflect its relative importance. The major reason for differences in weights between the two types of pensioner households is that differences in the expenditure patterns become more pronounced where there is only one household member.

The weights are revised each January based on the consumption pattern of pensioner households that par-

⁹ A study of the earnings-replacement rate of old-age benefits in 12 industrialized countries found that the United Kingdom had the lowest replacement rate. In 1975, the social security old-age pension for a single man with average earnings in manufacturing amounted to 26 percent (39 percent for a married, aged couple) of earnings in the year before retirement. See Leif Haanes-Olsen, "Earnings-Replacement Rate for Old-Age Benefits, 1965-75, Selected Countries," *Social Security Bulletin*, January 1978, pages 3-14.

¹⁰ For other distinctions between the various market baskets, see "Retail prices indices for one-person and two-person pensioner households," *Employment and Productivity Gazette*, Department of Employment, United Kingdom, vol. 77, No. 6, June 1969, pages 542-547.

ticipated in the consumer spending survey in the 3 years ending in June prior to the January date of revision. The market basket is revalued at the prices obtained at the revision date. This method of revision differs from that of the general index, in which weights are revised on the basis of spending behavior of cooperating households during a single year ending the June before the revision date.

Table 1 compares the 1981 weighting patterns assigned to basic categories of goods and services, excluding housing, purchased by one- and two-person pensioner households and by general index households. (Though housing is included as a price indicator for the general index, the United Kingdom constructs an index without this expenditure to permit comparisons between the three indexes.) The weights in the table reflect the purchasing patterns in the 3-year or 1-year periods ending June 1980 for pensioners and for general households, respectively, revalued at January 1981 prices.

The data in table 1 show the higher relative importance to retired persons than to general households of expenditures on food consumed at home and on utilities. When combined, these expenditures represented 55-60 percent of the pensioners' consumption budgets, but only about 30 percent of the general population's. Expenditures on items more responsive to declines in income or changes in life styles—such as restaurant meals, household furnishings, clothing, and transportation—comprised a smaller proportion of total expenditures for pensioners than for the general population. For all three household types, the proportions spent on tobacco, miscellaneous goods, and services were similar.

Trends in Index Movements

During the past decade, movements in the general index and the special pensioner indexes have differed rela-

Table 1.—Index weights, by type of household, 1981

Item	General price	One-person pensioner	Two-person pensioner
All items, excluding housing	1,000	1,000	1,000
Food			
At home	239	389	389
Away from home	49	19	13
Alcohol	92	25	41
Tobacco	42	30	48
Utilities	71	207	161
Household goods	75	42	47
Clothing	94	71	72
Transportation	175	28	70
Miscellaneous goods	86	88	84
Services	77	101	75

Source: "Pensioner households RPI weights' revision," *Employment Gazette*, Department of Employment, United Kingdom, vol. 89, No. 4, April 1981, pages 182-183.

tively little. This trend is especially interesting because the period covered was marked by rapid price rises, and the composition of items selected and their corresponding weights varied from one index to another.

As indicated, pensioners spend a much larger proportion of their budget on food and utilities than do the general index households, and they spend proportionately less on other categories. Consequently, food and utility price rises would have a much greater effect on pensioner households than on general households. For 1970–80, price rises in these two categories were substantial. The combination of heavy weights for food and utilities and their above-average price increases tended to pull the pensioner indexes up to the level of, and eventually to surpass, the general index.

Table 2 compares movements in the general index and the pensioner indexes. On the average, over the 10-year period ending with 1980, the two-person pensioner index increased at an annual rate of 14.1 percent, and the one-person pensioner index by 14.2 percent, compared with 13.7 percent for the general index.

In the long run, if allowances could have been made in the pensioners' indexes for housing, however, British planners believe the gap between the pensioner indexes and the general index would have been narrowed still further. The effect of housing allowances and subsidies that help cushion against the rise in housing costs is proportionately greater for pensioner households.

If movements from one year to the next are considered, however, the differences between the three indexes were frequently greater and not always in the

same direction. For example, from 1973 to 1974 the pensioners' indexes rose 16.1 percent contrasted with a 16.7-percent rise in the general index. Over the following year, however, this particular pattern switched, with the general index registering a 25.0-percent increase and the one- and two-person pensioner indexes showing 25.8-percent and 25.3-percent gains, respectively.

Over the years 1970–80, the trend was generally for the pensioners' indexes to move at a slightly more rapid pace overall than the general index. The growth differential was reversed in the last 3 years of this time series, however, as annual percentage increases in the general index from 1977 through 1980 surpassed those in the pensioners' indexes. The average annual rate of increase for these years was 12.4 percent in the general index, but only 12.1 percent in the one-person and 12.0 percent in the two-person pensioner series.

