

Quarterly Employment and Pay Rolls Under Old-Age and Survivors Insurance, 1940

J. R. ARNOLD, R. A. KELLER, and G. H. TRAFTON*

SOME 2 MILLION employers paid taxable wages to more than 31 million employees under the old-age and survivors insurance provisions of the Social Security Act during the last 3 months of 1940. In those 3 months, taxable wage payments exceeded \$8.5 billion. For the entire year, it is estimated that more than 35 million workers received almost \$33 billion in taxable wages.

These totals are derived from quarterly data compiled by the Bureau of Old-Age and Survivors Insurance, showing aggregate employment and pay rolls of the employers under its program. The data are tabulated from total figures which employers enter on their quarterly returns. They differ from the Bureau's annual tabulations of data from individual employee account records,¹ and they have characteristics of their own which give them special value for a variety of purposes.

The quarterly tables show the number of employers reporting under old-age and survivors insurance, and also the distribution of those employers according to size of employing organization. They provide data which include almost 100 percent of the covered workers and taxable wages reported for each quarter, and therefore they serve as controls on the annual tabulations, which are on a sample basis. The quarterly tabulations also indicate the number of employees with taxable wages in the last pay period of each quarter. These tabulations are particularly useful because they are available much earlier than the annual statistics of individual employees. By adjusting the quarterly figures, it is possible to obtain in advance approximate annual totals. The quarterly tabulations show distributions by State and industry, but not by personal characteristics of employees, such as age, sex, or race, or by amount of individual earnings. Such information must be obtained from the annual tabulations of individual employee account records.

In some respects, the State and industry data from the quarterly tabulations are more exact than the corresponding annual data. In the tabulation for any quarter or any year, it is necessary for technical reasons to allocate all the wages of each worker to one State and one industry. It may be assumed that there is less shifting of employees between States and industries in a single quarter than in an entire year; therefore, the quarterly tabulations probably are more useful than the annual data for determining the distribution of covered employment and wages among the various industries as well as among the States at successive intervals of time. Inasmuch as the annual tabulations of total employment for a given year include a larger proportion of workers who received taxable wages for only brief periods, the quarterly figures are less heavily weighted with short-term employees.

Tabulations have now been completed for the 4 quarters of 1940. The description and summary analysis here presented relate primarily to the 1940 data, but comparisons are also made with the employer tabulations for 1938 and 1939.²

The quarterly tabulations are subject to the limitations characterizing other old-age and survivors insurance data. They are confined to employment covered by the program and consequently do not include any wages that workers may have earned outside of covered employment. They also exclude wages in excess of \$3,000 received in any one year by a worker in the service of one employer.

Distributions by industry are at present restricted to a limited number of broad groups, most of which include numerous related industries. Moreover, on their taxable wage reports, employers who operated in more than one industry did not report their employees according to the industries in which they worked. For purposes of industry

* Bureau of Old-Age and Survivors Insurance, Analysis Division.

¹ Data from the Bureau's 1940 employee tabulations will be published next fall in a volume titled *Old-Age and Survivors Insurance Statistics*. Data for 1937, 1938, and 1939 have already been published in 2 volumes under the same title.

² Taxable wages for 1937 were reported semiannually. Employer tabulations were made for every quarter of 1938 and 1939, but those for 1938 were experimental and were not published in full. Quarterly data for 1939 were published in the 1939 issues of the *Social Security Yearbook*, pp. 66-74, and *Old-Age and Survivors Insurance Statistics*, pp. 328-334.

grouping, therefore, a variety of multi-industry "combinations" were first set up and multi-industry employers were classified according to these combinations. Then, for each State, the employment and pay rolls of the employers in each multi-industry combination were allocated to the industry group which represented the primary business of all employers in the combination in that State.

Certain differences between the quarterly and the annual tabulations should also be noted. Because of administrative considerations in processing the data, the quarterly tabulations include items of taxable wages which were suspended as incomplete or incorrect; but these items, if not later reinstated, were excluded from the annual tabulations. Both the quarterly and the annual tabulations exclude some delinquent reports, but because of differences in the cut-off dates the extent of the exclusions is not the same in the two cases.

The cut-off dates for the 1940 quarterly tabulations were set to include approximately 97 percent of the employment which, it is estimated, would ultimately be reported for each quarter. The proportion of total taxable pay rolls is also

about 97 percent. The proportion of the total number of employers, however, is estimated to be approximately 87 percent, because most of the delinquent employers whose reports were excluded operated small establishments.

The rule followed in selecting cut-off dates for 1940 quarterly tabulations was the same as for 1939. The quarterly data for 1939 and 1940, therefore, are approximately comparable. The quarterly tabulations for 1938, however, were made after nearly all reports of taxable wages for the year had been received; as a result they represent almost 99 percent of the ultimate totals. Changes in the number of covered workers and the amount of taxable pay rolls from 1938 to 1939 or 1940, therefore, cannot be determined from the employer data without allowing for the differences in the cut-off dates. Adjustment to a 100-percent basis has been made in the data shown in table 1, where comparisons are made between years.

Under the 1939 amendments to the Social Security Act, the wages of workers aged 65 and over were made taxable as a basis for benefits, and this extension applied retroactively to the year 1939. Thus, although wages of persons aged 65 and over were excluded from 1938 em-

Table 1.—Number of employers and employees, and amount of taxable and average wages under old-age and survivors insurance, and percentage change from preceding year and preceding quarter, 1937-40¹

Year and quarter	Employers reporting taxable wages ²		Employees receiving taxable wages				Taxable wages			
			On last day or in last pay roll of quarter ³		Total during period		Total		Average per employee	
	Number (in thousands)	Percentage change	Number (in thousands)	Percentage change	Number (in thousands)	Percentage change	Amount (in millions)	Percentage change	Amount	Percentage change
1937.....	(⁴)				32,800		\$20,300		\$893	
1938.....	(⁴)				31,200	-4.9	20,200	-10.6	840	-5.9
January-March.....	1,740		23,000		25,100		6,447		257	
April-June.....	1,783	+2.6	23,000	0.0	24,200	+4.4	6,623	+1.2	259	+4.8
July-September.....	1,813	+1.7	23,800	+3.5	25,900	+2.8	6,505	-3.3	251	-3.1
October-December.....	1,833	+1.1	23,600	-9.0	26,500	+2.3	6,725	+3.4	254	+1.2
1939.....	(⁴)				33,100	+6.1	20,200	+11.5	882	+5.0
January-March.....	1,820	-4.4	24,500	+3.8	25,400	-4.2	7,040	+4.7	277	+9.1
April-June.....	1,891	+3.9	25,300	+3.3	26,700	+5.1	7,221	+2.0	270	-2.5
July-September.....	1,936	+2.4	26,100	+3.2	27,400	+2.6	7,497	+3.8	274	+1.5
October-December.....	1,977	+2.1	25,700	-1.5	28,100	+3.6	7,442	-7.7	262	-4.4
1940.....	(⁴)				35,200	+6.3	32,900	+12.7	935	+6.0
January-March.....	1,975	-1.1	29,300	+2.3	27,400	-3.5	8,070	+5.4	295	+12.6
April-June.....	2,056	+4.1	27,200	+3.4	28,300	+3.3	8,125	+7.7	287	-2.7
July-September.....	2,099	+2.1	28,500	+4.8	29,700	+4.0	8,129	(⁵)	274	-4.5
October-December.....	2,132	+1.6	29,400	+3.2	31,500	+6.1	8,676	+6.5	272	-7.7

¹ Partly estimated and subject to revision; annual totals and averages represent all taxable wages reported, including those for employees whose age, sex, and/or race were unknown or for railroad retirement account number holders, as well as taxable earnings in excess of \$3,000 a year. They differ slightly from other published figures.

² Number of employers corresponds to number of employer returns. A return may relate to more than 1 establishment if employer operates several

separate establishments but reports for concern as a whole.

³ Beginning with first quarter of 1940, figures in this column represent employees on pay roll for last pay period of quarter; prior to 1940, they represent employees on last working day or last pay roll of quarter.

⁴ Data not available.

⁵ Increase of less than 0.05 percent.

ployer reports, they were included in reports for 1939 and 1940. The 1939 amendments also extended the coverage of old-age and survivors insurance, beginning January 1, 1940, to the crews of most American vessels and to the employees of national banks, of State member banks of the Federal Reserve System, and of certain other institutions partly owned by the United States Government. In view, however, of other changes which excluded some workers who previously were covered, the net effect of the 1939 amendments on the total number of covered employees was probably slight.³

Trend in Number of Employers and Employees

The number of employers⁴ reporting taxable wage payments under old-age and survivors insurance increased in almost every quarter during the 3 years 1938-40 (table 1). The 2,132,000 employers reporting in October-December 1940 exceeded by 155,000 or 8 percent the number who reported in the corresponding quarter of 1939; and by 299,000 or 16 percent those reporting in the last quarter of 1938. The increase over the first quarter of 1938 was 392,000 or 23 percent. The only breaks in the upward trend occurred in the first quarters of 1939 and 1940, both of which showed small decreases. This first-quarter decline appears to be a normal seasonal tendency resulting from winter slack in such industries as building construction. Year-end liquidations and consolidations are also contributing factors. The upward trend over the entire 3-year period, however, reveals clearly an increase in business activity, which was accelerated during 1940.

