Another Look at Workmen's Compensation

by ALFRED M. SKOLNIK and DANIEL N. PRICE*

Workmen's compensation programs were introduced in the days before World War I to compensate occupationally injured workers and their families for wage loss and medical expenses, regardless of fault or blame. The programs represented an attempt to replace the uncertainties, delays, and inequities of litigation at common law or under employer's liability laws with the promise of a predefined fixed schedule of payments. What are the scope and limitations of these work-injury compensation programs today? To what extent are they meeting the risk? How effective are they in terms of their costs? The following article presents some key statistics that throw some light on these questions.

RECENT LEGISLATIVE developments at the Federal level have focused national attention on workmen's compensation, the oldest form of social insurance in the United States. Despite the fact that workmen's compensation programs are operated on a State-by-State basis with no Federal administrative responsibility or financial participation, Congress has expressed concern about the adequacy and operation of the system.

In recent sessions, proposals have been made for a national study commission on workmen's compensation to determine if such laws provide "an adequate, prompt, and equitable system." Proposals have also been made to establish Federal standards and to supplement State workmen's compensation coverage for certain hazardous employments. One proposal, for example, would have provided compensation of uranium miners or their survivors by the Federal Government for total disability or death from lung cancer resulting from exposure to ionizing radiation, with the benefits supplementing those under State workmen's compensation.

More recently, the plight of coal miners suffering from pneumoconiosis ("black lung" disease) led to legislation giving the Federal Government temporary income-maintenance responsibility in the area of workmen's compensation.[1] Most of these miners are no longer or have never been eligible for regular workmen's compensation.

Under this legislation, monthly cash benefits amounting to about $144 (less any workmen's compensation) will be payable to a miner disabled by pneumoconiosis or to the widow of a miner who died with the disease. Additional amounts are allowed for dependents.

The Social Security Administration is responsible for payment and administration of benefit claims filed before January 1, 1973. Thereafter, claims for these

> benefits will be processed and paid under State workmen's compensation laws in those States with laws approved by the Secretary of Labor as providing adequate coverage for pneumoconiosis. Where the State law fails to meet the standards, the Department of Labor will require payment of benefits by coal mine operators or their insurers, but no payments will be required after 1976.

In the light of this recent legislative activity concerning workmen's compensation, it is therefore timely to look once again at the key statistics that are available for evaluating the progress of workmen's compensation programs. The Social Security Administration first began assembling such data in 1942, when it devised methods to estimate the amount of benefit payments made under each of the State and Federal programs, by type of insurer.

During the following decade, a methodology was established for estimating coverage and payrolls of State programs and for obtaining State and national estimates of costs. In the 1950's, emphasis was placed on developing measures of the scope and adequacy of workmen's compensation benefits and on measuring interstate variations.

Key indicators that have been developed include the proportions of the potential labor force covered, the percentage of wage loss compensated in temporary total disability cases, the relation

* Division of Economic and Long-Range Studies.

[1] For a description of this program, enacted December 30, 1969, see the *Social Security Bulletin*, March 1970, page 20.

of benefits and premium costs to payrolls, and the proportion of premiums that goes for benefits and expenses. These yardsticks appear either in the annual series published in the BULLETIN or in the more comprehensive articles that appear at regular intervals.[2]

Workmen's compensation already had a long history by the time the Social Security Administration began to collect nationwide figures for its statistical series on the program. The first effective workmen's compensation law was enacted in 1908, when Congress adopted a program for certain Federal civilian employees engaged in hazardous work. Similar laws were enacted by 10 States in 1911; by 1920 all but six States had such laws. Today, every State operates a workmen's compensation program. In addition, Federal workmen's compensation programs cover private employers in the District of Columbia and longshoremen and harbor workers throughout the country.

Statistics for workmen's compensation are not as complete or as highly developed as those for other social insurance programs, despite its early start. The paucity of nationwide data in the area of workmen's compensation can be explained by a variety of factors.

Each State has its own workmen's compensation law for providing cash benefits and medical care to the victims of work-connected injuries. These laws differ materially in the scope of coverage, benefit provisions, administrative procedures, and, most important, the insurance mechanism used to underwrite the risk of work injury.

Six States require the employer to carry his insurance with an "exclusive" State insurance fund (or, in two of the six, to self-insure). Except in these States, most purchase a workmen's compensation policy from a private insurance carrier or self-insure through providing proof of financial ability to carry the industrial risk. In 12 States, an employer also has a choice of insuring with a State insurance fund that is "competitive" with private insurance carriers.

Since most States are therefore not engaged in directly operating an insurance program—that is, setting rates, collecting premiums, paying benefits, or the like—they are not in a position financially or administratively to gather the type of data that are the normal byproducts of such other social insurance systems as old-age, survivors, disability, and health insurance (OASDHI), and unemployment insurance. Less than a third of the States collect, for example, any data on the number of covered workers or the amount of covered payrolls under workmen's compensation. Almost half the States fail to publish such basic data as the amount of benefits paid, by type of insurance or by type of benefit. Practically no State has any data on the number of persons currently receiving workmen's compensation benefits.

The problem of collecting meaningful nationwide data is complicated not only by the lack of assembled data in many jurisdictions but also by the difficulty of securing data comparable from one jurisdiction to another.[3] To help minimize this problem, uniformly compiled data are used from national sources wherever possible.

COVERAGE

The estimates of coverage under workmen's compensation programs developed by the Social Security Administration are based on the number

[2] Michalina M. Libman, "Workmen's Compensation Benefits in the United States, 1939–1940," *Social Security Bulletin*, January 1942; Dorothy McCamman, "Workmen's Compensation: Coverage, Premiums, and Payments," *Social Security Bulletin*, July 1950; Dorothy McCamman and Alfred M. Skolnik, "Workmen's Compensation: Measures of Accomplishment," *Social Security Bulletin*, March 1954; Alfred M. Skolnik, "Trends in Workmen's Compensation: Coverage, Benefits, and Costs," *Social Security Bulletin*, August 1958; Alfred M. Skolnik, "New Benchmarks in Workmen's Compensation," *Social Security Bulletin*, June 1962, and Alfred M. Skolnik, "Twenty-five Years of Workmen's Compensation Statistics," *Social Security Bulletin*, October 1966.

[3] One student of the subject recently summarized his findings as follows: "When it comes to payment, one State will count all money payments awarded; another will tabulate payments as made; and another will estimate future payments based upon actuarial data. All this is apart from the fact that data are not accumulated on any uniform time period. Fiscal years differ; annual periods in some States contrast with biennial periods in others; and other States with the same fiscal or calendar year reporting use different beginning and cut-off dates for the accumulation of data." (Monroe Berkowitz, *The Processing of Workmen's Compensation Cases*, Department of Labor, Bureau of Labor Standards, Bulletin 310, 1967, page 76.) See also Department of Labor, Bureau of Labor Standards, *Workmen's Compensation, The Administrative Organization and Cost of Administration*, Bulletin 279, 1966, pages 69–79.

of workers covered in an average month. They are thus much smaller than the count of different workers covered at some time during the year. In addition, the estimates include only employees of firms that actually carry insurance or submit proof of ability to self-insure. This measure of coverage has merit since it is comparable with that used for other social insurance programs and excludes employees who have no assurance that benefits will be paid without court action.

The basic method used to derive these estimates consists of building up a covered payroll figure for each State. These figures are then converted into estimates of the number of workers covered in an average month by using the relationships between total payrolls and average monthly employment under the various State unemploment insurance programs.[4] In about a dozen States, where the unemployment insurance and workmen's compensation laws differ significantly with respect to coverage of small firms, adjustments are made to allow for the likelihood that the more inclusive the coverage, the less the relation of payroll to number of employees. That is, small firms are more likely to have a lower computed average wage per employee than large establishments.

The primary source of payroll data is the National Council on Compensation Insurance (NCCI), to which such data are reported for ratemaking purposes by seven competitive State funds and by private insurance companies in 43 States and the District of Columbia. These payroll data, which are compiled for policy years, are converted into calendar-year data and then supplemented by estimates of payrolls for self-insurers and for other State funds obtained from State administrative agencies and various other sources.

Coverage estimates are confined to specific benchmark years. The latest full calendar-year for which private carrier payroll estimates could be computed for all States is 1965. This time lag is inevitable since the data obtained are based on policy-year experience that extends into succeeding calendar years and cannot be fully evaluated until 2 or 3 years after the end of the policy year.

[4] For a detailed description of the methodology, see the *Bulletin*, July 1950, pages 4–5, and August 1958, pages 4–6.

These benchmark data provide the basis for estimating coverage in the intervening and succeeding years. The 1968 estimates of the average monthly number of covered workers in each State are projections from the 1965 data, based on the percentage change in average monthly employment covered under unemployment insurance programs and adjusted where necessary for changes in the coverage provisions of the laws.

The NCCI agreed, as in previous years, to compute an adjustment factor that would permit the estimating of total payrolls in States where the insurance is limited to part of the payroll. In about seven of the jurisdictions, the earnings of individual workers above specified amounts ($100 a week, for example) are not reported for premium computation purposes. In the other States there is no limitation or the limit has been raised high enough to have little effect on total payroll.

The Council furnished an adjustment factor for all States with a significant limitation and for which it compiles data. Dividing the reported payroll by this factor produced a payroll estimate on an unlimited basis.

The method employed here for estimating coverage has the advantage of being applicable to all States on a uniform basis. Not only are the primary data compiled from national sources such as NCCI and the unemployment insurance program, but the concept of coverage is applied uniformly in each State. In summary, the workmen's compensation coverage estimates basically refer to employees of firms that actually carry insurance or that submit the required financial proof of ability to self-insure.[5] Employees of employers who voluntarily purchase a workmen's compensation policy are also counted, since they cannot be separated from those required to insure.

Each State total also includes estimates of workers covered by the Longshoremen's and Harbor Workers' Compensation Act, practically all

[5] Employees of self-insured State and local political subdivisions are included in the estimates whether or not the employing unit submits financial proof of ability to self-insure, since in many States financial solvency of the employing unit is assumed and security is not required by law. (For a detailed discussion of the security provisions applicable to private and public employers in the various states see C. Arthur Williams, Jr., *Insurance Arrangements under Workmen's Compensation*, Department of Labor, Bureau of Labor Standards, Bulletin No. 317, 1969, pages 17–32.)

of whom are insured by private carriers. The number of Federal workers covered under the Federal Employees' Compensation Act is estimated separately and not distributed among the States. The estimates exclude railroad workers in interstate commerce and seamen in the United States merchant marine, who are covered by statutory provisions for employer liability rather than by a workmen's compensation law.

National and State Estimates

New benchmark data for 1965 produced national estimates of 50.6–50.9 million workers covered in an average month under State and Federal workmen's compensation programs. The payroll in employment covered by these programs in 1965 is estimated at $291–$293 billion (table 1).

These estimates were fairly close to the original estimates for 1965, which were based on projections from 1961 benchmark data.[6] The new coverage estimates are only about 150,000 higher than the original and the payroll estimates about $2 billion greater.

Projecting from the 1965 data yields an estimate of 56.7–56.9 million workers covered in an average month in 1968, with a payroll of $375–$377 billion for the year. Workmen's compensation thus covered about 84 percent of the 67.8 million civilian wage and salary workers in the United States and the $447 billion in civilian wages and salaries.

The proportion of the employed labor force covered by workmen's compensation has increased since the early 1960's, after hovering at about 80 percent for the decade before. Some of the increase is artificially induced as a result of the redefinition by the Bureau of Labor Statistics of the labor force to exclude those aged 14 and 15. Another part of the increase reflects the shifting away of workers from noncovered types of employment (such as farm and domestic work and railroading) to covered industries. Farm workers, for example, comprised 3 percent of the labor force in 1961 and 2 percent in 1968; domestic workers represented 5 percent in 1961 and 3 percent in 1968.

Statutory extensions of coverage, especially to small firms, have also played a role in the increased rate of protection. From 1961 through

[6] See the *Bulletin*, January 1967, page 29.

