

ciaries in Michigan but to only about one-fifth of those in Mississippi. Only 9 percent of Michigan's beneficiaries were receiving a disability benefit of less than \$70.00, but for 34 percent of the beneficiaries living in Mississippi the amount was \$40.00-\$69.90.

Almost two-fifths of the old-age beneficiaries in Connecticut but only 8 percent of those living in Mississippi were receiving benefits of \$100.00-\$127.00. Benefits of less than \$70.00 were going to 29 percent of Connecticut's old-age beneficiaries and to 73 percent of those in Mississippi.

Relation of Social Security Expenditures to Gross National Product in 45 Countries*

The International Labor Office (ILO) recently published its latest triennial statistical study of the cost of social security in a large number of countries—the fifth in a series initiated in 1952. The current study contains statistics on receipts and expenditures under social security programs in nearly 50 countries, usually for each of the financial years 1957 through 1960. With these statistics, it is possible to compare ratios of social security outlays to gross national product in different countries. This note summarizes the ratios presented in the ILO study, explains how they were derived, and discusses some of the factors that may have been responsible for differences among them.

SOURCE OF SOCIAL SECURITY DATA

The social security financial data were derived from replies to a detailed ILO questionnaire that was sent in 1962 to all governments that were then members of the International Labor Organization. Each government was requested to submit statistical information on the financial operations of all social security programs within its territory for the years 1958, 1959, and 1960 (or the financial years ending in those years) and to revise the

* Prepared by Werner Hasenberg, International Social Security Branch, Division of Research and Statistics. The ILO publication from which the ratios shown in this note have been drawn is *The Cost of Social Security, 1958-1960, 1964*.

information for earlier years. Replies were received from more than 50 countries. A few of them, however, were unable to provide data for some of their more important programs. These countries are excluded from the comparative tables in the study and from this note, since the incompleteness of the data would seriously distort their comparability.

The social security system of most countries is made up of a number of different programs that usually are administered separately by various, sometimes highly decentralized, governmental or quasigovernmental agencies. Thus, the assembly and tabulation of data on the financial operations of all social security programs in a country necessarily require considerable time. Moreover, final data for individual programs often are not available for a year or two after the end of the financial year to which they relate. Thus there is an inevitable delay in publishing comprehensive international comparisons of social security operations.

The ILO study contains for each country separate data for the main categories of social security, usually for the 4 most recent financial years for which the information was available to the ILO. An objective of the study was to permit international comparison of the data and of trends in social security costs for the various countries during the period covered by the inquiry. As indicated above, the social security data contained in the study are essentially those provided by the countries themselves in response to the ILO questionnaire.

Since it is difficult to make valid comparisons at the international level of highly diverse social security systems, the ILO was obliged to provide a uniform definition of what should be included within the limits of social security for purposes of the study, instead of relying on each country to use its own concepts. The application of common definitions and classifications by all the different countries is best achieved by means of a questionnaire that enables all governments to arrange their data within a prescribed definitional framework.

DEFINITION OF SOCIAL SECURITY

The exact meaning and content associated with the term "social security" vary considerably from

country to country. To facilitate comparisons among countries, the ILO found it necessary to use for its study a working definition that would achieve the greatest possible measure of comparability and at the same time take into account the practical problems in obtaining the necessary data.

It therefore employed the following criteria to determine whether a particular program was to be regarded as a social security program:

(1) The objective of the program is (a) to maintain income in case of involuntary loss of earnings or of an important part of earnings, (b) to grant supplementary income to persons having family responsibilities, or (c) to grant curative or preventive medical care.

(2) The program is set up by legislation that attributes specified rights to individuals or imposes specified obligations on a public, semipublic, or autonomous body.

(3) The program is administered by a public, semipublic, or autonomous body.

