Automatic Cost-of-Living Adjustment of Pensions in Foreign Countries

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OLD-AGE pensions are lifetime benefits computed according to a specific formula when originally awarded and not ordinarily recomputed during the life of the individual pensioner. Receipt of a specified amount is thus guaranteed to pensioners as long as they live. The real value of the pensions, as reflected in the actual goods and services they enable their recipients to purchase, is, however, subject to change. If the price level rises after pensions are awarded, their real value inevitably shrinks. Whatever degree of adequacy they possessed at the time of their award is thus diminished; if the rise in living costs persists, the adequacy of the pensions on which large numbers of persons must live is progressively and eventually seriously undermined.

The impact of inflation upon the adequacy of existing benefits is a problem in all countries that provide old-age pensions under their social security programs. There are nearly 55 countries that now pay such pensions either through social insurance or a universal pension system or on an income-test basis. In many countries, as in the United States, the aged population is growing rapidly, and more and more persons are becoming pensioners. Dependent as most of these aged are on the pension as their primary source of income, they are particularly vulnerable to price movements that lessen what they can buy with it.

For most countries the first major price rise in the present century was that accompanying World War I. Not many countries, however, had general public pension systems in operation at that time. After the depression of the 1930's, another period of rising prices set in during World War II. The upward trend persisted into the late forties and during much of the fifties in many countries throughout the world.

Until the end of World War II, practically all countries that had public old-age pension programs endeavored to compensate for the effects of price rises by ad hoc increases in the amounts of existing pensions. Each specific increase was voted by the appropriate legislative body. After the war the majority of countries continued to rely on the same form of legislative action for the adjustment of pensions. These adjustments, although made at irregular intervals, have been numerous. Much of the extremely voluminous legislation enacted in the social security field since 1946 has consisted, in fact, of changes in pension rates made necessary by the persistent rise in prices.

In recent years, however, a gradually increasing number of countries have begun to adopt arrangements under which changes in outstanding pensions are linked by law to changes in some kind of economic index. Pension modifications under these arrangements are put into effect by the administering agency without legislative action, whenever a sufficient change occurs in the relevant index. It is this type of procedure that is characterized as the "automatic" adjustment of pensions.

Summary

There are now nine countries that, under their laws, currently make automatic adjustment of existing old-age pensions to specified economic changes. The first law to embody an automatic adjustment procedure in a national pension program was adopted in Denmark in 1922. Two more laws were enacted in 1946 in Iceland and Luxembourg, and one in France in 1948. The decade of the fifties witnessed the addition of six more nations to the list of those with such legislation: Belgium, Chile, Finland, Israel, the Netherlands, and Sweden. It will be noted that four of them are Scandinavian countries, which have taken somewhat of a lead in this field. Of the others, all but Israel and Chile are also located in Western Europe. Israel is currently the only non-European country in the group. Chilean legislation providing for automatic adjustments was suspended in 1957 because of the extreme inflation there, but its provisions are included in the analysis.

Three of the countries with automatic adjustment legislation provide for special cost-of-living supplements to old-age pensions. Only the supplements, which are computed separately from the basic pension but are payable along with it, vary with changes in the official index. The remaining countries, in contrast, make the adjustment in the old-age benefit itself.

There is some significant variation in the type of index specified by the laws of the various countries as the basis for pension adjustments. This variation is without doubt a reflection in part of certain differences in policy regarding the types of economic change that should justify a change in pension amounts. It may also be the result in part of technical differences in the statistical series available for use as an index.

Four of the nations providing automatic adjustments link changes in pension rates to changes in some kind of price index. This is a retail price index in two countries, the "national price index" in another, and the "pension price index" in a fourth. Two countries tie pension changes to the movement of what are called cost-of-living indexes. Three countries have used a considerably different procedure, basing their adjustments exclusively on some type of wage index. There are important differences, however, in the kind of index used. One country uses as an index the annual average taxable wages of insured persons, as calcu-

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lated from contributions collected. In another country the index is the average of the wages from which the pensions newly awarded in each year have been computed. The third uses the weighted average index of the hourly wages of adult workers. Changes in these wage indexes naturally parallel to some extent changes in prices—especially where there is a substantial degree of governmental wage control—but wage changes are also, of course, influenced by factors other than price changes.

The frequency of adjustments possible under the various laws, as well as the minimum change in the base index that will produce a change in pension amounts, also differs from country to country. Pension rates undergo alteration in some of the countries whenever a change of at least a specified minimum percentage occurs in the index used. In these countries the indexes are generally prepared and published monthly, and it is therefore possible for pension changes to be made monthly, provided that the index shows an increase or decrease of at least the specified number of points. Of the remaining countries, one provides for quarterly adjustments, two for the possibility of adjustments at 6-month intervals, and two for annual adjustments. In general, the countries that employ a wage index provide for less frequent adjustments than those using a price index.