TABLE 1.—Estimated number of workers covered in an average month and total annual payroll in covered employment, 1940, 1946, 1948–68 [1]

Year	Workers covered in an average month		Total payroll in covered employment	
	Number (in millions)	Percent of employed wage and salary workers [2]	Amount (in billions)	Percent of civilian wage and salary disbursements[2]
1940	24.2–25.0	70.8	$35–36	72.1
1946	32.2–33.2	76.8	79–81	76.8
1948	35.6–36.3	77.0	104–106	79.7
1949	34.9–35.7	76.9	102–104	79.1
1950	36.5–37.2	77.2	112–115	80.1
1951	38.3–39.0	78.4	130–133	81.2
1952	39.1–39.7	78.9	140–143	81.0
1953	40.4–41.0	80.0	152–155	81.7
1954	39.5–40.0	79.7	152–154	82.0
1955	41.2–41.6	80.0	167–169	83.4
1956	42.8–43.1	80.2	181–182	83.2
1957	43.2–43.4	80.5	189–191	83.0
1958	42.4–42.6	80.2	191–193	83.4
1959	43.9–44.1	80.3	208–210	83.8
1960	44.8–45.0	80.4	219–221	84.3
1961	44.9–45.1	80.3	226–227	84.5
1962	46.1–46.3	80.4	240–242	84.5
1963	47.2–47.4	80.5	253–255	84.6
1964	48.6–48.9	80.8	271–273	84.5
1965	50.6–50.9	81.5	291–293	84.2
1966	53.5–53.8	83.1	320–322	84.5
1967	54.9–55.1	83.1	341–343	84.0
1968	56.7–56.9	83.8	375–377	84.1

[1] Before 1959, excludes Alaska and Hawaii.
[2] Midpoints of range used in computing percentages.

Source: Employed wage and salary workers from *Current Population Survey*, Bureau of Labor Statistics. Starting with 1967, excludes those aged 14 and 15 (as well as younger workers) and includes certain workers previously classified as self-employed. Wage and salary disbursements from Office of Business Economics, Department of Commerce.

1968, eight States reduced their exemptions for size of firm, with four States joining 24 other jurisdictions in eliminating numerical exemptions in their entirety. Oregon amended its law to provide for compulsory rather than elective coverage, bringing the number with compulsory coverage to 29.[7] Four States (Maine, Michigan, New Hampshire, and Oregon) extended some coverage to farm workers, bringing the total to 21. Coverage has also been extended to some State and local government employees.

The benchmark coverage figures for each of the States and projections for 1968 are presented in table 2. The individual estimates for 1965 were submitted to the State administrative agencies for review, and any suggestions were taken into account. Although the method of estimating has been refined over the years, the estimates are still not uniformly good. The difficulty of obtaining data on coverage by self-insured firms is one of the weak links in the series. A range is used to embrace the probable coverage situation, where a lack of certainty concerning a single figure exists.

[7] Action by the Iowa Legislature, effective July 1970, brought the number to 30.

TABLE 2.—Estimated average monthly number of wage and salary workers covered by workmen's compensation, 1965 and 1968

[In thousands]

State	1965	1968
Total	50,659–50,834	56,683–56,858
Alabama	610	665
Alaska	52	61
Arizona	295	345
Arkansas	325	365
California	5,300	5,980
Colorado	405	470
Connecticut	870	985
Delaware	129	141
District of Columbia	285	295
Florida	1,220	1,470
Georgia	855	980
Hawaii	185–195	215–225
Idaho	139	149
Illinois	3,500	3,850
Indiana	1,220	1,340
Iowa	625–650	720–745
Kansas	390	450
Kentucky	550	635
Louisiana	680	775
Maine	220	255
Maryland	770	880
Massachusetts	1,570	1,710
Michigan	2,250	2,590
Minnesota	840	985
Mississippi	310	350
Missouri	1,050	1,210
Montana	125–135	130–140
Nebraska	330–340	380–390
Nevada	146	162
New Hampshire	173	205
New Jersey	1,950	2,130
New Mexico	161	164
New York	5,650–5,750	5,900–6,000
North Carolina	1,150	1,340
North Dakota	92	95
Ohio	2,840	3,150
Oklahoma	350	390
Oregon	430	560
Pennsylvania	3,410	3,660
Rhode Island	245	265
South Carolina	470–490	540–560
South Dakota	98	110
Tennessee	720	835
Texas	1,790	2,110
Utah	225	240
Vermont	96	117
Virginia	970	1,090
Washington	575	705
West Virginia	420	445
Wisconsin	1,160	1,290
Wyoming	60	62
Federal employees [1]	2,378	2,737

[1] Excludes employment outside the United States.

State Variations

Few jurisdictions offer what might be called complete protection to all employees with work-connected injuries. Twenty-three of the State laws (as of 1968) are elective for most of the private employments covered. Under these laws, the employer may accept or reject the legislation, but, if he rejects it, he loses the customary common-law defenses against suits by employees. The remaining laws are compulsory and require every employer within the scope of the law to comply with the provisions and pay the compensation specified. Some laws are part compulsory and part elective.

Twenty-four States exempt from coverage those employers with fewer than a specified number of employees. The range is from fewer than two employees in two States to fewer than 15 employees in one State. The most common exception is for employers with less than three employees.

Even in the 28 jurisdictions that have no numerical exemptions, there are restrictions on the type of employment covered, with exemptions such as agricultural employment, domestic work, and casual labor. Only four of the 28 jurisdictions cover agricultural workers in the same way as other workers; 10 others provide some coverage of farm workers. In only six of the 28 jurisdictions is domestic labor of any type included. Many laws exempt employees of nonprofit, charitable, or religious institutions. Some States limit coverage to workers in hazardous occupations, variously defined.

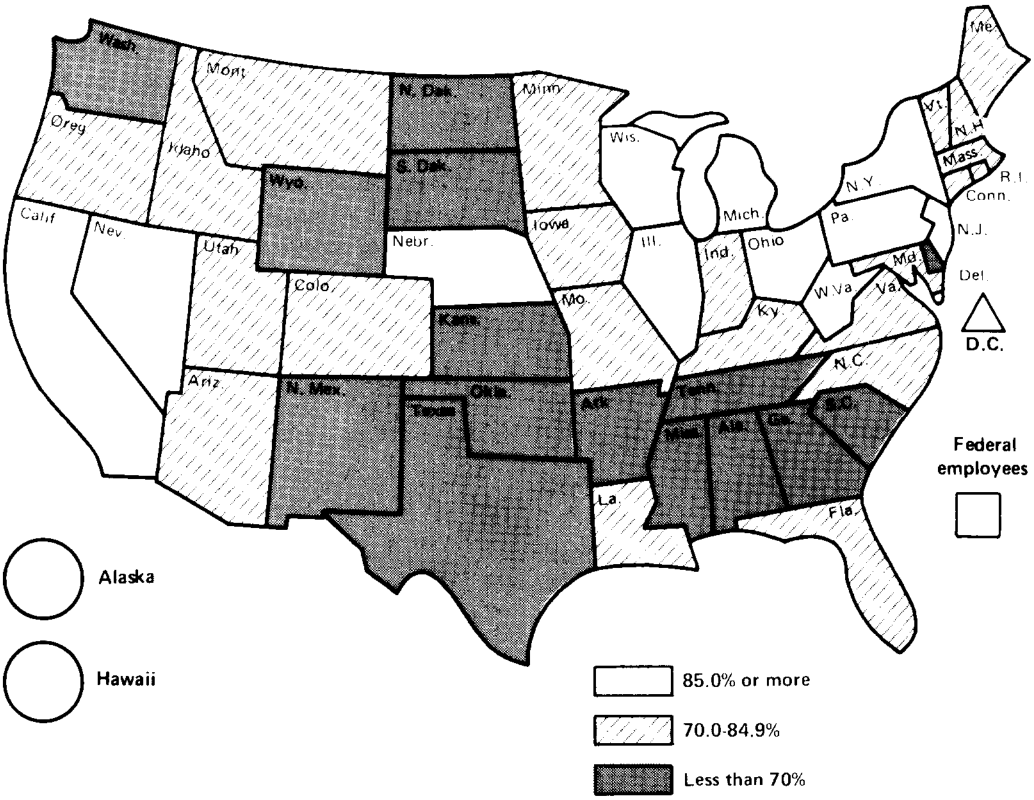
For State and local government employees, too, coverage differs markedly from one jurisdiction to another. Some laws specify no exclusions or exclude only such groups as elected or appointed officials. Others limit coverage to employees of specified political subdivisions or to employees engaged in hazardous occupations. In still others, coverage is entirely optional with the State or with the city or political subdivision.

Because of these many differences in the coverage provisions of the State laws, the number of workers actually covered by workmen's compensation as a percentage of the total employed wage-and-salary labor force shows considerable variation from State to State.

Chart 1 shows the actual workmen's compensation coverage in the States as a percentage of potential coverage. Potential coverage is based on 1968 State data from the Bureau of Labor Statistics for nonagricultural wage and salary workers and on data from the Department of Agriculture for farm workers. Estimates of domestic employment are projected from the 1960 Decennial Census. These data have been modified to exclude Federal employees (who have their own separate system) and interstate railroad workers (who are subject to Federal jurisdiction and therefore ineligible for State coverage).

In 1968 the workmen's compensation laws of 15 States covered less than 70 percent of their

CHART 1.—Actual coverage as a percent of potential coverage, by jurisdiction, 1968



workers who potentially could be protected by the program. Ten of these States were contiguous and located primarily in the South Central and Southeastern regions of the United States. These 10 predominantly rural States had 15 percent of the Nation's potential coverage. The other five States in this category (Delaware, North Dakota, South Dakota, Washington, and Wyoming) brought the total potential coverage in this category up to almost 18 percent. Because of their relatively low degree of coverage, however, these jurisdictions accounted for barely 14 percent of the actual number of workers protected by workmen's compensation nationally.

Eleven of the 15 States exempt small firms, ranging from those hiring less than two employees to those hiring less than 15 employees. Only two of the 15 States provide some coverage for agricultural workers, and eight of the 15 have elective laws. Coverage of State and local government employees is also much more limited in these States than elsewhere. The group includes four of the six States throughout the Nation in which protection of government employees depends completely upon voluntary participation in the program by government agencies. In other States of this group, coverage of State or municipal workers may be compulsory but often applies only to specified hazardous employments.

In contrast, 13 States, the District of Columbia, and the Federal system for civilian employees (with 53 percent of the potential coverage) had 85 percent or more of their potential labor force covered. Almost all the large industrial States of the Middle Atlantic and Great Lakes regions were in this group. Four States in the Pacific region (Alaska, California, Hawaii, and Nevada) were also a part of the high-coverage ratio group. Nine of the jurisdictions in this category (including the Federal Government) have compulsory laws and do not exempt small firms. Two States have compulsory laws but exempt firms with fewer than two or three employees. Only four laws are elective and they have no numerical exemptions. Eight laws provide some coverage for agricultural workers. Without exception each of the 13 States in this group provides mandatory coverage of all or practically all their State and local government workers.

In the remaining 22 States (accounting for 30 percent of the Nation's potential coverage), the ratio of workers covered to the total number employed was 70.0–84.9 percent. These States were scattered throughout the country, and fifteen of them have either compulsory laws or no numerical exemptions.

A comparison with 1964 coverage estimates reveals little shifting among States between categories. Forty-six jurisdictions were in the same coverage-ratio categories for both years. The high category where actual coverage was 85 percent or more of potential coverage added two States—Nebraska and Nevada. The low category of less-than-70-percent coverage had two fewer States; Louisiana, Missouri, and Oregon left this group by 1968, but Delaware entered it.

BENEFITS

The benefits provided under workmen's compensation laws include periodic cash payments, lump-sum payments, and medical services to the worker during a period of disability, and death and funeral benefits to the worker's survivors. These benefits amounted to nearly $2.4 billion in 1968, about 10 times what they were in 1939—the first benchmark year of the benefit series (table 3).[8]

Private carriers accounted for 63 percent of all benefits in 1968, State funds (including the Federal workmen's compensation programs) for 23 percent, and self-insurers for 14 percent. This distribution shows some fluctuations from year to year, but the share attributable to private carriers has remained at 62–63 percent since 1956. State fund disbursements, on the other hand, have been dropping since the mid-1950's from 26 percent of the total to 23 percent, while self-insurance payments have been inching up from 12 percent to 14 percent. Private insurance experienced a great spurt during World War II days and increased its share of the total from 52 percent in 1939 to 62 percent in 1945, a proportion it has steadily maintained. At the same time, State fund disbursements dropped from 29 percent in 1939 to 22 percent in 1945 and self-insurance payments went from 19 percent to 16 percent. In the following decade, State insurance funds got back some of the business, mainly at the expense of self-insurance.

