# Automatic Adjustment of OASDHI Cash Benefits

THE NEED to compensate for deterioration in the purchasing power of cash benefits under the old-age, survivors, disability, and health insurance (OASDHI) program has been widely recognized since the end of World War II. When the first and long overdue adjustment was made in 1950, benefits had to be almost doubled for some beneficiaries to restore the purchasing power of their original awards.

Since 1950, six more benefit increases have been provided through congressional action—to a large extent in recognition of rising prices. In recent years such increases have caught up with or even exceeded the rise in prices at the date of each increase. Yet they continue to leave the beneficiary vulnerable to substantial declines in purchasing power between benefit adjustments.

Interest in the automatic adjustment of social security benefits has grown markedly in the past 5 years, accompanying the acceleration of price increases that began early in 1965. The resurgence of inflationary pressure and the consequent resumption of a sharp uptrend in price levels had followed 7 years in which prices at the consumer level rose slowly, and wholesale prices showed no uptrend at all.

From 1958 to 1964, benefits were adjusted once—in 1959—by an increase of 7 percent. In the ensuing period of more rapidly rising prices, cash benefits were moved up twice—in 1965 by 7 percent and in 1968 by 13 percent. By the end of 1969, however, the price level had moved up about 10 percent and the purchasing power of the benefit declined proportionately. As a result, legislation enacted late in that year (P.L. 91–172) provided for a 15-percent benefit increase, effective with benefits for January 1970.

# ALTERNATIVE BASES FOR ADJUSTING BENEFITS

## **Purchasing-Power Adjustment**

The type of automatic adjustment most commonly proposed for social security benefits is the

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"purchasing power guarantee," a more accurate but less well-known term than "escalator clause" or "cost-of-living adjustment." An adjustment of this type is similar in operation to the escalator clauses in wage agreements and in rental and repair contracts. The prototype of the purchasing-power guarantee in wage agreements was in the General Motors-United Automobile Workers agreement of 1948. Since then, such guarantees have been included in many collectively bargained wage agreements. By 1968 the purchasing power of the wages of about 2½ million workers in manufacturing employment alone was provided protection through labor-management contracts.

The application of purchasing-power guarantees to pensions is more recent and less widespread. Variable annuity plans and other devices to give pensions a hedge against inflation and a share of the growth in real income have received considerable attention. Only a handful of such plans, however, have been put into effect by the private pension industry. The most notable example is that of the Teachers Insurance and Annuity Association-College Retirement Equities Funds. In the public sector, the programs for Federal civil-service and Armed Forces retirees have a purchasing-power guarantee, as does the Federal employees' compensation program for work injuries. These programs are described in more detail below.

Though social security benefit levels have been raised from time to time, beneficiaries have had to undergo long periods of deteriorating standards of living, with any increments in their monthly checks irregularly spaced. An automatic adjustment of benefits in relation to increases in price levels would tend to minimize the deterioration in their purchasing power, particularly in periods of rapidly rising prices. Some concern has been expressed that automatic adjustment of benefits would stimulate inflation or would make it more difficult to stem inflation. As a practical matter, the issue is whether permitting this lowering of the standards of living for social security beneficiaries should be one of the ways to restrain inflation.

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## Standard-of-Living Adjustment

A possible variant of the automatic adjustment of benefits is an adjustment to keep up with increases in the level of money earnings. This type of adjustment, which can be termed a standard-of-living adjustment, involves public policy issues beyond those implicit in the purchasing-power guarantee. A standard-of-living adjustment involves not only maintaining a retiree's ability to buy the same package of goods and services he could afford with his original benefit, but allowing him to participate in the rising standards of living for workers and their families. This kind of adjustment would be based on changes in an index of earnings, since it is through higher money earnings that increases in per capita output are translated into higher standards of living.

Accepted standards of living, including minimum levels that establish the poverty threshold, are likely to change substantially during a person's retired life. Therefore, unless provision is made for helping beneficiaries maintain the value of their benefits—despite changes in prices of goods and services—their relative economic security will be adversely affected the longer they are out of their active producing years. Beneficiaries with little or no other income and low benefit amounts to begin with—those living below or close to a poverty level—are particularly hurt if changing standards of living are not taken into account.