A few of the laws require pension amounts to be altered whenever there is any change in the relevant index, or a change of at least 1 point. The others specify somewhat larger changes—2 percent, 2½ percent, 3 percent, 5 percent, 10 percent, and 15 percent. It is either stated expressly or is virtually implicit in nearly all the laws that pensions will be reduced if the relevant index declines, as well as increased when it rises.

The laws are also usually explicit about the period of time, if any, that is to elapse between a change in the base index and the effective date of the pension changes. The size of this lag is perhaps determined mainly by technical administrative and statistical considerations in each individual nation, but in some countries other factors may have entered into the time interval prescribed. The interval most commonly specified is 3 months, but in some countries it is as brief as 1 month. Where adjustments may be made only half yearly or annually, it is, of course, theoretically possible for 5-11 months to elapse between a change in the index of the required number of points and a modification of the pension rates.

So far as the financing of automatic pension increases is concerned, the cost is generally met out of ordinary program revenues rather than from special sources. Such ordinary revenues include contributions of insured persons in all countries, employer contributions in most of them, and Government contributions in a majority. Contributions of insured persons and employers in nearly all the countries concerned are assessed as a percentage of wages, income, or payroll. Some rise in receipts from contributions thus tends to take place automatically if, as often happens, wages and payrolls move upward when prices increase. In certain countries, moreover, the maximum on taxable payrolls is also linked to changes in the wage or price index and fluctuates with changes in that index. Under such an arrangement, some further increase in the income of the pension system may automatically occur simultaneously with an increase in pension amounts.

The remaining revenues required for financing pension adjustments come either from accumulated reserves or, in the last analysis, from specific increases voted by the legislative body in the contribution rates of insured persons, employers, or the Government. In a few countries, especially the Scandinavian countries, where a large part of the cost of all old-age pensions is met out of general Government revenues, the pension adjustments probably nearly always entail additional appropriations by the Government after they are put into effect.

The remainder of this article reviews the automatic adjustment provisions operative in individual countries. The countries are considered in the chronological order in which they adopted the automatic device. The discussion deals almost entirely with old-age pension provisions, though much the same problems exist and the same procedures are used for other long-term benefits, such as invalidity and survivor pensions. The discussion also deals only with the adjustment of pensions after their award. It does not enter into the equally large and complex problem of benefit formulas relating newly awarded pensions to current price or income levels when, in the coverage and contribution periods during which rights to such pensions were built up, price or income levels had been much lower.

Denmark

The earliest inclusion of an automatic adjustment provision in a general social security law appears to have been in Denmark. An amendment of its pension law in 1922 linked general pensions to changes in the salaries of Government employees. Annual pensions were to be raised by 12 crowns[1] for a couple and 6 crowns for a single pensioner for each annual cost-of-living increase of 54 crowns received by Government employees. Such adjustments in pension rates were made semiannually.

This early provision for adjustment of pensions was repealed in 1927, to be subsequently reinstated in different form in the Danish national insurance act of 1933. The 1933 law contained a provision requiring old-age pensions, as well as other types of social security benefits, to vary automatically with changes in the national price index. This provision has remained in operation without any fundamental modification down to the present time.

A "national pension" is now payable in Denmark to every aged citizen, without regard to contributions paid in the past. The basic amounts of such pensions are different for single persons and couples and for residents of Copenhagen, of towns, and of rural areas; the amount is reduced, however, if pensioners have other income above specified exemptions. Supplements are also payable if the pensioner has a nonpensioned spouse or children, as well as for ad-

[1] One crown now equals $0.145, but a different ratio existed in 1922.

vanced old age and deferral of pensions. A minimum pension is provided for all aged citizens otherwise disqualified by the income test; it is equal to 6 percent for single persons and 9 percent for aged couples of the current average gross income of breadwinners, as last calculated by the national statistical department.

The existing legislation also provides that, whenever the price index published by the national statistical department for the months of January or July rises or falls by 1 percent from the index for January 1956 (which stood then at 410, with July 1914 as 100), each national old-age pension being paid, as well as supplements and applicable income limits, shall be automatically increased or reduced by 1 percent. For every additional 2-percent change in the index, pensions are increased or reduced by an additional 2 percent. The resulting amount is rounded to the nearest multiple of 12 crowns. The Ministry of Social Affairs is required to publish changes in pension rates resulting from the January index number by March 10, and these changes are put into effect on April 1. Changes occasioned by the July index must be published by September 10 and are put into force on October 1.

The price index used is an index of retail prices that reflects the cost of living of a typical wage-earning family. This index is compiled by the statistical department four times a year on the basis of data collected on such items as the prices of goods and services, tax rates, and contributions in January, April, July, and October.