TABLE 3.—Benefit payments by type of insurance, 1939–68 [1]

[Amounts in thousands]

Year	Total		Type of insurance: Insurance losses paid by private insurance carriers [2]		Type of insurance: State fund disbursements [3]		Type of insurance: Self-insurance payments [4]	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1939	$234,723	100.0	$122,183	52.0	$68,464	29.2	$44,067	18.8
1940	255,653	100.0	134,653	52.7	72,528	28.4	48,472	18.9
1941	290,812	100.0	159,823	55.0	77,408	26.6	53,581	18.4
1942	328,669	100.0	190,239	57.9	81,247	24.7	57,183	17.4
1943	353,035	100.0	213,123	60.4	80,574	22.8	59,338	16.8
1944	385,236	100.0	236,655	61.4	85,990	22.3	62,591	16.3
1945	408,374	100.0	252,570	61.9	91,225	22.3	64,549	15.8
1946	434,232	100.0	269,799	62.1	96,053	22.1	68,380	15.8
1947	485,794	100.0	301,833	62.1	110,303	22.7	73,658	15.2
1948	533,584	100.0	334,699	62.7	120,989	22.7	77,896	14.6
1949	566,295	100.0	353,140	62.4	131,734	23.3	81,421	14.4
1950	614,702	100.0	381,329	62.0	148,693	24.2	84,680	13.8
1951	709,047	100.0	444,416	62.7	170,445	24.0	94,186	13.3
1952	784,956	100.0	490,958	62.5	193,107	24.6	100,891	12.9
1953	841,126	100.0	524,176	62.3	210,337	25.0	106,613	12.7
1954	876,216	100.0	540,497	61.7	225,473	25.7	110,246	12.6
1955	915,665	100.0	562,515	61.4	238,445	25.9	114,705	12.5
1956	1,002,007	100.0	618,109	61.7	259,074	25.9	124,824	12.4
1957	1,062,171	100.0	660,903	62.2	271,406	25.6	129,862	12.2
1958	1,111,599	100.0	694,402	62.5	284,780	25.6	132,417	11.9
1959	1,209,808	100.0	752,580	62.2	315,990	26.1	141,238	11.7
1960	1,294,945	100.0	809,921	62.5	324,580	25.1	160,444	12.4
1961	1,374,176	100.0	850,872	61.9	347,433	25.3	175,871	12.8
1962	1,488,816	100.0	923,989	62.1	370,722	24.9	194,105	13.0
1963	1,582,459	100.0	987,580	62.4	388,242	24.5	206,637	13.1
1964	1,707,189	100.0	1,069,577	62.7	411,876	24.1	225,736	13.2
1965	1,813,807	100.0	1,124,013	62.0	445,382	24.5	244,412	13.5
1966	2,000,316	100.0	1,239,120	61.9	486,167	24.3	275,029	13.8
1967	2,189,294	100.0	1,362,938	62.3	523,683	23.9	302,673	13.8
1968	2,364,432	100.0	1,481,606	62.7	552,821	23.4	330,005	14.0

[1] Before 1959, excludes Alaska and Hawaii.

[2] Net cash and medical benefits paid by private insurance carriers under standard workmen's compensation policies. Data from the *Spectator* (*Insurance by States . . . of Casualty Lines*), from published and unpublished reports of State insurance commissions, and from A. M. Best Co.

[3] Net cash and medical benefits paid by competitive and exclusive State funds and the Federal systems. Includes payment of supplemental pensions from general funds. Compiled from State reports (published and unpublished), and from the *Spectator*, *Argus Casualty and Surety Chart*, or other insurance publications. Data for fiscal years for some funds.

[4] Cash and medical benefits paid by self-insurers, plus the value of medical benefits paid by employers carrying workmen's compensation policies that do not include the standard medical coverage. Estimated from available State data.

A little more than one-third of the $2,364 million paid in benefits in 1968 went for hospitalization and other medical services and a little under two-thirds for compensating the wage loss of injured or deceased workers (table 4). For many years, the proportion going for medical expenses was a constant one-third, but recent data from NCCI indicate an emerging era in

[8] For a detailed description of the derivation and sources of this series, see Ida C. Merriam and Alfred M. Skolnik, *Social Welfare Expenditures under Public Programs in the United States, 1929–66* (Research Report No. 25), Office of Research and Statistics, 1968, pages 67–71.

TABLE 4.—Benefit payments by type, 1939–68 [1]

[In millions]

Year	Total	Type of benefit			
		Medical and hospitalization payments	Compensation payments		
			Total	Disability	Survivor
1939	$235	$85	$150	$120	$30
1940	256	95	161	129	32
1941	291	100	191	157	34
1942	329	108	221	185	36
1943	353	112	241	203	38
1944	385	120	265	225	40
1945	408	125	283	241	42
1946	434	140	294	250	44
1947	486	160	326	280	46
1948	534	175	359	309	50
1949	566	185	381	329	52
1950	615	200	415	360	55
1951	709	233	476	416	60
1952	785	260	525	460	65
1953	841	280	561	491	70
1954	876	308	568	498	70
1955	916	325	591	521	70
1956	1,002	350	652	577	75
1957	1,062	360	702	617	85
1958	1,112	375	737	647	90
1959	1,210	410	800	700	100
1960	1,295	435	860	755	105
1961	1,374	460	914	804	110
1962	1,489	495	994	879	115
1963	1,582	525	1,057	932	125
1964	1,707	565	1,142	1,007	135
1965	1,814	600	1,214	1,074	140
1966	2,000	680	1,320	1,170	150
1967	2,189	750	1,439	1,284	155
1968	2,364	830	1,534	1,369	165

[1] Before 1959, excludes Alaska and Hawaii.

which a larger proportion of the workmen's compensation benefit dollar will be going for medical expenses. The data also indicate a long-term drop in the proportion of the benefit dollar paid to survivors of workers killed on the job.

Table 5 shows the long-term changes in the distribution of compensable cases and incurred losses by type or severity of injury, according to NCCI policy-year data that relate primarily to private carrier business. Between 1939 and 1954 a significant change took place in the percentage of cases classified as permanent partial disabilities. In policy-year 1939, such cases ("major" and "minor") accounted for 14 percent of total awards; by policy-year 1954 the ratio was 26 percent. Temporary total disability, which thus accounted for 85 percent of the awards in 1939, represented only 73 percent in 1954. Since 1954, the trend has continued but at a reduced pace.

In terms of dollars awarded, however, the trend in the last half of the 1939–66 period has been almost as dramatic as in the first half. In fact, between 1939 and 1954 the proportion of incurred losses attributable to temporary total disability dropped from 31 percent to 29 percent, but the drop to 25 percent between 1954 and 1966 was twice as great. On the other hand, the proportion of the award dollar attributable to deaths showed hardly any change from 1954 to 1966, although the average incurred loss per death case, when related to other types of cases, showed the greatest percentage increase during this period.

Proportion of Wage Loss Compensated

One measure of the effectiveness of a workmen's compensation law is the extent to which it is replacing the wages lost as the result of disabilities incurred while the worker was employed. The intent of most of the laws is to replace from three-fifths to two-thirds of a worker's weekly wage during total disability, after a waiting period of varying lengths.

The large majority of on-the-job injuries involve total disablement for temporary periods. Generally, workmen's compensation provisions for temporary total disability call for a benefit of at least 60 percent of the worker's wage. Only three States have benefit percentages below 60 percent; in two of these States, the statutory

TABLE 5.—Percentage distribution of compensable cases and incurred losses, and average incurred loss, by injury classification, policy year, 1939, 1954, and 1966 [1]

Injury classification	Compensable cases [2]			Incurred losses			Average incurred loss per compensable case		
	1939	1954	1966	1939	1954	1966	1939	1954	1966
Number (in thousands)	365.0	632.1	843.0						
Amount (in millions)				$84.0	$393.5	$886.5			
Percent	100.0	100.0	100.0	100.0	100.0	100.0			
Death	1.0	.8	.7	16.2	11.5	11.1	$3,873	$9,207	$15,869
Disability:									
Permanent total [3]	.1	.1	.1	3.9	2.0	2.1	9,415	16,758	28,128
Major permanent [4]	1.8	2.6	3.2	22.3	20.7	23.9	2,792	5,010	7,832
Minor permanent [5]	12.1	23.2	24.1	26.2	36.8	38.1	500	986	1,659
Temporary total	85.0	73.3	71.8	31.4	29.1	24.9	85	247	364

[1] Excludes cases receiving medical benefits only. Data for individual policy years not strictly comparable because of shift in States included and in definition of policy year.

[2] For permanent injury cases includes, in addition to compensation for loss of earning power, payments to those cases during periods of temporary disability. For temporary disability cases, includes only those closed cases known not to have involved any permanent injury and the open cases in which, in the carrier's judgment, the disability will be temporary only.

[3] Disability rate at 75–100 percent of total.

[4] Disability with severity equal to approximately 25–75 percent of total.

[5] Disability with severity equal to less than approximately 25 percent of total.

Source: Unpublished data from the National Council on Compensation Insurance.

percentage is above 60 percent for workers with qualified dependents.[9]

The most common benefit-wage ratio designated is 66-2/3 percent, with the highest at 80 percent as of December 1969. Throughout the history of this social insurance program, States have liberalized the statutory rate of wage replacement from time to time. In the 1960's four States (Connecticut, Kentucky, Oregon, and Rhode Island) raised their maximum benefit rate to 66-2/3 percent and Idaho raised its to 60 percent. Twenty-two States have changed the maximum benefit rate since 1940.

The objective of giving the injured worker a benefit equal to a stated percentage of his wage has been generally undercut, however, by the existence of weekly maximum dollar limits that eventually result in lower benefit-wage ratios than those originally incorporated in the law. Particularly in a period of rising wages, the replacement objective has been thwarted by the lag in enacting statutory increases in the ceiling on the weekly benefit amount. The data below show the trend in the number of States with maximums high enough to permit a worker with average earnings, as shown by unemployment insurance data, to receive a weekly benefit that provides the statutory proportion of his wage loss.

Year	Number of jurisdictions [1]	Percent of coverage
1940	46	93
1953	5	4
1957	7	9
1961	7	17
1965	5	7
1969	5	17

[1] Includes Federal program.

Ninety-three percent of the covered labor force in 1940 resided in areas that permitted a worker with average wages to receive the proportion of wage loss specified in the law. The comparable percentage in the 1950's and 1960's ranged from 4 percent to 17 percent.

In the most recent decade States have tended to raise benefit dollar maximums somewhat in tandem with increases in workers' wages. From 1960 to 1968 average weekly wages in employment covered under unemployment insurance increased 36 percent. Under workmen's compensation, the maximum statutory benefit amount (excluding dependents' allowances) increased by at least that percentage in 20 jurisdictions through 1969 and by at least 50 percent under 15 programs. In 10 areas the maximum weekly benefit was raised less than 25 percent between 1960 and 1969 and three made no change at all. From 1964 through 1968, workers' wages advanced 19 percent and again 20 jurisdictions increased their benefit maximums by at least this percentage through 1969. Nine States now provide for automatic adjustment of the benefit maximums according to increases in State earnings levels.[10] Six States, however, did not raise their maximum benefit at all between 1965 and 1969.

The actual portion of wage loss replaced varies among the States (depending on the benefit formula in the law) and within a State from one period to another (depending on the timing of statutory changes). Some insight into trends is gained from calculating for a worker with the average weekly wage in each State, an effective benefit rate based on the ratio of benefits payable to wages. Chart 2 shows the effects of such calculations (with dependents' allowances excluded), in terms of both covered workers and number of jurisdictions, for benchmark years 1953, 1961, and 1969.