A standard-of-living adjustment would cost more than an adjustment that protects only purchasing power. If it were desirable to pass on gains in real income to beneficiaries, should the allocation of such future gains be fixed in advance? Or should it be decided on an ad hoc basis in the light of competing claims for resources to improve other aspects of the social security program or other programs? Since a real liberalization of benefits is involved, the advantage of ad hoc adjustments and continuing review of priorities seems fairly strong.

## EXPERIENCE WITH AUTOMATIC ADJUSTMENT OF BENEFITS

A few public retirement programs in the United States adjust benefits automatically to

Much more common than systems with adjustments related to changes in earnings levels, especially among Federal Government programs, are plans that aim at restoring purchasing power. The Federal retirement systems generally and some State and local systems provide benefit adjustments in accordance with changes in the Consumer Price Index (CPI) of the Bureau of Labor Statistics. Some State and local systems automatically increase benefits each year by a specified percentage, a means of adjustment that offers protection against steady, moderate inflationary pressures but is clearly not responsive for variations in the rate of price changes. Eleven out of 214 jurisdictions surveyed in 1965 and 1966 automatically raised retiree benefits annually by 1.0 or 1.5 percent.<sup>1</sup>

The major programs providing retirement benefits for employees of the Federal Government are the civil-service retirement system and the program for the Uniformed Services. This article discusses first the military system, which began making its adjustments in retiree benefits in relation to changing earnings levels and then shifted to a purchasing-power guarantee. The civilservice retirement system and the smaller programs for Federal civilian employees, which in general rely on a purchasing-power guarantee, are then reviewed.

## Military Retirement Program

Before 1958, United States military retirees received increases in their pensions according to changes in the pay scales of those still on active duty. These adjustments were made on an ad hoc basis through a recomputation of benefits

<sup>&</sup>lt;sup>1</sup> Joseph Krislov, State and Local Government Retirement Systems, 1965 (Research Report No. 15, Social Security Administration), 1966, and Saul Waldman, Retirement Systems for Employees of State and Local Governments, 1966 (Research Report No. 23, Social Security Administration), 1968.

each time the pay of the Uniformed Services was raised. In 1958, however, most retirees were granted a flat 6-percent cost-of-living increase. Five years later a program to adjust military pensions automatically by use of the CPI was established under the Uniformed Services Pay Act of 1963.

When Congress was considering that legislation, a shift from adjustments patterned on changing salary levels for each grade was proposed for two reasons-the inequitable treatment of retirees in different ranks and the excessive cost of the system. Salary scales are set according to the management needs of the active-duty force, and the rate of increase is much higher for some grades than others. Such selective increases would have continued, under the system then in effect, to be the basis of any future pay changes. Congress therefore concluded that "it would be inevitable for some groups on the retired lists to suffer real income erosion if the recomputation system were continued."<sup>2</sup> In addition, because the number of retired military personnel had grown substantially in recent years, the total cost of adjusting retirement pensions under the recomputation system was expected to reach prohibitive levels.

The 1963 legislation provided for a 5-percent increase in military retirement benefits to reflect the rise in prices from 1958 through 1962. All future purchasing-power adjustments were to be in line with rises in the calendar-year average of the monthly CPI, under the same procedure as that established shortly before for Federal civil-service annuities.

In 1965 the methods for adjusting retirement benefits under both the military and civilian programs were modified to allow more frequent purchasing-power adjustments. Through that year, no benefit adjustment was possible under the 1963 law since the increase in the CPI from 1962 through 1964 amounted to only 2.6 percent somewhat below the 3-percent minimum increase necessary to trigger an adjustment in April 1965. It was thus necessary to wait another full year; at which point the increase in the annual CPI from 1962 to 1965 was 4.3 percent. The 1965 revision in the law, therefore provided for increases based on price changes over a 3-month period, instead of a year. The increases are payable only to those on the rolls at the time the new benefit amounts become effective.

