# Income-Loss Protection Against Illness, 1948-67

### by DANIEL N. PRICE\*

Railroad workers and most of the workers in four States have income-loss protection against short-term nonoccupational disability. In all other jurisdictions such protection was available in 1967 to slightly more than half the work force. generally through labor-management agreements, voluntary employer programs, or other group programs. In addition, for the first time since 1949 a new mandatory program of temporary disability benefits has been enacted. In June 1968. Puerto Rico passed a law that, starting July 1, 1969, will insure partial wage replacement to roughly 400,000 wage and salary workers in the event of unemployment due to short-term illness. Presented below are the estimates for 1967 in this series on the amount of income loss resulting from non-work-connected temporary disability, the extent and types of protection, trends since 1948, and concepts and methods used in making the estimates.

THE NUMBER OF workers with some form of income-loss protection in the event of non-workconnected short-term sickness or injury increased faster than the total number of workers in 1967. This was the second such year, following several years of stability in the percentage of workers with protection. During the year, 45.3 million workers, or two out of three in government and private industry were covered through their job by some kind of program. With government employment excluded, 36.6 million in private industry (almost two-thirds) could receive sickness benefits. In the States without temporary disability insurance laws, 22.6 million wage and salary workers-only a little more than half the workers in private employment-had such protection.

There was less disabling sickness in 1967 than in any of the past 6 years. Because of the particularly low incidence of influenza in the winter of 1966-67, workers lost fewer work days —a development that helps explain the rather small (3 percent) increase in income loss from 1966 experienced by all paid workers. Also in 1967, income loss of the self-employed continued to increase at a slower rate than the rates for other classes of workers and that of State and local government workers continued to increase at a faster rate.

Benefits paid in 1967 were \$3.8 billion, an increase of 5 percent. This was the smallest percentage increase in benefits recorded in the series except for the annual changes in 1954 and in 1964. Sick leave continued to account for the biggest share of benefits paid—\$2.1 billion in 1967. Private insurance paid \$1.4 billion in benefits and publicly operated plans (in States with mandatory programs and in the railroad industry) disbursed \$0.3 billion.

Sick leave is a form of sickness benefits available largely in government employment. Of the \$2.1 billion granted in sick leave during 1967, about \$1.4 billion went to Federal, State, and local government employees.

Once again, as it has for the past 9 years, the proportion of potential income loss replaced by cash sickness benefits in 1967 hovered at something less than 30 percent. This stability is in marked contrast to the 1948–59 period, when benefits as a proportion of income loss rose an average of one percentage point a year.

#### **MEASURING INCOME LOSS**

#### Trends

The amount of income lost because of nonoccupational short-term sickness by all gainfully employed civilians was higher in 1967 than in the preceding year as it has been in each successive year since the series began, except during 1949 and 1954. The increase from \$12.2 billion to \$12.6 billion was, however, small compared with the increases during the past decade; in two of these years, the rise had been as high as 11 percent. The modest increment in 1967 stems primarily from a sharp drop in the amount of sickness during the year and from a smaller-than-

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usual increase in civilian employment in 1967, compared with the rises in the past several years. The third major factor affecting estimates of lost employment income-wage and salary levelsalso continued upward but at a slightly lower rate than in the previous year.

It is interesting to note that the relative share of total income loss estimated for two of the groups in table 1 has changed noticeably over the years. Continuing a long-term downward trend, the income loss of self-employed persons as a

TABLE 1.--Estimated income loss from nonoccupational short-term sickness, <sup>1</sup> by type of employment, 1948-67<sup>2</sup>

In	millions]	
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			Wage an	id salary	workers		
			In pr employ		In pu employ	Self-em-	
Year	Total	Total	Covered by tem- porary disabil- ity in- surance laws 4	Other <sup>5</sup>	Federal <sup>6</sup>	State and local 7	ployed persons <sup>8</sup>
1948	\$4,568	\$3,630	\$391	\$2,807	\$174	\$258	\$938
1949	4.424	3.601	483	2.643	190	285	823
1950	4,795	3,921	712	2,703	201	305	874
1951	5,473	4,494	1.059	2,842	259	334	979
1952	5,814	4,831	1,132	3,039	291	369	983
1953	6,144	5,199	1,213	3,295	290	401	945
1954	6,094	5,161	1,212	3,232	280	437	933
1955	6,546	5,573	1,299	3,507	297	470	973
1956	7,031	6,034	1,430	3,773	313	518	997
1957	7,363	6,335	1,512	3,930	323	570	1,028
1958	7,458	6,371	1,507	3,884	352	628	1,087
1959 %	7,724	6,671	1,580	4,079	356	656	1,053
1960 9	8,555	7,445	1,773	4,507	403	762	1,110
1961 9	8,639	7,498	1,770	4,492	420	816	1,141
1962 9	9,622	8,383	1,983	5,005	467	928	1,239
1963 9	10,178	8,905	2,084	5,306	504	1,011	1,273
1964 9	10,248	9,015	2,085	5,383	506	1,041	1,233
1965 9	11,278	9,902	2,244	5,945	548	1,165	1,376
1966 9	12,192	10,748	2,408	6,464	597	1,279	1,444
1967 °	12,583	11,180	2,479	6,682	626	1,393	1,403

<sup>1</sup> Short-term or temporary non-work-connected disability (lasting not more than 6 months) and the first 6 months of long-term disability.
 <sup>2</sup> Beginning 1960, data include Alaska and Hawaii. Beginning 1959, data

adjusted to reflect changes in sickness experience (average number of dis-ability days), as reported in the Health Interview Survey of the Public Health Service.

Health Service. <sup>3</sup> Annual payrolls of wage and salary workers in private employment, multiplied by 7 (estimated average workdays lost per year due to short-term sickness) and divided by 255 (estimated workdays in year). Data for 1948-64 from table 6.2 of *The National Income and Product Accounts of the United States*, 1929-1965, Statistical Tables: a Supplement to the Survey of Current Business (Department of Commerce); for 1965-67 from Survey of Current Business, National Income Issue, July 1968

<sup>4</sup> Total annual payrolls of wage and salary workers in industries covered by temporary disability insurance laws in Rhode Island, California, New Jersey, and New York and in the railroad industry, multiplied by 7 and divided by 255.

divided by 255.
Difference between total loss for all wage workers in private employment and for those covered by temporary disability insurance laws.
Federal civilian payroll in United States from U.S. Civil Service Com-mission, multiplied by 8 (estimated average workdays lost per year due to short-term sickness) and divided by 260 (scheduled workdays in year).
Annual wage and salary payrolls of State and local government em-ployces from Department of Commerce data (see footnote 3), multiplied by 7.5 (estimated average workdays lost per year due to short-term sickness) and divided by 266 (estimated average workdays in year). and divided by 255 (estimated workdays in year). <sup>8</sup> Annual farm and nonfarm proprietors' income from Department of

<sup>•</sup> Annual farm and nontarm proprietors income from Department of Commerce sources citted in footnote 3, multiplied by 7 (estimated income-loss days per year due to short-term sickness) and divided by 300 (estimated workdays in year). <sup>•</sup> For 1959-67 computed as for earlier years, then adjusted to reflect changes in sickness experience (average number of disability days), as reported in the Health Interview Survey for those years.

proportion of all income lost declined to 11 percent in 1967. This proportion had been as high as 21 percent of the total in 1948, the first year for which these estimates were compiled. As in a few other years since 1948, the dollar value of income loss for the self-employed actually went down in 1967 from the previous year by 3 percent. For State and local government workers, the group whose income loss increased at the greatest rate from 1966 to 1967 (9 percent), the loss of income from short-term sickness also continued a long-term trend. Income loss for this group constituted 6 percent of the income loss of all groups in 1948 but was up to 11 percent in 1967. The increases in the value of wages lost from 1966 to 1967 were within a range of 2-5 percent for Federal workers and for workers in private employment.