Use of these criteria led to inclusion of the following kinds of measures as social security programs for purposes of the study: compulsory social insurance, certain voluntary insurance programs, public assistance, family allowances, curative and preventive government medical services (including national health services), public employee programs, and benefits for war victims and veterans. All programs of workmen's compensation—in most countries the oldest branch of social security—were also included even if they did not meet the third criterion in those countries where the law imposes responsibility for compensation of employment injuries directly on the individual employer. This exception was necessary because in many countries legislation concerning work accidents defines the liability of the employer but leaves him free to choose whether to assume this liability himself or to take out a private insurance policy to cover it.¹

The definition used by the ILO may have led to the exclusion of certain programs (paid

vacations, for example) that are considered an integral part of the social security system in some countries. At the same time, some programs included in the study, such as government or national health services, would in certain countries not be regarded as forming a part of the social security system.

SOURCE OF GROSS NATIONAL PRODUCT DATA

For its gross national product data, the ILO study uses for most countries the figures on "gross national product at market prices" published by the United Nations in its *Yearbook of National Accounts Statistics*. For this reason, the accompanying table does not include certain countries for which no gross national product or other comparable aggregate data have been published by the United Nations, though the individual country tables in the ILO study contain financial data on their social security programs.

The term "gross national product at market prices," as used by the United Nations, refers to the market value of the total annual production of final goods and services by a nation's economy. It is equal to the sum of public and private consumption expenditures, gross domestic capital formation, and net exports of goods and services. International comparisons are sometimes made on the basis of national income instead of gross national product. The data for national income are derived by deducting depreciation and indirect taxes from the gross national product. Social security expenditures are more nearly comparable from country to country as a percentage of gross national product than as a percentage of national income, since the exclusion of depreciation and indirect taxes (both of which may vary considerably from one country to the next with industrial structure or fiscal policy or practice) is not relevant to the nature of social security expenditures.

It should be noted that not all countries included in the accompanying table apply the same national income accounting concepts as are used in the United Nations System of National Accounts. For example, countries with centrally planned economies (Eastern European countries) mainly use instead the concept of "net material product," generally defined as the total value of

¹ Some countries also require individual employers to assume the responsibility for compensating other social security risks, such as sickness and maternity; for the sake of international comparability and in view of the practical problems of collecting pertinent data, however, it was found advisable to make an exception from the general criteria only for workmen's compensation programs.

goods and productive services, including turnover taxes, produced by the economy of a country during a year. It covers only those activities that are considered to contribute directly to material production, such as agriculture, mining, manufacturing, construction, transport and communications, trade, and catering. Activities such as public administration and defense, as well as personal and professional services and similar activities, are not included. As a result of the exclusion of certain economic activities from this concept, the ratio of social security expenditures to "net material product" in a given country would usually be higher than that of the same expenditures to the more encompassing "gross national product."

For some other countries, where data for gross national product at market prices are not available, the ratios have been calculated by the ILO on the basis of some other aggregate, indicated in a footnote to the table. It should be noted also that even though most of the gross national product figures used were in principle calculated according to the United Nations System of National Accounts, there inevitably is considerable variation among countries in the quality of the basic data available for the calculation, methods of estimating the various elements entering into calculations, and related matters.

RATIO OF EXPENDITURES TO GROSS NATIONAL PRODUCT

The accompanying table shows the ratio of aggregate social security outlays to gross national product in 45 countries for each of the years 1957-60, where the data are available. The countries are arrayed in the declining order of their ratio for the latest available year (generally 1960).

It is immediately apparent from the table that the ratios presented in the ILO study are much higher for most countries in Europe and Oceania than for countries in other parts of the world, including the United States, which falls at about the midpoint of the rankings. This situation is perhaps not too surprising in view of the much earlier introduction of social security in Europe and the great emphasis on social welfare measures in most of the more highly industrial-

ized European countries. The less industrialized European countries (Portugal, Spain, Cyprus, and Turkey) fall within the lower range of the rankings, which may reflect a level of development somewhere between that of countries in Asia, Africa, and Latin America on the one hand, and of the more industrialized countries on the other.