The 1965 provisions are still in effect except for two refinements added in 1967 and 1969. Under a 1967 amendment the procedure with respect to the first adjustment made for each retiree was revised. The change provides equal treatment of persons who retire after the most recent pay raise for active-duty personnel and of those who retire after an increase in benefits that adjusts for price changes. The first adjustment to a retiree's benefit is computed in one of two ways:

(1) For those retiring after the effective date of a purchasing-power increment, an adjustment is made that is equal to the rise in the CPI between the month of the last pay raise and the base month used for the most recent purchasing-power adjustment; the retiree, who would not otherwise be eligible for an increase, is thus compensated for the effects of inflation between these 2 months.

(2) For those who retire after a pay raise, an adjustment is made at the time of the next purchasingpower increase that equals the percentage rise in the CPI between the month before the pay raise and the month used to determine the next adjustment; the retiree is thus given a benefit increase commensurate with the rise in prices since his last pay raise but excluding the earlier price rises that his pay raise presumably reflected.

The purchasing-power guarantee for military retirees was amended in December 1969 (P.L. 91-179) to provide a supplement to each benefit increase. This change was designed to offset the loss of purchasing power sustained between benefit adjustments. (An identical amendment was made in the civil-service retirement adjustment provisions and is described in detail in the following section of the article.)

## **Civil-Service Retirement Program**

Before 1962, no systematic mechanism for restoring the lost purchasing power of civil-service retirees' benefits existed. As in the present social security program, adjustments were made from time to time through legislation.

To compensate for the effects of inflation in a uniform, consistent fashion, 1962 amendments to the Civil Service Retirement Act included a provision for increasing annuities automatically as the CPI rises. This first purchasing-power guarantee called for raising benefits on April 1 following a year in which the annual average

<sup>&</sup>lt;sup>2</sup> S. Rept. 387, 88th Cong., 1st sess.

of the monthly CPI was 3 percent or more above the annual average CPI of the previous base year. (A year in which the CPI increased enough to raise benefits was defined as the base year for the measurement of succeeding price rises.) To be eligible for an increase in April of a particular year, a worker had to start receiving his retirement annuity on or before January 1 of the preceding year.

Under this procedure a considerable lag developed from the time retirees began losing purchasing power until the time an adjustment was to be implemented. The civil-service program was therefore amended in 1965 to minimize the gap between rising price levels and benefit adjustment.

Under the 1965 amendment, benefits are increased whenever the CPI in each of 3 consecutive months is as much as 3 percent above the price level of the base month. The amount of the increase is computed from the percentage rise in the CPI in the highest of the 3 months, rounded to the nearest tenth. That month then becomes the base month for computing the next increase. The higher benefit amount is effective the first day of the third month following the 3-month period, for those on the rolls by that date.

The current procedure assures restoration of purchasing power on a more timely basis than the previous one in two ways. First, as under the old system, prices must climb at least 3 percent above the last increase, but the price indicator is measured for a shorter period-3 months instead of a year. Second, the 3 months that determine the need for an increment in benefits are the first 3 at the specified CPI level after the base month. These features insure that the program will respond to inflationary trends in a reasonably prompt manner. The current provision thus calls for a minimum of 5 months between the base month and the effective date of a benefit increase. Under the old procedure, at least 1 year and 3 months of elapsed time was required (plus another full year if the increase in prices fell short of the 3-percent requirement). In the 4 years since the new provision went into effect four automatic adjustments, in addition to the initial increase, have been made.

Until 1969, the civil-service annuitant had no protection against still another element of benefit deterioration. When prices rise 3 percent, the system provides a proportionate increase in future benefits, but the loss of purchasing power during the period that prices have risen—that is, from the old base month to the next—is never made up unless a benefit adjustment specifically to take this effect into account is provided. The net result, when prices rise steadily for an extended period, is that the monthly benefit, despite the periodic 3-percent increases, is, on the average, permanently 1½ percent below what is needed to maintain parity with prices.

