

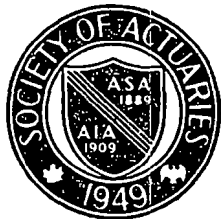


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INDEX-INDUCED INFLATION

by Geoffrey N. Calvert

Great damage is being done to the U.S. economy as a result of the widespread misunderstanding that the Consumer Price Index measures changes in the cost of living. It does not; but the common belief that it does tragically underlies the practice of CPI indexing (through cost-of-living adjustment clauses) of wage rates applying to tens of millions of workers; also CPI-indexing of Social Security benefits to more than thirty million recipients, and of civil service and other pensions to millions of others. The terms "CPI indexing" and "cost-of-living adjustments" are used interchangeably in many government documents, labor contracts, and reports of all kinds, as though they meant the same thing, but they do not. The fact is that the CPI *overstates* the rise in the cost of living by upwards of 2% annually, and this overadjustment is feeding right back into the inflation. By attempting to compensate for the inflation, and, in doing so, by *overcompensating*, we are accelerating the very condition we are trying to recognize.

How does this overcompensation arise? It arises through (i) measurement of the *wrong thing* by the CPI, (ii) *incomplete* measurement of the cost of the end use to the consumer, and incredibly, (iii) *inclusion of cost but exclusion of benefit* of many products used by the consumer. These points are clearly brought out by the following examples drawn from the work of academic economists Ruggles of Yale and Gordon of Northwestern, and of consulting economist Lee Moore of New York.

(1) Let us start with these statistics on motor tires:

	Price	Life	Cost per mile
1935 4-ply cotton	\$13	7,000 miles	.186 cents
1978 steel belted radial	\$68	40,000 miles	.170 cents

Ignoring the increase in miles delivered by each tire, the CPI tire price index rose 140%, but cost per mile fell by 9%.

(2) The CPI similarly ignores many other changes in quality and performance.

- Modern motor oil goes 5 or 10 times as many miles as the oil of 30 years ago;
- Today's television set lasts longer, uses less electricity, needs fewer repairs, and shows better pictures than 15 years ago;
- A jet plane flies faster, saving time which has value, and is safer;
- A modern razor blade gives more and better shaves.

(3) Similarly many kinds of taxes (other than direct income taxes) flow directly into the CPI, but *all* the government services we receive in return are incredibly omitted!

(4) The CPI movie entertainment index is up 330% since 1948, whereas the cost of equivalent programs on TV is down 80%.

(5) The gasoline excise tax went straight into the CPI, but the superhighway system that we got for it was ignored, and with it all the saving in time, gas, wear and tear, and the improvements in comfort and safety.

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Editorial Support

Jonathan L. Wooley, who is now relinquishing his post as Associate Editor, has been an example to us all in his painstaking and thorough attention to the details that determine the quality of a magazine. Since January 1975 he has watched over the accuracy of words and formulas. Our warmest thanks to Jonathan.

WOMEN IN OUR PROFESSION

by Esther H. Milnes

No doubt about it—there are more women in the actuarial profession these days. That shouldn't be a surprise since more women have been entering the labor force over the last twenty years. Women now make up 41% of the work force, and 1 out of 6 of them is in a profession.

Of course, the actuarial profession has been affected by these changes. For example, at Society meetings we've all noticed increases in the number of women who are FSA's and men who are AP's (accompanying persons). Let's take a closer look at some of these changes. Have women faced the same difficulties in the actuarial profession as in medicine or law? Where do we stand now? How is our track record compared to other professions?

Women in the professional world have been examined in publications from *The Wall Street Journal* to *Redbook*. Women now established in their professions say how difficult it has been to reach these positions. There are many stories of disparate pay, lack of respect, and struggle with prejudice.

Was it any different in the actuarial profession? Probably not. Josephine Beers provided some examples. When she started her career in 1929, the start-

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Index-Induced Inflation

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(6) A set of calculations that cost \$1.26 to do by IBM computer in 1952 now costs 0.7 of a cent—but this startling reduction is nowhere reflected in the CPI.

(7) Economies of scale are similarly omitted. The CPI electricity index is up 46% per KWh since 1917, but by using more, the average consumer actually pays 51% less per KWh. (The average American worker earned one KWh in 902 seconds in 1917, in 98 seconds in 1947, in 29 seconds in 1967, and in 26 seconds in 1978).

(8) A \$200 microcomputer has as much computing capacity as a \$1 million room-size computer in 1954; but it is not in the CPI. Pocket calculators were excluded until *after* their price had fallen 90%, or 98% from comparable desk calculators.