As indicated above, one of the major factors affecting yearly changes in the levels of income loss described in this series is the change in morbidity rates experienced by the working population. Estimates of income loss derived by the Social Security Administration are adjusted to take these fluctuations into account on the basis of data from the Health Interview Survey of the U.S. Public Health Service. The sickness index used for making the annual adjustments was estimated as 102 in 1966 and 99 in 1967. This large drop in the index can be attributed in large part to a considerable decline in the amount of influenza during the winter of 1966-67, compared with that of 1965-66.

#### **Concepts of Income Loss**

The estimates of income loss used in this series are designed to cover the loss of current earnings during the first 6 months of nonoccupational illness or injury, including loss during the first 6 months of a long-term disability. This concept of short-term income loss is based on traditional usage developed in connection with accident and sickness insurance practices and later adopted by government disability insurance programs. In designing various types of insurance policies and programs, the 6-month period was considered a useful administrative device for distinguishing between short-term and long-term disability. Disability that has already lasted such a substantial

period of time is customarily dealt with under plans designed for long-continued or permanent disability. The first 6 months of any illness are thus included in the short-term category regardless of the eventual span of illness. From the viewpoint of the actual nature of disability, these distinctions are of course arbitrary. There is little evidence to indicate that the period of 6 months represents any significant point in the distribution of the duration of disabilities.

The term income loss, as used in this article, refers to the value of potential as well as actual loss. It includes, for example, income that would have been lost if not replaced under a sick-leave plan that continues wages and salaries during periods of illness or under another type of arrangement. Sick leave is counted among the types of benefits that offset the worker's potential wage loss.

With this concept of income loss, it has been estimated that wage and salary workers in private industry lose an average of 7.0 workdays a year, Federal Government workers 8.0 days a year, State and local government employees, 7.5 days, and the self-employed, 7.0 days. These averages have been modified annually, starting with 1959, to reflect trends in morbidity rates as reported by the Health Interview Survey.

The averages used in this series have been higher than those derived from the Health Interview Survey.<sup>1</sup> For the 12-month period ended June 30, 1967, data from the Health Interview Survey show an estimated average of 5.3 days of work lost because of illness or injury by currently employed persons aged 17 or over, including the self-employed (see table 1a). For wage and salary workers in private industry, the average was 5.3 days. (Note that private wage and salary workers accounted for 73 out of each 100 workdays lost by all workers in fiscal year 1967.) For Federal workers the average was 6.4 days, and for State and local government employees it was 4.8 days. The self-employed lost 5.8 days of work.

Work-loss days declined from fiscal year 1966 for each category of workers in table 1a, except for Federal women employees. The large decline TABLE 1a.—Number of work-loss days per person per year for currently employed persons aged 17 and over, by class of worker and sex, July 1961–June 1967

Period	Total	Private wage and salary workers	Federal Govern- ment em- ployees	State and local govern- ment em- ployees	Self- em- ployed
			Total		
July 1961–June 1962 July 1962–June 1963 July 1963–June 1964 July 1964–June 1965 July 1965–June 1966 July 1966–June 1967	5.8 6.1 5.5 5.7 5.8 5.3	5.7 5.9 (1) (1) 5.6 5.3	$\begin{array}{r} 6.5 \\ 6.1 \\ (1) \\ (1) \\ 6.4 \\ 6.4 \end{array}$	$ \begin{array}{c c} 5.7 \\ 5.4 \\ (1) \\ (1) \\ 5.6 \\ 4.8 \\ \end{array} $	6.2 7.8 (1) (1) 7.0 5.8
		L	Men	1	<u> </u>
July 1961–June 1962 July 1962–June 1963 July 1963–June 1964	5.7 5.9 5.6	5.6 5.5	$6.8 \\ 5.2$	5.7 5.7	6.3 7.9
July 1964–June 1965 July 1965–June 1966 July 1966–June 1967	$5.7 \\ 5.9 \\ 5.3$	5.7 5.2	5.8 5.5	5.6 4.7	7.3 6.1
			Women		
July 1961–June 1962 July 1962–June 1963 July 1963–June 1964 July 1964–June 1965 July 1965–June 1966 July 1966–June 1967	$5.8 \\ 6.6 \\ 5.3 \\ 5.6 \\ 5.6 \\ 5.6 \\ 5.4$	5.8 6.8 (1) (1) 5.5 5.4	5.7 8.7 (1) (1) (1) 8.1 8.4	5.8 5.0 (1) (1) 5.7 4.9	5.9 7.2 (1) (1) 5.7 4.7

<sup>1</sup> Data not available.

Source: National Center for Health Statistics, Public Health Service, unpublished data from the Health Interview Survey.

from 7.0 days to 5.8 days among the self-employed was more than matched by the substantial increase between fiscal years 1961–62 and 1962–63. Each of the other classes of workers was subject to smaller fluctuations in the number of work-loss days during the 4 years. When the sickness experience of men and women is examined separately, however, for each class of worker a fairly substantial range in the number of workloss days is evident for the years shown. Only for the men among private wage and salary workers was the spread as low as 0.5 days (from 5.7 in 1965–66 to 5.2 in 1966–67).

Because of the differences in the scope and definition between the Social Security Administration series and the Health Interview Survey data, the latter have been used as a measure of year-to-year variations rather than as a measure of the aggregate amount of work-time or average number of workdays lost. With 1958 as the benchmark year, equaling an index of 100, the applicable sickness rate (or index) has been computed for the subsequent years. These annual adjustments are then applied across the board to the estimates of income loss derived through the

<sup>&</sup>lt;sup>1</sup> For discussion of factors responsible for differences in the two series, see Alfred M. Skolnik, "Income-Loss Protection Against Illness, 1948–66," *Social Security Bulletin*, January 1968.

regular methods for the various labor-force components (see footnotes to table 1).

PROTECTION AGAINST INCOME LOSS

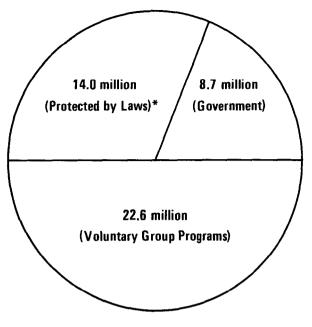
### Workers Covered and Types of Protection

Generally, income-maintenance protection in the event of nonoccupational sickness is provided through the worker's place of employment. Some employers insure their workers against this risk by purchasing group policies from commercial companies under which cash benefits are paid during specified periods of disability, or they provide similar payments by self-insuring. Others establish formal paid sick-leave plans that provide for continuation of wages (usually full wages) for a certain number of days. Still others combine the two methods and establish both sickleave and group insurance plans that supplement each other. Among other sources of employmentconnected protection against income loss resulting from sickness are mutual benefit associations and union or union-management plans, often on a regional or industrywide basis.

Of the 67.3 million wage and salary workers in December 1967 in private industry and government employment, 45.3 million were formally protected through their place of employment against loss of earnings from short-term nonoccupational disability. The 2 out of 3 workers with this protection include those covered under statutory programs in four States and the railroad industry, as well as those whose protection derives from voluntary plans (see chart 1).

Workers and self-employed persons may also obtain protection through the purchase of individual sickness insurance policies from insurance companies or through membership in fraternal societies.

A description of the types of group insurance and other group plans like sick leave, and estimates of the numbers of workers under these plans is presented below. Estimates of the number of employed or self-employed workers covered by individual insurance policies are considerably more difficult to make. Some persons may have more than one insurance policy or may have group protection as well as an individual plan. The extent of this duplication is not readily CHART 1.—Employees with group income-loss protection against short-term sickness through their job, 1967



\* California, New Jersey, New York, Rhode Island, and the railroad industry. Includes some workers with voluntary protection in these jurisdictions.

measured. The available information about income-maintenance protection through individual policies is also complicated by the inclusion of contracts that insure against long-term illness starting at the end of, or extending beyond, the 6-month span covered in the concept of short-term income loss considered here.

Further, individual policies are not necessarily related to an individual's participation in the labor force (those that provide flat-rate periodic cash benefits upon proof of hospitalization, for example). Because of these considerations no estimate of the number of workers with individual insurance is attempted here. (A measure of income-maintenance protection under individual insurance policies is presented in the form of dollar value of benefits in table 2.)