Although this situation is often called a "lag" or delay in benefit adjustment, it is actually more. It represents a loss each month (that benefits are received) that is never regained if benefits are adjusted only to compensate for the change in price levels from one base period to another.

In addition, there is a genuine lag in the adjustment process. Benefits are not raised until the start of the third month after prices rise high enough in a 3-month period to call for a boost in the benefit level. This lag is probably inevitable. Both the data gathering and compilation involved in measurement of prices and the administrative operations required to make the benefit changes require some lead time.

In recognition of this type of purchasingpower loss, Congress amended the civil-service retirement program in October 1969 to provide a supplement to the statutory adjustment. Whenever benefits are raised under the current formula, 1 percent will be added to the increase based on the CPI rise.

The 1-percent supplement helps achieve the objective of maintaining full purchasing power of a retiree's annuity as prices rise. The House of Representatives legislative report emphasized this objective.<sup>3</sup> It is interesting to note that the supplement in effect eventually will compensate for more than lags in purchasing-power adjustments. The benefit level will be raised above its original purchasing power after the first two adjustments. Taking cognizance of this effect, the Senate report on the legislation alludes to a broader objective—that of relating benefit adjustments to the higher standards of living achieved by workers.<sup>4</sup> These higher standards arise out of the increased real income reflected

<sup>&</sup>lt;sup>3</sup>Civil Service Retirement Financing and Benefits, H. R. Rept. 91–158.

<sup>4</sup> Civil Service Retirement, S. Rept. 91-329.

in higher money earnings. The Senate report states that one reason for the addition of the 1percent increment to the CPI-based adjustment was "to take into account the increased productivity of a national economy."

## **Other Federal Programs**

The method used by the Federal civil-service retirement system for adjusting retirees' benefits is also employed for benefits under other special Federal retirement programs such as those of the Central Intelligence Agency, the Federal Deposit Insurance Corporation, and the Federal Reserve Board. Since 1966, benefits received under the Federal Employees' Compensation Act by Federal employees injured on the job are also revised under procedures like those of the civilservice retirement program. Two differences are: (1) the first adjustment is payable only when the death or disability to which the compensation award relates occurred more than 1 year before the effective date of the benefit adjustment and (2) there is no 1-percent supplement to the purchasing-power adjustment.

Like the purchasing-power guarantee for Federal civilian and military retirement benefits, the benefit adjustment under the workmen's compensation program for Federal workers is determined by measuring price increases—rises equal to at least 3 percent for a consecutive 3-month period. Below are shown for the three programs the relative increases in benefit amounts and their effective dates since the current system began.

Date of increase	Percentage increase in benefits		
	Military retirement	Civil-service retirement	Federal workmen's compensation
1965: Sept			
Dec	2.2	6.1	
1966: Oct			19 6
Dec.	3.7		
1967: Jan		30	
1968:		5.5	•••••••
Anr	3.9		3.7
May		3.9	
1969:			4.0
Feb	4.0		
Sept		3.9	4.4
Nov	1 5.3	15.0	

<sup>1</sup> Includes 1-percent supplement provided under the 1969 amendments.

Another retirement program with benefit adjustments modeled on those of the civil-service system is the Foreign Service system. In October 1965, the Foreign Service Act was amended to provide, as prices rise, adjustments in retirement benefits. The system established was identical with the kind used for civil-service retirees before the 1965 amendments to CSR Act—that is, they were to be based on calendar-year changes in the CPI. Proposals for making benefit adjustments in the Foreign Service system like those now in the Civil Service Retirement system are currently before Congress.

Perhaps the most unusual and intricate public program for protecting the value of retirement income is that of the Tennessee Valley Authority (TVA). The retirement plan for the TVA employee consists of several segments. First, his TVA employment is covered under the social security program. In addition, he can qualify for (1) an annuity to which he contributes 6 percent of his wages and (2) a pension financed by TVA contributions (currently 10 percent of payroll). At the employee's discretion, part or all of the employee portion may be diverted from the fixed annuity plan to a variable annuity program that provides retirement income varying from month to month on the basis of the market value of equity investments.