Among the Asian countries, Israel and Japan have a relatively high ranking, which again reflects their degree of economic development. Only four Latin American countries are included in the table, and it would therefore be difficult to draw any particular conclusions with respect to all of Latin America. Of the countries in Africa, South Africa ranks highest, but the

Ratio of social security expenditures to gross national product¹ in 45 countries, financial years 1957-60²

Country	1957	1958	1959	1960
Germany (Federal Republic)	16.3	17.3	16.7	16.1
Czechoslovakia	15.1	14.6	15.5	15.3
Belgium	12.2	13.7	14.5	14.2
Luxembourg	13.1	14.3	14.6	14.2
Austria	13.2	14.5	14.8	14.0
France	14.1	14.0	14.1	13.9
New Zealand	11.1	11.2	11.9	13.0
Italy	11.7	12.6	13.0	12.7
Sweden	11.8	12.4	12.5	12.4
Denmark	10.5	11.6	11.6	11.1
Netherlands	10.3	11.1	10.8	11.0
United Kingdom	9.9	10.8	11.0	11.0
Yugoslavia	9.4	10.8	10.6	11.0
Norway	8.6	9.1	10.3	10.3
Finland	9.7	10.2	10.1	9.6
Ireland	9.7	9.9	9.8	9.4
Poland	7.7	8.5	9.3	9.0
Canada	6.7	7.8	8.5	8.9
Australia	7.4	7.7	7.6	7.9
Switzerland	7.6	7.7	7.7	7.7
Iceland	5.6	5.4	5.4	7.2
Israel	6.3	6.4	6.7	7.1
United States	5.2	5.9	6.5	6.3
Panama	5.2	5.9	6.4	6.2
Portugal	5.0	5.4	5.6	5.5
Japan	4.7	5.6	5.3	5.2
Ceylon	4.0	3.3	3.7	4.5
Spain		3.4	4.0	4.2
South Africa	3.5	3.6	3.7	3.8
Malagasy Republic		3.4		
Cyprus		2.2	2.7	3.3
Malaya	3.3	3.7	3.2	3.1
Congo (Brazzaville)		3.0		
Guatemala	2.9	2.8	3.0	3.0
Venezuela		2.2	2.2	2.8
El Salvador	2.1	2.1	2.3	2.2
Tanganyika		1.8	1.8	1.0
Upper Volta		1.8		
Viet-Nam		1.5		
India	1.0	1.2	1.4	1.4
Ghana		1.4	1.3	1.3
Turkey	1.2	1.0	1.2	1.3
China (Taiwan)	.9	1.2	1.4	1.2
Philippines		1.1	1.2	1.1
United Arab Republic	1.1	1.1		

¹ Gross national product at market prices, with the following exceptions: Czechoslovakia and Poland, net material product at market prices; Yugoslavia, gross material product at market prices; Malagasy Republic, Congo (Brazzaville), and Upper Volta, gross domestic product at factor cost; El Salvador in 1957 and Tanganyika, gross domestic product at market prices; and India and United Arab Republic, national income at factor cost.

² For the United Kingdom, Israel, and Japan, the figures shown are for the financial years ending on March 31 of the following year—that is, the figures shown under 1960 are for the 12 months ended Mar. 31, 1961.

Source: International Labor Office, *The Cost of Social Security, 1958-1960*.

dispersion among the seven African countries included is relatively small.

Various factors exert an influence on the size of the ratio in any given country and thus serve to explain to some extent the substantial differences between countries. One basic factor is the extent to which the various social risks are, or are not, covered. Some countries, including a number of those in Europe, have public programs—in the form of social insurance, social assistance, public services, or otherwise—dealing with the five major branches of social security: pensions, sickness insurance, workmen's compensation, unemployment insurance, and family allowances. If a country maintains relatively complete programs in all five branches, it is likely that its ratio of social security expenditures to gross national product will be comparatively high.