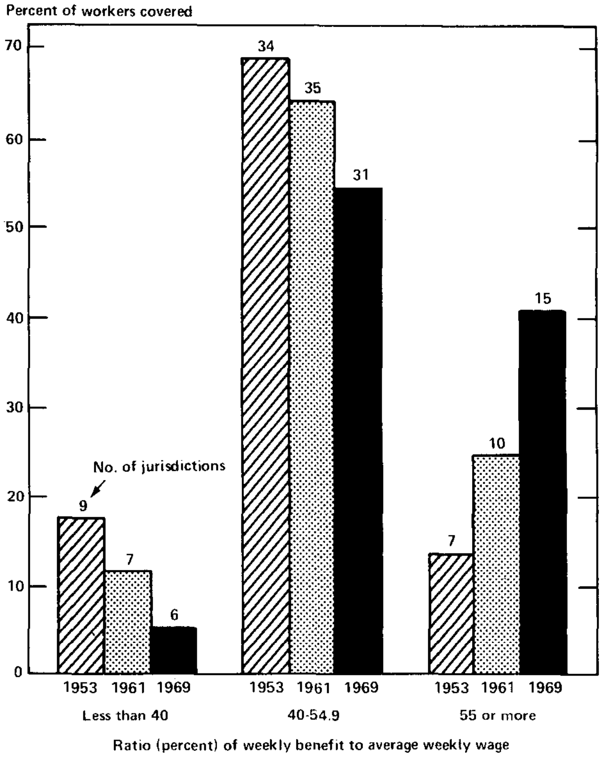
The average rate of wage replacement for benefits received by temporarily disabled workers has improved steadily. Under the laws effective at the end of 1969, a worker receiving the average wage for 1968 would have been paid a benefit amounting to 55 percent or more of his wage in 15 jurisdictions encompassing 41 percent of all covered employment. In 1953, seven jurisdictions, accounting for only 14 percent of total coverage, had been in that category.

The substantial growth in this proportion with potential wage replacement of 55 percent or more from 1961 to 1969 resulted chiefly from the addition to the group of two large industrial States, New Jersey and New York, that together accounted for 14 percent of all those covered under workmen's compensation. It should be noted that even with the progress in this area, only nine

[9] These and other references to statutory benefit provisions are based primarily on data from *State Workmen's Compensation Laws* (Bulletin 161, Revised 1969), Department of Labor, Bureau of Labor Standards, and on unpublished data.

[10] In July 1970, Iowa became the tenth State with such a provision.

CHART 2.—Distribution of covered workers and of jurisdictions, by ratio of weekly benefits payable for temporary total disability to weekly wages, for a worker with average weekly wage in the preceding year, for 1953, 1961, and 1969[1]



[1] Benefits are those payable to worker without qualified dependents. Data for 1953 exclude Alaska and Hawaii.

States and the Federal system provided in 1969 a benefit to the average worker equal to 60 percent of his wage, though a statutory percentage at least that high is called for in most of the laws.

The actual weekly benefit payable under the provisions in effect in December 1969 to a worker receiving the average 1968 wage during a period of temporary total disability as a proportion of the average weekly wage is shown for each State in the lefthand panel of chart 3. In 1969, for the Nation as a whole, a weekly benefit for a worker without dependents at the average wage was $68.37 or 53 percent of the nationwide average weekly wage. (The national average is weighted by the proportion of covered employment in each State.) The corresponding benefit as a percent of wages in 1961 and 1965 was 50 percent. From this aspect, then, it is also evident that there has been some improvement in benefits in the last few years.

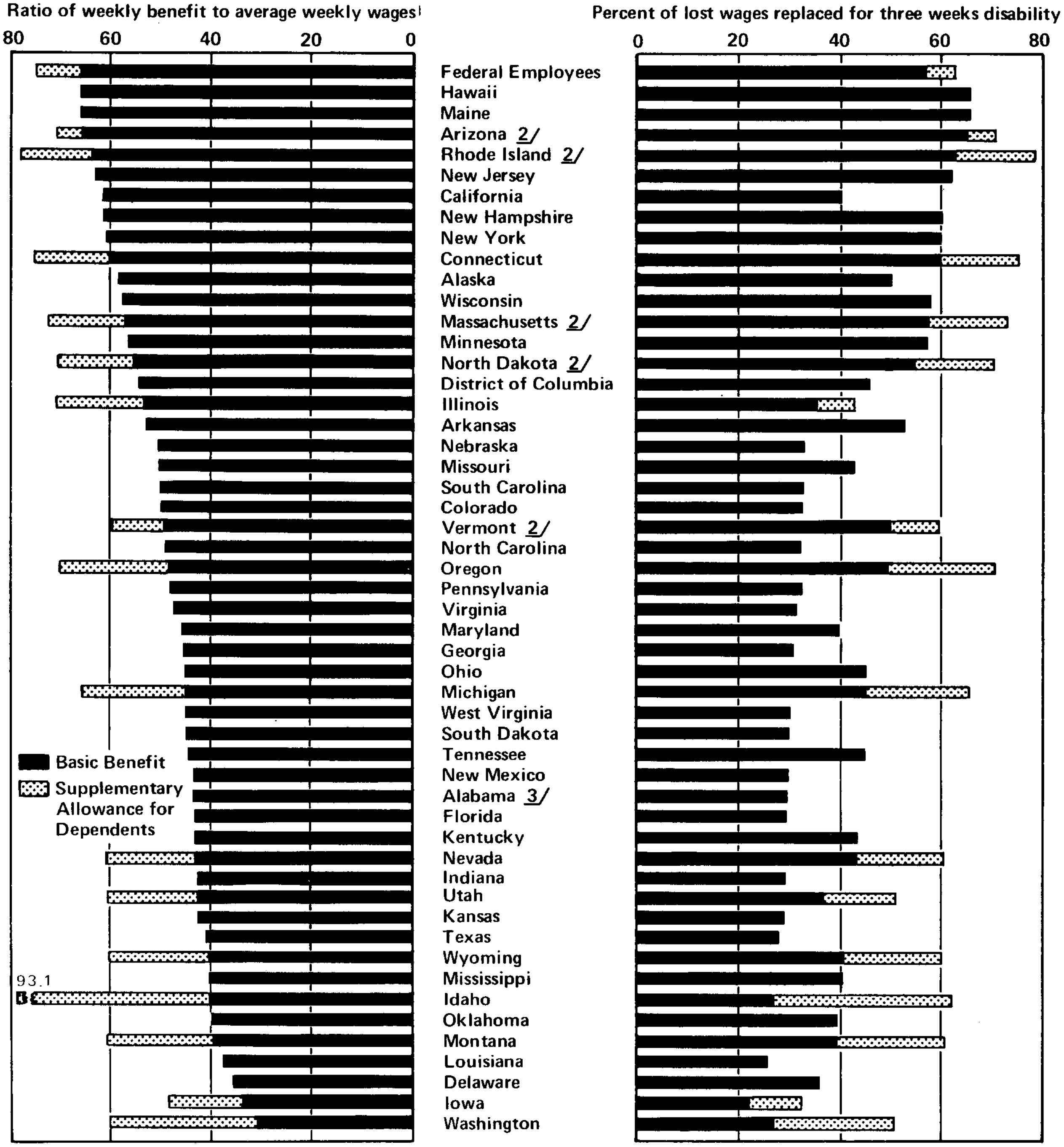
As chart 3 shows, 17 jurisdictions granted an allowance for qualified dependents. Including these augmented amounts, the United States average benefit in December 1969 for temporary total disability (with these augmented amounts included) was $73.80 or 57 percent of workers' wages. Comparison of the average benefits payable in December 1969 to a worker at the average wage in States having dependents' allowances with benefits in those without allowances reveals the following differences in benefit-wage ratios, weighted by employment:

Type of benefit	As percent of wages in jurisdictions—	
	with dependents' allowance (17)	without dependents' allowance (35)
Benefit for single worker	53	52
Benefit with maximum number of dependents	68	52

In areas with dependents' allowances even single workers averaged a slightly higher wage replacement rate than injured workers in the other 35 jurisdictions.

Since workmen's compensation is intended to be a program for partial wage replacement, it is desirable to consider the relationship between benefits and "take-home" wages as well as the benefit-gross wage ratios. A well-accepted and readily available estimation of a worker's "take-home" pay is the total minus the amounts withheld for Federal income tax and for the social security contribution. Using this concept for two types of workers—a single worker and a worker with a wife and two children—the Social Security Administration estimates that a worker with no dependents earning the nationwide average weekly wage of $127.02 in 1968 would have had $20.38 withheld for Federal income tax each week and $5.59 in social security contributions and would have a take-home pay of $101.05. The workmen's compensation benefit of $69.11 for such a worker would therefore account for 68 percent of his take-home pay. The corresponding ratios for workers with a wife and two children in jurisdictions with and without dependents' allowances indicate, as shown below, the substantial

CHART 3.—Measures of interstate variation: Weekly benefit payable for temporary total disability as percent of average weekly wage, 1968, and percent of lost wages replaced for worker with 1968 average weekly wage for temporary total disability lasting 3 weeks; December 1969[1]



[1] Maximum weekly benefit for worker with and without eligible dependents under laws paying dependents' allowances; average wage for workers covered by unemployment insurance program (for Connecticut, "average production" wage is used).

[2] Assumes 3 dependents.

[3] Maximum same for worker earning average wage whether or not he has dependents, but compensation for worker with dependents is based on higher proportion of wages.

difference in wage replacement for these two groups of States.

[Percent]

Year	Single worker (U.S.)	Worker with wife and two children, in jurisdictions—	
		With dependents' allowances	Without dependents' allowances
1961	62	67	56
1965	61	73	54
1969	68	73	60

The higher take-home pay replacement ratios shown for 1969 are to a large extent explained by the surtax added to the Federal income tax in 1968 that reduced the level of take-home pay. The failure of the ratio for family workers in jurisdictions with dependents' allowances to rise from 1965 to 1969 reflects a slower pace of increases in maximum dependents' allowance amounts than in maximum "basic" benefits—that is, those without dependents' allowances. Eight of the 16 jurisdictions that paid dependents' allowances in both 1965 and 1969 raised the maximum dependents' allowance during this period by proportionately smaller amounts than the basic maximum benefit. Six States increased the allowances at about the same rate, and two States provided a greater increase.

Waiting-period provisions.—In measuring the extent to which overall wage loss is being replaced under workmen's compensation laws, another factor to consider is the waiting period that must elapse after the injury date before cash benefits are payable. This is an especially important consideration in temporary disability cases, which last, on the average, about 18 calendar days in manufacturing industries (according to 1968 data from the Bureau of Labor Statistics).

As of December 1969, all States required some waiting period before paying benefits, with the 2 days required in Hawaii the shortest period. In 32 States having 78 percent of all covered workers, benefits were payable only after 7 days of disability. The other jurisdictions all required either a 3-day or a 5-day wait. Provisions of this type remained the same throughout the 1960's, except that one jurisdiction added such a period and two reduced the wait.

In almost all States, workers whose disability last beyond a specified time are paid retroactively for the waiting period. The retroactive pay provision can take effect in as little as 5 days in three States and as much as 50 days in one State. As the tabulation below indicates, nearly 1 out of 4 workers in December 1969 were employed in the 19 States requiring less than 15 days for payment of benefits from date of injury. About one-third of the workers are in the 16 jurisdictions that require at least 29 days.

Benefit payable for waiting period if disability lasts—	Number of jurisdictions	Percent of covered employment
2 weeks	19	23
More than 2–3 weeks	6	19
More than 3–4 weeks	10	23
More than 4–6 weeks	12	14
More than 6 weeks	4	20
No retroactive provision	[1] 1	1

[1] Effective July 1970, the last State, Kansas, adopted a retroactive-pay provision.

Retroactive-pay provisions have been liberalized steadily over the years. During the 1960's, the number of jurisdictions reducing the waiting period to less than 21 days for retroactive benefits increased from 17 to 25 and the proportion of workers included in these areas doubled—from 21 to 42 percent. In all, 13 States liberalized their retroactive-pay provisions in this period.

