

### Chapter 3.-Benefit Structure

This Panel's recommendation for a new formula for calculating retirement benefits is built upon our belief that the objectives discussed in Chapter 2 can be achieved more satisfactorily and more completely through our recommended formula than through the formula in the present law or through other proposals that are being considered. The specific objectives that are relevant to the changes we are recommending are listed here; other objectives that are basic to a continued successful national pension system but that do not bear upon choice of the benefit formula are omitted.

- Objective I. Reducing sensitivity of benefits to changes in economic conditions.
- Objective II. At least maintaining the purchasing power of benefits within each generation and also for successive generations of retired people.
- Objective III. Leaving to Congress *at the time* the final decision on the degree to which benefit levels and supporting taxes should be increased.
- Objective IV. Improving the equity and social adequacy of the system.
- Objective V. Avoiding inadvertently supplying opportunities to obtain benefits larger than Congress intends.
- Objective VI. Making the benefit computation process more readily understandable.
- Objective VII. Avoiding duplication of benefits granted by other programs.
- Objective VIII. Encouraging continued development of personal savings and private pensions.

This chapter contains, *first*, a description of the benefit formula that this Panel recommends; *second*, our recommendation for orderly transition from the present to the new formula; *third*, explanation of how our proposal promotes the objectives listed above; and, *fourth*, analysis of the pros and cons of "final-average" (and the somewhat similar "High-5", etc.) benefit formula types that have been discussed but which the Panel believes would prove unsatisfactory.

#### DESCRIPTION OF RECOMMENDED BENEFIT FORMULA

For retirement at age 65 in late 1976 or early 1977:

Average indexed monthly earnings (AIME):	Initial monthly benefit (PIA)
Less than \$200	80 percent of AIME.
\$200 to \$600	\$90 plus 35 percent of AIME.
Over \$600	\$150 plus 25 percent of AIME.

Expressed in a different way, this formula is:

80 percent of the first \$200 of AIME, 35 percent of the next \$400, 25 percent of the excess over \$600. This formula is designed for indexing by the Consumer

Price Index (CPI). As the CPI rises, the dollar amounts (\$200 and \$600, and \$90 and \$150) in the formula will rise proportionately, but the percentages (80 percent, 35 percent, and 25 percent) will remain the same.

The recommended computation periods, averaging periods and numbers of dropped-out years remain the same as under present law. Also, the formula for reduction in retirement benefits that begin before age 65 would be unchanged except as recommended in chapter 7.

The general procedure for setting the Maximum Taxable Earnings Base (MTEB) continues as at present except for a single increase to the point, estimated at \$18,900 for 1977, needed to embrace the entire earnings of 90 percent of covered workers, and with provision for periodic monitoring to assure that approximately this percentage continues to be within the future MTEB. The following table shows the percentages, corresponding to the 90 percent level we are recommending, of workers whose entire earnings have been within the taxable earnings base, in past years.

ESTIMATED PERCENTAGES OF ALL COVERED WORKERS WHOSE ENTIRE EARNINGS WERE WITHIN THE MAXIMUM TAXABLE EARNINGS BASE [1]

	1940	1945	1950	1955	1960	1965	1970	1973
Millions of workers	35.4	46.4	48.3	65.2	72.5	80.7	93.1	100.2
Percent having entire earnings within MTEB_	96.6	86.3	71.1	74.3	71.9	63.9	74.1	79.7
Percent men only	95.4	78.6	59.9	63.3	60.8	51.0	61.8	68.7
Percent women only	99.7	98.9	94.6	93.9	<b>93.4</b>	87.3	93.5	96.3

[1] From Tables 39 & 40, "Social Security Bulletin, Statistical Supplement," 1973.

This Panel favors a proviso, which we believe and hope will rarely if ever have to be invoked, that in the event that the national wage-level grows more slowly than the price-level for an extended period, benefits will be adjusted upwards in proportion only to wage growth rather than to price growth. This would apply only if Congress decides at the time that such a limitation is necessary in the national interest. Particulars of this provision are set forth in Chapter 7.