The pension part of the benefit is automatically adjusted as the CPI rises. This employer-financed portion of the benefit is raised by the amount of increase in the annual average CPI, when the index is at least 1 percent above the level that produced the last benefit increase. The adjustment is subject to a ceiling of 5 percent in a given year, but the limitation may be modified in any year at the Retirement Board's discretion, with the approval of TVA. The provision prevents excessive drain on the retirement fund during an accelerating inflation. The adjustments apply to the benefits of most persons on the rolls by December of the latest year for which prices are measured and are payable beginning with the following January.

#### **APPLICATION OF PRICE OR EARNINGS INDEXES**

The best known and probably leading index available for tracing the changing patterns of inflation, with respect to a purchasing-power guarantee, is the Consumer Price Index of the Bureau of Labor Statistics. The strength and the weakness of this index as a possible measure of the declining purchasing power of social security benefits are outlined below. Consideration of a standard-of-living adjustment calls for use of a time series on earnings levels. Several sources of such wage and earnings statistics are also discussed.

#### The Consumer Price Index

The CPI measures the monthly changes in average retail prices of goods and services purchased by urban wage earners and clerical workers and their families. To exclude any price changes from the trends due to changes in quality or quantity of purchases, the same market basket of goods is priced each month. Periodically-about once every decade-the index is revised to update the weighting design and list of items being priced. The series originated on a comprehensive basis at the end of World War I. Throughout the 1920's the index had remained relatively stable, dropped 25 percent to its lowest point during the depression of the 1930's, and thereafter rose in 29 of the 30 years from 1940 through 1969. During this 30-year period the index rose more than 160 percent.

Although the CPI is sometimes used as a costof-living index, the Bureau of Labor Statistics emphasizes that it is not intended for that purpose. Because the quantities and qualities of goods and services priced in the index are kept constant to the extent possible, the CPI does not measure the changes in the total cost of living over a period of time. Such changes include adjustments in types and amounts of goods and services purchased, as well as price changes. In theory, therefore, it would not be appropriate to use the index as a measure of changes in the "cost of living." If, however, an automatic procedure for raising benefits is seen as a means of preserving only the purchasing power of the original pension, the use of the CPI is appropriate.

Applicability to OASDHI beneficiaries.—The use of the CPI as a means of adjusting OASDHI

benefits poses a major question on its applicability to the persons receiving the benefits. Usually the question is raised with respect to the aged, who presumably have different expenditures patterns than the average urban worker represented in the CPI. This is not the proper focus on the problem since almost one-third of the OASDHI beneficiary population is under age 65.

Out of the total of 25 million beneficiaries in December 1969, 12 million were retired workers aged 65 and over, including more than a half million with "special age-72" benefits. Five million beneficiaries were survivors and dependents aged 65 or older, and 8 million were under age 65. The under-age-65 category included nearly 4 million children, as well as several other groups of substantial size: early retirees, wives and widows under age 65, and disabled workers.

Adjustment of benefits by using a special index for older persons would presumably not be appropriate for the almost one-third of the beneficiaries under age 65. In addition, unless an index for the aged is specifically designed to take into account the relative proportions of the various types of older beneficiaries—single and married persons and those who receive special age-72 benefits it may not even be any more representative for the older pensioner group than the CPI. The CPI, being a broad gauge index, may represent the OASDHI beneficiaries as well as a price index devised to represent a particular age group.

Even if a price index for older persons were considered desirable, it is not clear that such an index would show results much different from those of the CPI. To have much effect, the differences in purchases of older people would have to be considerable, price trends for those items would have to be substantially different, and most of the differences in price trends would have to be in the same direction.

Some experimental calculations made in recent years to estimate an index for the aged show fairly small differences between it and the CPI.<sup>5</sup> The CPI increased 22.7 percent from September 1954 to January 1967 and the estimated index for those aged 65 and over went up 24.4 percent in the same period.

<sup>&</sup>lt;sup>5</sup> See Saul Waldman, "OASDI Benefits, Prices, and Wages: 1966 Experience," *Social Security Bulletin*, June 1967, page 11.