The effect of waiting-period and retroactive-pay provisions, as of December 1969, is illustrated in chart 3 (on the right) for a worker who has been disabled for 3 weeks. For each State, total benefits payable for the first 3 weeks of temporary total disability are related to the wage loss of a worker (with and without dependents) receiving the average 1968 weekly wage in his jurisdiction.

For a single worker with average wages, two States replace two-thirds or more of a worker's lost wage during a 3-week spell of disability. In contrast, 15 States provide a benefit equal to less than one-third the worker's wage. For the Nation as a whole the proportion of wage loss replaced during the first 3 weeks of disability, weighted by coverage, equaled 43.7 percent in December 1969. This replacement rate continues the trend of improvement noted in estimates made for earlier years in the decade: the rate was 40.6 percent in 1965, and it was 37.3 percent 4 years earlier. The effect of continued reductions in the minimum period of disability for receiving retroactive benefits is clearly evident in these figures.

When the dependents' allowances payable in 17 jurisdictions are taken into consideration, the national average replacement rate in 1969 for a disability lasting 3 weeks rises from 43.7 percent to 47.2 percent (for a worker with the maximum number of dependents qualified for benefits).

It is difficult to translate these estimates on proportions of wage loss compensated for the average worker into overall ratios of wage loss. Influencing the latter are such factors as the dispersion of wages and benefits around the average and the distribution of temporary disabilities by duration. For workers with higher-than-average wages, it is obvious that the proportions of wage loss replaced will be smaller as the dollar maximums come into full play. For workers with below-average wages, the wage-replacements ratios may be higher—especially when statutory benefit minimums become applicable.

Similarly, workers with shorter-than-average periods of disability will have a smaller proportion of their wage loss compensated because of the limiting effects of waiting-period provisions. Workers with longer-than-average periods of disability would have a somewhat greater proportion of their overall wage loss replaced because of the provisions for retroactive payments of benefits, as well as because of the declining importance of the waiting period in calculating the wage-replacement ratio. In 35 States and the District of Columbia, however, monetary or time limits may prevent payment of benefits throughout the entire period of the temporary disability, though few temporary disabilities last long enough to be affected by such restrictions.

For the Nation as a whole, the following figures reveal the extent to which the statutory benefit-wage ratio for a single worker in temporary total disability cases is affected by limits on weekly benefits and waiting-period requirements. It appears obvious that, although the wage-replacement picture has been improving, the average worker is being compensated for considerably less than half his total wage loss.

	Benefit-wage ratio
With benefit award based on—	
Statutory percentage	64
Average weekly wage	53
Average weekly wage for disability lasting 3 weeks	44

Death and permanent disability benefits.—For work injuries that result in death or permanent disability, the proportion of the wage loss compensated is even smaller than it is for temporary disability, partly because the compensation is more likely to be subject to statutory maximums on duration or amount of payments.

Statutory limitations on death benefits have been liberalized in several States in the past 4 years after a period of legislative inaction in the early 1960's. In both 1961 and 1965 only 20 jurisdictions with 42 percent of covered employment provided death benefits to the widow for life or until remarriage and to children until grown. Under the laws in effect in December 1969, 25 jurisdictions (with 56 percent of the covered workers) did so. It should be noted, however, that, of these 25 jurisdictions, 10 (with 23 percent of covered employment) limit the total amount payable.

In the 18 States with both dollar and durational restrictions, survivor benefits are rarely paid for more than 10 years and the monetary maximums range from $12,500 to $27,500, with only six States providing more than $20,000 (9 States, if there are qualified dependent children).

Permanent total disability benefits are paid for life or for the duration of disability in 33 jurisdictions that have 78 percent of all covered workers. About the same situation prevailed in 1965, though in 1961 only 29 jurisdictions provided disability benefits of unrestricted duration. A few of these 33 programs reduce the weekly benefit amount after a specified number of weeks, varying from 260 weeks to 400 weeks, or they provide discretionary payments after a specified time. In the 19 States where permanent total disability benefits are limited as to duration, amount, or both, the periods ranged as of December 1969 from 330 weeks to 550 weeks, and the monetary limitations from $12,500 to $45,000. (The $45,000 limitation is unusually high; the next highest maximum is $27,500.)

In evaluating the adequacy of long-term compensation for permanent disability or death, consideration should be given to the fact that a worker's wages will ordinarily rise as time passes because of the inflationary pressures and increases in industrial productivity and because of the greater experience, skill, and seniority acquired by the individual. Thus, particularly for a young worker who becomes disabled, the benefit under workmen's compensation tends to move farther and farther from adequacy in relation to the higher earnings he might have received.

In recent years, several States have taken steps to adjust original benefit awards in order to overcome the long-time depreciation that occurs. In all these States, provisions have been enacted that relate to the benefits of permanently disabled workers who are totally incapacitated. Benefits for survivors or for permanent partial disability are also adjusted in some of these areas.

Two workmen's compensation programs, the Federal program and that of Connecticut, adjust benefits of those already on the rolls systematically without need for future legislation. The weekly benefit amounts awarded in Connecticut for total disability are raised annually according to increases in the average wage of covered employees. These increases apply to beneficiaries already on the rolls as well as to newly disabled workers. Disabled Federal employees (and their survivors) have their benefits raised whenever retail prices, as measured by the Consumer Price Index of the Bureau of Labor Statistics, advance at least 3 percent. Provisions such as these assure that at least benefits will not deteriorate in purchasing power because of inflation. The Connecticut provision also makes some allowance for the increasing wages that a worker might have earned if not disabled.

Michigan, Nevada, and Oregon are the only other jurisdictions that periodically raise the benefits of earlier beneficiaries in accordance with a predetermined procedure. In these States the general statute calls for updating the weekly benefit amount of permanently disabled beneficiaries whenever higher benefits are enacted for payment of future claims. Thus, these States assure periodic adjustment of benefits to those on the rolls. The time and amount of increase is not specified but depends upon what is included in the revised benefit schedules.

In a few instances, amendments providing new benefit schedules have incorporated a provision for raising the benefits of those already on the rolls. In recent years Ohio has increased the benefit amount of those receiving permanent total disability benefits when the benefit schedule for current claims has been improved. These "workmen's relief fund payments" are financed through general revenue appropriations. The States of New York and Washington have raised benefits of those on the rolls in a similar ad hoc fashion. It should be noted that increases in these States have been one-time adjustments and future increases will require additional legislation.

In addition, some States specify that in determining the worker's wage for computing benefits, weight should be given to earnings levels he might have reached if he had not been disabled. Such a provision is not readily implemented, however, because of the difficulties of forecasting economic trends and individual work patterns. For the most part, then, except in the few States mentioned above, the value of benefits of disabled workers on the rolls for any substantial length of time erodes drastically.

Other factors.—The unmet wage loss is not, of course, a measure of the overall cost of industrial injury that the worker must meet. If he lives in a State that has time or money restrictions on the medical benefits furnished, his costs may include a part of the medical or hospital bills. As of December 1969, there were 11 such States, with 16 percent of the covered workers. Ten States limit the medical benefits paid in cases of occupational diseases.

In addition, the worker may have to pay his own legal fees to have his claim brought to a successful conclusion. These fees may range as high as a third of the cash compensation awarded, although in some States the financial burden of paying fees can be shifted to the employers or carriers under specified conditions. Severely disabled workers may also lose certain fringe benefits provided through the place of employment.

Furthermore, some consideration should be given to the wage loss and medical bills of employees who are excluded from the protection of the workmen's compensation program because of the type of employment or type of injury or disease experienced. Seventeen States, with 17 percent of the covered employment, still have less than full coverage of occupational diseases. As recently as 1967, one State provided no coverage for disability from occupational disease.

Workers may also have to absorb the costs of rehabilitation. As of the end of 1969, 20 laws (affecting 26 percent of the covered workers) had no specific provisions to facilitate the restoration of an injured worker to his role as worker. The remaining laws contain provisions for retraining, education placement, and job guidance, and most of them also provide cash maintenance benefits during rehabilitation training, generally in addition to indemnity benefits. Some progress has been made in this area, as there were 29 States without special rehabilitation provisions at the beginning of the decade.

It is thus clear that much the larger share of the cost of industrial accidents falls on the worker and his family or on public assistance or private charity—far from the original intent of workmen's compensation. At the same time, recognition should be given to the economic relief that some injured workers receive through employee-benefit plans. These plans are increasingly being used to supplement the statutory workmen's compensation benefits or pay cash sickness and medical care benefits in cases not covered by workmen's compensation. For injuries resulting in death or long-term disability the benefits payable, in addition to workmen's compensation, under the provisions of the Social Security Act may be even more significant. For a totally disabled worker, the social security benefits, in combination with workmen's compensation benefits, may equal a maximum of 80 percent of his average monthly earnings (as defined in the Act) before he became disabled.

Benefits in Relation to Payroll

Yearly changes in payroll amounts are an aggregate statistic representing a composite of changes in wage levels and employment. Relating total benefit payments to covered payrolls year by year may thus give some indication of the extent to which benefits have kept pace (1) with the increase in the number of workers covered by workmen's compensation, (2) with the rise in wage rates on which cash benefits are based, and (3) indirectly with the growing costs of hospitalization and medical benefits. Continuing the trend noted in the early 1960's, the ratio of benefits to payroll from 1965 through 1968 has been rising very slowly (table 6). As a matter of fact, the whole pattern since World War II is an irregular but continued rise in this ratio, though the level is still considerably below the level in 1940.

Any inferences concerning trends in benefit-payroll ratios should take account of changes occurring in the frequency of work injuries. The benefit part of the benefit-payroll ratio is clearly affected by patterns in accident experience as well as statutory changes in benefits and economic changes. In this regard, table 6 indicates a pronounced reversal of the national injury frequency rates in the most recent years. A decline in the rate until the early 1950's was followed by a long period of relative stability from 1954 through 1964 when the rates ranged from 11.5 to 12.4 injuries per million employee-hours worked. From 1965 to 1968 the injury rates have risen to 14.0 per million. (The new direction in injury frequency rates has not been accompanied by any change in injury severity data.) This rise in injury rates would seem to suggest that not much of the recent increase in benefit outlays can be attributed to liberalized laws that outstripped economic changes.

The benefit-payroll relationship may also be examined for interstate patterns. In 1968, aggregate benefits as a proportion of covered payroll ranged from 0.35 percent in North Carolina to 1.28 percent in Arizona. The States were fairly

TABLE 6.—Aggregate benefits as percent of payroll in covered employment and rates of injury frequency and injury severity in manufacturing, 1940, 1946, and 1948–68

Year	Benefits as percent of payroll	Injury frequency rates [1]	Injury severity rates [2]
1940	0.72	15.3	1.6
1946	.54	19.9	1.6
1948	.51	17.2	1.5
1949	.55	14.5	1.4
1950	.54	14.7	1.2
1951	.54	15.5	1.3
1952	.55	14.3	1.3
1953	.55	13.4	1.2
1954	.57	11.5	1.0
1955	.55	12.1	637
1956	.55	12.0	712
1957	.56	11.4	754
1958	.58	[3] 11.4	761
1959	.68	12.4	752
1960	.59	12.0	753
1961	.61	11.8	698
1962	.62	11.9	698
1963	.62	11.9	689
1964	.63	12.3	702
1965	.62	12.8	713
1966	.62	13.6	699
1967	.64	14.0	709
1968	.63	14.0	691

[1] Average number of disabling work injuries per million employee-hours worked.

[2] For years before 1955, average number of days lost for each 1,000 employee-hours worked. In 1955 the basic computation was changed to average number of days lost per million hours, and different and more exact time charges were used in evaluating permanent impairments. Rates for years after 1954 are therefore not comparable with those of earlier years.

[3] Beginning 1958, new series based on revised Standard Industrial Classification Manual. The comparable 1958 figure under the old series was 10.8.

Source: Work-injury rates from published and unpublished data of the Bureau of Labor Statistics.