## ILLUSTRATIONS

The following illustrations are designed to assist in picturing how benefits will grow if this Panel's formula comes into effect. They are shown in figures and also in Chart A that follows.

BENEFIT ILLUSTRATIONS-WORKERS WITH (a) MEDIAN, (b) MAXIMUM TAXABLE, EARNINGS  
ASSUMPTIONS ARE DESCRIBED AT END OF THIS CHAPTER

Year of birth Year of retirement	1911 1976	1918 1983	1925 1990	1932 1997	1939 2004
MONTHLY RETIREMENT BENEFIT IN 1976 DOLLARS					
Median earnings:					
Men:					
Price-indexed formula	341	375	408	450	511
Wage-indexed[1] formula	347	430	499	578	<b>674</b>
Women:					
Price-indexed formula	281	293	312	327	357
Wage-indexed formula	268	321	379	431	505
Maximum taxable earnings:					
Price-indexed formula	352	399	438	489	563
Wage-indexed formula	361	440	513	596	699
"SHORT" REPLACEMENT RATIOS (PERCENT) <sup>2</sup>					
Median earnings:					
Men:					
Price-indexed formula	42	35	32	30	30
Wage-indexed formula	43	40	39	39	40
Women:					
Price-indexed formula	52	45	38	35	33
Wage-indexed formula	50	49	46	46	47
Maximum taxable earnings:					
Price-indexed formula	30	25	24	23	23
Wage-indexed formula	31	28	28	28	29

## BENEFIT ILLUSTRATIONS-WORKERS WITH (a) MEDIAN, (b) MAXIMUM TAXABLE, EARNINGS-Continued

## "LONG" REPLACEMENT RATIOS (PERCENT) [2]

Median earnings:					
Men:					
Price-indexed formula	38	33	30	29	29
Wage-indexed formula	38	38	37	37	38
Women:					
Price-indexed formula	46	44	39	35	34
Wage-indexed formula	44	48	47	47	48
Maximum taxable earnings:					
Price-indexed formula	36	29	26	25	25
Wage-indexed formula	36	32	30	31	31