Similarly, the ratios are smaller in a number of other countries chiefly because no substantial program is in force for one of these five fields. The United States, unlike many other countries, has no family allowance program; moreover, it has only relatively limited public programs covering the risks of wage loss and need for individual curative care in case of sickness. A number of the less-developed countries, such as Guatemala, Venezuela, Tanganyika, and Ghana, had no general public pension program during the period reviewed. Only a few of these countries have any kind of unemployment insurance program.

Differences in the coverage of persons also affect the comparative size of the ratios. Those countries with relatively high ratios usually tend to cover under their programs at least the great majority of the working population and their families. In contrast, many of the nonindustrialized countries, such as India, China (Taiwan), and the United Arab Republic, confine their programs to employees in industry and commerce. Such employees may represent only a small percentage of the total labor force; the rest would be in agriculture, often as self-employed cultivators rather than as employees.

A third factor accounting for intercountry differences in the ratios of social security outlays to gross national product lies in the relative liberality of benefits. Given two countries with the same coverage of risks and persons and the same level of per capita income, if one has a benefit formula that provides payment of a

higher percentage of wages than the other, the ratio of the former will tend to be higher. This factor of benefit liberality involves not only the basic benefit formula itself but also the liberality of qualifying conditions, the duration of benefits, the age at which old-age pensions are payable, and so on.

A fourth general factor affecting the ratios is the variable incidence of the risks dealt with. Naturally, the larger the aged population or the larger the number of dependent widows and orphans who survive in case of the breadwinner's premature death, the higher the expenditures under a national social security program tend to be. They will also fluctuate from country to country with the volume of sickness or ill health, with the number of work accidents, with the volume of compensable unemployment, and so on.

The level of expenditures may also be affected, at least under some programs, by the age or degree of maturity of the program. Thus, in the case of old-age pension programs, there is an inherent tendency for the beneficiary rolls to be small in the early years and to rise steadily with the passage of time as more and more beneficiaries build up benefit rights and become entitled to a pension.

Comparison of the ratios for 1960 with those for earlier years suggests that the ratios do not tend to change rapidly and that in fact they have some degree of stability from one year to the next. This finding suggests that aggregate social security expenditures have in recent years moved more or less in the same direction and degree as gross national product. Of course, if a country introduces a major new social security program, a sudden upward movement in the ratio may result as soon as benefits are paid on a major scale. Moreover, if the ratios are examined over a longer period, a general tendency for a gradual but fairly steady rise is apparent in many countries.

The ratios presented here cover only public social security programs as defined. They do not take account of nonstatutory measures in the form of private employer programs or programs established under collective-bargaining agreements or otherwise. In some countries, such private programs afford substantial protection for covered workers, and the expenditures under

such plans may in some instances amount to a significant percentage of the gross national product. The fact that private plans are more prevalent in some countries than in others may also provide an additional explanation of differences in the ratios.

Recent Publications*

SOCIAL SECURITY ADMINISTRATION

DIVISION OF RESEARCH AND STATISTICS. *The Disabled Worker Under OASDI: The 1960 Survey of Disability Beneficiaries and Workers With a Disability Freeze in Eight Metropolitan Areas*, by Lawrence D. Haber and others. (Research Report No. 6.) Washington: U. S. Govt. Print. Off., 1964. 368 pp. \$1.25.

Examines the relationship of social and economic factors to disability, describes the disabled population protected by the OASDI program, and suggests the scope and direction of further research.

DIVISION OF RESEARCH AND STATISTICS. *Social Security and Social Services in France*, by Alvin L. Schorr. (Research Report No. 7). Washington: U. S. Govt. Print. Off., 1965. 48 pp. 35 cents.

Considers some of the underlying ideas and social attitudes that have helped shape the French programs.

WELFARE ADMINISTRATION

BUREAU OF FAMILY SERVICES. *A Guide for Training Local Public Welfare Administrators*, by Joseph I. Hungate, Jr. Washington: U. S. Govt. Print. Off., 1964. 136 pp. 45 cents.

One of a series of training guides for use of staff development personnel.