This estimated index for the aged was compiled by weighting the eight major groups of goods and services used in the CPI by the actual expenses of two-person families with a head aged 65 or over. It should be recognized that such a procedure is only an approximation of what would be done if an index were being compiled specifically for the aged. In such an index, the individual items within each major group would be weighted according to actual spending patterns for the aged, and the prices to be applied would be derived from information collected on specific items bought by the aged.

To take into account the effect of Medicare on the living costs of retirees, the estimated index was adjusted by reducing the weight of medical services 40 percent. After this adjustment, the rise in the index for the aged from 1954 to 1967 became 23.3 percent, and the trend was thus even closer to the CPI trend than that of the index without special provision for medical costs.

An earlier BLS study indicated that expenditures rose 23.3 percent from 1950 to 1960 for those under age 65 and 24.5 percent for the group aged 65 and over.<sup>6</sup> This comparison is somewhat rough since it too was based on calculations for an older-person index that involved reweighting of CPI data rather than expenditure data related particularly to the aged. Nevertheless, the figures lend support to the belief that the CPI is fairly representative of older consumers as well as younger. The report on the study concluded that "even in a period when larger-than-average price changes tended to be concentrated in classes of items which are relatively more important in the spending pattern of older consumers the total change was not substantially larger for older than young families."

Another question that may be raised on the applicability of the CPI to OASDHI beneficiaries relates to the fact that the CPI measures prices paid by worker families but, by and large, OASDHI beneficiaries are nonworkers. It can reasonably be expected that income levels, family size and composition, and consumption patterns of nonworkers will differ from those of families with earners. It may be argued then that an index confined to nonearners would represent OASDHI beneficiary consumption patterns better than one confined to the aged—though some nonworkers are not OASDHI beneficiaries and some OASDHI beneficiaries are not nonworkers. The issue is really academic because of the difficulties of devising a special index applicable to such a diverse group as nonworkers. Thus, no clear-cut alternative to the broad-gauged CPI appears evident.

#### **Alternative Measures of Earnings**

If the real value of social security benefits were to be adjusted by means of an earnings index, several appropriate measures would be possible. The Bureau of Labor Statistics publishes data, supplied by a sample of employers, on weekly earnings of production or nonsupervisory workers in a large range of industries. The series is compiled monthly and is available, starting with 1964, on a current dollar and "real dollar" (deflated) basis. The coverage of this series is more restrictive than the definition of "covered employment" under the social security program, and some forms of earnings—self-employment income for example—are excluded.

The Office of Business Economics prepares annual estimates of total compensation and average annual earnings of full-time (equivalent) employees. The OBE data are broader in scope than the BLS earnings series and so are more representative of all beneficiaries. They are, however, the summation of diverse secondary sources, they include some earnings not measured directly, and they are available only on an annual basis.

Perhaps the most appropriate earnings index might be one constructed from OASDHI earnings records, despite some limitations. Data are available only on a quarterly and annual basis and are thus not as current as the monthly BLS series. Nevertheless, use of earnings covered by the social security program as a base would have much to recommend it. For one thing, social security earnings records, by definition, represent the types of workers and earnings covered under the social security program (except that only the annual data include agricultural and self-employment earnings). Although actual data are available only for taxable earnings, estimates are made of total earnings.

<sup>&</sup>lt;sup>6</sup> From Helen H. Lamale, *The Impact of Rising Prices* on Younger and Older Consumers, BLS Report No. 238-2, December 1963.

Workmen's compensation offset.-Earnings records of the social security program are now used to adjust disability insurance benefits when a periodic workmen's compensation benefit is also payable. The law provides that the amount of social security benefits payable to a disabled worker and his family cannot, in combination with workmen's compensation, exceed 80 percent of the worker's average earnings during his 5 consecutive years of highest covered earnings. In addition, in determining the amount of combined benefits to be paid in postaward years, the beneficiary's "high 5 year" earnings are adjusted periodically to take account of increases in national average wage levels. This provision is designed to minimize any erosion in the earningsreplacement value of disability benefits caused by rising wage levels and living costs.