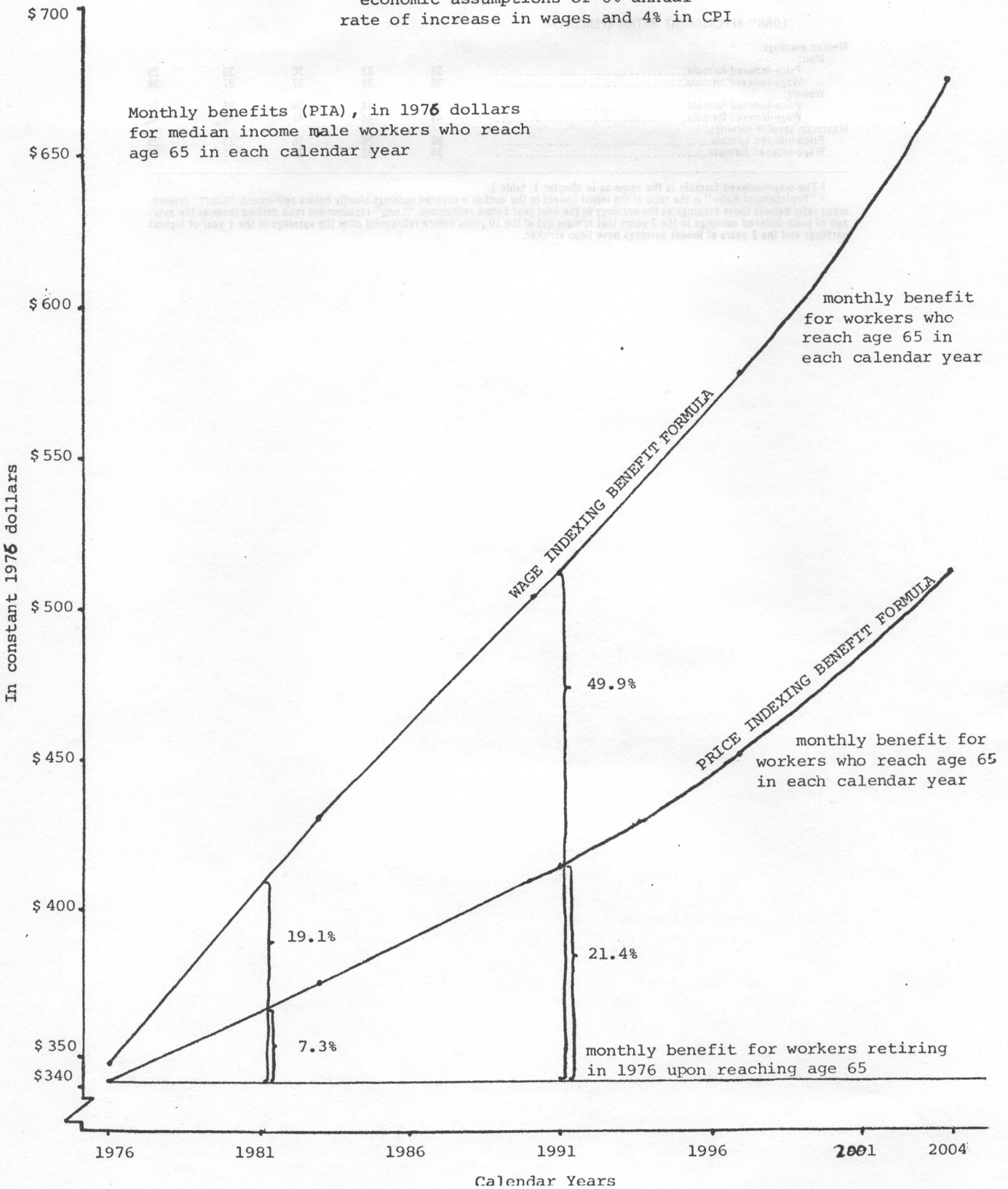
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[1] The wage-indexed formula is the same as in chapter 1, table 1.

[2] "Replacement Ratio" is the ratio of the initial benefit to the worker's covered earnings shortly before retirement. "Short" replacement ratio defines those earnings as the earnings in the final year before retirement. "Long" replacement ratio defines them as the average of price-indexed earnings in the 7 years that remain out of the 10 years before retirement after the earnings of the 1 year of highest earnings and the 2 years of lowest earnings have been stricken.

Benefit illustrations, using ultimate economic assumptions of 6% annual rate of increase in wages and 4% in CPI

Monthly benefits (PIA), in 1976 dollars for median income male workers who reach age 65 in each calendar year



## COMMENTS ON THESE ILLUSTRATIONS

These illustrations are displayed in a manner designed to emphasize two matters that this Panel believes to be of great importance.

The first point is that the effects of any particular formula should be studied in terms of what that formula accomplishes in each of two related but distinct measures, these being (a) the purchasing power of the benefit, and (b) the relationship of retirement benefit to income covered for Social Security just before retirement, i.e., the "replacement ratio".

Discussion of Social Security benefit structure has concentrated heavily upon the second of these as the criterion of reasonableness. But we believe it is just as important to discover whether the proposed formula succeeds in granting nearly equal purchasing power to comparable workers who retire at different times. That is why our table shows the results in terms of constant (1976) dollars as well as in terms of replacement ratios.

Having said this, we must also point out that the definition of "comparable workers who retire at different times" is much more elusive than seems always to be recognized. In our rapidly changing economic and social environment it is a mistake to assume that the future shape of the curve of earnings for even the median worker will be similar to that of the median worker who has already retired. This warning applies with even greater force to earnings of women in view of the changing role of women in the labor market and the widening prohibitions upon discrimination by sex.