A similar upward trend is shown in the total number of employees⁵ who received taxable wages at any time within a quarter. In October-December 1940, there were 31.5 million such workers. That figure was 3.1 million or 11 percent more than in the fourth quarter of 1939; 5.0

million or 19 percent more than in the fourth quarter of 1938; and 6.4 million or 25 percent more than in the first quarter of 1938. As in the case of the employers, the total number of employees increased steadily except for first-quarter declines in 1939 and 1940. The drop in January-March of each year, however, was much sharper for employees than for employers. The first quarter showed 1.1 million fewer employees in 1939 and 1.0 million fewer in 1940 than in the fourth quarter of the preceding years. These were decreases of 4.2 and 3.5 percent, respectively, as compared with declines of less than 0.5 percent in number of employers.

Except for this first-quarter drop, no regular tendency is apparent in the quarterly changes in number of employees. For example, the rate of increase was greatest in the third quarter in 1938, in the second quarter in 1939, and in the fourth quarter in 1940. Although a sharp increase might have been expected in the second quarter on account of seasonal recovery after the low first quarter, such an increase was unusually large only in 1939. With the trend of employment upward, the fourth quarter of each year showed the largest number of both employers and employees. It is apparent that the general upward movement has obscured the other fluctuations. Caution must be exercised, therefore, in drawing conclusions on seasonality from these figures. The data are unsuitable for seasonal analysis also because they are reported and compiled on a calendar-quarter basis and because they are total figures in which the seasonal fluctuations of many industries are combined.

Another measure of the trend in employment is provided by the total number of employees reported to be working on the last day or during the last pay-roll period of each quarter,⁶ as distinguished from the number reported as receiving taxable wages at some time within the quarter. There were 29.4 million last-pay-period employees reported for the fourth quarter of 1940. This number represented an increase of 3.7 million workers or 14 percent over the corresponding figure for 1939; 5.8 million or 25 percent over the

³ See "Estimates of Coverage Under Federal Retirement Programs," *Social Security Yearbook, 1939*, pp. 30-31. See also discussion below on this point, p. 18.

⁴ Every employer who employs 1 or more workers covered by old-age and survivors insurance must submit a separate report of taxable wages. A large organization which is ordinarily regarded as a single employer but which is divided into several separately incorporated entities will be represented in the quarterly tabulations as several employers.

⁵ Number of employees in each quarter has been derived from taxable wage items reported by employers. The figures have been adjusted both for delinquent reports and for the employment of the same workers by 2 or more concerns during the quarter.

⁶ In reporting for 1938 and 1939, an employer had the option of giving the number of workers in his service on either the last day of the quarter or the last pay roll of the period. The results were not wholly satisfactory. Hence, beginning with 1940 all employers were required to report the number of employees as of the last pay period. The change, however, is not believed to have affected the approximate comparability of the totals.

last quarter of 1938; and 6.4 million or 28 percent over the first quarter of 1938. The first-quarter declines noted for 1939 and 1940 in the quarterly number of workers in covered employment do not appear either in the absolute figures or in the rate of change in number of last-pay-period employees. Instead, there was a drop in the number of last-pay-period employees in the last quarter of 1938 and 1939, but a rise in the corresponding period of 1940.

The total number of employees receiving taxable wages in any quarter always exceeds the number of last-pay-period employees, because the total for an entire quarter includes workers who have been employed less than a full quarter and are not working in the last pay period. Only once in the 12 quarters in 1938-40 did the difference between the two figures fall below 1 million, and in 6 quarters it exceeded 2 million. Each year, the difference was greatest in the fourth quarter, and the low point was reached in the first quarter. This difference results from a variety of factors. The 1 to 2 or 3 million employees who were not on the last pay roll of each quarter included short-term seasonal and casual workers, and in addition regularly employed workers who were away from work temporarily on account of holidays, vacations, illness, unemployment, or lay-offs in slack seasons or inventory periods. This latter category was probably substantial in number, and one which was larger in the second and fourth quarters than in the others. Still another segment were workers who had discontinued work on account of marriage, retirement, or death; and here again there was probably some seasonal variation.

None of the United States totals for number of employers and employees show any striking increases that could be clearly ascribed to the coverage changes of the 1939 amendments. The decrease in number of employers from October-December 1939 to January-March 1940 was only 2,000 as compared with 7,000 for the corresponding periods of 1938-39; but the number of employees in the last pay period increased only 600,000 as compared with 900,000 for the earlier period. These figures indicate that any net gain in coverage that may have resulted from the amendments was not large enough to outweigh other factors responsible for fluctuations in total employment.

Trend in Total Wages and Average Wages

Total taxable wages reported by employers increased by almost one-third from the first quarter of 1938 to the last quarter of 1940. In October-December 1940, wage payments totaled \$8.6 billion, a rise of more than \$1.1 billion or 15 percent over wages paid in the corresponding quarter of 1939; \$1.9 billion or 28 percent over the last quarter of 1938; and \$2.1 billion or 33 percent over January-March 1938. For the year 1940, taxable wages amounted to \$32.9 billion, an increase of 13 percent over 1939. Throughout the 3-year period, 1938-40, total wages rose in every quarter except 2—July-September 1938 and October-December 1939—when small decreases occurred.

Average quarterly wages also showed an upward trend, but the gains were more irregular. The highest quarterly average for the 3 years—\$295—came in January-March 1940. The 1939 high was \$277 (first quarter) and the 1938 high was \$259 (second quarter). The lowest quarterly averages were \$251 (third quarter 1938), \$262 (fourth quarter 1939), and \$272 (fourth quarter 1940). The average wage for the entire year 1940 is estimated to be \$935, in comparison with \$882 for 1939 and \$840 for 1938.

From the experience of a 3-year period, it may perhaps be concluded that average taxable wages will normally be high in the first 2 quarters and low in the last 2 quarters. The quarters with high average wages have also been the quarters of low total employment. This situation is probably due in part to the fact that regularly employed workers tend to have higher wage rates as well as higher total earnings than those who are less steadily employed. The latter half of the year, furthermore, is probably characterized by a proportionately larger number of short-term, seasonal employees, whose low earnings tend to depress the averages.

Still another factor is the \$3,000 taxable wage limitation. The earnings of high salaried employees for whom taxable wages of \$3,000 are reported in the first quarter raise the average wage for that quarter. Their earnings in the remaining quarters, however, are not reported because they are not taxable. The quarterly averages are similarly affected by the earnings of those whose taxable wages reach the \$3,000 limit by the end of the second or third quarter. These

high earnings make average taxable wages somewhat higher in the earlier quarters than in the later quarters of the year.

Employment and Wages by Industry

The quarterly data for 1940 have been tabulated to show, by industry, the number of workers receiving taxable wages as well as the total and average wages paid (table 2). In the discussion of these figures, it must be kept in mind that the industry and also the State tables are based on tabulations which exclude some delinquent reports and that, because of differences in cut-off dates, the exclusions are not the same for each quarter. The percentages of the estimated totals represented by the data are indicated in footnotes to the tables.

These differences result in some lack of comparability between quarters. They also affect to some extent comparisons between industries, because the percentage of delinquency in reporting varies from one industry to another. It is, therefore, not possible to draw conclusions based on small differences. The data do, nevertheless, reveal some marked characteristics which stand out clearly above these limitations.

It has already been pointed out that the fourth quarter of 1940 showed the largest aggregate number of employees as well as the largest total of taxable wages. In that quarter, 43 percent of all covered workers were employed in manufacturing industries (table 4). This group of workers received 48 percent of all wages, a proportion which indicates a relatively high level of earnings in manufacturing.

Although for manufacturing as a whole the proportion of aggregate wages was high as compared with the proportion of total employees, this relationship is not shown by each of the component industries. Only 10 of the 19 industry groups included had a similarly high wage ratio (table 2). These 10 industry groups represented 50 percent of all manufacturing employees and accounted for 60 percent of all manufacturing wages. Chief among them were iron and steel and their products; machinery other than electrical; and automobiles, bodies, and parts. Among the others were chemicals, electrical machinery, and printing and publishing.