Table 1.—***Indexes of prices and of basic national pensions in Denmark, 1946–59***

Month	Price index (July 1914=100)	Month of change	Index of basic pension amount
January 1946	290	April 1946	100
January 1947	292	April 1947	103
January 1948	300	April 1948	105
January 1950	315	April 1950	108
July 1950	323	October 1950	111
January 1951	346	April 1951	120
July 1951	366	October 1951	128
July 1952	378	October 1952	131
January 1955	388	April 1955	134
July 1955	397	October 1955	136
January 1956	410	April 1956	141
July 1956	419	October 1956	142
January 1957	427	April 1957	145
July 1957	437	October 1957	148
July 1958	440	October 1958	151
January 1959	448	April 1959	153
July 1959	448	October 1959	153

The changes in this price index and in the basic amounts of the national pension that have occurred in the postwar period are summarized in table 1. The national pension (excluding supplements) for a single aged person living in Copenhagen rose from 2,388 crowns to 3,660 crowns between April 1946 and April 1959, while in rural areas it rose from 2,100 crowns to 3,216. The rise in the pension of an aged couple was from 3,600 crowns to 5,520 in Copenhagen and from 3,132 crowns to 4,800 in rural areas.

The size of the minimum pensions also changes automatically whenever there is a change in the average income of breadwinners—the basis on which such pensions are computed. Such adjustments may take place on April 1 or October 1, whenever a change of sufficient magnitude occurs. They are rounded to the nearest multiples of 12 crowns for single pensioners and 60 crowns for aged couples. At the end of 1959, minimum pensions amounted to 756 crowns a year for single persons and 1,140 crowns for aged couples.

About 85 percent of the cost of national pensions in Denmark is met from general Government revenues. The remaining cost is financed through a special 1-percent tax on personal net income that is collected with the regular income tax.

Iceland

The social security act adopted in 1946 provided flat non-wage-related pensions, payable to all citizens at age 67, that differed only with the pensioner's marital status and his place of residence (town or country). These pensions were reduced by one-half of any other income in excess of the pension. The 1946 law also provided that there should be paid, in addition to the basic pension, a cost-of-living increment related to the price index. Surcharges varying with the average price index for the preceding year were also to be collected along with regular contributions payable by insured persons, employers, and the Government. Generally similar provisions were retained in new legislation enacted in 1956.

Table 2.—***Average price index and amount of basic annual pension, cost-of-living increment, and total pension in Iceland, 1947–59*** [1]

[Amounts in crowns]

Period	Average price index	Basic annual pension	Cost-of-living increment	Total annual pension
January 1947–June 1949	315	1,200	2,580	3,780
July 1949–March 1950	315	1,320	2,838	4,158
April 1950	[2] 100	4,158	------	4,158
May 1950–June 1950	105	4,158	2,208	4,366
July 1950–December 1950	115	4,158	406	4,564
1951	131	4,080	1,265	5,345
1952	$148\frac{3}{4}$	4,080	1,989	6,069
1953	$157\frac{1}{4}$	4,080	2,336	6,416
1954	$158\frac{1}{12}$	4,284	2,488	6,772
1955	$162\frac{1}{4}$	4,284	2,667	6,951
1956	$175\frac{7}{12}$	4,680	3,537	8,217
1957	$180\frac{3}{8}$	4,680	3,775	8,455
January 1958–May 1958	183	4,680	3,884	8,564
June 1958–August 1958	183	4,914	4,079	8,993
September 1958–February 1959	$190\frac{2}{3}$	5,381	4,879	10,260
March 1959–October 1959	[2] 100	9,955	------	9,955

[1] Amount for a single aged person living in a town. One crown equals $0.04.

[2] New index introduced. Index before 1950 revision was 315; before 1959 revision it was 185.

All wages and salaries in Iceland, as well as the net income of farmers, are adjusted quarterly, whenever there is a change in the index of prices for consumer goods and services. The same index is used for computing the cost-of-living increments to old-age pensions, and the same procedure is applied.

When old-age pensions first became payable in 1947, the price index stood at 315 and the cost-of-living increment was 2.15 times larger than the basic pension itself. A revised price index was developed in 1950, with March 1950 as 100, and the basic pension was increased to absorb all previous cost-of-living adjustments. By the end of 1958 the 1950 index had again risen, to around 190 points, and the cost-of-living increment to old-age pensions rose in the same degree. On the basis of a family-living survey conducted among wage-earner, salaried-employee, and fisherman families in Reykjavik, the consumer price index was again revised in 1959, with a new base of March 1959 as 100. The basic pension was once again altered to absorb all preceding cost-of-living increments. The changes from 1947 to 1959 in the annual pension for a single aged person living in a town are summarized in table 2.

Pensions in Iceland are financed

on a pay-as-you-go basis, and no substantial reserves have been accumulated. Contribution rates are fixed to achieve a balance of income and outgo for only 1 year at a time. Pension increases resulting from a rise in the cost of living must thus be financed by a concurrent increase in contributions.

Luxembourg

A law of June 21, 1946, that reinstated social insurance legislation in effect before the "occupation" provided at the same time for automatic adjustment of the basic nongraduated portion of old-age pensions. Whenever the cost-of-living index then in use rose or fell 100 points from the level of 1,500 points (with 1913–14 as 100), all basic pensions were to be automatically increased or decreased in the same proportion—that is, by 6⅔ percent. These adjustments were to become effective the first day of the month following the publication of the index number that occasioned the change.