The records are used to estimate such changes in average wages, by measuring year-to-year changes in average taxable wages in the first calendar quarter. The percentage change in this computed index is then applied to each beneficiary's earnings.

This procedure has the advantage of being directly applicable to the beneficiaries whose benefits are being adjusted. Changes in the index may not, however, precisely measure the movement of earnings levels from one year to another since calendar-quarter data are subject to seasonal and cyclical variation.

The first application of the average wage index to the workmen's compensation offset for disability benefits was for the period from the first quarter of 1966 to the first quarter of 1968. Average taxable wages during this period went up 13.8 percent. The Bureau of Labor Statistics reported that, during the same period, the average weekly earnings of production or nonsupervisory workers in nonagricultural industries went up 7.6 percent—from \$96.76 to \$104.13.7 All the elements accounting for the substantial difference in rate of increase cannot be considered here. Two of the most important factors may be (1) the inherent difference between earnings levels compiled from weekly and quarterly employment data and (2) the differences in coverage. (The BLS figures, for example, exclude earnings of

supervisory and of State and local government workers.)

# **Overadjustment of Benefits for** Recent Retirees

It is sometimes said that OASDHI beneficiaries who retire just before a benefit increase are better off than earlier retirees because the depreciation in purchasing power covers a much shorter time period. Various adjustments to remove this alleged windfall have been proposed. In one respect the recent retiree may actually be worse off than the worker who retired soon after the last increase: the ratio of his initial benefit to his recent monthly earnings may be lower than the corresponding ratio for those who retired earlier in the period between the benefit increases. The decline in the earnings-replacement ratio of his benefit occurs as long as earnings levels are rising. Three factors account for this deterioration in the benefit-earnings relationship: (1) Under the weighted benefit formula, higher earnings yield proportionately smaller increases in benefits; (2) since the benefit formula is applied to average monthly earnings based on the worker's earnings after 1950 (with the lowest 5 years' earnings eliminated), increases in earnings are only partly reflected in the average; (3) if a worker earns at or above the maximum creditable for benefit purposes, any increase in his earnings will not be reflected in the monthly benefit.

Benefit increases under OASDHI have been provided not only for those already on the rolls but also for those who will receive benefit awards in the future-by the same percentage for both groups. An automatic benefit adjustment would have to incorporate a similar provision to achieve the same results. It could not, for example, apply only to those receiving benefits as of a certain date, as the automatic adjustment under the Federal civil-service retirement program does. That type of adjustment is appropriate to the civilservice system because, unlike the OASDHI program, it maintains earnings-replacement automatically: (1) by basing benefits on the 3 highest years of earnings, (2) by including all of each year's earnings, with no maximum wage base,

<sup>&</sup>lt;sup>7</sup> Arithmetic averages of January, February, and March data.

and (3) by using a benefit formula for most employees that provides a constant benefit-wage ratio for workers at all earnings levels and varies the ratio only with length of service.

#### **Cost Considerations**

Enactment of an automatic purchasing-power adjustment of OASDHI cash benefits would, it is estimated, not require any additional financing through increase of the tax rates now scheduled. The estimate assumes an automatic growth in payroll tax revenue proportionate to the growth in earnings. This growth is expected to continue in the future, unless the percentage of total earnings taxable under the program is allowed to decline indefinitely by failure to raise the taxable maximum—an unlikely eventuality. Automatic adjustment of the taxable earnings limit has been proposed, and such a provision would probably assure adequate financing.

On the one hand, taxes collected (at given tax rates) increase proportionately with earnings as long as the taxable maximum is kept up with earnings. On the other hand, the increase in future benefits generated by these higher earnings is considerably less than proportionate because of the factors already discussed that provide lower earnings replacement as earnings increase.

If it is assumed that future earnings levels will rise at about twice the rate of prices over the long run, and that the taxable earnings base is raised proportionately to increases in earnings levels, it is estimated by the Chief Actuary that the cost of financing purchasing-power adjustments can be met from tax revenues. Thus a purchasing-power guarantee does not increase the cost of the system expressed relative to taxable payroll.