Seven of the 9 remaining manufacturing industry groups showed a smaller proportion of wages

than of employees. The largest of these groups was food manufacturing, which accounted for 13 percent of all manufacturing employees and 12 percent of the taxable wages. Next came textile-mill products, and apparel and other finished articles made from fabrics. These include industries which, besides having a relatively large proportion of employees with low wage rates, are subject to marked seasonal fluctuations.

Second to manufacturing in total number of employees and in total taxable wages in the fourth quarter of 1940 was trade (table 4). In this broad industry division, however, the proportion of total employees (22 percent) was substantially larger than that of total wages (19 percent). This difference resulted in large part from the disparity between employment and wages shown by the largest trade group—retail general merchandising—which accounted for 25 percent of all employees in trade but for only 16 percent of the taxable wages. Similar but less marked disparities occurred in retail food and in retail apparel. On the other hand, wholesale trade, wholesale and retail trade combined, and retail automotive trade all showed substantially larger proportions of taxable wages than of employees.

Compared with trade as a whole, an even greater relative difference existed in the service occupations. As a whole, the service division accounted for 12 percent of all employees with taxable wages in the fourth quarter of 1940, but these 12 percent received only 8 percent of all taxable wages. The service groups in which the proportion of employees was high in relation to the proportion of wages received included eating and drinking places; hotels, furnished rooms, camps, and other lodging places; and amusement and recreation and related services not elsewhere classified. The proportion of wages, on the other hand, was higher than the proportion of employees in personal service; business service; automobile-repair services, garages, and filling stations; repair services and miscellaneous hand trades; and amusement and recreation—motion pictures.

The 10 remaining broad industry divisions accounted for 24 percent of total employees and 25 percent of total taxable wages in the fourth quarter of 1940. Total wages were proportionately higher than the number of employees in all except contract construction, real estate, and the

Table 2.—Number of employees, amount of taxable wages and average wages, by quarter and by industry, 1940; and percentage distribution of employees and taxable wages within each industry division, fourth quarter, 1940¹

Industry ²	January-March ³			April-June			July-September			October-December				
	Em- ployees ⁴	Taxable wages		Em- ployees ⁴	Taxable wages		Em- ployees ⁴	Taxable wages		Em- ployees ⁴	Taxable wages		Percentage distribution	
		Amount	Average per worker		Amount	Average per worker		Amount	Average per worker		Amount	Average per worker	Em- ployees	Taxable wages
Total.....	26,519,447	\$7,853,819,662	\$296	27,523,815	\$7,896,496,554	\$287	28,722,801	\$7,856,775,778	\$274	30,261,841	\$8,346,188,585	\$276
Mining and quarrying.....	906,897	295,815,442	326	892,894	277,690,513	311	916,048	287,031,726	313	946,126	296,786,923	314	100.0	100.0
Metalliferous mining.....	111,534	42,146,165	378	122,896	45,560,728	371	122,299	44,951,602	368	129,588	47,509,094	367	13.7	18.0
Anthracite mining.....	89,187	29,516,010	331	84,977	25,920,436	305	83,688	26,532,005	299	90,671	27,546,363	304	9.6	9.3
Bituminous coal mining.....	444,475	131,012,281	285	405,547	108,917,460	269	423,035	121,586,451	287	443,071	130,606,438	295	46.8	44.0
Crude petroleum and natural gas production.....	186,152	75,302,698	405	187,914	74,628,266	397	181,674	69,144,517	381	183,626	66,097,251	360	19.4	22.3
Nonmetallic mining and quarrying.....	75,549	17,838,288	236	91,560	22,663,623	248	100,352	24,817,151	247	99,170	25,027,757	252	10.5	8.4
Contract construction.....	1,088,074	255,219,453	235	1,427,787	359,612,003	252	1,582,300	396,280,586	250	1,818,082	456,049,177	251	100.0	100.0
General contractors—building con- struction.....	326,848	78,691,726	241	418,032	103,932,823	248	460,811	114,079,408	248	585,066	143,903,098	246	32.2	31.6
General contractors, other than building construction.....	300,926	67,309,913	224	437,997	99,427,018	227	526,973	116,716,602	221	603,561	141,810,660	235	33.2	31.1
Special trade contractors (subcon- tractors).....	460,300	109,217,814	237	570,751	156,252,162	274	594,516	165,484,576	278	629,455	170,335,419	271	34.6	37.3
Manufacturing.....	11,447,561	3,718,152,894	325	11,585,915	3,645,558,904	315	12,452,123	3,715,617,401	298	12,867,360	4,025,536,217	313	100.0	100.0
Food manufacturing.....	1,381,202	439,302,607	318	1,555,563	454,824,029	292	1,836,533	488,031,729	265	1,664,517	465,991,274	280	12.8	11.6
Tobacco manufacturing.....	121,743	27,368,528	225	117,435	28,457,915	242	117,898	27,142,630	230	122,255	28,311,645	232	1.0	7
Textile mill products.....	1,315,883	301,029,293	229	1,258,703	262,998,664	209	1,319,646	270,500,261	205	1,349,947	298,263,892	221	10.5	7.4
Apparel and other finished articles made from fabrics.....	1,020,071	236,136,617	231	982,930	205,903,528	209	1,030,791	222,178,215	216	1,064,560	231,011,536	217	8.3	5.7
Basic lumber industries.....	429,933	87,874,432	204	457,670	97,977,571	214	495,650	103,151,654	208	537,681	110,184,839	205	4.2	2.7
Finished lumber products.....	443,672	113,605,735	256	453,355	116,968,777	258	473,989	116,338,127	245	495,262	128,772,801	260	3.8	3.2
Paper and allied products.....	325,424	106,954,310	329	315,065	101,416,359	322	335,371	102,521,751	306	330,824	103,175,282	312	2.6	2.6
Printing, publishing, and allied industries.....	614,489	244,049,264	397	605,758	233,333,377	385	593,422	209,533,928	353	615,258	210,863,498	343	4.9	5.2
Chemicals.....	557,621	219,298,998	393	575,169	212,466,288	369	583,391	202,643,827	347	602,164	212,088,685	352	4.7	5.3
Products of petroleum and coal.....	203,780	83,187,216	457	212,810	94,177,270	443	217,540	89,918,023	413	212,654	85,386,210	402	1.7	2.1
Rubber products.....	151,184	65,891,471	364	179,850	64,643,272	359	185,627	64,418,638	347	196,687	69,536,603	354	1.5	1.7
Leather and its manufactures.....	412,362	100,371,919	243	390,025	86,393,515	222	399,530	92,296,418	231	414,283	85,435,641	230	3.2	2.4
Stone, clay, and glass products.....	395,257	121,461,234	307	428,560	137,355,035	321	426,814	129,067,720	302	443,701	138,756,475	313	3.4	3.4
Iron and steel and their products.....	1,387,604	505,838,727	365	1,338,154	482,851,604	361	1,479,339	536,060,573	362	1,590,287	597,947,007	376	12.3	15.0
Nonferrous metals and their prod- ucts.....	311,914	110,943,283	356	310,878	109,491,932	352	337,804	112,780,908	334	370,922	133,038,178	359	2.9	3.3
Electrical machinery (including radios and refrigerators).....	456,144	171,405,979	376	471,060	176,231,829	374	507,807	179,874,164	354	551,637	198,726,185	360	4.3	4.9
Machinery other than electrical.....	826,968	345,631,210	418	836,888	351,972,622	410	899,336	350,052,927	389	956,855	385,051,613	402	7.4	9.6
Automobiles, bodies and parts.....	520,639	247,791,556	476	508,389	239,740,122	472	574,737	219,064,396	381	631,368	294,771,049	467	4.9	7.3
Miscellaneous manufacturing.....	541,671	180,010,485	332	565,653	188,353,195	333	636,898	202,051,712	317	716,598	233,232,494	332	5.6	5.9
Transportation.....	968,111	298,222,827	299	1,009,999	313,501,499	310	1,002,252	300,649,124	300	1,060,282	317,530,774	299	100.0	100.0
Street, suburban and interurban railways (other than interstate rail- roads) and city and suburban bus lines	163,899	68,991,723	421	159,424	67,170,231	421	131,083	56,444,649	431	135,461	58,707,398	419	12.8	17.9
Trucking and/or warehousing for hire.....	400,155	106,519,844	266	411,639	111,971,683	272	446,055	114,199,545	256	507,467	129,303,881	255	47.8	40.6
Other transportation, except water transportation.....	152,744	46,907,269	307	156,428	46,265,779	296	152,760	44,596,928	292	157,942	46,268,377	293	14.9	14.6
Water transportation.....	124,088	38,049,156	307	136,988	50,637,908	370	134,125	50,294,963	375	121,856	47,842,659	393	11.5	15.1
Services allied to transportation, not elsewhere classified.....	157,225	37,754,835	240	145,520	37,455,898	257	138,229	35,313,039	255	137,556	37,408,429	272	13.0	11.8