Public programs.—In California, New Jersey, New York, and Rhode Island, coverage is provided through a compulsory State temporary disability law, and in the railroad industry workers are protected under a Federal act. More than four-fifths of the employees in the four States are safeguarded against wage loss by these laws. Many of those not protected by statutory programs in these jurisdictions, however, have disability insurance or sick leave provided by their employers. In particular, most State and local government workers and many employees of nonprofit firms are covered under such incomemaintenance programs. In all, more than 9 out of 10 of all wage and salary workers in these States are eligible for some form of income maintenance when they are ill.

In Rhode Island and the railroad industry, all benefits are provided from publicly operated disability funds. In California and New Jersey, employers may "contract out" of the public plan by providing an approved private plan, usually one insured by a commercial company or financed on a self-insured basis. The New York law requires employers to provide sickness protection of a specified value for their employees by establishing a privately insured or self-insured plan or insuring with a State fund that itself has many characteristics of a private carrier. In California, New Jersey, and New York, union or unionmanagement plans may provide the sickness benefits required by law.

The coverage provisions of the temporary disability laws in the four States, which are similar to the unemployment insurance laws of those States, cover most employees in industrial and commercial firms. They generally do not cover hired farm workers (except in California), domestic service workers, or employees of governments and nonprofit organizations. Virtually all railroad workers are included in the statutory program for that industry.

Voluntary protection.-Except for workers in the four States with temporary disability insurance laws and the railroad industry, approximately half the workers throughout the United States historically have not had the protection of short-term income maintenance in the event of illness. But in 1967, increases in the number of workers with group accident and sickness insurance and in the estimated number of employees with paid sick leave exceeded the rate of growth in the labor force. The proportion of workers with some form of income-loss protection therefore rose to 54 percent (table 1b). Unfortunately, Bureau of Labor Statistics changes in definition and in measuring the number of persons in the labor force result in data for 1967 that are not strictly comparable with earlier figures. Labor force estimates for 1966 and previous years include workers aged 14 and over, but, starting with 1967, only those aged 16 are counted.

The other major change affecting the comparison of 1967 with earlier years is that beginning with 1967 data, certain employees of corporations previously classified as self-employed are counted with other wage and salary workers. These changes tend to affect the total number of wage and salary workers in opposite directions, but to what degree they offset each other is unknown.

The 22.6 million employees shown as having such income-loss protection include only those with group cash sickness insurance policies provided in connection with their employment and those covered under formal sick-leave plans. Protection afforded by group credit accident insurance and by informal sick leave or other informal plans through employment are excluded from table 1b.

Group credit accident policies are not provided as part of an employment relationship. Moreover, such policies are not provided primarily for the benefit of the insured but to assure financial institutions the repayment of loan if the borrower becomes disabled. Informal sick-leave protection

TABLE 1b.—Degree of income-loss protection against shortterm sickness for employed wage and salary workers in private industry not under temporary disability insurance laws, selected years, 1954-67

	Wage and salary workers				
Year	Total	With protection			
	number (in thousands) <sup>1</sup>	Number (in thousands) <sup>2</sup>	Percent of total		
1954	$\begin{array}{c} 31,400\\ 34,200\\ 33,600\\ 34,300\\ 35,900\\ 38,100\\ 40,000\\ 41,000\\ 41,700\end{array}$	15,000 16,400 16,000 17,300 18,500 19,500 20,800 22,600	47.8 48.0 49.0 49.1 48.1 48.1 50.7 54.2		

<sup>&</sup>lt;sup>1</sup> Number in private industry (excluding railroad employees), as adjusted by ratio of private industry employees on nonagricultural payrolls in the four States with temporary disability insurance laws to all such employees. Data from Bureau of Labor Statistics, Employment and Earnings and Monthly Report on the Labor Force.

Monity Report on the Labor Force. <sup>1</sup> Estimated number of private-industry workers (1) with group accident and sickness insurance (except group credit insurance); (2) under paid sick-leave plans; and (3) under union and mutual association plans—after subtraction of the number of workers with such protection in jurisdictions with temporary disability laws. Estimates of private protection based on data from Health Insurance Association of America and from State administrative agencies.

<sup>&</sup>lt;sup>1</sup> Data not strictly comparable with that for earlier years. Labor-force information for 1967 excludes those aged 14 and aged 15 and includes certain workers previously classified as self-employed.

is also excluded here since such informal arrangements for continuation of pay at the discretion of the employer are rarely specified publicly in advance. It is therefore difficult to estimate either the number of workers who would actually receive payments of this nature when they are sick or the magnitude of such benefits.

Characteristics of plans.-Both the major types of protection against income loss-insurance plans and paid sick-leave plans-replace income that would otherwise be lost, but the method of replacement is of course very different. Sick-leave plans usually provide for the continuation of wages for a specified number of days, usually 5-15 a year, sometimes varying with length of service. Some plans permit unused leave to be accumulated from year to year with or without a maximum limit.

Short-term disability insurance plans include private insurance and self-insurance and the five government programs whose benefit structures are similar to that of voluntary insurance plans. The disability insurance plans commonly provide 13-26 weeks of payments, usually after a waiting period of 1 week. Some private plans use a shorter waiting period, perhaps 3 days, and may start benefits on the first day in case of accident. The benefit is usually a stated percentage of the worker's recent wages, often one-half to twothirds, but is generally subject to some specified maximum amount.

Each of the two types of protection has advantages and disadvantages. The sick-leave plans offer "first-day" benefits and usually full pay but may provide little protection in cases of more extended illness or disability, especially if the sick leave is not cumulative. Moreover, since there is no uncompensated initial waiting period, the worker is more apt to use sick leave for minor ailments. This lack of disincentive to use sick leave may be considered socially desirable or undesirable, depending on the objectives to be achieved in a sickness benefits program. On the one hand, if resources available for a sickness benefits program are generally rationed just as they are for other economic needs, sick leave is inefficient to the extent that it promotes the use of benefits for slight indispositions and may lead to abuse of the benefits provided.

On the other hand, early treatment may be

invaluable in minimizing the risk of routine sickness leading to major illness and in cutting down the spread of contagious illness. The role of a sick-leave program in encouraging prompt care of sickness must be deemed a considerable advantage in this regard. In addition, the administration of a sick-leave system should be economical since it involves only adding necessary controls to an already established payroll procedure.

TABLE 2.—Premiums and benefit payments for private insurance against income loss, 1948-67  $^{1}$ 

[In millions]