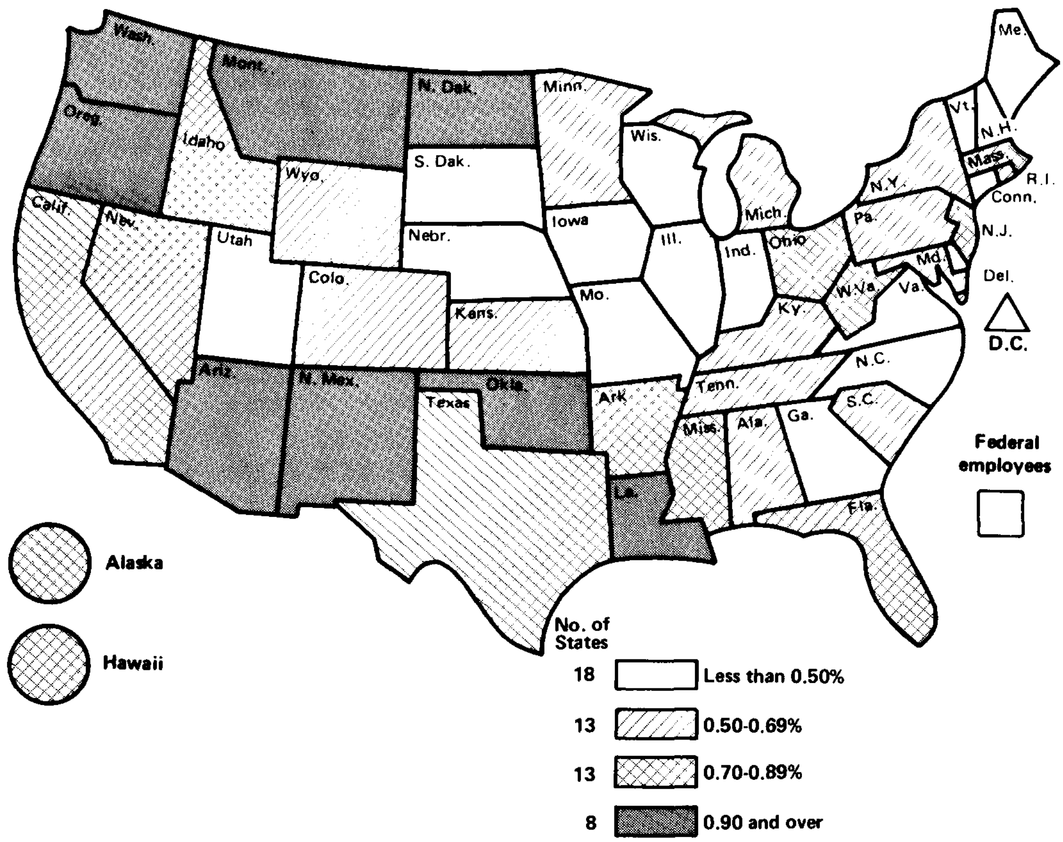
evenly distributed over the range of benefit-payroll ratios, except for some grouping toward the lower end. Benefits equaled 1 or more percent of payroll in only 7 States, with 5 percent of covered employment, but they were less than ½ of 1 percent in 18 jurisdictions with 31 percent of all covered workers.

As chart 4 shows, industrial States in the Midwest and the eastern seaboard have lower benefit-payroll ratios than those in other sections generally. States exhibit a changing pattern with the years. In Kansas, Nevada, Rhode Island, and South Dakota, for example, benefit-payroll ratios dropped between 1960 and 1964 and also dropped between 1964 and 1968. The various elements that influence the ratio of benefits to payroll tend to be stable, however. The fact that six of the seven States with ratios of 1 percent or more in 1968 had also been in this category in 1964 is an illustration of this stability.

Among these elements are (1) the frequency and severity of work injuries as affected by the hazardous nature of a State's industries, by the age, sex, and occupational composition of the labor force, and by the effectiveness of safety and rehabilitation programs; (2) the level and distribution of wages and the size of the group at risk; (3) the methods used to underwrite the risk; (4) the regional differences in cost and accessibility of medical care; and (5) the administrative and legal procedures and policies used in evaluating, adjudicating, and policing claims.

Because the elements are so diverse, little correlation exists between the benefit-payroll ratios and the statutory provisions for compensating temporary total disability. Comparing chart 4 with chart 3 shows that States with relatively liberal benefit provisions are among those expending the lowest proportion of payroll for benefits and vice versa. As of December 1969, the 17 jurisdictions with the highest rate of wage-replacement (including dependents' allowances) for disabilities lasting 3 weeks are distributed among all jurisdictions by benefit-payroll ratio as follows: six are in the highest third, six in the middle third, and five in the lowest third. States

CHART 4.—Total benefits as a percent of payrolls in covered employment, by jurisdiction, 1968



with middle and low wage-replacement ratios are similarly scattered throughout the distribution of States when arrayed by size of benefit-payroll ratio.

COST

The total cost of workmen's compensation to employers[11] is made up of several components. In addition to benefit costs (commonly termed "pure premium"), there are the overhead costs (known as "expense loading") of insuring the risk, which are reflected in the premium (manual) rates or their "equivalent" that employers pay to insure or self-insure the risk of work injury. Included in the overhead are the expenses of policywriting, ratemaking, payroll auditing, claims investigation and adjustment, safety inspection, legal services, and general administration. In self-insurance, some of these overhead expenses are eliminated or reduced, but in insurance provided by commercial carriers there are additional charges, such as acquisition costs (commissions and brokerage fees), taxes and licenses, and allowances for underwriting profit and gain.

Annual costs for employers in the aggregate were constantly on the rise during the 1960's (table 7). Toward the end of the decade they reached 1.07 percent of payroll in covered employment. This rate is still lower than the rate before World War I but is considerably higher than the 89–92 cents per $100 of covered payroll that prevailed throughout the late 1950's.

The wide differences that exist among individual employers are, of course, hidden by these overall cost ratios. The major factors in the differences are the employer's industrial classification and the hazards of that industry as modified by experience rating. The premium rate an employer pays, in comparison with the rate for the same industrial classification in another State, also reflects the level of benefits provided in his jurisdiction. His costs are also influenced by the method he uses to insure his compensation liability —through a commercial carrier, through an exclusive or competitive State fund, or through carrying his own risk—and the proportion of his premium assigned to acquisition costs and costs for services and general administration.

Studies made by the Bureau of Labor Statistics and the Chamber of Commerce of the United States indicate the extent of these industry differences. The BLS, for example, in its sample survey of employer expenditures for selected fringe benefits in the private nonfarm economy reported that such expenditures in 1968 for workmen's compensation averaged 0.9 percent of compensation, amounting to 3 cents per hour of work.[12] In manufacturing the rate was 0.8 percent and in nonmanufacturing, 0.9 percent. Among office workers, the rate was as low as 0.3 percent of compensation; among non-office or production workers, the rate was 1.2 percent, with manufacturing reporting 1.0 percent and nonmanufacturing reporting 1.4 percent. Earlier BLS studies reported similar differentials but somewhat lower overall rates, with establishments of 500 employees or more having lower expenditures for

TABLE 7.—Estimated costs of workmen's compensation to employers as percent of payroll in covered employment, 1940, 1946, and 1948–68

Year	Amount [1] (in millions)	Percent of payroll
1940	$421	1.19
1946	726	.91
1948	1,013	.96
1949	1,009	.98
1950	1,013	.89
1951	1,185	.90
1952	1,333	.94
1953	1,483	.97
1954	1,499	.98
1955	1,532	.91
1956	1,666	.92
1957	1,734	.91
1958	1,746	.91
1959	1,869	.89
1960	2,055	.93
1961	2,156	.95
1962	2,323	.96
1963	2,510	.99
1964	2,713	1.00
1965	2,908	1.00
1966	3,279	1.02
1967	3,656	1.07
1968	4,027	1.07

[1] Premiums written by private carriers and State funds and benefits paid by self-insurers increased by 5–10 percent to allow for administrative costs. Also includes benefit payments and administrative costs of Federal system. Where necessary, fiscal-year data converted to calendar-year data. Before 1959, excludes Alaska and Hawaii.

[11] Except in a few States that require minimal employee contributions—primarily toward the cost of medical care—or that pay supplemental pensions from general revenues, workmen's compensation benefits are entirely employer-financed.

[12] Bureau of Labor Statistics Release 11–197, dated May 11, 1970. Compensation in this study was defined as gross payroll plus employer payments for legally required insurance programs and private welfare plans. Since gross payroll totaled less than 90 percent of compensation, workmen's compensation expenditures, if they were related only to payroll in the BLS study, would come very close to the 1.07 percent of payroll estimated by Social Security Administration for 1968.

workmen's compensation than small plants did.[13]

The Chamber of Commerce in its 1967 sample survey of employee benefits reported that workmen's compensation costs incurred by employers equaled 1.1 percent of gross payroll in manufacturing industries and 0.5 percent in nonmanufacturing industries, for an overall ratio of 0.8 percent.[14] These rates ranged from a low of 0.1 percent for insurance companies to a high of 1.6 percent in primary metal industries. The same industries also represented the range in terms of cents per payroll hour—from 0.3 to 5.3.

Costs vary not only from one industry to another but also from one State to another, as might be anticipated from the State differences noted in aggregate benefit-payroll ratios. Policy-year data for 1966 from the National Council on Compensation Insurance show that earned premiums as a proportion of insured payrolls ranged from 0.7 percent in Indiana, Pennsylvania, and Utah to 2.8 percent in Louisiana and the national average was about 1.3 percent. About two-fifths of the States, with a little over one-third of the insured payroll, had rates of 0.8–1.1 percent, and only 3 had rates lower than 0.8 percent. Almost one-third of the States—with about the same proportion of payroll—had rates of 1.6 percent or more, including 3 with rates of 2.0 percent or more. The distribution of States is similar to that reported for policy-year 1962 except that a few less States had rates of 1.6 or more in 1962.

It should be emphasized that the variation in these ratios, like those of benefits to payrolls, is due to a multiplicity of factors, of which benefit costs is only one.

Loss and Expense Ratios

When benefits paid (table 4) are compared with premium costs (table 7), a rough indication of the proportion of the premium dollar that reaches the injured worker is obtained. In 1968, for every $1 spent by employers to insure or self-insure their work-injury risks, 59 cents was paid out in medical and cash benefits. This is the lowest proportion computed since 1954. The ratio has been steadily dropping from a high of 65 percent for 1959.

The loss ratio—the ratio of benefits paid during the year to insurance costs for the same year—is subject to considerable misinterpretation. In the first place, the overall ratio conceals sharply varying ratios that result from differences in the insurance mechanisms. Thus, for self-insurers and the system for Federal employees, the ratio is 90–95 percent because the cost is figured on the basis of payments during the year plus administrative expenses. For participating (dividend-paying) carriers—primarily mutual companies—and for some State funds, the ratio is lower than it would be if dividends could be taken into account. That is, the cost of employers insured by these carriers is overstated to the extent that part of their premiums may later be returned in the form of dividends.

For all private carriers and State funds, moreover, a loss ratio based on losses paid during the year is lower than one based on losses incurred. This difference is especially great in a period when insured payrolls are rising rapidly. The large amounts of premium income that must be set aside to cover liabilities for future payments may be considerably higher than the amounts paid during the year in cases continued from earlier years when wages and compensation rates were lower.

Table 8 shows the extent of the difference in the loss ratios computed by the two methods. Relating losses paid to direct premiums written produces an average loss ratio of 53.4 percent for private carriers for 1950–68. The loss ratio is 62.4 percent when losses incurred are related to premiums earned. The largest yearly differences are registered in the period when the upward trend in business and payrolls is most pronounced. Thus, during the early 1950's and the late 1960's, annual differences of more than 10 percentage points prevailed. When economic growth slackened in the late 1950's and much of the early 1960's, the differences were considerably below 10 percentage points. But whichever series is used, benefit payments as a percentage of premiums have been gradually dropping since the late 1950's.

The bulk of workmen's compensation private insurance policies are sold through stock or

[13] Bureau of Labor Statistics, *Employee Compensation in the Private Nonfarm Economy, 1966* (Bulletin No. 1627), June 1969, tables 8a and 8b.

[14] Chamber of Commerce of the United States, *Employee Benefits, 1967*, 1968, table 6.