Public utilities.....	886,702	\$352,797,513	\$398	923,641	\$356,434,014	\$386	925,521	\$345,992,694	\$374	930,609	\$323,586,108	\$348	100.0	100.0
Communications: telephone, telegraph, commercial radio, and related services.....	427,241	157,739,519	369	442,449	159,268,115	360	436,879	153,062,776	350	433,575	132,111,235	305	46.6	40.8
Utilities: light, heat, and power companies, electric and gas.....	439,645	189,457,594	431	457,643	191,035,474	417	466,652	187,173,601	401	475,136	185,706,182	391	51.0	57.4
Other local utilities and local public services.....	10,816	5,600,100	283	23,549	6,130,425	260	21,990	5,756,317	262	21,898	5,768,691	263	2.4	1.8
Trade.....	5,822,177	1,516,566,768	260	5,858,140	1,512,986,125	258	5,952,774	1,451,048,827	244	6,698,259	1,556,970,177	232	100.0	100.0
Wholesale trade.....	573,298	304,828,809	349	883,030	293,892,262	333	904,575	274,192,568	303	936,522	287,165,838	307	14.0	18.4
Wholesale and retail trade combined.....	1,122,140	357,973,995	319	1,127,010	356,314,206	316	1,168,077	343,371,012	294	1,217,597	349,760,137	287	18.2	22.5
Retail general merchandise.....	1,190,334	218,608,349	154	1,158,788	215,752,559	186	1,197,720	210,402,283	176	1,670,695	253,649,596	152	25.0	16.3
Retail food.....	888,994	196,355,939	221	929,355	199,558,055	215	929,945	195,304,748	210	956,616	202,921,529	212	14.3	13.0
Retail automotive.....	416,694	124,963,946	300	435,339	134,507,357	309	429,231	124,453,254	290	445,152	131,663,556	296	6.6	8.5
Retail apparel.....	505,190	107,433,591	213	485,557	105,395,594	217	479,755	100,490,228	209	553,487	113,628,751	201	8.4	7.3
Retail trade not elsewhere classified.....	825,537	206,382,139	250	829,061	207,566,092	247	843,471	202,804,732	240	906,190	217,980,760	241	13.5	14.0
Finance.....	423,224	191,086,418	455	432,780	178,951,049	414	409,080	151,995,402	372	426,785	155,717,393	365	100.0	100.0
Bank and trust companies.....	253,467	116,490,805	460	260,802	109,130,491	418	249,639	95,073,841	381	260,739	97,167,980	373	61.1	62.4
Investment banking and security speculation.....	71,154	38,072,830	535	71,539	34,083,161	476	61,529	24,589,710	400	59,100	23,981,940	406	13.8	15.4
Finance agencies not elsewhere classified.....	98,603	36,522,783	382	100,419	35,757,397	356	97,912	32,332,851	330	106,948	34,567,473	323	25.1	22.2
Insurance.....	477,525	214,440,173	449	482,210	202,443,446	420	472,416	182,594,231	387	470,802	168,598,894	358	100.0	100.0
Insurance carriers.....	409,916	187,955,987	459	412,610	177,611,804	430	404,267	160,785,828	398	400,854	146,308,045	365	85.1	86.8
Insurance agents and brokers.....	67,609	26,484,186	392	69,600	24,831,642	357	68,149	21,808,403	320	69,948	22,290,849	319	14.9	13.2
Real estate.....	429,049	122,995,965	287	475,054	129,832,811	273	459,074	116,546,211	254	471,592	126,441,705	268	100.0	100.0
Real estate dealers, agents, and brokers.....	358,889	96,842,454	270	390,420	98,917,476	253	386,419	94,162,218	244	393,344	101,324,566	258	83.4	80.1
Real estate, insurance, loans, law offices; any combination.....	57,247	18,695,974	327	58,965	18,494,028	314	58,198	16,903,582	290	58,042	17,329,630	299	12.3	13.7
Administrative offices and holding companies.....	12,913	7,457,537	578	25,669	12,421,307	484	14,457	5,480,411	379	20,206	7,787,509	385	4.3	6.2
Service.....	3,171,987	668,583,425	211	3,503,371	695,775,732	199	3,556,687	679,405,158	191	3,497,806	675,917,714	193	100.0	100.0
Hotels, furnished rooms, camps, and other lodging places.....	407,675	68,637,168	168	474,557	72,474,216	153	509,010	82,373,738	162	446,085	70,649,606	158	12.8	10.5
Eating and drinking places.....	853,785	137,827,586	161	933,950	148,039,622	155	983,418	148,808,294	151	972,523	154,492,369	159	27.8	22.9
Personal service.....	670,686	135,771,631	202	709,406	143,028,779	202	716,824	133,047,756	193	717,081	143,411,375	200	20.5	21.2
Business service not elsewhere classified.....	334,787	113,907,025	340	344,405	107,909,276	313	334,815	94,803,682	283	351,840	93,923,834	267	10.1	13.9
Employment agencies and commercial and trade schools.....	20,797	5,709,385	275	18,783	5,063,400	270	18,737	4,681,426	250	18,683	4,964,786	266	.5	.7
Automobile repair services, garages and filling stations.....	300,986	63,423,919	211	319,321	66,633,438	209	323,702	67,635,833	209	335,682	70,946,829	211	9.6	10.5
Repair services and miscellaneous hand trades not elsewhere classified.....	89,448	20,511,112	229	87,516	22,345,474	255	84,778	22,071,183	260	90,851	24,551,491	270	2.6	3.6
Agricultural and horticultural services and related services.....	66,412	11,515,495	173	61,704	14,751,783	181	79,333	12,749,892	161	83,468	13,639,494	163	2.4	2.0
Amusement and recreation: motion pictures.....	203,294	65,924,595	324	202,787	61,871,388	305	196,166	53,528,668	273	197,034	50,113,456	254	6.6	7.4
Amusement and recreation and related services not elsewhere classified.....	224,117	45,352,499	202	310,962	53,658,356	173	309,904	54,706,686	177	284,559	49,224,474	173	8.1	7.3
Professional service.....	294,697	81,450,228	276	306,407	80,549,028	263	304,959	74,634,737	245	316,228	80,120,105	253	100.0	100.0
Medical and other health services.....	153,862	33,552,105	218	160,255	33,754,734	211	161,676	33,094,028	205	161,302	33,497,545	208	51.0	41.8
Law offices and related services.....	83,280	26,602,269	319	85,969	28,052,863	303	85,296	23,641,962	277	83,439	23,532,310	282	26.4	29.4
Educational institutions and agencies.....	18,314	4,718,644	258	17,720	4,137,323	233	14,285	2,578,205	180	17,766	4,259,379	240	5.6	5.3
Other professional and social service agencies and institutions.....	39,241	16,577,210	422	42,463	16,604,108	391	43,702	15,320,542	351	53,721	18,830,871	351	17.0	23.5

notes at end of table.

Table 2.—Number of employees, amount of taxable wages and average wages, by quarter and by industry, 1940; and percentage distribution of employees and taxable wages within each industry division, fourth quarter, 1940¹—Continued

Industry ¹	January-March ²			April-June			July-September			October-December				
	Em- ployees ⁴	Taxable wages		Em- ployees ⁴	Taxable wages		Em- ployees ⁴	Taxable wages		Em- ployees ⁴	Taxable wages		Percentage distribution	
		Amount	Aver- age per worker		Amount	Aver- age per worker		Amount	Aver- age per worker		Amount	Aver- age per worker	Em- ployees	Taxable wages
Other.....	210, 738	\$53, 513, 195	\$254	210, 276	\$53, 707, 716	\$255	211, 841	\$53, 031, 252	\$250	234, 385	\$51, 827, 668	\$221	100. 0	100. 0
Private business organizations not elsewhere classified.....	88, 305	16, 280, 186	184	92, 519	18, 174, 365	196	103, 341	21, 022, 108	203	112, 367	20, 823, 608	185	47. 9	40. 2
Membership organizations, such as trade associations, trade-unions, etc. Services for Government agencies ³	122, 253 180	37, 224, 218 28, 791	304 160	117, 508 249	35, 487, 601 45, 750	302 184	108, 275 225	31, 966, 736 42, 408	295 188	121, 728 290	30, 947, 761 56, 299	254 194	52. 0 . 1	59. 7 . 1
Unclassified ⁴	365, 705	84, 975, 371	232	415, 361	89, 453, 714	215	477, 726	101, 747, 429	213	523, 525	111, 105, 730	212	100. 0	100. 0

¹ Data in this table represent the following percentages of the estimated totals for each quarter: employees, first quarter, 96.8; second quarter, 97.3; third quarter, 96.7; fourth quarter, 96.1. Taxable wages, first quarter, 97.3; second quarter, 97.2; third quarter, 96.7; fourth quarter, 97.3.