			Į I	n minioi	isj			
		Unde	r volunts	ıry provi	sions	Under p	oublic pro	visions
Year	Total	Total	Group insur- ance <sup>2</sup>	Indi- vidual insur- ance <sup>2</sup>	Self- insur- ance <sup>3</sup>	Total	Group insur- ance <sup>2</sup>	Self- insur- ance 4
				Prem	iums			
1954 1955 1956 1957 1959 1960 1961 1963 1963 1965 1966	$\begin{array}{c} \$558.9\\ 603.6\\ 685.3\\ 804.7\\ 874.0\\ 1,026.0\\ 1,074.1\\ 1,133.9\\ 1,206.3\\ 1,346.9\\ 1,417.9\\ 1,526.4\\ 1,561.9\\ 1,692.6\\ 1,692.6\\ 1,927.1\\ 1,815.6\\ 1,927.1\\ 2,134.9\end{array}$	$\begin{array}{c} \$545.8\\ 564.8\\ 609.4\\ 660.9\\ 718.2\\ 839.5\\ 896.0\\ 955.1\\ 1,029.2\\ 1,129.7\\ 1,85.6\\ 1,293.6\\ 1,323.1\\ 1,375.2\\ 1,437.2\\ 1,437.2\\ 1,437.4\\ 1,453.3\\ 1,577.6\\ 1,668.7\\ 1,854.4\\ \end{array}$	\$162.2 177.8 225.6 269.4 286.2 321.5 340.1 386.2 418.3 453.7 449.6 484.1 516.8 516.0 556.9 620.8 710.9 810.2	$\begin{array}{c} \$350.0\\ 355.0\\ 360.0\\ 366.0\\ 405.4\\ 494.8\\ 534.2\\ 547.8\\ 591.2\\ 654.4\\ 714.6\\ 787.8\\ 783.0\\ 835.9\\ 856.5\\ 870.0\\ 933.0\\ 933.0\\ 933.1\\ 1,018.5\\ \end{array}$	\$33.6 32.0 23.8 25.5 26.6 23.2 21.7 21.1 19.7 21.6 21.4 21.4 21.4 21.3 23.3 23.8 23.3 23.8 23.8 23.7 25.7	\$13.1 38.8 75.9 143.8 155.8 186.5 178.1 178.8 177.1 217.2 232.3 232.8 238.8 2255.3 2255.4 228.4 228.4 228.4 228.4 228.4 228.5	\$12.7 31.9 58.3 102.9 112.8 136.2 129.8 128.3 128.5 157.9 167.8 166.2 179.1 168.2 179.1 169.2 161.0 163.2 163.0 176.3	
1007		2,237.4 1,926.8 853.1 1,048.6 25.1 310.6 194.3 116. Benefit payments						
1948 1949 1950 1952 1953 1953 1954 1955 1956 1957	322.0 383.8 500.8 559.1 606.2 629.1 692.4 802.5	\$277.5 294.9 329.5 387.5 431.3 466.5 497.1 557.2 651.3 696.3	\$115.0 124.7 161.3 212.4 234.6 241.0 251.8 292.0 357.3 372.3	\$141.0 150.0 153.0 157.0 177.0 209.0 230.0 250.0 278.0 307.2	\$21.5 20.2 15.2 18.1 19.7 16.5 15.3 15.2 16.0 16.8	\$9.3 27.1 54.3 113.3 127.8 139.7 132.0 135.2 151.2 178.1	\$9.0 22.3 41.7 81.1 92.5 102.0 96.2 97.0 109.7 129.5	\$0.3 4.8 12.6 32.2 35.3 37.7 35.8 38.2 41.5 48.6
1961 1962 1963 1964 1965 1966	909.1 990.1 1,031.2 1,051.6 1,086.7 1,117.5 1,192.4 1,239.7 1,342.7 1,377.4	$\begin{array}{c} 725.4\\ 800.6\\ 835.1\\ 850.2\\ 882.4\\ 919.3\\ 1,001.0\\ 1,042.1\\ 1,134.0\\ 1,155.0\end{array}$	$\begin{array}{r} 355.9\\ 394.2\\ 424.1\\ 406.8\\ 445.8\\ 445.8\\ 454.2\\ 498.9\\ 541.6\\ 602.9\\ 610.5\end{array}$	$\begin{array}{c} 353.4\\ 389.6\\ 392.8\\ 425.9\\ 418.5\\ 447.2\\ 483.9\\ 482.6\\ 512.9\\ 527.4 \end{array}$	$\begin{array}{c} 16.1\\ 16.8\\ 18.2\\ 17.5\\ 18.1\\ 17.9\\ 18.2\\ 17.9\\ 18.2\\ 17.9\\ 18.2\\ 17.1\end{array}$	$183.7 \\ 189.5 \\ 196.1 \\ 201.4 \\ 204.3 \\ 198.2 \\ 191.4 \\ 197.6 \\ 208.7 \\ 222.4 \\$	$\begin{array}{c} 132.7\\ 135.2\\ 138.1\\ 141.3\\ 143.7\\ 130.6\\ 123.2\\ 124.8\\ 131.2\\ 139.1 \end{array}$	$51.0 \\ 54.3 \\ 58.0 \\ 60.1 \\ 60.6 \\ 67.6 \\ 68.2 \\ 72.8 \\ 77.5 \\ 83.3$

 Beginning 1960, data include Alaska and Hawaii.
 Data on premiums earned and losses incurred by commercial companies (including fraternal) as provided by the Health Insurance Association of America for the United States, by types of insurance benefit, adjusted to include accidental death and dismemberment provisions in in inlividual policies that insure against income loss to offset understatement arising from the omission of current short-term income-loss insurance in automobile, resident liability, life, and other policies. For 1956-67, dividends deducted from earned premiums (2-3 percent for group; 1 percent for individual). Starting with 1956, all credit accident and health insurance classified under individual insurance. <sup>3</sup>Union-management trust fund, trade-union, and mutual benefit associa-

tion plans.

<sup>4</sup> Company, union, and union-management plans under California, New Jersey, and New York laws.

In many cases the strong points of sick leave are the weakness of sickness insurance and vice versa. The insurance plans usually provide better protection for the lengthier illness or disability that often imposes the greatest financial hardship. If the plan pays 26 weeks of benefits, it will usually maintain a certain income for the worker until programs geared to long-term disability start paying benefits. Insurance plans of course give little or no protection for the most frequent types of illness-those that last only a few daysand then they provide only partial wage replacement.

The fact that most illness lasts only a single day, or a few days, is important in interpreting the data on income replacement under sick-leave and insurance plans. Data on sick leave show replacement of a high proportion of income, probably about three-fourths for a typical group. Insurance plans show a much lower percentage, perhaps 20-40 percent under most plans. Because of the difference in the kind of protection offered, however, the extent of wage replacement is not necessarily an adequate measure of the comparative advantages of the two types of plans.

#### **Benefits Paid**

Private insurance.--In 1967 about \$1,377 million or 37 percent of all benefits replacing income lost because of sickness were paid by insurance companies and other private organizations. Included in table 2 are data for funded private plans such as union or company trust funds and mutual benefit associations and for unfunded plans in States with temporary disability insurance laws that require the payment of benefits. Unfunded plans in other States as well as all sick-leave plans are not shown in table 2 but are part of table 4, which describes sick-leave benefits. Data in table 2 are divided into private insurance arising out of employer initiative, labor-management contracts, or other voluntary arrangements, and similar protection under private auspices that satisfies the requirements of California, New Jersey, and New York temporary disability laws. Benefits paid by publicly operated programs under these and the Rhode Island and railroad industry laws are included in table 3.

TABLE 3.-Cash benefits under temporary disability insurance laws provided through private plans and through publicly operated funds, 1948-67<sup>1</sup>

[In millions]

		Type of	insurance arran	gement
Year	Total	Private	Publicly	
		Group insurance	Self- insurance <sup>3</sup>	operated funds 4
1948	\$66.4	\$9.0	\$0.3	\$57.1
1949	89.2	22.3	4.8	62.1
950	117.4	41.7	12.6	63.1
951	174.2	81.1	32.2	60.9
952	202.3	92.5	35.3	74.5
953	230.2	102.0	37.7	90.8
954	235.1	96.2	35.8	103.1
955	244.6	97.0	38.2	109.4
956	265.0	109.7	41.5	113.8
.957	305.3	129.5	48.6	127.2
958	325.1	132.7	51.0	141.4
959	353.2	135.2	54.3	163.3
960	368.2	138.1	58.0	172.
961	396.6	141.3	60.1	195.
962	416.3	143.7	60.6	212.0
963	442.2	130.6	67.6	243.
964	455.8	123.2	68.2	264.
965	466.7	124.8	72.8	269.
966	481.9	131.2	77.5	273.
967	507.1	139.1	83.3	284.

<sup>1</sup> Programs under the Railroad Unemployment Insurance Act and the laws of Rhode Island, California, New Jersey (beginning 1949), and New York (beginning 1950). Excludes hospital benefits in California and hospital, surgical, and medical benefits in New York. <sup>2</sup> Under the laws of California, New Jersey, and New York. <sup>3</sup> Employers may self-insure by observing certain stipulations of the law. Includes some union plans whose provisons come under the law. <sup>4</sup> Includes State-operated plans in Rhode Island, California, and New Jersey, the State Insurance Fund and the special fund for the disabled unemployed in New York, and the railroad program.