The second point is that in studying replacement ratios as criteria of benefit suitability, errors can be made by relying upon a single post-retirement/pre-retirement relationship. Almost no workers in this or any country enjoy a pattern of lifetime earnings that follows the national average pattern particularly when that national average pattern combines, as is customary, wages of people at all ages. It is even true that national median wages portray a pattern that applies to relatively few people. Wage fluctuations are the rule, not the exception.

With this in mind our Panel shows two replacement ratios with the definitions recited at the foot of the table. It is noteworthy that even for the median earnings cases these ratios show markedly different results.

The conclusion that one reaches from these considerations is that any proposed benefit formula must be subjected to a large number of tests involving different earnings patterns, different economic assumptions and different definitions of pre-retirement earnings for replacement ratio calculations.

## THE PANEL'S RECOMMENDATIONS FOR TRANSITION

Whenever a change to a new benefit structure is made, special attention must be given to its effect upon people who at the time of the change are close to retirement. This Panel favors what we call a *transition* rather than a different form of arrangement that is sometimes, but rather dubiously, labelled *guarantee*. Our reason for doing this is that we doubt the ability of designers to construct a form of guarantee that, in a period of rapid price change, will be considered as solid a guarantee by the prospective recipient as it may be by the framers thereof.

Our proposal is that no change be made for workers born in 1917 or earlier, regardless of when they retire, and that there be a 5-year transition period during which the benefit to a retiring worker (born after 1917) would be calculated as a blend of the benefits that would emerge under the old and new laws, regardless of which in his or her case is the larger. This blend would be calculated thus:

<i>Year of birth</i>	<i>Retirement benefit will be:</i>
1917 or earlier	100 percent of the old-law benefit.
1918	80 percent of the old-law benefit plus 20 percent of the new-law benefit.
1919	60 percent of the old-law benefit plus 40 percent of the new-law benefit.
1920	40 percent of the old-law benefit plus 60 percent of the new-law benefit.
1921	20 percent of the old-law benefit plus 80 percent of the new-law benefit.
1922 and later	100 percent of the new-law benefit.

The Panel recommends that this transitional arrangement be based upon year of birth, not year of retirement. Thus 100 percent of the new-law benefit would apply to workers born in 1922 and later. This transitional arrangement was selected to avoid sizable benefit differences depending on date of retirement. If retirement benefits vary by date of retirement for workers born in the same year, then it will lead to many requests for benefit calculations by the Social Security Administration, and incentives for workers to retire at different dates.

**HOW OUR RECOMMENDATION PROMOTES THE EIGHT OBJECTIVES ON THE FIRST PAGE OF THIS CHAPTER**

**Objective I.** Reducing Sensitivity of Benefits to Changes in Economic Conditions

It has been heavily and rightly emphasized that, in the words of one report,<sup>[1]</sup> the benefit provisions of present laws "may result over the long range in unintended, unpredictable, and undesirable variations in the level of benefits." This Panel endorses indexing of earnings records as the best solution to this problem. For this specific purpose we do not claim that indexing by CPI is superior to indexing by national average wages. Either method accomplishes this objective, and either approach is superior to any alternative that we have studied.

**Objective II.** Maintaining the Purchasing Power of Social Security Benefits and

Objective III. Restoring Congressional Control over the System

These objectives are different but are best considered here as a unit because this Panel's recommendation for indexing by prices rather than wages relates to both of them and to the relationship between them.

Nobody knows what the future has in store for the relationship between wage levels and price levels, particularly during relatively short periods of possible economic difficulties. The expectation and hope are that this country will enjoy continued growth in real earnings, i.e., more rapid growth in average wages than in average cost of living. Moreover, in the future, as in the past, unpredictable social, demographic, and economic changes will have serious effects on the social security system. For example, discovery of cures for any major diseases would materially alter the benefit disbursements.