The major reason for the recent trend reversal has been attributed to the slower rise in food prices as compared with prices in general (excluding housing). During the past few years, the slower acceleration in food prices tended to offset the rapid increase in utility prices. Because food and utility prices carry more weight in the pensioners' indexes, this offset has had the effect of slowing down those indexes relative to the general index.

Value of Maintaining Pensioner Indexes

From the viewpoint of social security, the value or effectiveness of producing a separate retail price index for pensioners of limited income has been discussed in the United Kingdom. In some respects, these discussions are similar to those posed in the United States concerning the construction of a consumer price index around the purchasing patterns of the elderly.¹¹

As indicated, the purpose of special pensioners' indexes was to monitor the impact of inflation on the purchasing power of elderly pensioner households with limited income. The indexes have been useful in this regard. Nevertheless, some persons in the United Kingdom argue that the pensioners' indexes have had no practical value since it is the general index—rather than either of the pensioners' indexes—that is used for social security benefit adjustments. At present, the old-age pension as well as other social security benefits are subject to an annual review to safeguard their value in rela-

Table 2.—Comparison of pensioners' indexes with the general price index (excluding housing), annual averages, 1970–80

[January 15, 1974 = 100]

Year	General price		One-person pensioner		Two-person pensioner	
	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change
1970.....	73.5	....	71.1	....	71.1	....
1971.....	80.5	9.5	78.3	10.1	78.1	9.8
1972.....	85.8	6.6	84.3	7.7	83.9	7.4
1973.....	93.3	8.7	92.4	9.6	92.5	10.3
1974.....	108.9	16.7	107.3	16.1	107.4	16.1
1975.....	136.1	25.0	135.0	25.8	134.6	25.3
1976.....	159.1	16.9	160.8	19.1	159.9	18.8
1977.....	184.9	16.2	187.8	16.8	186.7	16.8
1978.....	200.4	8.4	203.1	8.1	201.6	8.0
1979.....	225.5	12.5	226.8	11.7	225.6	11.9
1980.....	262.5	16.4	264.2	16.5	261.9	16.1
Average annual rate.....	....	13.7	....	14.2	....	14.1
Average annual rate, 1977–80.....	....	12.4	....	12.1	....	12.0

Sources: For 1970–74, *Employment Gazette*, Department of Employment, United Kingdom, vol. 83, No. 4, April 1975, page 382; for 1974–80 data, *Employment Gazette*, Department of Employment, United Kingdom, vol. 89, No. 3, March 1981, page S60.

¹¹ For recent writings on this issue as it relates to the U.S. Social Security program, see *Social Security in America's Future*, op. cit.; and *Indexation of Federal Programs*, op. cit.

¹² A more detailed discussion of the British benefit adjustment process falls outside of the scope of this note. For further discussion of the procedure as well as the legislative changes that have occurred since the review process was initiated in 1971, see A. I. Ogus and E. M. Barendt, *The Law of Social Security*, Butterworths, London, 1978; and A. I. Ogus and E. M. Barendt, *The Law of Social Security: First Supplement*, Butterworths, London, 1979.

tion to the general level of prices.¹² At the time of this review—usually in April—the government determines the amount of increase necessary to keep benefits in line with the cost of living. The increase would then be applied in November of that same year. This approach differs from that of the U.S. Social Security programs in which OASDI benefits in force are adjusted automatically on the basis of the CPI.

If the pensioner indexes were to be used to adjust old-age benefits, the question is whether these indexes, based on the consumption habits of elderly pensioners with limited means, would be appropriate for adjusting the levels of other social security benefits for price increases. Many persons receiving long-term social security benefits are younger persons who may either be disabled and getting disability pensions, or they are widows, widowers, or orphans drawing survivors' benefits. Information about their particular consumption patterns is very limited. The use of one type of indexing for old-age pensioners and a second type for other long-term beneficiaries is thought to be difficult and cumbersome, both administratively and technically.

Another problem with the pensioner indexes in the United Kingdom is that they do not adequately reflect

the effect of inflation on the purchasing power of many old-age pensioners. By definition, the special price indexes for elderly pensioners include only those households that derive 75 percent of their income from social security benefits. Because private pensions are rather widespread,¹³ and because beneficiaries might have other income sources, an estimated 50 percent of old-age social security pensioners are outside the definition. Another distortion comes from the exclusion of housing costs for the elderly pensioner from the special indexes, as explained earlier. Finally, and probably the most significant argument against basing benefits on the pensioners' index is that—as the British experience has shown—the use of the pensioners' indexes over the long run would result in relatively little difference to benefit rates. These three indexes (the general index, and the one- and two-person pensioners' indexes) behave quite similarly. Theoretically, they could be quite different, but experts do not anticipate that this will happen.

¹³ For a discussion of private pensions in the United Kingdom, see Max Horlick and Alfred M. Skolnik, **Mandating Private Pensions: A Study of European Experience** (Research Report No. 51), Office of Research and Statistics, Office of Policy, Social Security Administration, 1979.