In May 1948, legislation was enacted that substantially revised the salary scale for Government employees. This legislation also provided that whenever the cost of living, averaged over a 6-month period, rose or fell 5 percent in comparison with the level of January 1, 1948, the salaries as well as the pensions of Government employees were to be automatically raised or reduced 5 percent. A law of April 10, 1951, subsequently provided that the same procedure would be followed in adjusting the pensions of private wage earners to cost-of-living changes occurring after January 1948. Similar provisions were adopted for pensions of private salaried employees and self-employed craftsmen in the same year and for self-employed farmers in 1956.

The new cost-of-living index employed in the automatic adjustment of pensions is prepared by the statistics office of Luxembourg and uses January 1, 1948, as its base. It reflects the average annual consumption pattern of 4-adult families and includes food, clothing, heating and electricity, and miscellaneous components. It is computed from price quotations secured monthly in nine localities. The index has risen 5 points on six separate occasions since January 1948—in August and December 1949, March and July 1951, and January and October 1957.

The Government meets the greater part of the expense resulting from the adjustment of pensions to the cost of living. It also pays about half the cost of basic pensions; employee and employer contributions cover the remaining cost of basic pensions, as well as the entire cost of the increments to pensions, which are graduated with wages.

France

A law adopted in August 1948 amended French postwar social insurance legislation for nonagricultural employees to provide for the adjustment of old-age pensions after they have been awarded. The adjustments authorized differ somewhat from those in most other countries, however, in that they are linked to changes in average covered wages rather than directly to changes in prices. Specifically, the law requires the Minister of Labor and the Minister of Finance and Economic Affairs, after consulting the Superior Social Security Council, to issue an order each year before April 1 (and with effect from that date) that fixes the percentage adjustment to be made in old-age pensions already being paid. It specifies that these adjustments shall be based on the ratio between the average covered wages of insured persons during the past year and those in the immediately preceding year, as calculated from total contributions collected and the total number of persons insured.

Pensions have been increased almost annually, ordinarily as of April 1 of each year, as a result of these provisions. The percentage increases put into effect during the past 11 years are shown below.

Year	*Percent*
1949	15
1950	15
1951	16
1952	10
1953	20
1954	No change
1955	9
1956	8½
1957	12
1958	7½
1959	13½

There are no special financial arrangements for covering the cost of pension increases. The added expense that they occasion is met from the regular revenues of the social insurance program, which consist of an employee contribution of 6 percent of wages and an employer contribution of 10 percent of payroll for pension and sickness insurance combined.

Sweden

The system of universal national pensions that was established in 1946 was modified in June 1950 by the addition of cost-of-living increments linked with price changes. The provisions currently governing these increments are contained in subsequent amendments that became effective at the start of 1956.

Every Swedish citizen receives a national pension at age 67, without regard to any past contributions. Before 1956, this pension was fixed at 1,000 crowns a year for single persons and 1,600 crowns for aged couples.[2] The 1950 legislation provided that, for each quarterly change of 5 points in the "pension price index," one 5-percent cost-of-living increment would be added to or subtracted from the basic pension. Each increment thus amounted to 50 crowns a year for single persons and 80 crowns for aged couples.

The first of these quarterly increments became payable in November 1950 when the pension price index (with June 1946 as 100) reached 108. Three more increments were added in May 1951, when the index jumped to 122. Others went into effect in August 1951 (index, 127), November 1951 (index, 130), May 1952 (index, 135), and August 1954 (index, 140). The index did not go above 144 during 1955, so that a total of eight increments continued to be paid throughout that year, equal to 40 percent of the basic pension.

The amendments that took effect at the start of 1956 raised basic national pensions to 1,700 crowns and 2,720 crowns a year, retained the 50- and 80-crown increments but provided for their payment or deduction for any monthly change of 3 points in the pension price index, and

[2] One crown equals $0.193.

shifted the base of the index from June 1946 to December 1951. The latter month was selected as the base for technical reasons. It was desired to retain the same increment amounts used previously, since the complex punchcard machinery used in administering pension payments was keyed to it. Payment of increments was therefore made contingent on only a 3-point change in the pension price index, and a base for computing it had to be found that would keep increment payments on a level that, in relation to the new basic amounts, would correspond to the previous ratio. December 1951 was found suitable for this purpose.

Three 3-percent increments to the new basic pension amounts were immediately payable in January 1956, since the index with its later base then stood at 110. Additional increments became payable in May 1956 (index, 112), February 1957 (index, 115), October 1957 (index, 118), April 1958 (index, 121), and, most recently, July 1958 (index, 124). By January 1960 the index had risen only to 125. Thus, a total of eight increments are payable at present, amounting to 400 crowns a year for single persons and 640 crowns for aged couples or about 24 percent of their basic pensions. During this period, two "standard supplements" (reflecting the general rise in national income and production) were also granted to all pensioners, amounting to 350 crowns a year for single persons and 560 crowns for couples. The total pension thus currently payable to every aged person (excluding means-test housing supplements and special disability supplements) is 2,450 crowns a year for single persons and 3,920 crowns for couples.