OETTINGER, KATHERINE B. "Children's Bureau Health Service Activities Under the 1963 Amendments." *Welfare in Review*, vol. 3, Feb. 1965, pp. 1-7. 35 cents.

TIBBITTS, CLARK, and SHMELZER, JUNE L. "New Directions in Aging and Their Research Implications." *Welfare in Review*, vol. 3, Feb. 1965, pp. 8-14. 35 cents.

GENERAL

BLOOM, GORDON F., and NORTHRUP, HERBERT R. *Economics of Labor Relations*. (5th edition.) Homewood, Ill. Richard D. Irwin, Inc., 1965. 901 pp. \$11.95.

Complete revision of earlier edition. Includes new chapter on Federal and State equal opportunity laws and discussions of the Civil Rights Act.

EVITTS, CHARLES E. "Interstate Benefit Payment Plans." *Unemployment Insurance Review*, vol. 1, Oct. 1964, pp. 1-4.

* Prepared in the Library, Department of Health, Education, and Welfare. Orders for items listed should be directed to publishers and booksellers; Federal publications for which prices are listed should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

Describes the interstate system for payment of unemployment insurance benefits.

U. S. CONGRESS. JOINT ECONOMIC COMMITTEE. *The Distribution of Personal Income: A Study of Statistics on the Size Distribution of Personal Income in the United States*. (88th Cong., 2d sess., Joint Committee Print.) Washington: U. S. Govt. Print. Off., 1965. 134 pp.

RETIREMENT AND OLD AGE

FORD, CAROLINE S. "Ego-Adaptive Mechanisms of Older Persons." *Social Casework*, vol. 46, Jan. 1965, pp. 16-21. 65 cents.

Social, physical, and emotional demands on older persons.

MAYERSON, ALLEN L. "Financing Private Pension Plans in the United States." *International Review on Actuarial and Statistical Problems of Social Security*, No. 9, 1963, pp. 11-30. \$3.50 a year.

MILLER, MICHAEL B., "Physical, Emotional and Social Rehabilitation in a Nursing-Home Population." *Journal of the American Geriatrics Society*, vol. 13, Feb. 1965, pp. 176-185. \$1.50.

Describes a rehabilitation program involving 90 patients during a 6-month period.

MORRIS, ROBERT, and RANDALL, OLLIE A. "Planning and Organization of Community Services for the Elderly." *Social Work*, vol. 10, Jan. 1965, pp. 96-102. \$1.75.

Paper presented at the Sixth International Congress of Gerontology, held in Copenhagen in August 1963.

MYERS, ROBERT J. "Actuarial-Reduction Factors for Early-Retirement Benefits." *International Review on Actuarial and Statistical Problems of Social Security*, No. 9, 1963, pp. 31-40. \$3.50 a year.

By the Chief Actuary of the Social Security Administration.

NASH, BERNARD E. "Community Services for the Aging: A Field for State Action." *State Government*, vol. 33, Winter 1965, pp. 20-24. \$1.50.

Importance of State services of consultation to local communities on meeting the needs of the aging.

"Panel Discussion—Psychiatric Aspects of Geriatric Patients." *Journal of the American Geriatrics Society*, vol. 13, Feb. 1965, pp. 108-117. \$1.50.

"Psychological, Physiological, Health, and Medical Aspects of Aging." *Library Counselor* (Colorado Department of Public Welfare), vol. 20, Jan. 1965, entire issue. \$1.

Annotated bibliography.

ROSOW, IRVING. "And Then We Were Old." *Trans-action*, vol. 2, Jan.-Feb. 1965, pp. 21-26. 75 cents.

States that welfare of the aged varies with their resources, the functions they perform, and the state of social organization.

U. S. CONGRESS. SENATE. SPECIAL COMMITTEE ON AGING. *Frauds and Deceptions Affecting the Elderly: Investigations, Findings, and Recommendations, 1964*. (89th Cong., 1st sess., Committee Print.) Washington: U. S. Govt. Print. Off., 1965. 90 pp. 30 cents.

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