The Panel believes the Congress would do best if it were to recognize that a fully automatic system is a less desirable goal than is a partly automatic system that embraces a limited objective and leaves to the future the key decision on how far beyond that limited objective the financial condition of the country and of the system itself will permit. An important implication is that this leaves Congress the flexibility to decide how the increase should be divided among different classes of beneficiaries, reflecting the social needs of the time. We believe also that in accepting a solution geared to:

*Moderate Automatic Objective-Plus-Congressional Decision*

it is legitimate and proper to keep in mind that most Social Security beneficiaries,

[1] Reports of the Quadrennial Advisory Council on Social Security (1975), p. xv.

now and for many, many years into the future, will be receiving retirement benefits whose value is far greater than could have been purchased outside the system by the accumulated combined contributions to the system made from their own earnings *and* by their employers on their behalf.

The Panel believes that whenever Congress exercises its prerogative to increase benefits, a simple change—even as simple as a flat percentage increase for all then present and future beneficiaries—would be fully in keeping with the principles upon which such Congressional decisions should rightly be based. Alternatively, a larger percentage increase could well be granted to groups most in need. A third possibility would be to use a portion of available resources to grant extra benefit increase to all who had retired in past years, on the grounds that they are receiving relatively lower benefits than those retiring currently and in the future. There are numerous other possibilities.

The issue posed by Objectives II and III determines the choice between indexing by prices and by wages. This choice is not easy, but this Panel is recommending the CPI-indexed system for a combination of reasons which include the above and also the following:

1. The very clear need for wider public understanding of how benefits are calculated is an issue favoring CPI-indexing. The public can more readily see why price-indexing is fair and necessary because they are becoming more and more accustomed to CPI adjustments.
2. An argument for wage-indexing sometimes heard—that the national average wage is a fact not subject to doubt or dispute while the CPI is necessarily the result of a calculation that can justifiably be criticized and that does not necessarily reflect the impact of prices on the living standards and buying habits of retired people—seems to us not governing, for at least two reasons.

First, any controversy about applicability of CPI will not in any event be removed by wage-indexing because it is generally agreed that CPI-indexing should continue to be used for adjusting benefits after retirement. Second, even the trend and rate of increase in the national average wage depend, with sharply varying results, upon whether or not age and sex are taken into account.

3. Those who believe that a revised benefit formula should provide for a distribution of replacement ratios that remains unchanged as time passes *will not* find this objective satisfied just by adopting wage-indexing; it would be necessary to freeze the averaging period to come close to accomplishing this.

Furthermore, replacement ratios for workers whose wages exceeded the maximum taxable earnings base—which sometimes has included nearly one-half of all full-time male workers—will increase in the future because of the accelerated rise in the MTEB legislated since the late 1960's. This situation will continue until the turn of the century.

4. The merit of seeking a benefit formula that undertakes to maintain the present distribution of replacement ratios is a source of doubt to this Panel. To throw light upon this question the Panel examined the replacement ratios in a sample of 3,501 persons who applied for retirement benefits in December, 1974. The distribution of these replacement ratios is shown in the following table. The pre-retirement earnings are the gross unindexed covered wages of the year 1973, the last full calendar year before retirement.

NUMBER OF PERSONS CLASSIFIED BY REPLACEMENT RATIOS; SAMPLE OF 3,501 RETIREMENTS IN DECEMBER 1974

Preretirement monthly earnings	Total	Replacement ratio (percent)						
		Less than 30	30 to 39.9	40 to 49.9	50 to 59.9	60 to 89.9	90 to 119.9	120 and over
Less than \$50	641							641
\$50 to \$199	268			3	18	62	56	129
\$200 to \$299	195		12	25	38	90	27	3
\$300 to \$499	541	21	67	174	167	109	3	
\$500 to \$699	554	28	162	329	35			
\$700 to \$849	343	29	266	48				
\$850 to \$900	959	107	849	3				
Total	3,501	185	1,356	582	258	261	86	773

This analysis shows there is a wide dispersion of replacement ratios under current law. These can hardly be the most desirable ratios in all cases. It hardly seems likely that such a distribution qualifies as the optimal pattern for generations to come.