The "pension price index" with which cost-of-living increments are linked is based essentially on changes since December 1951 in the Swedish general consumer price index, but with a 3-month lag. The consumer price index, with 1949 as 100, is prepared monthly by the Social Welfare Board and is based on prices of 177 goods and services collected in 70 localities. Compilation of this index takes about a month, and the pension price index based on it requires Government approval. Because of the time involved, the derived index computed on the basis of the consumer index for any given month is referred to as the "pension price index" for the month that follows 3 months later.

About one-fifth of the cost of national pensions, including cost-of-living increments, is financed from a special 4-percent earmarked pension tax on income, payable with his regular income tax by every citizen aged 18–66. The balance is financed almost entirely from general revenues, mainly by the National Government. There is no employer contribution.

A law adopted in May 1959 establishes a comprehensive new system of supplementary pensions in Sweden.[3] These will be payable in addition to universal flat national pensions and will be graduated according to the previous earnings level of each worker and his years of coverage. This new system is to be financed exclusively by employers (except for contributions on their own behalf by the self-employed). The minimum and maximum amounts of earnings considered for both contribution and benefit purposes, as well as wage credits recorded for each year, are to be adjusted automatically with changes in the pension price index.

Chile

The social insurance law for wage earners passed in July 1952 introduced a policy of automatic adjustment of outstanding pensions in Chile. Somewhat similar arrangements were embodied in the pension legislation for salaried employees and seamen adopted during the same year. These provisions operated for several years, but legislation for stabilizing prices and wages in 1957 abolished the practice of making automatic adjustments.

The 1952 legislation had provided that, whenever the average wages on which the pensions of new beneficiaries were based rose in a year more than 15 percent from the corresponding average for the year in which pensions were last adjusted, all existing pensions were to be adjusted by the same percentage increase on January 1 of the following year. Because of the sizable increases in prices and wages taking place in Chile in recent years, the application of the automatic provision led to large adjustments. On January 1, 1956, for example, all pensions were adjusted upward in conformity with the provision by 65.8 percent. On January 1, 1957, they were increased by a further 63.6 percent.

It was presumably the magnitude of these increases that eventually occasioned the suspension of the automatic provisions in Chile. After their suspension, however, several specific increases in pensions were voted by Congress in the effort to compensate pensioners for the continuing rise in living costs.

Israel

The national insurance law of 1953, which introduced contributory old-age and survivors insurance in Israel, established a system of flat-rate pensions. The basic old-age pension is fixed at 15 Israeli pounds a month for a single person; it is increased to £22½ if the pensioner has one dependent, £28½ if he has two, and £34 if he has three or more dependents.[4] There is added, however, to the basic amount paid every pensioner a supplementary cost-of-living allowance. This allowance has become substantially larger than the basic pension itself.

The amount of the cost-of-living allowance for pensioners varies automatically with changes in the cost-of-living index that is used for the payment of similar allowances to Government employees. Under the specific formula prescribed for computation of allowances for pensioners, the allowance is equal to $\frac{1}{100}$ of the product of the cost-of-living index and the relevant basic pension, minus the basic pension.

Before 1959, changes in the cost-of-living allowance for Government employees were made semiannually whenever the cost-of-living index showed a change of 8 points or more. The index in use when old-age pensions first became payable in April 1957 had as its base September 1951 and it stood at 249 when pensions

[3] See "New Graduated Pension System in Sweden," *Social Security Bulletin*, November 1959.

[4] The pound equals $0.555.

were first paid. The initial supplements were thus 1.49 times the basic pension. The supplements were increased further in July 1957, when the index rose to 258, and again in July 1958, when it stood at 267.

A new index was introduced for the cost-of-living allowances paid to Government employees on January 1, 1959. These allowances are now based on the retail price index published monthly by the central bureau of statistics (with January 1959 as 100), which reflects the retail prices of about 2,000 items contained in the family budget of an average worker's family of four persons. The allowances will change henceforth whenever the new index varies by at least 2 percent. The same procedures are followed with respect to cost-of-living supplements to old-age pensions.

The cost of pension supplements is met from the ordinary revenues of the national insurance system. These revenues are derived from contributions by insured persons and employers and from interest on the invested reserve. Contribution rates, it should be noted, are not on a flat-rate basis as are pensions, but instead are specified percentages of earnings and payrolls. A rise in the cost of living, if accompanied by a somewhat comparable rise in earnings and payrolls, may thus result in a concurrent increase in contribution income. Moreover, most of the reserves of the program are lent to the Israeli treasury; the Government has contracted to repay the amount borrowed, plus an amount equal to the percentage rise in the cost-of-living index that has occurred since the loan was made. Thus, a rise in pension outlays resulting from automatic adjustment of pensions is accompanied by an automatic increase in the value of the invested assets of the program. Interest rates on the invested reserve are also linked with the cost-of-living index.

