



SOCIETY OF ACTUARIES

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## JUSTING OASDI BENEFITS IN UNUSUAL ECONOMIC TIMES

by Robert J. Myers

The existing provision for automatic increases in Social Security benefits proportional to the rise in the Consumer Price Index is sound, I believe, provided the CPI itself is a reasonable and proper index.

But if, over any extended period, prices rise more rapidly than wages, it is unfair for active workers to be burdened by a lowered standard of living, while beneficiaries get the benefit of a full CPI increase at the expense of those workers. Hence, under such circumstances the adjustment should somehow be modified.

Simply basing the benefit increase on the lower of the wage and price changes does not solve the problem satisfactorily, because it gives beneficiaries the worst of both worlds under conditions that are mere fluctuations. For example, if wages increase more than prices by 1% in one year, but the reverse occurs in the next year, it seems just and proper to use the price index for both years.

I have developed a modification of the automatic-adjustment provision that I believe works equitably in unusual economic times when wages rise less rapidly than prices for several successive years. I propose that the percentage increase derived by the present method be reduced by the average percent that the wage increase was lower than the CPI increase in the second and third preceding years. This plan takes into account the necessary lag in obtaining indexing factors for wage changes as compared with factors for price changes under the present definitions of those factors.

One possible version of this proposal would be to provide that such reductions be offset by later adjustments upward when wage increases again become larger than price increases.

An illustration of both parts of this plan is presented in the table below. As an example, the 1981 CPI increase as derived under present law would be reduced by 0.1 percentage points so as to reflect the average 0.1% excess of the CPI over wage increases that occurred in 1978 and 1979. Beginning in 1985

in this example, CPI adjustments would be increased until the illustrated reduction of 7.4 percentage points for 1981-84 had been restored.

Objection might be raised to the logic of imposing reductions in years, such as 1982 in the illustration, when wages

are increasing more rapidly than prices. The answer to this criticism is that, because of the lag, beneficiaries will have had larger benefits than if the adjustment data had been available currently, so really they are somewhat ahead, rather than behind.

### Illustration of Proposed Automatic-Adjustment Plan For 1980-86

Year	Increase under Present Law	Wage Increase from Prior Yr.	(2) (minus) (1)	Avg. of col. (3) for 2nd & 3rd prior yrs.	Adjusted Increase (1) + (4)
	(1)	(2)	(3)	(4)	(5)
1978	6.5%	7.9%	+1.4%		
1979	9.9	8.3	-1.6		
1980	14.3	8.5	-5.8		
1981	10.0	9.0	-1.0	-.1%	9.9%
1982	9.0	9.6	+.6	-3.7	5.3
1983	7.0	8.0	+1.0	-3.4	3.6
1984	6.0	7.6	+1.6	-.2	5.8
1985	5.0	n.a.	n.a.	+.8	5.8
1986	5.0	n.a.	n.a.	+1.3	6.3

The figures above the line are actual (or reasonably close thereto). Those below the line are only for purposes of illustration.

### Letters

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#### An Author Replies

Sir:

The figures in my article (Feb. issue), on which Messrs. Kovacs and Myers have kindly commented, were designed for use with 1979 monthly earnings. When E represents 1980 earnings, the relationships are:

1980 Monthly Earnings (E)	Approximate AIME
Up to \$1,125	.942 E
\$1,126 - 2,313	$-(.0023E)^3 - (.0145E)^2 + 1.153E$
Over \$2,313	\$1,382

The method was intended, as Mr. Myers said, to produce values at the beginning of the calendar year of attaining age 65. The formula for retirements occurring uniformly through the calendar year, would be:

$$PIA (CYB + 65) = PIA (1979) \times 1.07^{CYB-1974} \times (1 + [.07 \times 7/12])$$

Mr. Myers also is correct in saying that the birth-year must be 1917 or later, i.e., within the period to which the AIME method applies.

My assumption wasn't that the rates of CPI and average wage increases would be the same, but that replacement ratios for workers with the same present earnings but different years of birth would be the same percentage of their final earnings. This was the intent of those who legislated the 1977 amendments, and it appears they were successful.

As Mr. Myers observed, the greatest divergence between exact values and my approximation is at the highest earnings levels. As time goes on, my method should become more accurate in that range; meanwhile, the distortion is not excessive for the age and salary distributions of most plans.

Richard Carson