Premiums for private insurance totaled \$2,237 million in 1967, an increase of \$103 million over the preceding year. This increase amounted to 5 percent and was less than half the growth rate in premiums from 1965 to 1966 (11 percent—the highest increase since 1957). It was also less than the corresponding yearly changes from 1963 to 1964 and 1964 to 1965. Similarly benefits paid under insurance showed a much smaller growth in 1967 than in the three previous years. They were less than 3 percent higher than benefits in 1966. This slower rate of growth in benefits resembled that of 1959-63 when the annual average increase was 3 percent. The slackened rate of increase in premiums and benefits in 1967 was attributable entirely to the "voluntary" sector.

In contrast, group and self insurance provided under temporary disability insurance laws grew at a rate somewhat higher than that of the previous year. The differential rate of increase in these two components of private insurance is reflected in the amount of group insurance benefits paid to workers protected by the laws of California, New Jersey, and New York as a proportion of all group insurance payments. Benefits under public provisions were 19 percent of the \$750 million paid by all group policies in 1967, compared with 18 percent in 1966. Before 1967 and back to 1953, the share of group insurance benefits written in compliance with public laws had decreased each year, influenced to a large degree in recent years by the decline of private sickness insurance in California. Benefits in that State went from a high of \$35 million in 1959 to a low of \$1 million in 1965.

Benefits under temporary disability laws.—The total amount of protection under the five temporary disability laws, by type of insurance arrangement, is presented in table 3. The data in table 3 showing the protection provided under these laws through commercial insurance companies or other private arrangements are the same as the data in the last two columns of table 2.

For the third consecutive year, benefits paid by publicly operated funds in 1967 represented a slightly lower proportion of all benefit payments under temporary disability laws than they had in the previous year. From 1957 to 1964, the trend was in the opposite direction. The following figures illustrate the changed pattern in benefits paid from publicly operated funds as a percentage of all benefits under disability laws:

Year P	ercent
1957	41.7
1964	_ 58.0
1965	
1966	
1967	56.1

The earlier trend had been due primarily to major changes in the California program. Because of increasingly unfavorable legal requirements that include periodic statutory liberalizations of benefits, private insurance companies found it more and more difficult to offer sickness insurance policies. Benefits under insured private plans declined from more than half of all benefits paid under the law in the early 1950's to a fraction of 1 percent by 1964. There had also been a significant shift from private plans to the Stateoperated plan in New Jersey. From 1957 to 1964, the proportion of total benefits paid in New Jersey by private plans dropped from 72 percent to 58 percent and continued to decline in 1967 to 56 percent.

Since 1964, the steady relative decline in private plans in New Jersey, however, has been offset by a slight increase in benefits paid under the California private plans and the continual growth of private group insurance under the New York law, which is almost entirely under private in-

TABLE 4.-Estimated value of formal paid sick leave in private industry and in Federal, State, and local government employment, 1948-67<sup>1</sup>

1	In	millions]

(,							
		Workers in	ndustry <sup>2</sup>	Gover	nment wo	rkers	
Year	Total	Total	Not covered by tem- porary disabil- ity in- surance laws	Covered by tem- porary dis- ability insur- ance laws <sup>3</sup>	Total	Federal 4	State and local s
1948	\$413	\$157	\$145	\$12	\$256	\$148	\$108
1949	462	162	147	15	300	173	127
1950	492	177	154	23	315	172	143
1951	588	198	164	34	390	221	169
1952	667	214	178	36	453	254	199
1953	713	231	193	38	482	262	220
1954	741	241	201	40	500	252	248
1955	813	268	224	44	545	269	276
1956	884	293	243	49	591	280	311
1957	951	324	270	54	627	290	337
1958	1,034	338	283	55	696	315	381
1959 6	1,076	351	295	56	725	315	410
1960	1,219	392	327	65	827	348	479
1961 6	1,310	410	344	67	900	376	524
1962 6	1,459		384	77	998	414	584
1963 6	1,624	513	428	85	1,110	450	660
1964 6	1,621	492	412		1,129	445	684
1965	1,804		464		1,251	488	763
1966 6	1,962		508		1,356	523	833
1967 *	2,089	656	550	106	1,432	558	871
	1	1	1	1	1	1	1

<sup>1</sup> Beginning 1960, data include Alaska and Hawaii.

<sup>1</sup> Beginning 1960, data include Alaska and Hawaii. <sup>2</sup> Sum of estimated value of formal paid sick leave for employees with (a) sick-leave but no other group protection and (b) sick-leave supplemental to group insurance or other forms of group protection, including publicly operated funds. Under each category, number of employees was adapted from Health Insurance Council, Annual Survey of Accident and Health Coverage in the United States, 1948-54, after reducing estimates of exclusive sick-leave coverage in early years by a third to allow for exclusion of in-formal sick-leave plans and for conversion of exclusive protection to supple-mental protection under temporary disability insurance laws. Later-year formal sick-leave plans and for conversion of exclusive protection to supple-mental protection under temporary disability insurance laws. Later-year estimates based on nationwide projection of formal paid sick-leave coverage reported for plant and office workers in the community wage surveys of the Bureau of Labor Statistics. Assumes that workers in private industry receive an average of 4 days of paid sick-leave a year, excluding other pro-tection, and 3.2 days when they have other group protection. Daily wages obtained by dividing average annual earnings per full-time private employee as reported in table 6.5 in *The National Income and Product Accounts of the United States, 1929-1965, Statistical Tables: A Supplement to the Survey of Current Business, 1966, and in <i>Survey of Current Business, July 1968* (Depart-ment of Commerce), by 255 (estimated workdays in a year). <sup>3</sup> Assumes that some workers entitled to cash benefits under temporary disability insurance laws have sick leave in addition to their benefits under

disability insurance laws have sick leave in addition to their benefits under

disability insurance laws have sick leave in addition to their benefits under the laws, but only to the extent needed to bring up to 80 percent the replace-ment of their potential wage loss. <sup>4</sup> Based on studies showing that Federal employees use paid sick leave of 7.7 days on the average for nonoccupational sickness, equivalent to 3 percent of payroll. Payroll data derived by multiplying number of paid civilian full-time employees as of June 30 in all branches of the Federal Government in the United States, by their mean earnings, as reported in Pay Structure of the Federal Civil Service, Annual Reports, U.S. Civil Service Commission. Practically all full-time employees are covered by paid sick-leave protection. <sup>5</sup> Assumes that number of State and local government employees covered by formal sick-leave plans has increased gradually from 65 percent of the

Assumes that number of State and local government employees covered by formal sick-leave plans has increased gradually from 65 percent of the total number employed full-time in 1948 to 85 percent in 1967 and that workers covered by such plans received on the average paid sick leave ranging from 5.2 days in 1948 to 6.0 days in 1967. Number of full-time employees from *Public Employment, Annual Reports* (Bureau of the Census). Daily wages obtained by dividing average annual earnings per full-time State and local employee as reported in Department of Commerce data (see footnote 2) by 255 (estimated workdays in a year).
 <sup>6</sup> For 1959-67, computed for earlier years, then adjusted to reflect changes in sickness experience (average number of disability days), as reported in the Heath Interview Survey for those years.

surance auspices. At the same time, the amount of benefits paid under the completely publicly operated railroad disability program has been steadily diminishing. The decline in railroad employment has meant an uninterrupted decrease in aggregate temporary disability benefits under that program since 1960, at an average rate of almost 8 percent each year.

Paid sick leave.-Of the two major forms of income-loss protection against sickness-insurance and sick leave-sick leave accounts for a larger share of the benefits received. In 1967 the value of formal sick leave paid to workers in private industry and government employment was close to \$2.1 billion, compared with less than \$1.4 billion in benefits from all types of insurance. The sick-leave estimate includes the value of leave paid as a supplement to group insurance, publicly operated plans, or other types of group protection, as well as the value of exclusive sick leave (sick leave in lieu of any other type of group income-loss protection). Supplemental sick leave often takes the form of wage replacement for an initial waiting period before insurance benefits become available.

The value of sick leave increased in 1967, as shown in table 4. Except for 1964, the rise was the smallest since 1959. In 1964 a decline in the value of sick leave was reported, in part as a result of (1) sampling variability and (2) changes in the types of sick-pay plans reported by employers, according to a Bureau of Labor Statistics study used for compiling the sick-leave estimates.