Belgium

The pension law for wage earners passed in May 1955 introduced in Belgium the practice of automatic adjustments of existing pensions to price changes. Similar provisions were included in the pension laws for salaried employees and self-employed persons enacted in July 1957 and June 1956 and also in the special pension programs for miners and seamen. The 1955 law required all pensions to be automatically increased or decreased by 5 percent if the retail price index rose to 440 points or fell below 400 points. Further increases or decreases of 5 percent were to be made whenever the index deviated by an additional 5 percent from the figure taken as a basis for the last previous adjustment.

These provisions were amended on August 9, 1958, to tie the adjustments to a revised price index using a base of 1953 as 100. The amended legislation provides that pension amounts are to be increased by 5 percent when the index first reaches 105, by a further 2½ percent when it reaches 107.62, and by an additional 2½ percent for each further 2½-percent rise in the index. Provision is similarly made for reduction of all pensions if the index declines 2½ percent from its previous level. Pension adjustments are made as of the first day of the second month following that in which the index reaches the specified level.

The first automatic adjustment of pensions under the Belgian program took effect on February 1, 1957, and consisted of a 5-percent increase. The second increase, one of 2½ percent, occurred on September 1, 1958. The third and most recent increase, also of 2½ percent, became effective on December 1, 1959, and resulted from the fact that the retail price index for October 1959 was 2½ percent higher than the index on which the September 1958 adjustment had been based.

The price index now being used is based on the retail prices of 35 foods, 25 nonfood products, and five services. It is derived from quotations secured from more than 3,500 stores in 62 localities throughout the country. Rents are not covered.

Pensions, including the increases resulting from price changes, are financed from employee and employer contributions and an annual lump-sum Government subsidy paid according to a gradually rising scale. Employee and employer contributions under the wage earners' program have been payable at the rate of 4¼ percent of wages each. Since at least a part of wages in the majority of Belgian industries are themselves linked to retail price changes, some increase in contribution income tends to occur automatically with any rise in prices. The maximum on salaries applied in the computation of contributions under the salaried employees' program also varies automatically with changes in the retail price index. Finally, the law makes the scheduled Government subsidies to the program subject to adjustment to changes in the retail price index in the same manner as pensions.

The Netherlands

The next law to embody an adjustment principle was the Netherlands general old-age act of May 31, 1956, which set up a new program of nonwage-related pensions payable to all aged residents. This act provides that the specified pension amounts shall, in principle, be increased or decreased automatically in proportion to any increase or decrease in the wage index. The adjustment is not completely automatic, however, since some degree of administrative discretion is allowed.

Specifically, the rates of all existing as well as new pensions are to be altered whenever the wage index changes during a period of 6 consecutive months by an average of at least 3 percent. Pension amounts are to be increased or decreased by the percentage difference between the current wage index and the earlier index, except that the new amounts are to be rounded to the next highest multiple of 6 guilders.[5] If a revision of pensions takes the form of an increase, the revision takes effect on the first day of the month following the 6-month period in question. If a decrease is involved, it takes effect on either the same day or later, as determined by decree.

The law authorizes pension rates to be changed before a 6-month period has elapsed or before a 3-percent shift in the wage index occurs if there is a special reason for the change. It also provides that when an adjustment of pensions would produce a change in the real net income of

[5] One guilder equals $0.263.

pensioners, and this change is not the same or approximately the same for the employed persons covered by the wage index, the revision may be canceled or modified in such a way as to moderate the change in the real net income of pensioners.

The law itself stipulates that the index used for the purpose of pension adjustments shall be a weighted average index of the hourly wages of adult workers. The specific index currently used is a monthly index of the hourly wages of adult male manual employees in industry, transportation, and agriculture, as computed by the central statistical office (with June 1947 as 100). When this index was selected, it was believed to be the best and most comprehensive one available for the purpose. The intention is to develop eventually a new wage index that will be more suitable.

The pension amounts specified in the original law were 804 guilders a year for a single person and 1,338 guilders for a married pensioner. These amounts were selected as of March 31, 1955, when the wage index stood at 152. From that date to June 30, 1956, the index rose to 159, or 4.6 percent, so that when pensions first became payable at the start of 1957 they were initially fixed at 846 guilders for a single person and 1,404 guilders for a couple. Since the index had risen further between June 30 and December 31, 1956, to 162, however, pensions during the first half of 1957 were later raised retroactively to 858 and 1,428 guilders.

The wage index rose once again, from 162 to 174, during the first 6 months of 1957. A part of this rise, however, was the result of a compulsory wage increase granted to all workers at the beginning of 1957 as compensation for the newly imposed old-age tax of 6.75 percent. For this reason, pension rates were not adjusted by the full amount of the 7.4-percent increase in the wage index but instead were set at 876 and 1,452 guilders beginning July 1, 1957.