² See text, pp. 13-14, for method of allocating multi-industry employer reports.

³ First-quarter data were tabulated by State of headquarters of employing organizations. Data by State of employment of workers were estimated on basis of second-quarter tabulation before allocating workers and taxable wages of multi-industry employing organizations.

⁴ Derived from taxable wage items, with adjustments for delinquent reports and for employment of same employees by 2 or more concerns during the quarter. These figures include employment during the entire quarter; therefore the data are not comparable to the 1938 and 1939 quarterly tables which show the distribution of employees by industry on the basis of employment in the last pay period of the quarter.

⁵ Includes such services as employment in fourth-class post offices and mail delivery under contract.

⁶ Includes all industries which cannot be classified in any of the groups listed.

Table 3.—Number of employees, amount of taxable wages and average wages, by quarter and by State, and ratio of employees in the first quarter to population aged 14 years and over and to labor force¹, 1940²

Geographic division and State	January-March ³				April-June			July-September			October-December			
	Employees ⁴		Taxable wages		Employees ⁴	Taxable wages		Employees ⁴	Taxable wages		Employees ⁴	Taxable wages		
	Number	As percent of—		Amount		Average per em- ployee	Amount		Average per em- ployee	Amount		Average per em- ployee	Amount	Average per em- ployee
Total.....		26, 519, 447	26. 2		50. 1			\$7, 853, 819, 662			\$296			
New England.....	2, 315, 049	34. 6	64. 1	680, 422, 074	294	2, 360, 644	664, 869, 542	282	2, 497, 522	685, 502, 346	274	2, 599, 417	732, 563, 313	282
Maine.....	179, 039	27. 9	54. 2	41, 689, 906	233	191, 397	40, 238, 145	210	210, 328	44, 155, 754	210	194, 866	41, 936, 005	215
New Hampshire.....	119, 476	31. 0	57. 7	29, 219, 846	245	120, 830	27, 829, 179	230	129, 602	30, 439, 164	235	130, 166	29, 854, 557	229
Vermont.....	67, 763	24. 8	47. 9	16, 978, 032	251	73, 508	17, 809, 239	242	73, 621	17, 392, 882	236	68, 121	16, 612, 884	244
Massachusetts.....	1, 194, 023	34. 7	64. 8	364, 403, 851	305	1, 202, 762	349, 951, 759	291	1, 264, 364	357, 563, 309	283	1, 340, 498	382, 681, 746	285
Rhode Island.....	226, 426	39. 8	70. 4	58, 592, 733	259	230, 627	60, 583, 524	263	242, 689	62, 131, 482	256	254, 507	67, 936, 659	267
Connecticut.....	528, 322	38. 4	68. 6	169, 537, 706	321	541, 520	168, 447, 696	311	576, 918	173, 819, 755	301	611, 259	193, 541, 462	317
Middle Atlantic.....	7, 510, 509	34. 2	63. 5	2, 455, 721, 929	327	7, 666, 019	2, 418, 216, 869	315	7, 852, 664	2, 354, 067, 547	300	8, 111, 940	2, 434, 778, 832	300
New York.....	3, 864, 371	35. 4	64. 6	1, 317, 995, 566	341	3, 970, 857	1, 291, 761, 308	325	4, 012, 788	1, 222, 729, 433	305	4, 211, 953	1, 280, 812, 796	299
New Jersey.....	1, 152, 399	34. 3	62. 0	375, 846, 899	326	1, 181, 427	373, 169, 170	316	1, 269, 191	375, 981, 539	296	1, 244, 299	382, 746, 066	308
Pennsylvania.....	2, 493, 739	32. 5	62. 5	761, 878, 464	306	2, 513, 735	753, 286, 391	300	2, 570, 685	755, 356, 575	294	2, 653, 688	791, 219, 970	298

	6, 276, 808	30.1	58.1	\$2, 051, 903, 890	\$327	6, 546, 418	\$2, 077, 278, 538	\$317	6, 864, 350	\$2, 065, 229, 247	\$301	7, 180, 482	\$2, 244, 593, 233	\$313
East North Central														
Ohio.....	1, 616, 197	29.7	58.6	526, 663, 304	326	1, 691, 891	536, 178, 356	317	1, 784, 850	549, 159, 417	308	1, 860, 519	581, 612, 241	313
Indiana.....	688, 111	23.1	50.2	195, 202, 066	292	709, 411	201, 197, 890	284	776, 006	215, 083, 640	277	804, 818	234, 396, 542	291
Illinois.....	2, 156, 082	34.2	64.1	691, 572, 779	321	2, 235, 819	694, 060, 843	310	2, 239, 921	667, 740, 573	298	2, 337, 679	700, 356, 373	300
Michigan.....	1, 273, 273	31.5	59.8	466, 130, 163	366	1, 321, 098	470, 940, 318	356	1, 437, 611	457, 868, 484	318	1, 547, 996	541, 392, 383	350
Wisconsin.....	563, 145	23.4	45.9	172, 335, 578	306	588, 199	174, 903, 431	297	625, 962	175, 377, 133	280	629, 470	186, 837, 694	297
West North Central	1, 870, 852	18.0	35.8	492, 129, 571	263	1, 984, 116	504, 445, 690	254	2, 070, 054	503, 994, 173	243	2, 126, 158	520, 289, 693	245
Minnesota.....	394, 898	18.3	35.9	114, 705, 390	290	428, 649	118, 737, 561	277	465, 832	125, 010, 333	268	466, 397	125, 127, 514	268
Iowa.....	321, 890	16.4	33.6	79, 646, 675	247	341, 731	82, 864, 238	242	362, 491	82, 474, 558	228	368, 315	85, 958, 808	233
Missouri.....	710, 971	24.0	46.7	183, 518, 488	272	734, 094	192, 374, 735	262	741, 322	185, 027, 185	250	767, 056	193, 290, 267	252
North Dakota.....	42, 046	9.0	17.8	9, 541, 489	227	45, 331	10, 182, 960	225	49, 304	10, 808, 967	219	51, 344	10, 852, 619	211
South Dakota.....	48, 908	10.2	20.4	11, 521, 081	236	53, 643	12, 263, 094	228	56, 220	12, 631, 054	225	59, 014	12, 934, 109	219
Nebraska.....	151, 655	15.0	30.3	37, 073, 341	244	164, 008	38, 903, 264	237	165, 780	36, 620, 154	221	171, 389	37, 864, 126	221
Kansas.....	200, 484	14.4	29.9	46, 123, 407	230	216, 460	49, 119, 838	227	229, 105	51, 421, 922	224	242, 643	54, 262, 250	224
South Atlantic	2, 974, 692	22.9	42.7	701, 515, 017	236	3, 083, 264	699, 900, 418	227	3, 278, 328	702, 442, 757	214	3, 585, 089	781, 172, 112	218
Delaware.....	70, 746	33.6	61.9	22, 668, 687	320	77, 991	23, 603, 209	303	80, 470	22, 157, 632	275	92, 928	28, 310, 617	305
Maryland.....	425, 796	30.0	55.5	116, 131, 308	273	446, 831	118, 903, 964	266	481, 749	120, 966, 221	251	516, 532	135, 393, 331	262
District of Co- lumbia.....	171, 966	31.1	50.0	53, 347, 884	310	180, 568	55, 122, 089	305	186, 561	53, 411, 076	286	195, 371	53, 393, 047	273
Virginia.....	417, 932	21.3	40.5	94, 688, 968	227	445, 925	99, 953, 340	224	492, 625	102, 617, 907	208	511, 871	108, 717, 242	212
West Virginia.....	316, 456	23.5	49.8	92, 148, 954	291	317, 470	91, 184, 533	287	341, 759	96, 553, 008	283	369, 729	103, 008, 949	279
North Carolina.....	534, 338	21.4	40.1	107, 428, 610	201	541, 919	107, 335, 667	198	591, 451	109, 001, 197	184	622, 404	120, 913, 380	194
South Carolina.....	263, 457	20.2	36.1	47, 309, 667	180	266, 546	47, 649, 676	179	283, 729	46, 942, 096	165	317, 894	55, 632, 929	175
Georgia.....	452, 023	20.3	36.9	97, 624, 141	216	462, 965	88, 740, 354	192	503, 109	89, 563, 170	178	533, 880	97, 603, 137	183
Florida.....	321, 978	22.1	40.9	70, 168, 798	218	343, 049	67, 407, 586	196	316, 875	61, 230, 450	193	424, 480	78, 199, 480	184
East South Central	1, 202, 112	15.7	30.9	256, 092, 873	213	1, 239, 856	261, 403, 796	211	1, 299, 296	264, 690, 117	204	1, 424, 997	298, 679, 776	208
Kentucky.....	314, 030	15.4	31.4	75, 474, 027	240	323, 315	75, 883, 312	235	332, 855	75, 682, 280	227	361, 122	79, 960, 266	221
Tennessee.....	393, 814	18.6	36.7	84, 566, 562	215	406, 893	85, 675, 340	211	419, 951	84, 486, 590	207	475, 378	100, 851, 311	212
Alabama.....	341, 429	17.2	33.6	69, 278, 236	203	349, 408	72, 394, 831	207	382, 771	76, 846, 867	201	404, 402	82, 530, 585	204
Mississippi.....	152, 539	10.1	18.9	28, 774, 048	175	160, 240	27, 450, 313	171	163, 719	27, 674, 380	169	184, 095	33, 337, 614	181
West South Central	1, 640, 470	17.2	33.9	385, 305, 572	235	1, 669, 945	391, 049, 931	234	1, 741, 660	382, 016, 908	219	1, 970, 301	420, 922, 233	214
Arkansas.....	144, 212	10.4	21.2	26, 274, 763	182	147, 308	26, 827, 096	182	172, 853	29, 009, 224	168	189, 832	34, 444, 950	181
Louisiana.....	330, 069	19.3	37.3	74, 478, 237	226	342, 006	76, 869, 503	225	355, 768	75, 177, 237	211	428, 324	87, 960, 565	205
Oklahoma.....	252, 323	14.8	31.4	64, 711, 259	256	254, 551	66, 000, 847	259	262, 370	63, 694, 237	243	284, 390	66, 434, 901	234
Texas.....	913, 866	19.3	37.1	219, 843, 313	241	926, 080	221, 352, 485	239	950, 669	214, 136, 210	225	1, 067, 755	232, 061, 817	217
Mountain	559, 727	18.4	36.7	150, 965, 427	270	620, 782	160, 630, 794	259	642, 821	165, 103, 187	257	684, 853	168, 751, 886	254
Montans.....	71, 561	16.7	31.8	21, 202, 329	296	86, 244	23, 885, 174	277	98, 826	26, 964, 154	273	89, 763	25, 558, 232	285
Idaho.....	60, 654	15.8	31.7	14, 677, 870	242	70, 664	16, 764, 473	237	78, 937	19, 216, 751	243	77, 123	18, 266, 850	237
Wyoming.....	33, 374	17.7	33.2	9, 416, 312	262	39, 556	10, 102, 117	255	39, 328	10, 645, 993	271	39, 956	10, 694, 221	268
Colorado.....	171, 491	20.1	40.7	46, 867, 896	273	184, 629	48, 220, 740	261	179, 450	46, 595, 985	260	203, 191	50, 476, 472	248
New Mexico.....	53, 261	14.8	29.9	12, 013, 298	226	55, 310	12, 383, 526	224	56, 747	12, 620, 979	222	56, 746	12, 737, 882	224
Arizona.....	72, 440	20.4	40.2	19, 926, 715	275	77, 535	20, 384, 464	263	69, 387	17, 046, 216	246	80, 282	20, 485, 383	255
Utah.....	73, 884	19.0	40.8	19, 801, 355	268	80, 866	20, 750, 353	257	91, 649	23, 225, 232	254	91, 206	22, 581, 452	248
Nevada.....	23, 062	26.5	48.1	7, 059, 652	306	25, 978	8, 139, 947	313	28, 597	8, 787, 877	307	28, 586	7, 951, 394	299
Pacific	2, 089, 303	26.5	50.7	659, 581, 920	316	2, 258, 121	696, 808, 876	309	2, 365, 337	703, 582, 962	297	2, 506, 863	723, 633, 271	289
Washington.....	336, 534	24.1	47.0	101, 095, 422	300	370, 677	111, 677, 673	301	409, 032	119, 219, 389	291	412, 172	117, 921, 822	286
Oregon.....	201, 840	23.1	44.5	56, 118, 922	278	234, 866	63, 883, 009	272	254, 092	67, 193, 907	264	282, 569	77, 551, 735	274
California.....	1, 550, 929	27.6	52.5	502, 367, 576	324	1, 652, 578	521, 248, 194	315	1, 702, 213	517, 169, 666	304	1, 812, 122	528, 159, 714	291
Alaska.....	12, 969	(9)	(9)	4, 209, 721	325	16, 312	5, 555, 856	341	26, 428	12, 107, 006	458	13, 979	4, 366, 303	312
Hawaii.....	66, 956	(9)	(9)	15, 971, 368	239	78, 338	16, 335, 944	209	84, 341	18, 039, 628	214	77, 762	18, 435, 933	237