The increase between 1966 and 1967 was more than 6 percent, but the average yearly increase from 1959 through 1967 (excluding the change from 1963 to 1964) was 10 percent. As mentioned earlier, the amount of disabling sickness nationally in 1967 was notably lower than in the previous year. In fact, the sickness index compiled annually to adjust the income-loss estimates for this series was at its lowest point since 1959 when these adjustments were first made.

Another factor that helps explain the relatively slow increase in sick-leave benefits for 1967 is the relatively low rate of growth in the covered State and local government labor force. Full-time employment in this sector increased only 3 percent between 1966 and 1967, compared with a 6-percent increase the previous year and annual increases of 5 percent in the 3 preceding years. Sick-leave benefits for State and local government workers went up 5 percent in 1967—to \$875 million. In 1966 the rate of growth of sick leave for this group was almost double, somewhat over 9 percent.

Sick-leave plans in the public sector continue to dominate this type of income-loss protection against short-term disability. Practically all Federal workers are entitled to sick leave, and for a number of years it has been estimated that 85 percent of all full-time State and local government employees have this protection. In 1967, as in previous years, more than two-thirds of all sick-leave benefits are accounted for by government workers.

provided Income-loss protection entirely through sick leave (that is, exclusive sick leave) is also more prevalent among government workers than among those in private industry. Government workers accounted for 69 percent of all paid sick leave in 1967, but four-fifths of the almost \$1.8 billion paid out in exclusive sick leave went to these workers. The difference was attributable to the fact that most government workers are covered by exclusive sick-leave programs (table 5). Among workers in industry and commerce, however, paid sick leave as a supplement to other forms of group disability protection is the more common form of sick leave. On the

[Amounts in millions]

Үеаг	Income loss	Value of sick leave under exclusive plans	Ratio (percent) of sick leave to income loss
1948	\$567 601 635 723 804 846 874 952 1,024 1,107	\$375 416 432 507 677 612 634 691 745 800	66.1 69.2 68.0 70.1 71.7 72.3 72.5 72.6 72.6 72.8 72.8 72.3
1958	$\begin{array}{c} 1,203\\ 1,242\\ 1,427\\ 1,536\\ 1,609\\ 1,875\\ 1,883\\ 2,092\\ 2,259\\ 2,397\end{array}$	875 908 1,034 1,125 1,243 1,384 1,391 1,546 1,671 1,771	72.7 73.1 72.5 73.2 73.2 73.2 73.8 73.9 73.9 73.9 74.0 73.9

 $^{-1}$  Sick-leave plans that do not supplement any other form of group protection, including publicly operated plans.

basis of BLS labor-market studies for selected communities, it is estimated that in 1967, 54 percent of private-industry employees covered by paid sick-leave plans were covered for other sick-pay programs in these communities. In 1948 the BLS studies showed that only 29 percent of private-industry employees with sick-leave rights also had other types of group protection.

#### **Summary of Protection Provided**

The value of each of the types of benefits available as a protection against income loss due to sickness is shown in table 6. Income-loss protection for wage and salary workers in connection with their employment is shown under the general heading "group benefits." Benefits based upon individual insurance include protection for the self-employed, for employees, and perhaps to some extent for individuals not attached to the labor force. Information is not available, however, to allocate the benefits into these categories. This table does not show the total share of benefits originating under temporary disability laws.

TABLE 6.—Benefits provided as protection against income loss, summary data, 1948-67

1			G		efits prov st wage a			m
		Bene- fits pro-		Worker	s in priva	ate empl	oyment	
Year	Total	vided through indi- vidual insur- ance	Total	Total	Private cash sickness insur- ance and self- insur- ance <sup>1</sup>	Pub- licly oper- ated cash sick- ness funds	Sick leave	Sick leave for govern- ment em- ployees
1948	\$756.9	\$141.0	\$615.9	\$359.9	\$145.8		\$157.0	\$950 D
1948	846.1	150.0	696.1	396.1	172.0	$\frac{57.1}{62.1}$	162.0	
1949	938.9	153.0	785.9	470.9	230.8	63.1	102.0	315.0
1951	1,149.7	157.0	992.7	602.7	343.8	60.9	198.0	390.0
1952	1.300.6	177.0	1,123.6	670.6	382.1	74.5	214.0	453.0
1953	1,409.7	209.0	1,200.7	718.7	397.2	90.5	231.0	482.0
1954	1,473.2	230.0	1,243.2	743.2	399.1	103.1	241.0	590.0
1955	1,614.8	250.0	1,364.8	819.8	442.4	109.4	268.0	545.0
	1,800.3	278.0	1,522.3	931.3	524.5	113.8	293.0	591.0
1957	1,952.6	307.2	1,645.4	1,018.4	567.2	127.2	324.0	627.0
1958	2,084.5	353.4	1,731.1	1,035.1	555.7	141.4	338.0	696.0
1959	2,229.8	389.6	1,840.2	1.115.2	600.5	163.7	351.0	725.0
1960	2,422.3	392.8	2,029.5	1,202.5	638.4	172.1	392.0	827.0
1961	2,556.8	425.9	2,130.9	1,230.9	625.7	195.2	410.0	900.0
	2,757.7	418.5	2,339.2	1,341.2	668.2	212.0	461.0	998.0
1963	2,984.4	447.2	2,537.2	1,427.2	670.3	243.9	513.0	1,110.0
1964	3,077.8	483.9	2,593.9	1,464.9	708.5	264.4	492.0	1,129.0
1965	3,312.8	482.6	2,830.2	1,579.2	757.1	269.1	553.0	1,251.0
1966	3,576.9	512.9	3,064.0	1,708.0	829.8	273.2	606.0	1,356.0
1967	3,751.1	527.4	3,223.7	1,790.7	850.0	284.7	656.0	1,433.0
	1	1	1	1	1		I	1

[In millions]

<sup>1</sup> Includes a small but undetermined amount of group disability insurance benefits paid to government workers and to self-employed persons through farm, trade, or professional associations. Only that part of such benefits paid by government-operated plans is shown separately.

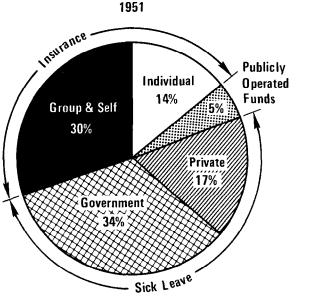
Total benefit payments rose 5 percent from 1966 to about \$3.8 billion in 1967. Reflecting the smaller over-the-year increases for each of the types of benefits shown in table 6 (except for publicly operated funds), the total value rose proportionately less than it had between 1965 and 1966 and less than it had in all years since 1948 except 1954 and 1964. There have been some noticeable trends over the years for some of the types of benefits-the decline for example, in the relative share of benefits paid under private cash sickness insurance and self-insurance, from 30 percent of the total in 1951<sup>2</sup> to 23 percent in 1967. The proportionate decline in insurance benefits was balanced by increases in the share of publicly operated plans and sick leave for government employees, which jointly increased from 39 percent to 46 percent over the same span. The relative shares of benefits paid through each of the major forms of income replacement for sickness in 1951 and 1967 are shown in chart 2.

For the types of benefits available to workers in private industry, 1967 witnessed a continuation of a trend noted in last year's analysis: Publicly operated funds and sick-leave payments in 1967 accounted for more than half the total of benefits paid to workers in private employment (53 percent), and private insurance (including selfinsurance) benefits declined correspondingly to 47 percent. In 1956 private insurance benefits had been 56 percent of the total.

## **MEASURING THE EXTENT OF PROTECTION**

The adequacy of protection against income loss due to short-term illness can be examined from several aspects. The number of workers subject to the risk being protected against can be compared with the number who have some form of protection, as in the analysis on page 24. If data were available, it would be useful to analyze the weekly benefit amount, number of weeks of benefits, and personal and economic characteristics

 $<sup>^2</sup>$  Comparison is made with 1951 rather than 1948 because 1951 was the first full year in which benefits were paid under all the temporary disability laws.