The wage index of August 31, 1957, registered a further substantial advance, to 181—again the result of a special circumstance. This was another compulsory wage increase to compensate for a general rise in rents connected with the gradual unfreezing of postwar rent controls. Since it was found after investigation that the rent increase impinged more heavily on the budgets of aged persons than on those of wage earners generally, pension amounts were increased as of August 1, 1957, by proportionately more than the rise in the wage index—to 936 and 1,524 guilders. The next and most recent increase in pension amounts took effect November 1, 1958, after the wage index had risen 3.9 percent and stood at 188 for 6 consecutive months. The current pension rates, fixed at that time, are 972 and 1,584 guilders a year.

The cost of old-age pensions in the Netherlands, including that of any increases resulting from changes in the wage index, is financed mainly from a special 6.75-percent personal old-age tax on the net taxable income of every resident. A ceiling is placed on the annual income on which the tax is payable, but the law provides for this maximum also to vary with changes in the wage index. Its level is to change automatically as of January 1 of any year, whenever the wage index for the preceding July has varied by at least 3 percent from the index on which the previous revision of the maximum had been based.

The maximum on net income for purposes of the old-age tax was originally fixed in the law at 6,000 guilders a year, but, when the program actually started at the beginning of 1957, it became 6,900 guilders as a result of the rise in the wage index. It was raised again to 7,450 guilders on January 1, 1959, because of the changes in the wage index occurring during 1958. No change has been made in the 6.75-percent contribution rate since the start of the program, despite several increases in pension rates. It appears, therefore, that the rise in contribution revenue resulting from a general increase in income as well as from the higher ceiling has in general been sufficient thus far to finance the higher costs occasioned by the pension adjustments.

Finland

At the same time that a new national pensions act was enacted in Finland in June 1956, a companion law was adopted that provided for linking both the universal basic pensions and supplementary assistance pensions included in the main law with changes in the cost of living. Under this law, pensions are increased or reduced to the extent to which the cost of living at the time of payment has risen or fallen in comparison with the cost of living at the time when the pension rates were last fixed. The same adjustment to cost-of-living changes is made in the income limits applied in determining eligibility for the assistance part of the pension. The above adjustments are now being made whenever a change of at least 10 percent occurs in the Finnish cost-of-living index.

Other Countries

There are some countries in which the social security legislation implies with varying degrees of explicitness that the rates of existing pensions and other social security benefits are to be modified when there is a change in economic conditions, although provision is not made for automatic changes in benefit rates.

The British national insurance act of 1946, for example, requires the Ministry of Pensions and National Insurance to review benefit rates after each quinquennial actuarial report in relation to the current circumstances of insured persons. Consideration must be given, in particular, to expenditures required for the preservation of health and working capacity, to changes in the circumstances of beneficiaries since the rates were last adjusted, and to the likelihood of future changes. A report must be submitted to Parliament on completion of the review.

The social insurance law enacted in Greece in 1951 provides that, in the event of significant variation in the general cost-of-living index, all pensions being paid may be changed by a percentage decided upon by the governing body of the Social Insurance Institution. Its decision, however, is subject to the approval of the Minister of Labor.

Two 1957 laws effecting extensive changes in pension insurance for wage earners and salaried employees in the Federal Republic of Germany

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Table 4.—*Status of the unemployment trust fund, by specified period, 1936–59* [1]

[In thousands]