TABLE 8.—Comparative loss ratios, private carriers, 1950–68 [1]

[Amount in millions]

Year	Direct writings related to losses paid [2]			Earned premiums related to incurred losses [3]		
	Direct writings [4]	Direct losses paid	Loss ratio	Earned premiums [4]	Incurred losses	Loss ratio
Total	$29,048.9	$15,519.5	53.4	$27,538.6	$17,176.8	62.4
1950	721.5	381.3	52.8	696.6	427.7	61.4
1951	844.5	444.4	52.6	789.9	518.5	65.6
1952	956.3	491.0	51.3	903.7	571.9	63.3
1953	1,074.1	524.2	48.8	1,010.6	605.4	59.9
1954	1,067.3	540.5	50.6	1,010.8	561.4	55.5
1955	1,078.4	562.5	52.2	1,027.9	594.3	57.8
1956	1,152.8	618.1	53.6	1,103.4	649.3	58.8
1957	1,234.1	660.9	53.6	1,173.5	706.7	60.2
1958	1,235.0	694.4	56.2	1,193.9	746.6	62.5
1959	1,322.5	752.6	56.9	1,271.4	821.7	64.6
1960	1,452.3	809.9	55.8	1,367.9	874.2	63.9
1961	1,530.9	850.9	55.6	1,434.0	930.8	64.9
1962	1,651.1	924.0	56.0	1,562.6	982.1	62.8
1963	1,782.3	987.6	55.4	1,671.3	1,071.7	64.1
1964	1,924.8	1,069.6	55.6	1,827.8	1,153.4	63.1
1965	2,074.4	1,124.0	54.2	1,966.6	1,236.4	62.9
1966	2,366.4	1,239.1	52.4	2,229.4	1,412.8	63.4
1967	2,640.2	1,362.9	51.6	2,500.4	1,584.7	63.4
1968	2,940.0	1,481.6	50.4	2,796.9	1,727.2	61.8

[1] Before 1959, excludes Alaska and Hawaii.
[2] Data for 1950–58 from *Spectator: Insurance by States of Fire, Marine, Casualty, Surety and Miscellaneous Lines*, annual issues. Data for 1959–66 compiled from published and unpublished reports of the State insurance commissions. Data for 1967–68 from A. M. Best Company.
[3] From National Council on Compensation Insurance, *Insurance Expense Exhibit (Countrywide)* annual issues.
[4] Disregards dividends to policyholders but allows for premium discounts and retrospective rating.

mutual companies.[15] Table 9 gives the countrywide experience of these companies in underwriting workmen's compensation.

Comparisons of loss and expense ratios must be made with caution, since the mode of operation of stock and mutual companies is different. Nonparticipating stock companies, for example, distribute profits among their stockholders, but the bulk of the profits of mutual companies is returned to policyholders as dividends—in essence the difference between the anticipated and actual cost of insurance. Precise data on the amount of dividends returned to policyholders are hard to obtain. Companies issuing workmen's compensation policies on a participating basis generally estimate dividends equal to 10–15 percent of premium income.[16]

If the data in table 9 were adjusted to allow for dividends, the loss ratios for mutual companies would be increased by about 7–11 percentage points. The expense ratios would be higher by 3–5 points.

TABLE 9.—Countrywide workmen's compensation experience of stock and mutual companies, 1939–68

[Amounts in thousands]

Year	Premiums earned	Losses incurred	Loss ratio	Expenses incurred	Expense ratio	Net gain ratio
	Stock companies					
1939–47, total [1]	$1,934,554	$1,110,676	57.4	$733,512	37.9	4.7
1948–56, total [1]	3,920,104	2,318,171	59.1	1,403,189	35.8	5.1
1957–64, total [1]	6,131,817	3,924,643	64.0	2,119,200	34.6	1.5
1965–68, total	6,217,537	3,936,791	63.3	1,948,892	31.3	5.4
1965	1,282,399	818,822	63.9	420,650	32.8	3.3
1966	1,446,192	929,406	64.3	456,928	31.6	4.1
1967	1,637,183	1,032,859	63.1	515,289	31.5	5.4
1968	1,851,763	1,155,704	62.4	556,025	30.0	7.6
	Mutual companies [2]					
1939–47, total [1]	$1,200,334	$684,948	57.1	$273,267	22.8	20.1
1948–56, total [1]	2,614,500	1,533,125	58.6	626,992	24.0	17.4
1957–64, total [1]	3,421,181	2,140,765	62.6	891,391	26.1	11.3
1965–68, total	2,979,624	1,846,522	62.0	759,943	25.5	12.5
1965	615,468	377,615	61.4	164,191	26.7	12.0
1966	712,795	438,454	61.5	181,743	25.5	13.0
1967	785,479	505,171	64.3	199,201	25.4	10.3
1968	865,882	525,282	60.7	214,808	24.8	14.5

[1] Annual figures previously published in the articles on workmen's compensation that appeared in the *Social Security Bulletin*, March 1954, August 1958, and October 1966.
[2] All figures disregard dividends to stockholders, which if taken into consideration result in higher loss ratios and expense ratios; net gain ratio represents ratio before dividends to policyholders.

Source: Data for 1939–64 compiled from Annual Reports of the New York State Insurance Department and from the Annual Casualty-Surety Editions of the *Eastern Underwriter* and refer to countrywide business of private carriers operating in the State of New York (representing about 80 percent of all business underwritten for United States employers by insurance companies). Data for 1965–68 are from annual issues of National Council on Compensation Insurance, *Insurance Expense Exhibit (Countrywide)* and refer to countrywide business of all private carriers operating in the United States.

Without that adjustment, the average loss ratios of mutual and stock companies for the period 1965–68 are not far apart. Stock companies earned $6.2 billion in premiums and paid to claimants, or reserved for future payments, $3.9 billion—for a loss ratio of 63.3 percent. Mutual companies earned $3.0 billion in premiums and incurred losses of $1.8 billion, for a ratio of 62.0 percent. In line with the trend revealed in table 8, these loss ratios are somewhat lower than those registered in 1957–64.

Stock companies have generally found the workmen's compensation line less profitable than mutual companies have. During 1965–68, stock companies earned an underwriting profit of 5.4 percent and mutual companies averaged a gain of 12.5 percent from underwriting. This situation, however, represents considerable improvement for stock companies from the period 1957–64, when their gain was 1.5 percent and that for mutual

[15] A description of the types of private insurers, their legal form of organization, their marketing and pricing methods, and their share of the market appears in C. Arthur Williams, Jr., *Insurance Arrangements under Workmen's Compensation* (Department of Labor, Bureau of Labor Standards, Bulletin No. 317, 1969), chapter 3.
[16] For some recent data on dividend rates, see C. Arthur Williams, Jr., *op. cit.*, pages 90–91.

companies was 11.3 percent. These averages, of course, conceal wide year-to-year fluctuations. During the past 10 years, the underwriting gain for stock companies has ranged from a profit of 7.6 percent in 1968 to a deficit of 0.5 in 1961. For the mutual companies, the fluctuation has ranged from a net gain of 14.5 percent in 1968 to 7.4 in 1963.

Comparison of the financial showing of stock and mutual companies reveals differences attributable mainly to differences in expense ratios and in acquisition costs particularly. Stock companies sell the major proportion of their policies through independent agents or brokers, and mutuals sell most of their policies through their own employees, who usually receive a lower compensation per policy. In 1965–68, stock companies incurred expenses averaging 31.3 percent of premiums earned, and mutual companies incurred expenses averaging 25.5 percent of premiums earned. The difference would be less if dividends were taken into account.

Over the years there has been a narrowing of the gap between stock and mutual companies in their expense ratios. During 1939–47, the expense ratio for stock companies averaged 37.9 percent and has been dropping ever since. Conversely, the expense ratio for mutual companies averaged 22.8 percent in 1939–47 and higher ratios have been registered since then.

Acquisition cost differences have also narrowed. For nonparticipating stock companies, acquisition and field supervision costs dropped from 17.4 percent of premiums earned in 1950 to 12.7 percent in 1968, at the same time that those of mutual companies remained more or less at 7 percent of earned premiums (table 10).

For the competitive and exclusive State funds the ratio of benefits to premiums or contributions are considerably higher than they are for the private carriers. Table 11 shows that, for 1950–68, benefits paid amounted to 70.8 percent of the premiums written for the 18 State funds—17 percentage points greater than the corresponding ratio for private carriers (table 8). This difference narrowed somewhat in 1967 and 1968, but, in general, fluctuations in the ratio for State

TABLE 10.—Administrative expenses incurred as percent of net premiums earned, by category of expense and by type of private carrier, 1950, 1955, 1960, and 1965–68

Year	Expenses incurred as percent of net premiums earned [1]						
	Total	Investigation and adjustment of claims	Acquisition, field supervision, and collection expenses [2]	Taxes, licenses, and fees	Safety inspection and engineering	Payroll audit	Other [3]
	Nonparticipating stock companies						
1950	40.9	10.3	17.4	3.8	1.6	2.7	5.1
1955	36.5	8.7	15.8	3.5	1.4	2.3	4.8
1960	36.9	9.4	15.4	3.6	1.2	1.9	5.4
1965	34.6	8.9	14.5	3.7	1.1	1.4	5.0
1966	33.2	8.7	14.0	3.6	1.0	1.3	4.7
1967	32.9	8.6	13.7	3.7	1.0	1.2	4.7
1968	31.4	8.2	12.7	3.7	.9	1.1	4.7
	Participating stock companies						
1950	28.6	8.2	11.5	2.4	1.1	1.1	4.3
1955	28.3	7.9	11.9	2.3	1.0	.9	4.3
1960	26.8	8.3	11.0	2.3	.7	.6	3.9
1965	25.1	8.1	9.9	2.3	.7	.6	3.5
1966	25.0	8.1	9.6	2.6	.7	.6	3.4
1967	25.1	8.0	9.4	2.5	.7	.6	3.9
1968	24.1	7.6	8.2	2.7	.7	.5	4.3
	Mutual companies						
1950	25.0	8.0	7.4	3.1	2.3	1.2	3.0
1955	25.0	7.7	7.5	2.8	2.3	1.1	3.6
1960	25.6	8.3	7.4	3.0	2.2	1.0	3.7
1965	26.6	8.9	7.4	3.5	2.1	1.0	3.7
1966	25.5	8.5	7.2	3.5	1.9	.9	3.4
1967	25.4	8.5	7.2	3.6	1.8	.9	3.3
1968	24.8	8.0	7.0	3.6	1.8	1.0	3.4

[1] Net premiums earned excludes premium discounts and retrospective adjustments but not dividends.
[2] Includes commission and brokerage expenses.
[3] Includes general administration and rating bureau expenses.

Source: National Council on Compensation Insurance, *Insurance Expense Exhibit (Countrywide)*, annual issues.

TABLE 11.—Benefit payments and administrative expenses in relation to premiums written, 18 State funds, 1950–68 [1]

[Amounts in millions]

Year	Premiums written [2]	Benefits paid [3]	Benefits as percent of premiums	Administrative expenses [4]	Expenses as percent of premiums
Total	$6,931.3	$4,904.1	70.8	$633.6	9.1
1950	172.1	126.7	73.6	16.5	9.6
1951	204.9	140.9	68.8	18.6	9.1
1952	228.6	158.3	69.2	20.4	8.9
1953	250.1	170.4	68.1	21.9	8.8
1954	265.9	183.2	68.9	24.1	9.1
1955	279.6	192.6	68.9	24.4	8.7
1956	324.3	209.5	64.6	26.0	8.0
1957	300.8	216.7	72.0	26.3	8.7
1958	302.4	225.9	74.7	29.6	9.8
1959	328.4	247.6	75.4	31.2	9.5
1960	366.9	266.0	72.5	33.6	9.2
1961	370.7	287.0	77.4	36.0	9.7
1962	394.8	307.8	78.0	38.4	9.7
1963	432.8	320.6	74.1	41.4	9.6
1964	469.8	337.4	71.8	43.8	9.3
1965	493.9	351.3	71.1	46.1	9.3
1966	531.9	374.2	70.4	47.4	8.9
1967	591.9	394.6	66.7	50.9	8.6
1968	621.5	412.9	66.4	57.0	9.2

[1] For some States, fiscal-year data converted to calendar-year data.
[2] Disregards dividends to policyholders but allows for premium discounts.
[3] Excludes payment of supplemental pensions from general revenues.
[4] Excludes loss-adjustment expenses for certain competitive State funds, estimated at 6–9 percent of premiums. Includes administrative expenses financed through appropriations from general revenue, generally not separable.