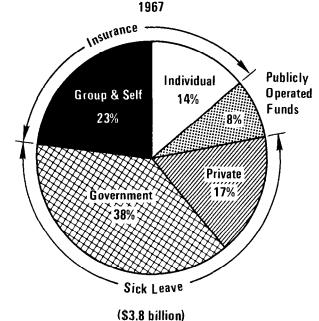


(\$1,1 billion)

of individuals who receive sickness benefits. Another means of assessing the adequacy of the various forms of temporary disability programs is by relating the total value of benefits paid to the total income loss incurred. This approach is developed in data set out in tables 7–9.

Growth of the labor force over the years, improvements in benefit levels, and extensions in coverage to new groups all give rise to higher dollar value of benefits paid. Therefore, comparision of the value of benefits paid with the total income loss in table 7 provides a composite evaluation of the development of temporary disability benefit programs. In 1967, as in all other years, income-loss protection against sickness increased in dollar terms, but when it is related to income loss, the 28-30 percent range that has prevailed since 1959 is maintained. This leveling off is in contrast to the steady extension of protection evident in every year from 1948 through 1959, when the protection-loss rate rose from 17 percent to 29 percent.

The \$8.8 billion income loss not protected in 1967 cannot be taken as an absolute measure of inadequacy of cash benefit programs. It is not ordinarily expected that temporary disability benefits should replace all of a man's lost earnings. Benefits are generally pegged at some level below total earnings in order to preserve incentive



to return to work, as well as to take into account the portion of gross wages that is not a real loss (taxes withheld, the cost of transportation to work, etc.).

In the other direction, some loss of real income occurs in addition to the loss of the worker's wage. Life insurance, accumulation of vacation and retirement rights, and other fringe benefits may be discontinued. The extent to which discontinuation of fringe benefits causes income loss depends in part on the length of illness and in part on the nature of the benefit. Some employment-connected benefits may not be affected at all during short illnesses (yearend bonuses, for example). Other benefits (such as free company lunches) will be lost while the worker is sick regardless of the duration. For longer periods of illness, the value of supplemental benefits lost may grow considerably, particularly if the employer dismisses the worker. A worker permanently separated from his job, for example, may suffer a permanent income decline with respect to nonvested retirement rights and similar prerequisites based on seniority.

Table 7 also shows the cost of operating the programs that provide temporary disability benefits. The cost of providing insurance consists mainly of the difference between insurance premiums and benefit payments under commercial

TABLE 7.-Extent of protection against income loss, 1948-67

[Amounts	in	millions]
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Year	Income loss	and protecti	Ŧ	Net	
	Income loss <sup>1</sup>	Protection provided <sup>2</sup>	Protection as percent of loss	Income loss not protected	cost of providing insurance <sup>3</sup>
1948	\$4,568	\$757	16.6	\$3,811	\$277
1949	4,424	846	19.1	3,578	287
1950	4,795	939	19.6	3,856	307
1951	5,473	1,150	21.0	4,323	311
1952	5,814	1,301	22.4	4,513	322
1953	6,144	1,410	22.9	4,734	428
1954	6,094	1,473	24.2	4,621	453
1955	6,546 7,031	1,615 1,800	$24.7 \\ 25.6$	$4.931 \\ 5.231$	413
1956	7,363	1,953	26.5	5,410	415
1958	7,458	2,084	27.9	5,374	519
1959	7,724	2,230	28.9	5,494	548
1960	8,555	2,422	28.3	6,133	542
1961		2,557	29.6	6,082	592
1962	9,622	2,758	28.7	6,864	620
1963	10,178	2,984	29.3	7,194	596
1964	10,248	3,078	30.0	7,170	640
1965	11,278	3,313	29.4	7,957	704
1966	12,192	3,577	29.3	8,607	809
1967	12,583	3,751	29.8	8,832	878

 <sup>1</sup> From table 1.
 <sup>2</sup> Total benefits, including sick leave (from table 6).
 <sup>3</sup> Includes retention costs (for contingency reserves, taxes, commissions, acquisition, claims settlement, and underwriting gains) of private insurance companies (from table 2) and administrative expenses for publicly operated plans and for supervision of the operation of private plans. Excludes costs of operating sick-leave plans; data not available.

insurance and self-insurance. The balance consists of selling and administrative expenses, premium taxes, additions to reserves, and underwriting gains.

The \$878 million net cost in 1967 included not only commercial insurance expenses but \$18 million in administrative expenses required to run the five government programs. A major cost element in administration of sickness benefits programs is not shown here for lack of data-that is, the costs involved in paying the \$2.1 billion in sick leave during 1967. It can perhaps be reasonably assumed that sick-leave administration costs are low compared with those of either the public or private insurance programs. The costs associated with administering sick-leave plans are likely to be intermingled with the costs of maintaining a company's payroll, however, and therefore difficult to compile separately.

The relationship between the protection provided to workers and the wage loss they suffer is shown in table 8 for workers in private industry, according to whether or not they are under the aegis of temporary disability insurance laws, and for all wage and salary workers (including government employees). Benefits paid under individual insurance policies are excluded. Generally, the value of temporary disability benefits paid has been a fairly constant proportion of wage loss for the past 10 years for each of the categories of workers listed. The ratio for all wage and salary workers rose from 28.5 percent in 1966 to 28.8 percent in 1967, and there were similarly small increases for each of the component groups.

The wage-replacement ratio is much higher

TABLE 8	Group protection	provided in relation	to wage and salary l	loss, 194867
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[Amounts in millions]

				Wage and salary workers in private industry								
Year	All wage and salary workers		Total		Covered by temporary disability insurance laws			Not covered by temporary disability insurance laws				
		Protection provided			Protection provided			Protection provided		<u> </u>	Protection provided	
	Income loss	Amount	Percent of income loss	Income loss	Amount	Percent of income loss	Income loss	Amount	Percent of income loss	Income loss	Amount	Percent of income loss
1948         1949         1950         1951         1952         1953         1954         1955         1956         1957         1958         1959         1960         1961         1961         1961         1962         1963	3,921 4,494 4,831 5,199 5,161 5,573 6,034 6,335 6,335 6,371 6,671 7,445 7,498 8,383 8,3905	\$616 696 786 993 1,124 1,201 1,243 1,365 1,522 1,645 1,731 1,840 2,030 2,131 2,339 2,537 2,554	17.0 19.3 20.0 22.1 23.3 23.1 24.1 24.5 25.2 26.0 27.2 27.6 27.3 28.4 27.9 28.5	\$3,198 3,126 3,415 3,901 4,171 4,508 4,444 4,806 5,203 5,442 5,391 6,659 6,280 6,280 6,280 6,288 6,288 7,390	\$360 396 471 603 671 719 743 820 931 1,018 1,018 1,018 1,203 1,231 1,341 1,341 1,427	11.3 12.7 13.8 16.5 16.1 15.9 16.7 17.1 17.9 18.7 19.2 19.7 19.2 19.7 19.2 19.7 19.2 19.3	\$391 483 712 1,059 1,132 1,213 1,212 1,299 1,430 1,512 1,507 1,580 1,773 1,770 1,983 2,084	\$78 104 140 208 238 265 275 289 314 359 380 409 433 464 493 527 527	19.9 21.5 19.7 19.6 21.0 22.1 22.2 22.0 23.7 25.2 25.9 24.4 26.2 24.9 24.9 26.3	\$2,807 2,643 2,703 2,842 3,039 3,295 3,295 3,232 3,507 3,773 3,930 3,884 4,079 4,507 4,492 5,005 5,306	\$282 292 331 395 433 451 458 531 617 659 655 706 770 767 848 900	10.0 11.0 12.2 13.9 14.2 13.7 14.5 15.1 16.4 16.8 16.9 17.3 17.1 17.1 16.9 17.3
1964	9,902 10,748	2,594 2,830 3,064 3,224	28.8 28.6 28.5 28.8	7,468 8,189 8,872 9,161	1,465 1,579 1,708 1,791	19.6 19.3 19.3 19.6	2,085 2,244 2,408 2,479	536 557 581 613	25.7 24.8 24.1 24.7	5,383 5,945 6,464 6,682	929 1,022 1,127 1,178	17.3 17.2 17.4 17.6

for all wage and salary workers than for those in private industry because the former includes government workers' sick-leave payments, which replace income at a much higher proportion than insurance benefits.