Period	Assets at end of period [2]			State accounts				Railroad unemployment insurance account [5]			
	Total assets	Invested in U.S. Government securities [3]	Cash balances	Deposits and transfers [4]	Interest earned	Withdrawals	Balance at end of period	Deposits and transfers	Interest earned	Withdrawals	Balance at end of period
Cumulative, January 1936–December 1959	$6,889,720	$6,876,956	$8,683	$27,684,974	$2,978,551	[6] [7] $23,783,488	$6,880,037	$1,696,119	$220,856	$1,911,646	[6] [8] $5,330
Calendar year:											
1940	1,957,977	1,945,300	12,677	860,784	58,901	614,814	1,804,835	59,907	1,217	15,449	153,142
1941	2,744,358	2,732,000	12,358	1,008,149	53,000	349,583	2,516,400	66,281	4,557	15,088	227,958
1942	3,698,008	3,687,000	11,008	1,138,530	68,047	344,263	3.378,714	85,973	6,084	6,695	319,293
1943	5,146,745	5,095,000	51,745	1,328,117	81,864	77,582	4,711,113	98,244	7,409	1,014	435,632
1944	6,583,434	6,579,000	4,434	1,316,940	50,518	63,153	6,015,418	119,261	4,564	568	568,016
1945	7,537,391	7,508,184	29,208	1,160,712	118,460	461,709	6,832,880	117,374	11,010	1,949	704,511
1946	7,585,255	7,564,000	21,255	915,787	130,183	1,103,967	6,774,884	122,053	13,347	39,168	810,371
1947	8,124,162	8,102,487	21,675	1,097,213	131,620	786,875	7,216,842	126,360	15,574	54,862	907,320
1948	8,520,442	8,496,365	24,077	989,067	218,902	852,484	7,572,327	67,001	27,333	60,120	948,115
1949	7,780,021	7,696,298	52,125	997,582	156,472	1,761,695	6,953,683	7,133	19.190	146,241	826,338
1950	7,721.432	7,639,229	24,181	1,190,397	145,687	1,341,832	6,947,935	15,420	16,916	85,178	773,497
1951	8,519,230	8,427,162	99,263	1,495,218	158,265	844,672	7,756,745	19,752	16,505	47,270	762,484
1952	9,032,018	9,023,089	16,118	1,371,660	177,351	995,549	8,310,207	20,020	16,594	77,288	721,810
1953	9,556,549	9,545,005	15,882	1,350,011	201,277	969,894	8,891,602	19,399	16,189	92,451	664,947
1954	8,749,444	8,739,929	4,486	1,135,261	198,602	2,032,194	8,193,272	17,287	13,692	204,078	491,848
1955	8,764,415	8,753,543	4,692	1,214,977	184,974	1,351,551	8,241,672	16,446	9.539	145,675	372,157
1956	9,069,279	9,061,089	3,138	1,504,131	199,597	1,399,095	8,546,305	56,592	8,119	119,450	317,418
1957	9,108,651	9,098,092	8,316	1,618,328	220,398	1,744,111	8,640,919	85,672	7,405	148,225	262,270
1958	7,124,037	7,113,981	8,691	1,642,198	198,989	3,541,352	6,940,754	103,858	4,441	282,330	88,240
1959	6,889,720	6,876,956	8,683	2,058,273	177,850	2,296,839	6,880,037	259,971	828	343,709	5,330
1958											
October–December	7,124,037	7.113,981	8,691	328,699	45,875	600,434	6,940,754	26,715	710	72,750	88,240
1959											
January–March	6,534,576	6,484,998	4,463	234,104	42,972	834,127	6,383,703	26,358	425	60,590	54,432
April–June	6,719,017	6,709,422	5,946	782,737	42,431	520,586	6,688,285	30,693	288	56,080	29,334
July–September	6,960,841	6,906,396	6,702	629,583	45,901	411,400	6,952,369	88,198	69	111,997	5,604
October–December	6,889,720	6,876,956	8,683	411,849	46,545	530,726	6,880,037	114,722	46	115,042	5,330

[1] Beginning 1949, not strictly comparable with data for earlier years because of differences in accounting methods in source materials used.

[2] Beginning 1949, total investments plus cash balances differ from total assets on a ledger basis by the sum of items in transit or suspense at the end of period. Beginning December 1954, includes transactions and assets of the Federal unemployment account, under the Employment Security Administrative Financing Act of 1954; beginning September 1956, includes undistributed appropriations.

[3] Includes accrued interest purchased, and repayments on account of interest on bonds at time of purchase.

[4] Includes, when applicable, loans and transfers from the Federal unemployment account and/or transfers from undistributed appropriations.

[5] Beginning July 1947, includes temporary disability program. Beginning September 1958, includes transactions and assets of the railroad unemployment insurance administration fund. Beginning September 1959, includes loans from and repayments to railroad retirement account.

[6] Includes transfers from State accounts to railroad unemployment insurance account amounting to $107,161,000.

[7] Includes withdrawals of $79,169,000 for temporary disability insurance benefits.

[8] Includes transfers to the account from railroad unemployment insurance administration fund amounting to $106,187,199, and transfers of $12,338,198 out of the account to adjust funds available for administrative expenses because of retroactive credits taken by contributors under the Railroad Unemployment Insurance Act Amendments of 1948.

Source: Unpublished Treasury reports.

COST-OF-LIVING SUPPLEMENTS

(Continued from page 19)

specify that, in the event of a change in the average earnings of insured workers (averaged over the first 3 of the last 4 calendar years), all existing pensions are to be adjusted "by the passage of a law." Such statutory adjustment is to take into account, however, the development of the Nation's economic capacity and productivity and any change in the per capita income of the gainfully employed. The laws also require that reports be made to Parliament by September 30 of each year on the financial position of the two pension programs, the development of the Nation's economic capacity and productivity, and changes in per capita income during the preceding calendar year. These reports are to be accompanied by the expert findings of a social advisory council, and by Government proposals for adjustment of outstanding pensions if considered desirable. The German laws leave to Parliament, nevertheless, the final decision as to whether or not existing pensions will be readjusted.

It was found during 1958 that the average monthly wages of insured workers in Germany had risen from 379 marks during 1954–56 to 401 marks during 1955–57. As a consequence, the West German Parliament approved a 6.1-percent increase, effective January 1, 1959, in almost 7 million existing pensions. This was the first application of the adjustment provisions of the new legislation.

The German pension programs are financed by tripartite contributions of insured persons, employers, and the Government. The maximum earnings on which employee and employer contributions are payable varies automatically with changes in average insured wages, since it is set by law at double such wages. The maximum thus rose from 760 marks a month in 1958 to 802 marks in 1959. The law also provides that the size of the annual lump-sum Government contribution shall vary automatically with changes in average wages.