¹ Data on population 14 years old and over and on labor force are from *Sixteenth Census of the United States: 1940* (preliminary releases: Series P-4 and P-8). Labor force represents those persons who were 14 years old and over and who were employed or seeking employment during the week of Mar. 24-30, 1940.

² Data in this table represent the following percentages of the estimated totals for each quarter: employees, first quarter, 96.8; second quarter, 97.3; third quarter, 96.7; fourth quarter, 96.1. Taxable wages, first quarter, 97.3; second quarter, 97.2; third quarter, 96.7; fourth quarter, 97.3.

³ First-quarter data were tabulated by State of headquarters of employing organizations. Data

by State of employment of employees were estimated on basis of second-quarter tabulation.

⁴ Derived from taxable wage items, with adjustments for delinquent reports and for employment of the same employees by 2 or more concerns during the quarter. These figures include employment during the entire quarter; therefore the data are not comparable to the 1938 quarterly tables which show distribution of employees by State on the basis of employment in the last pay period of the second quarter.

⁵ Excludes Alaska and Hawaii, for which census data were not available.

two miscellaneous groups designated "other" and "unclassified."

With the exception of contract construction, which showed a substantial increase with respect to both employment and wages, changes in these proportions from one quarter to another were not large. In all 13 industry divisions, however, there were some industry groups in which the relation between employment and wages ran counter to that of the industry division as a whole. This situation serves to emphasize again the fact that the industry classifications are so broad that each group includes numerous industries with differing characteristics both as to seasonality and wage structure. Furthermore, this is the case not only in the broad divisions but also in the narrower industry groups. The totals, therefore, must be viewed as indicating only the general tendency of the group as a whole.

The quarterly data cannot be used to measure the extent of seasonal fluctuations in particular industries. As already indicated, the fact that the data are tabulated from returns for calendar quarters is itself a basic limitation which precludes such use. In many industries, the active seasons will straddle 2 or more quarters, and so will affect the total number of employees shown as receiving taxable wages for each of the quarters, although the period of full employment may be considerably less than 6 months. Thus, the quarterly data can at most indicate the quarter in which the peak in employment occurred. A still further limitation arises from the composition of the industry groups. The groups each include a number of related industries, and in many instances these industries may have peak seasons in different quarters, thus tending to level out fluctuations in total employment for the group as a whole. Comparisons of relative fluctuations by industry must therefore be made with extreme caution.

In the 1940 data, moreover, normal variations from quarter to quarter have been obscured by the general increase in the total number of covered employees, which in large part may be ascribed to the defense program. Indicative of this widespread upward trend is the fact that fourth-quarter employment was largest in 42 of the 67 industry groups (table 2). Those 42 groups employed 76 percent of all workers with taxable wages in that quarter. Moreover, 41 industry

Table 4.—Percentage distribution of employees and taxable wages, by industry division, for each quarter of 1940¹

Industry division	January-March		April-June		July-September		October-December	
	Em- ploy- ees	Tax- able wages	Em- ploy- ees	Tax- able wages	Em- ploy- ees	Tax- able wages	Em- ploy- ees	Tax- able wages
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing.....	43.1	47.4	42.0	46.1	43.4	47.4	42.5	48.1
Trade.....	22.0	19.3	21.3	19.2	20.7	18.5	22.1	18.7
Service.....	12.0	8.5	12.7	8.8	12.4	8.6	11.6	8.1
Contract construction.....	4.1	3.2	5.2	4.0	5.5	5.0	6.0	5.5
Transportation.....	3.6	3.8	3.7	4.0	3.5	3.8	3.5	3.8
Mining and quarrying.....	3.4	3.8	3.2	3.5	3.2	3.7	3.1	3.6
Public utilities.....	3.3	4.5	3.4	4.5	3.2	4.4	3.1	3.9
Insurance.....	1.8	2.7	1.8	2.0	1.0	2.3	1.6	2.0
Real estate.....	1.6	1.6	1.7	1.6	1.0	1.5	1.6	1.5
Finance.....	1.6	2.4	1.6	2.3	1.4	1.9	1.4	1.9
Unclassified.....	1.4	1.1	1.5	1.1	1.7	1.3	1.7	1.3
Professional service.....	1.1	1.0	1.1	1.0	1.1	.9	1.0	1.0
Other.....	.8	.7	.8	.7	.7	.7	.8	.6

¹ For absolute figures and distribution within each industry division, see table 2.

groups showed the smallest number of employees in the first quarter of the year.