As would be expected, the total protection received by workers in areas covered by temporary disability laws in relation to lost wages was higher than that received by workers elsewhere. Almost 25 percent of the wage loss of the former was reimbursed by sickness benefits, but other employees in private industry received benefits covering only 18 percent of their loss. The main reason for the difference is the fact that most workers in private employment in jurisdictions with statutory programs are covered, but only a little over half of the workers in other States have some form of voluntary insurance or other formal group protection.

Because of the major difference in coverage, one might expect an even greater discrepancy in the benefit-income loss ratio between the two groups. That the difference in degree of wage replacement has been modest is the result of a number of factors, some of which are:

(1) Relatively few workers entitled to protection under the temporary disability statutes have sick leave, compared with somewhat more substantial numbers of other workers in private industry. And, as indicated previously, sick leave provides a much higher proportion of income replacement than insurance or similar plans.

(2) State compulsory programs often lag in keeping benefit schedules current with changing wage levels, and improvements are often adopted sporadically. Although some of the better private insurance plans call for a two-thirds income-replacement formula, the statutory temporary disability programs provide for varying replacement rates, with only New Jersey giving all eligible workers a benefit that is two-thirds of their weekly wage.

As a final means of assessing the effectiveness of benefits currently received by men and women out of work because of short-term illness or injury, table 9 presents a comparison between sickness benefits under insurance policies (excluding sick leave) and several hypothetical levels of compensable income loss. The amount of assumed income loss varies according to (1) selection of alternative waiting periods before payments begin and (2) whether all or two-thirds of the gross weekly wage is to be replaced. This exami-

TABLE 9.--Insurance benefits as percent of estimated potentially insurable and compensable income loss  $^1$  for workers without exclusive formal sick leave, 1948-67

[Amounts in millions]

	-	As a percent of income loss—							
Year	Amount of insurance benefits <sup>2</sup>	After firs	t 3 days '	After first 7 days '					
		Total	Two-thirds	Total	Two-thirds				
948	\$344	12.3	18.4	15.6	23.4				
949	384	14.4	21.5	18.3	27.4				
950	447	15.4	23.0	19.5	29.3				
951	562	16.9	25.4	21.5	32.3				
952	634	18.1	27.1	23.0	34.5				
953		18.8	28.2	23.9	35.9				
954		20.0	30.0	25.5	38.2				
955	802	20.5	30.7	26.1	39.1				
956	916	21.8	32.7	27.7	41.€				
957	1,002	22.9	34.3	29.1	43.7				
1958		24.0	36.0	30.5	45.8				
959	1,154	25.4	38.1	32.4	48.8				
960	1,203	24.1	36.2	30.7	46.0				
961	1,247	25.1	37.6	31.9	47.9				
962	1,299	23.4	35.1	29.8	44.				
963		23.4	35.1	29.8	44.				
964		24.9	37.3	31.7	47.5				
965	1,509	23.6	35.2	29.9	44.8				
1966		23.2	34.8	29.6	44.3				
1967	1,663	23.3	35.0	29.7	41.				

 $^1$  The portion of income loss that may be considered insurable or compensable under prevailing insurance practices.

<sup>2</sup> Excludes sick-leave payments.
 <sup>3</sup> Based on 70 percent of total income loss (from table 1), after exclusion of income loss of workers covered by exclusive sick-leave plans (from table 5).
 <sup>4</sup> Based on 55 percent of total income loss (from table 1), after exclusion of income loss of workers covered by exclusive sick-leave plans (from table 5).

nation of insurance benefits, then, is to show to what extent benefits replace that part of wages that would be considered insurable and compensable under various liberal policies.

Under the typical insurance plan, there is an initial waiting period (except for injury or hospitalization cases, ordinarily) before benefits are payable, and the benefit level is set at some level below the worker's full wage. These limitations on payments are to prevent malingering and may also allow more substantial payments for long illness by not insuring the indispositions of shortest duration. In this review the alternative waiting periods shown and the two-thirds level of weekly wage replacement are in line with provisions of some of the better plans now in operation.

In table 9 the total income loss is reduced for (1) a 3-day uncompensated waiting period, which requires a 30-percent reduction and (2) a 7-day uncompensated waiting period, with a 45-percent reduction. The potentially insurable income loss is further reduced by one-third to allow for the portion of the loss after the waiting period that is not indemnified. It is assumed that two-thirds of wages are to be replaced.

Benefits payable under exclusive sick-leave programs and the income loss associated with such programs (shown in table 5) are excluded from table 9. Sick-leave benefits under plans that generally supplement insurance benefits are also excluded since the wage loss generally protected by this sick leave (that is, the first 3 to 7 days) is also excluded. The remaining income loss is not excluded since such sick-leave provisions do not give any appreciable protection against the portion of the loss resulting from sickness that is considered insurable under prevailing provisions.

In 1967 the degree of partial income replacement by insurance remained about the same as it was in 1966. Since 1959 the extent of protection offered by insurance has declined to some extent. After deduction of the income loss for the first 7 days of illness, for example, with an assumed replacement objective of two-thirds of the worker's income, insurance benefits covered 49 percent of the amount to be insured in 1959 but only 45 percent in 1967. It may be noted that these rates of income replacement are considerably higher than those shown for all forms of sickness benefits in table 7, such as the 30 percent for 1967. Yet it is clear that there is a considerable gap between the safeguard against income loss from short-term sickness currently available to American workers and the degree of protection that might be achieved. Ideally, if all workers were protected and all insurance plans provided two-thirds replacement of weekly wages after a 1-week waiting period, the rate of protection shown in table 9 would approach 100 percent.

## Notes and Brief Reports

# Workmen's Compensation Payments and Costs, 1967\*

Workmen's compensation costs in the United States shot up to an average of \$1.07 per \$100 of payroll in covered employment in 1967, a record-high ratio for the post-World War II period. The increase from 1966 to 1967 was 5 cents, the largest increase reported for any single year since World War II.

Reflected in these higher costs was a higherthan-average increase in aggregate amounts expended under workmen's compensation programs for cash benefits and medical services. The estimated total of \$2,134 million paid out under State and Federal work-injury laws represented a 9-percent rise from the 1966 aggregate of \$1,958 million. At the same time, covered payrolls rose only 6.3 percent—from an estimated \$320 billion in 1966 to \$340 billion in 1967. As a result, total benefit outlays reached a new high of 0.63 percent of payroll. In 1966, the ratio was 0.61 percent.

The 9-percent rise in benefit payments almost matched the 9.7-percent increase registered for 1966, despite the fact that the 1967 growth in the covered labor force was less than half that for 1966 and the fact that wage levels did not rise as fast in 1967 as in 1966. Workers covered by workmen's compensation laws in an average week in 1967 numbered an estimated 54.7-54.9 million, an increase of approximately 1.3 million from 1966. In the preceding year, the increase had been almost 3 million. Average wages, on which cash benefits are based, advanced a little less than 4 percent from 1966 to 1967, compared with a rise of slightly more than 4 percent in the preceding year.

Apparently of great influence in pushing benefit levels upward were unusually high increases reported in work-accident rates and in medical care prices. According to the Health Interview Survey of the U.S. Public Health Service, there was a 10-percent increase in work-injury rates during the fiscal year 1967. An increase of only 3 percent occurred in the preceding year. Similarly, according to the consumer price index of the Bureau of Labor Statistics, hospital and medical care prices experienced a 7.0-percent increase in calendar year 1967, compared with a 4.4-percent rise for 1966.

Not to be overlooked for their effect on ag-

<sup>\*</sup> Prepared in the Division of Economic and Long-Range Studies, Office of Research and Statistics, by Alfred M. Skolnik and Julius W. Hobson. Annual estimates of workmen's compensation payments in recent years have appeared in the January issues of the *Bulletin*.