(9) From 1918 to 1940 the CPI represented the cost of shaving by barbers, whose fees accounted for 0.4% of the 1918 CPI and stayed in the index until 1940, even though the safety razor (which cost much less) became the dominant shaving method in the 1920's—a good illustration of obsolescence in the face of continuing technical substitution.

(10) When 100% cotton sheets were displaced by polyester blends needing less care and giving longer life, this value improvement was ignored by the CPI.

(11) Penicillin was excluded from the CPI until *after* its price had fallen by 99%.

(12) Today's radical increase in miles per gallon delivered by the average automobile is being ignored, but the increase in the cost of each gallon is counted in the CPI—a blatant distortion of the cost of personal transportation.

(13) The fuel efficiency of a wide range of products is being rapidly improved as a step toward meeting the energy squeeze. The CPI ignores this, but it counts the rise in energy cost per unit.

(14) Substitutions of low-priced for high-priced items are going on all the time, as relative prices change; and substitutions of better-value or better-quality items or materials for poorer ones. The CPI assumes that none of this is happening.

(15) Convenience foods save time and waste, but these very real values are ignored by the CPI.

One could easily extend this list, but the above items suffice to show that the CPI, with all its fateful impact on the economy, is *not* a measure of the actual cost of living at all, but is instead a highly incomplete, inaccurate, and misleading gauge which is based on the prices of a stated, rigid, outdated set of items that are connected with the actual cost of living only in a rude and even indirect way. Not only is it inaccurate as a measure of living costs; it is consistently biased upwards, making it a prime cause of inflation.

As the price of energy rises, but conservation measures shrink our need to use it, does it make sense to increase the incomes of one section of the population so as to adjust fully for the rise in its price, thus placing them in a position to use fully as much as before, while everyone else must cut back twice? When taxes are increased to pay for a new government service, must those with indexed incomes have these taxes refunded (through CPI adjustments in their incomes) so that these government services are provided to them at no cost, while those with non-indexed incomes must carry twice the load?

In indexing incomes and benefits for one section of the population by the crude application of this rough tool, we are (i) constantly *elevating* the economic status of this section at the expense of the remainder, and (ii) speeding up the inflation so that the non-indexed population has to withstand a double impact, as living standards, savings, pensions and insurance values wither. In a period dominated by an energy crunch, faltering productivity, and a need for belt-tightening, this procedure is indeed inequitable and anomalous.

Is it not time for us to take this whole matter in hand?

FEDERAL STATISTICS

DHEW Annual Report on Health, United States, 1978.

Single copies of the report, *Health, United States, 1978* [DHEW Publication Number (PHS) 78-1232] may be obtained from the National Center for Health Statistics, Room 1-57, Center Building, 3700 East-West Highway, Hyattsville, Md. 20782. It is a compendium of health statistics, data on health providers, expenditures, usage — 1976 and 1977 data and projections.

Proposed Federal Budget for Fiscal Year 1980—Unified Budget and an Alternative Concept.

Single copy available from the Tax Foundation, 1975 Connecticut Avenue, N.W., Washington, D. C. 20009.

Demographic, Social, and Economic Profile of States: Spring, 1976.

P-20, No. 334, may be obtained for \$3.00 from GPO*.

Estimates of the Population of States, by Age: July 1, 1977 and 1978.

Series P-25, No. 794, may be obtained for 70 cents from GPO*.

Perspectives on American Husbands and Wives, Special Studies.

Series P-23, No. 77 is available from GPO*, \$2.30 per copy. First study of joint characteristics (demographic and economic) of married couples.

The Future of the American Family and Prospective Trends in the Size and Structure of the Elderly Population, Impact of Mortality Trends and Some Implications.

These are in one Report, Series P-23, No. 78, \$1.30 per copy, from GPO*.

Reasons for Interstate Migration: Jobs, Retirement, Climate, and Other Influences.

Covers moves from August 1973 to December 1976. Census Bureau publication, Series P-23, No. 81, available from Government Printing Office for \$1.50 per copy.

Utilization of Short-Stay Hospitals: Annual Summary of the United States, 1977.

Gives estimates by age, sex, and color of patients and by geographic region, size, and ownership of hospital. Also, statistics on diagnoses and operations performed. Utilization is in terms of frequencies, days of care, and average lengths of stay. Single copies are available free of charge from NCHS, Room 1-57, Center Building, 3700 East-West Highways, Hyattsville, Maryland 20782, Attn: M. Murray.

Population Profile of the United States: 1978.

1978 statistics on population growth, social characteristics, employment and income, etc. Series P-20, No. 336, available for \$2.40 from GPO.

*Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.