**Objective IV.** Improving the Equity and Social Adequacy of the System

There is an inherent weakness in any national pension system that computes benefits by averaging earnings over a period shorter than the full potential coverage period and that also aims to provide relatively larger benefits for low-paid workers. The weakness is that affluent people who are in the system for short periods will be treated just as if they were low-paid workers. It has been observed that in 1969 one-third of social security beneficiaries who were also receiving benefits under another governmental plan were receiving minimum benefits. This is part of the reason why elimination of any set minimum benefit is appropriate.

It is for this reason that the present law provides for gradual lengthening of the averaging period, and that this and other proposals retain this provision. However, the Panel wishes to emphasize that Objective IV can be defeated if the benefit formula were to be of the so-called "High-5" or "High-10" type. Therefore, we are not supporting proposals of this kind that relate benefits heavily to the earnings in a short pre-retirement period. A more detailed analysis of this subject appears at the end of this chapter.

Objective V. Removing Opportunities for Manipulating Benefit Amounts

This Panel shares with others concern about the possibility that a formula will be introduced that will encourage the practice, even though indulged in by just a few, of exercising opportunities to report high earnings in years close to retirement, such earnings having been established for the express purpose of obtaining larger social security benefits. As in Objective IV, such manipulation can be best thwarted by career-averaging rather than by "High-5" and the like.

**Objective VI.** Increasing Public Understanding of How Benefits Are Computed

This Panel believes that revision of the benefit structure furnishes an opportunity that should be grasped—to simplify the formula as much as can be done with due regard for equity and other considerations. Indexing of earnings records introduces a new complexity that we think is unavoidable; we have kept our recommended formula as straightforward as possible as an offset to existing and new complexities.

**Objective VII.** Avoiding Duplication with Other Programs

The availability of benefits under the Supplemental Security Income program to needy people permits the adoption of a social security formula that does not contain a minimum benefit. Existence of SSI would not, however, justify failure to recognize in the formula the greater needs of low-paid workers. Our recommended formula, with its 80 percent bracket at the lowest level of average earnings, continues this recognition.

**Objective VIII.** Maintaining the Three-Tier Concept in Retirement Provisions

Any hazard that the future benefits under social security might more and more preempt the fields of individual savings and private pensions will be avoided when Congress has adopted the proposal offered by this Panel or some similar solution to the problem that the irrationality of the present formula poses.

**ANALYSIS OF FINAL-AVERAGING (OR HIGH-S) BENEFIT FORMULA**

"Final-averaging" is a type of benefit structure frequently used in private pension plans.<sup>2</sup> Typically the benefit is based on a worker's annual earnings over

<sup>2</sup> And in some plans covering government workers.



his or her last (or highest) five years. For each year of service the benefit earned is a specified percentage of the average of these earnings. Thus, the benefit is related jointly to pre-retirement earnings and years of service.

This benefit type was examined by this Panel to ascertain its suitability for social security. Although it has attractive features, we find this approach contradictory to the goals of the program. We conclude that it is unsuitable for this country's social insurance program.

One of the attractive features of a final-averaging benefit lies in its understandability. Its frequent use in private pensions has made many workers familiar with it. Undoubtedly more people would understand it than could readily grasp the meaning of an indexed formula such as is being recommended.

Another merit is its capacity to stabilize the benefit replacement ratio. If Congressional intent were solely to approach as closely as possible the replacement of a predetermined portion of pre-retirement income, the final-averaging formula would most nearly achieve this. Also it can reduce sensitivity of benefits to changes in economic conditions.

The shortcomings of final-averaging, however, are many. These include: difficulty in weighting benefits in favor of low-income groups; weakening the equity of the system; giving powerful incentives for people to earn or report exceptionally high income in the critical years involved; and, providing inadequate benefits to many because of changes in the value of the dollar interacting with variable wage histories.

A distinctive and necessary feature of a social insurance program is that of granting to low-income workers relatively large benefits in relation to their pre-retirement wages. This cannot readily be done through a final-averaging formula. For instance, it is impractical to vary, by income level, the credits earned from each year of covered employment. One possible solution would be to combine a final-averaging benefit with a uniform flat benefit; however, this would give some retired too little and others too much, and complicate fitting of SSI with OASDI.