In nine industry groups, however, the 2 quarters of highest employment in 1940 were the first and the fourth. These groups include such industries as anthracite and bituminous coal mining, printing and publishing, and educational institutions, which are most active in the fall and winter months. In eight other industries, the second and third quarters showed the largest number of workers. Among these were industries which normally have busy summer seasons—hotels and other lodging places, amusement and recreation services other than motion pictures, and water transportation. In seven other industries, the 2 quarters of highest employment both occurred in the first half of the year.

The differing proportions of total employment and total wages already noted are reflected in the figures for average wages by industry. Average taxable wages under old-age and survivors insurance are the result not only of wage rates but also of duration of employment in occupations covered by the act. Even though an industry has relatively high hourly wage rates, it may show a relatively low taxable wage for a quarter when many employees were on short time because of slack business, or when, for any reason, a large proportion of the employees were employed only part of the quarter. Inasmuch as these short-term and seasonal workers are to a substantial extent not the same individuals from quarter to quarter, they constitute a larger proportion of the yearly totals than of the quarterly totals. Con-

sequently, the average taxable wage for any year is substantially smaller than the sum of the quarterly averages. In considering variations in average wages from quarter to quarter, it must again be noted that the limit of \$3,000 a year on taxable wages tends to result in higher averages for the first and second quarters of the year.

It is not surprising, therefore, to find that the highest quarterly average wage for all employees in all industries combined occurred in the first quarter of 1940 (table 2). This was the quarter of lowest total employment; moreover, there were probably fewer short-term employees than in any of the other quarters of the year.

For all industries, the average taxable wage for the first quarter of 1940 was \$296. The lowest quarterly averages were \$274 in the third and \$276 in the fourth quarter.⁷ Among the 13 industry divisions, the highest quarterly average wages were in finance and in insurance, and the lowest included service, trade, and contract construction. Only in contract construction was the average wage in the first quarter exceeded in the fourth quarter.

Among the 67 industry groups the average taxable wages in the high first quarter ranged from \$578 to \$160; and in the low third quarter, from \$431 to \$151. In the first quarter, however, only two industry groups with relatively few employees had averages in excess of \$500, and only nine others had averages in excess of \$400. In the same quarter, at the other extreme, six industry groups had average taxable wages below \$200.

The two industry groups with the highest first-quarter averages—administrative offices and holding companies, and investment banking and security speculation—probably included a substantial number of employees who received more than \$3,000 a year. This fact may account in large part for the drop in average wages in the third quarter to \$379 and \$400, respectively. Of the nine other industries with average taxable wages of more than \$400 in the first quarter, only two maintained this level in all 4 quarters of 1940—street, suburban, and interurban railways and city and suburban bus lines, and products of petroleum and coal. All but one of the six

⁷ Since figures in table 2 are unadjusted, the figures for average wages differ somewhat from those in table 1. In the unadjusted data, the third-quarter average for the United States was lower than that for the fourth quarter, while the adjusted data show the fourth quarter to be lower. The absolute differences in the figures, however, are small.

industry groups with taxable wage averages below \$200 in the first quarter continued at this relatively low level in the other 3 quarters. By the third quarter, however, three more industry groups had fallen below \$200—amusement and recreation and related services not elsewhere classified; educational institutions and agencies; and personal service.

Although the quarterly averages in the large majority of the industry groups were lower in the fourth quarter than in the first, the fourth-quarter average was higher in 15 industries. In some of these—notably iron and steel and their products; nonferrous metals and their products; water transportation; general contractors, building construction; and general contractors other than building construction—the increase is clearly ascribable to improved business conditions resulting from the defense program

Employment and Wages by State

Distribution of the 1940 quarterly data by State reveals a marked concentration of covered employment in the 3 Middle Atlantic and 5 East North Central States (table 3). Together, these 8 States accounted for 52 percent of all employees receiving taxable wages in the first quarter of 1940.

This concentration may be accounted for in part, but not wholly, by the concentration of population and labor force. These States represented 42.4 percent of the 1940 population aged 14 and over, and 42.9 percent of the 1940 labor force as reported by the Bureau of the Census⁸ (table 3). If, in this group, Massachusetts and California are substituted for 2 of the East North Central States—Indiana and Wisconsin—the resulting list will include the 8 States which had the largest number of employees with taxable wages in January–March 1940. These 8 States accounted for 58 percent of all covered employees in that quarter, as compared with 46 percent of the 1940 population 14 years old and over, and 47 percent of the 1940 labor force.

From these figures, it is evident not only that the leading industrial States included a large proportion of all covered employees but also that, as

⁸ In the 1940 census, all persons 14 years old and over who were employed or seeking employment during the week of March 24–30, 1940, were included in the labor force. These ratios of employees with taxable wages to population and to the labor force are of interest for comparisons among States, but must not be regarded as accurate measures of the percentage of covered employment within any State. The percentages here shown do not include Alaska and Hawaii, for which census data are not available.

compared with most other States, a larger proportion of their working population was engaged in employments covered by the old-age and survivors insurance program. This conclusion is verified when the States are arrayed according to the ratio between the number of first-quarter employees having taxable wages and the 1940 labor force. Showing ratios higher than that for the United States as a whole are all the New England States except Vermont, all the Middle Atlantic States, and all the East North Central States except Wisconsin. Only 3 other States—California, Delaware, and Maryland—are included in this group. At the other extreme, the States falling in the lowest third as ranked by the same ratio include 6 of the West North Central States⁹ and 4 of the 8 Mountain States—Montana, Idaho, Wyoming, and New Mexico. In addition, this group includes Alabama, Arkansas, Kentucky, Mississippi, Oklahoma, and South Carolina.

In terms of individual States, the greatest concentration of covered employment as measured by this ratio is shown for Rhode Island, Connecticut, and Massachusetts—three highly industrialized States. The lowest concentration, on the other hand, was in North Dakota, Mississippi, and South Dakota. The extreme range in percentage of labor force was from 70 in Rhode Island to 18 in North Dakota; and in percentage of population it was from 40 in Rhode Island to 9 in North Dakota.

These State and regional differences result chiefly from the exclusion of various employments from coverage under old-age and survivors insurance. The States with relatively high ratios of covered employment are those in which a large proportion of the labor force are employees engaged in manufacturing, commerce, and mining. The States with relatively low ratios are those in which workers are predominantly engaged in agricultural occupations.¹⁰

The concentration of taxable wages is even greater than that of covered employees. In the first quarter of 1940, the three Middle Atlantic States accounted for 28 percent of all covered employees but 31 percent of all taxable wages. Similarly, the five East North Central States had 24 percent of the total number of covered workers

but 26 percent of all taxable wages. The proportion of taxable wages was also somewhat greater than the proportion of first-quarter employees in the Pacific States. Except New England, where the proportions were the same, all other regions showed larger proportions of covered employees than of taxable wages. These differences are also evident in average wages in the various States, and in interpreting them the same considerations as those affecting wage differences must be kept in mind.

In 1940, as already noted, usual fluctuations in quarterly employment were obscured by the business expansion which accompanied the defense program. For many States, the quarterly variations in employment are probably not typical, and consequently differences among the States in extent of variations are similarly affected. A few general observations, however, appear to be supported by the 1940 data.

Wide fluctuations in quarterly employment may be considered normal in States where in the peak quarter a fairly large proportion of all covered employment is concentrated in a relatively few industries. Where such concentration exists, there are less likely to be offsetting fluctuations tending to level out total employment from quarter to quarter. Wide variations are also typical of States which have few manufacturing industries and in which a large proportion of all covered employees are engaged in such industries as mining and the service trades, which are affected more sharply by the natural seasons. On the other hand, States which have developed many diversified manufacturing industries will normally show relatively small quarterly fluctuations in covered employment.

It has already been pointed out that for the United States as a whole the number of employees with taxable wages was greatest in the fourth quarter of 1940. This was also the case in all but 10 States,¹¹ most of which have comparatively few manufacturing industries. The quarter of lowest employment, on the other hand, was the first quarter in all but 2 States.¹² The increase in total covered employment from the lowest to the highest quarter was 14 percent for the entire country, and among the States it ranged from 6.5 percent in

⁹ Minnesota, Iowa, North Dakota, South Dakota, Nebraska, and Kansas.

¹⁰ See Slomlin, Herman, "State and Regional Differences in Covered Employment and Taxable Wages, 1939," *Social Security Bulletin*, Vol. 5, No. 1 (January 1942), pp. 35-44.