Source: *Spectator, Insurance by States*, annual issues; *Argus Casualty and Surety Chart*, annual issues; and State reports.

funds have followed the trend revealed by the private-carrier data.

The loss ratios shown in table 11 are not strictly comparable, however, with those reported for private carriers in table 8. First, the premium income of State funds is more likely than that of private carriers to reflect anticipatory dividends or advance discounts on the manual rates charged standard risks. For private carriers, especially mutual companies, the difference between the anticipated and the actual cost of insurance is usually reflected in ex post facto dividends returnable to policyholders—an item not taken into account in table 8. Second, the premium charges of some State funds do not always cover allowances for certain items included in the premium charges of private carriers—maintenance of certain reserves, for example, administrative and legal services financed through public appropriations or provided by other government departments, and taxes and other special assessments. Third, benefit outlays for the State funds reflect the fact that the States generally insure an undue proportion of the high-hazard undesirable risks, many of which cannot get insurance from private carriers. These factors combine to increase the loss ratio for State funds.

Since competitive State funds spend a very small proportion of premiums for business-getting, and exclusive State funds spend practically nothing, it is to be expected that the expense ratios of State funds are lower than those of private carriers. For 1950–68, administrative costs (excluding loss-adjustment expenses for certain competitive funds) of all State funds averaged 9.1 percent of premiums written (table 11). Exclusive funds devoted, on the average, 6.4 percent of premiums to expenses and competitive funds 11.5 percent. These ratios do not vary significantly from year to year.

Comparison of the expense ratios of State funds and private carriers must, like comparison of their loss ratios, be made carefully. In their expense loading, private carriers include certain charges, noted above, that not all State funds are required to meet out of their premium income —taxes, for example, and those administrative expenses absorbed by other government departments. In addition, private carriers generally provide special consultative services in the fields of accident prevention, rehabilitation, payroll auditing, program planning, and merit rating that may be inadequately furnished by State funds.[17]

Table 10 shows the magnitude of such services. Taxes, licenses, and fees, for example, generally take 2–4 percent of premium; inspection and safety engineering, 1–2 percent; and payroll auditing, 1–2 percent. Some State funds, however, would have a lower expense ratio than indicated if the premium volume were adjusted to include the amounts from general revenues for operations.

TABLE 12.—Administrative costs of State agencies by method of financing, 1950–68 [1]

[Amounts in millions]

Fiscal year	Total administrative costs	Financed through legislative appropriations		Financed through assessments on carriers	
		Amount	Percent	Amount	Percent
1950	$12.4	$4.6	37	$7.8	63
1951	12.9	4.8	37	8.1	63
1952	14.1	5.1	36	9.0	64
1953	15.5	5.3	34	10.2	66
1954	16.1	5.6	35	10.5	65
1955	16.7	5.8	35	10.9	65
1956	17.3	6.0	35	11.3	65
1957	19.1	6.5	34	12.6	66
1958	21.1	7.4	35	13.7	65
1959	23.3	7.7	33	15.6	67
1960	23.9	8.1	34	15.8	66
1961	24.9	8.7	35	16.2	65
1962	26.3	9.3	35	17.0	65
1963	28.8	10.6	37	18.2	63
1964	30.1	10.8	36	19.3	64
1965	32.3	12.1	37	20.3	63
1966	35.6	13.3	37	22.3	63
1967	40.3	15.0	37	25.3	63
1968	42.7	15.9	37	26.8	63

[1] Includes the District of Columbia. Excludes the States with exclusive funds (7 States through 1965, 6 States thereafter), where the task of administering the law is generally merged with that of providing insurance protection. Also excludes the Federal system, 4 States where the laws are court-administered, and before 1960, Alaska and Hawaii. Relates to expenditures of State administrative bodies in supervising the operations of insurance carriers and in exercising adjudicative and enforcement powers.

Source: Compiled from State budget, finance, and treasury documents and annual reports of State administrative agencies.

State Administrative Costs

Another item in the total cost of workmen's compensation represents the expenditures of State administrative agencies in supervising the operations of the insurance carriers and in exercising adjudicative and enforcement powers to ensure compliance with the law. For the fiscal year 1968, these administrative costs totaled $42.7

[17] For an evaluation of the activities of private insurers and State insurance funds in these areas as well as with respect to such factors as promptness of settlement, see C. Arthur Williams, Jr., *op. cit.*, chapter 7.

million for the District of Columbia and the 40 States with available data (table 12).

Not all of this amount, however, represents a cost in addition to that paid by employers, as shown in table 7. In 21 States, expenses amounting to $26.8 million were financed through assessments against the insurance mediums and were already reflected in the premium charges of carriers to employers. Only where administrative expenses were financed through appropriations from the general treasury (19 States and the District of Columbia) did such expenses—totaling $15.9 million—represent a cost of workmen's compensation additional to that charged in premiums. In recent years, the proportion of administrative expenditures met through the two methods of financing has not changed.

According to a Department of Labor study[18] costs of general administration in 1962 ranged from 0.5 percent of total workmen's compensation payments to 4.7 percent. Most agencies spent between 1.0 percent and 3.0 percent of their benefit amounts on administrative expenses. Seven States spent less than 1.0 percent of total payments, 24 States spent between 1.0 and 2.9 percent, and 6 States had costs exceeding 3.0 percent. These figures exclude the States with court administration and States where the cost includes the administration of a State insurance fund. The study concludes that the administration of workmen's compensation, in general, is underfinanced.

SUMMARY

The tempo of change in workmen's compensation has been accelerating, partly as the result of fast-moving economic developments such as inflation. Another factor is the growing concern among States that failure to bring their laws up to commonly accepted standards will increase the possibilities of Federal participation.

Thus, in the area of coverage from 1961 through 1968, eight States have eliminated or reduced their numerical exemptions, one State shifted from elective to compulsory coverage, and several expanded their coverage for agricultural workers or State or local government employees. Consequently, the proportion of the labor force insured for workmen's compensation, after hovering at four-fifths for years, is now rising and reached 84 percent in 1968. Some of the increased coverage, however, can be attributed to a diminishment in the size of the groups that historically have been exempt from workmen's compensation coverage.

Similarly, in the area of wage-replacement protection, most laws have undergone improvement. During the 1960's, all but 3 States increased their statutory dollar maximum for weekly temporary total disability benefits. By the end of 1969, nine States had automatic arrangements for keeping these maximums current with changing wage levels. Waiting-period provisions underwent little change, but 13 States liberalized their provisions for paying benefits retroactively to include the waiting period.

As a result, nationwide, the average worker without dependents in 1969 could expect (after a waiting period) to have had 53 percent of his weekly wage restored in case of wage loss from work injury, compared with 50 percent in 1961. When this worker's disability has lasted 3 weeks, his benefit would replace (with waiting-period provisions taken into account) 44 percent of his lost wages, compared with 37 percent in 1961. Despite the improvements, these ratios are considerably below the statutory benefit-wage replacement ratios (which, when weighted by coverage, average 64 percent for the Nation).

The 1960's also saw some liberalization in the durational restrictions in the compensation of total permanent disabilities and in the payment of survivor benefits. Nevertheless, the adequacy of these benefits is seriously impaired in periods of inflation by the failure of most States to provide periodic increases to long-term beneficiaries on the rolls as wages rise. When allowance is made for restrictions on medical benefits furnished, legal fees incurred by the injured, exclusions due to occupational diseases and inadequate

[18] Department of Labor, Bureau of Labor Standards, *Workmen's Compensation, The Administrative Organization and Cost of Administration*, Bulletin 279, 1966, pages 91–99. The study includes a review of claims procedures in supervising benefit payments, methods of internal and external management, personnel practices, supervision of self-insurance and insurance requirements, and procedures for identifying potential rehabilitees. See also Raymond G. Schultz, "Administrative Issues in Workmen's Compensation," *The Journal of Risk and Insurance*, September 1967, pages 423–434.

provisions for rehabilitation, it is clear that the average worker is meeting, out of his own resources, the larger share of the cost of work injuries.

Partly as the result of liberalizations in the law, the annual cost to employers of workmen's compensation has been on the rise—from less than 1 percent of payroll in the early 1960's to 1.07 percent in 1968. At the same time, the proportion of the earned premium dollar that is being returned to workers in the form of cash benefits and medical services has been dropping and in 1968 was about 61–62 percent for private insurance carriers. Since expense ratios—the portion of premiums that go for administrative expenses—have also been dropping, underwriting gains of the private insurance carriers have shown improvement in recent years.

Differentials in the expense ratios of State insurance funds and of private carriers are still considerable. During 1965–68, these ratios averaged 30–33 percent for stock companies, 25–27 percent for mutual companies, and 11–14 percent for State funds (including an estimated allowance for loss-adjustment expenses). Although State funds like private carriers also reported a drop in loss ratios, they still pay out a considerably higher proportion of their premium income in benefits than private carriers do.

Recent Publications*

SOCIAL SECURITY ADMINISTRATION

OFFICE OF RESEARCH AND STATISTICS. *Directory of Health Insurance Plans Other Than Blue Cross or Blue Shield Plans or Insurance Companies*, compiled by Louis S. Reed and Maureen Dwyer. Washington: The Office, 1970. 37 pp. Limited free distribution; apply to the Social Security Administration, Office of Research and Statistics, Publications Staff, Washington, D.C. 20201.

OFFICE OF RESEARCH AND STATISTICS. *Social Security Disability Applicant Statistics, 1966.* Washington: The Office, November 1969. 68 pp. Limited free distribution; apply to the Social Security Administration, Office of Research and Statistics, Publications Staff, Washington, D.C. 20201.

SOCIAL AND REHABILITATION SERVICE

KRAMM, ELIZABETH R. "Vocational Rehabilitation for Disabled Public Assistance Recipients: A Cooperative Demonstration." *Welfare in Review*, vol. 8, March–April 1970, pp. 11–23. 35 cents.

GENERAL

BOS, H. C., ed. *Towards Balanced International Growth: Essays Presented to J. Tinbergen.* New York: John Wiley & Sons, 1969. 329 pp. $16.

Essays presented on the retirement of the Director of the Netherlands Economic Institute. Subjects include planning, trade flows, savings programs, and distribution.

CHAMPION, DEAN J. *Basic Statistics for Social Research.* Scranton, Pa.: Chandler Publishing Co., 1970. 310 pp. $8.

CHILD STUDY ASSOCIATION OF AMERICA. *1970 Supplement to Recommended Reading about Children and Family Life.* New York: The Association, 1970. 24 pp. $1.

Annotated list of over 80 books and pamphlets published between late 1968 and early 1970, for use by parents and by professionals in the field of mental health education.

FRIEDMAN, MILTON, and SCHWARTZ, ANNA J. *Monetary Statistics of the United States: Estimates, Sources, Methods.* New York: Columbia University Press for National Bureau of Economic Research, 1970. 629 pp. $15.

Includes a compendium of estimates of the amount of money in the U.S. and methods for constructing estimates of money at any particular time.

MORGAN, JAMES N., and SMITH, JAMES D. *A Panel Study of Income Dynamics . . . A Report on Research in Process Under Contract to the Office of Economic Opportunity.* Ann Arbor: Institute for Social Research, University of Michigan, 1969. 2 vols., $4 each.

Examines short-run changes in the economic conditions of individuals and families, using a recursive model with three main variables: economic status, economic behavior, and personality and attitudes.

MOYNIHAN, DANIEL P., ed. *Toward a National Urban Policy.* New York: Basic Books, 1970. 348 pp. $7.95.

"Twenty-four of the Nation's leading experts here explore . . . urban policy, from housing to transportation and from crime to education."

MYRDAL, GUNNAR. *The Challenge of World Poverty: A World Anti-Poverty Program in Outline.* New York: Pantheon Books, 1970. 518 pp. $8.95.

Summarizes the basic research and conclusions of the author's *Asian Drama* and offers proposals for radical reforms.

(Continued on page 42)

* 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.