Equity is difficult to achieve because the benefit depends only on the years of coverage and the pre-retirement earnings. The relation between the benefit and the lifetime contribution total is diminished.

Experience under municipal plans that use final-averaging has shown its vulnerability to what amounts to manipulation. Employees seek and find ways to raise their wages, e.g., by overtime work, as retirement draws close. Employers are tempted to give their older employees abnormally high wages because of their important effect on retirement benefits. Also, workers not covered under social security, such as Federal and state government employees, can accumulate large benefit credits through part-time covered employment.

It is sometimes held that a final-averaging formula neatly fits the benefit to the family's pre-retirement living standard. The weakness in this argument is found in the extraordinary variability of earnings patterns, particularly among low-income workers. As described in Chapter 6, the Panel has found that in many cases earnings shortly before retirement have declined so sharply that they are not at all representative of career earnings.

The following table shows that in more than 30 percent of cases, male workers have at least one of their highest five years of covered wages occurring more than ten years before retirement.

PERIOD BEFORE RETIREMENT NECESSARY TO INCLUDE ALL THE HIGHEST 5 YR OF CAREER EARNINGS [1] -MALE WORKERS ONLY

	13 Years or more	12 yr	11 yr	10 yr	9 yr	8 yr	7 yr	6 yr	5 yr
Percentage of workers for whom the period of years stated applies	20.9	3.3	4.0	3.5	4.0	5.7	4.6	12.4	41.6

[1] Tabulated from the 0.1 percent CWS sample of active male workers born in 1907. Workers eligible for minimum benefit excluded. Total earnings for those whose wages exceeded MTEB estimated.

Consequently, if the average of the highest five years of earnings were used to compute benefits, earnings many years before retirement would have to be taken into account in many cases. But money wages earned in such distant years cannot, because of inflation, properly represent the living standards at retirement time. This problem can be solved by indexing but doing so would defeat the simplicity argument favoring the High-5 system.

### Supplement to Chapter 3

#### WAGE-GROWTH, PRICE-GROWTH AND TAXABLE EARNINGS USED IN BENEFIT ILLUSTRATIONS

For the illustrations in this chapter-which are intended to be just the beginning of a series of many illustrations using various earnings patterns and economic assumptions-median total incomes of year-round full-time workers in decennial age groups were taken from Census Bureau Population Reports for every fifth year starting with 1955. (Being medians, these were assumed to represent, with sufficient accuracy, wages only.) Data from SSA records were used to help generate figures for individual ages. The age-by-age relationships of past years, in conjunction with an assumption that the annual wage-growth for 1981/1980 and later years would be 6 percent, were used to produce plausible future values. Figures for sample years are given in the following table.

MEDIAN EARNINGS ASSUMED FOR BENEFIT ILLUSTRATIONS

Birth yr. and sex	Age 30	Age 40	Age 50	Age 60	Age 64
1911:					
Men		\$3,800	\$5,840	\$8,610	\$9,650
Women		2,360	3,430	5,630	6,450
1918:					
Men		5,550	8,940	16,330	18,670
Women		3,190	4,910	9,710	11,230
1925:					
Men	\$4,350	7,380	14,660	26,580	29,390
Women	2,850	4,070	7,940	15,810	18,640
1932:					
Men	5,880	11,750	24,800	39,970	44,190
Women	3,750	6,550	13,410	23,770	28,030
1939:					
Men	8,900	20,960	37,280	60,100	66,450
Women	5,430	11,740	20,400	35,740	42,150
Maximum taxable earnings used and assumed:					
1911		3,600	4,800	7,800	14,100
1918		4,200	7,800	20,400	27,600
1925	4,200	4,800	14,100	33,000	41,700
1932	4,800	9,000	27,600	49,500	62,700
1939	7,800	22,200	41,700	74,700	94,500

Note.-Annual price growth for 1983/1982 and later years was taken at 4 percent.