¹¹ Maine, Vermont, New Jersey, Montana, Idaho, New Mexico, Utah, Nevada, Alaska, and Hawaii. In these States the third quarter showed highest employment.

¹² Arizona and Florida, in which the third quarter was lowest.

Pennsylvania and New Mexico to 40 percent in Oregon.¹³ Next to Oregon, the largest increases occurred in Montana (38) and Florida (34). There were 5 States, besides Pennsylvania and New Mexico, in which employment increased by less than 10 percent—New Hampshire, Vermont, New York, Illinois, and Missouri.¹⁴

In the large majority of States, average taxable wages in 1940 fluctuated in accordance with the national pattern. The average was highest in the first quarter and, after a second-quarter decline, the low point was reached in most States in the third quarter (31 States) or the fourth quarter (17 States). Although the first and second quarters showed the highest average wages for the year in a majority of the States, the highest 2 quarters in 11 States¹⁵ were the first and fourth. For the entire country, the average wage in the first quarter was 8 percent higher than the average for the low third quarter. Among the States the percentage difference was greatest in Alaska, Georgia, Florida, Delaware, and Michigan. It was smallest in New Mexico, Idaho, Kansas, and Alabama.

In the high first quarter, average wages ranged from \$366 in Michigan to \$175 in Mississippi. The range for the low third quarter was from \$458 in Alaska to \$165 in South Carolina. In the first quarter, 15 States showed averages of \$300 or more, but in the third quarter the number had fallen to seven. Only Michigan, Ohio, Alaska, and Connecticut maintained averages in excess of \$300 in all 4 quarters. In the first quarter, 3 States had average taxable wages below \$200, but in each of the other quarters there were 6 such States—Mississippi, South Carolina, Arkansas, North Carolina, Georgia, and Florida.

Distribution by Size of Firm

A large majority of the 1.8 million employing organizations which reported payment of taxable wages in the third quarter of 1940 were firms with very few employees. About 1.5 million of these employers did not have as many as 10 employees

in the last pay-roll period of the third quarter (table 5). Approximately a million firms—more than half the total—had fewer than 4 employees. Only 31,781 firms—less than 2 percent of the total—employed 100 or more workers.

Although the average employer under old-age

Table 5.—Employing organizations¹ and taxable pay rolls, July–September, and employees in last pay period in September, by size of firm, 1940²

Number of employees in employing organization ³	July–September		Employees in last pay period of September	Percent of total		
	Employing organizations	Taxable pay rolls		July–September		Employees in last pay period of September
				Employing organizations	Taxable pay rolls	
Total.....	1,821,990	\$7,856,775,778	27,541,263	100.0	100.0	100.0
0.....	20,781	14,043,237	0	1.5	.2	.0
1-9, total.....	1,484,128	948,148,235	4,305,382	81.5	12.1	15.6
1.....	512,724	99,645,658	512,724	28.1	1.3	1.9
2.....	314,314	127,883,329	623,628	17.3	1.6	2.2
3.....	211,287	135,700,057	633,861	11.6	1.7	2.3
4.....	136,851	123,610,915	547,404	7.5	1.0	2.0
5.....	101,280	113,007,000	500,430	5.6	1.4	1.8
6.....	77,170	106,212,366	463,020	4.2	1.4	1.7
7.....	61,181	101,290,368	428,267	3.4	1.3	1.6
8.....	38,787	74,127,274	310,206	2.1	.9	1.1
9.....	30,528	60,642,282	274,752	1.7	.9	1.0
10-99, total.....	279,300	1,886,123,799	7,208,047	15.3	24.0	26.2
10-19.....	149,072	508,184,307	2,009,608	8.3	6.4	7.3
20-29.....	53,422	331,932,969	1,272,623	2.9	4.1	4.6
30-39.....	27,306	247,566,345	929,038	1.5	3.2	3.4
40-49.....	16,483	193,264,677	727,167	.9	2.5	2.6
50-59.....	11,025	159,003,344	597,224	.6	2.0	2.2
60-69.....	7,894	134,284,335	507,077	.4	1.7	1.8
70-79.....	5,903	116,804,706	438,213	.3	1.5	1.6
80-89.....	4,499	101,134,048	378,807	.2	1.3	1.4
90-99.....	3,690	93,948,570	348,342	.2	1.3	1.3
100-999, total.....	29,408	2,022,419,645	7,337,172	1.6	25.7	26.6
100-199.....	16,520	607,132,080	2,283,326	1.0	7.0	8.3
200-299.....	5,582	395,568,827	1,351,024	.3	4.7	4.8
300-399.....	2,730	255,962,700	940,008	.1	3.3	3.4
400-499.....	1,588	197,361,216	706,475	.1	2.5	2.6
500-599.....	1,018	157,946,975	557,107	.1	2.0	2.0
600-699.....	751	139,811,649	485,149	(⁴)	1.8	1.8
700-799.....	485	104,412,251	363,266	(⁴)	1.3	1.3
800-899.....	441	114,783,118	374,351	(⁴)	1.5	1.4
900-999.....	293	79,440,829	276,466	(⁴)	1.0	1.0
1,000-9,999, total.....	2,224	1,709,879,518	6,220,497	.1	21.8	19.0
1,000-1,999.....	1,346	575,093,324	1,839,920	.1	7.4	6.6
2,000-2,999.....	397	317,782,821	983,829	(⁴)	4.0	3.6
3,000-3,999.....	185	212,999,895	640,077	(⁴)	2.7	2.3
4,000-4,999.....	105	159,493,757	468,392	(⁴)	2.0	1.7
5,000-5,999.....	77	141,596,660	421,155	(⁴)	1.8	1.5
6,000-6,999.....	41	90,563,705	264,084	(⁴)	1.2	1.0
7,000-7,999.....	32	85,795,796	235,530	(⁴)	1.1	.9
8,000-8,999.....	22	65,297,141	188,005	(⁴)	.8	.7
9,000-9,999.....	19	61,266,619	170,505	(⁴)	.8	.7
10,000 and over.....	149	1,276,161,344	3,470,105	(⁴)	16.2	12.6

¹ An employing organization includes all establishments reported on 1 employer return.

² The tabulation from which this table was compiled includes 86.8 percent of the estimated number of total employing organizations, 96.7 percent of the estimated amount of total taxable pay rolls, and 90.6 percent of the estimated total number of employees.

³ As determined by the number of workers reported in last pay period of September.

⁴ Returns show taxable pay rolls during the quarter but no workers in last pay period.

⁵ Less than 0.05 percent.

¹³ This range excludes Alaska, in which the percentage increase of 104 was due to exceptional circumstances peculiar to that Territory.

¹⁴ These percentages are based on the quarterly data unadjusted for delinquent reporting. It is believed that complete returns would not alter materially the relative position of the States in this respect.

¹⁵ Connecticut, Delaware, Montana, Indiana, Oregon, Vermont, Hawaii, Maine, Tennessee, Alabama, and Mississippi. In Wisconsin and New Mexico, the second highest average wage occurred in both the second and fourth quarters.

and survivors insurance operates a small establishment, the typical employee works for a large employer. In the third quarter of 1940, almost a third of all last-pay-period employees were working for 2,373 employers with 1,000 or more employees. As many as one-eighth of the total number were employed by 149 organizations each of which had 10,000 or more employees. Firms with 100 or more employees accounted for more than one-half of all workers in covered employment. The small employers with fewer than 10 employees, on the other hand, accounted for less than one-sixth of the total workers, although these firms represented four-fifths of all employers. The figures, moreover, would show a heavier concentration of workers in the larger employing organizations if reporting reflected actual ownership of the concerns rather than legal taxpaying entities.

This concentration is even more marked with respect to taxable pay rolls. The 149 largest firms (10,000 or more employees), with 13 percent of all last-pay-period workers, paid 16 percent of all taxable wages in the third quarter of 1940. The 2,224 firms with 1,000-9,999 employees paid 22 percent of total wages, but had only 19 percent of all employees. At the other extreme, firms which had fewer than 10 employees paid 12 percent of all wages although they accounted for 16 percent of all last-pay-period employees.

The distribution of pay rolls as compared with that of employees suggests a higher wage level in the larger firms. Several observations must be made, however, in modification of such a conclusion. Most important, perhaps, is the indus-

trial distribution of the employers. It is probable that, on the average, the firms with smaller numbers of employees are in industries characterized by lower wage levels and less stable employment, as compared with the industries in which large establishments operate. There is also reason to believe that small firms employ a relatively high proportion of short-term or part-time employees, a situation which tends to depress the quarterly average wage. Moreover, in small unincorporated firms where the managerial function is performed entirely by a sole proprietor or by the members of a partnership, the manager's remuneration is often not taxable as wages. But in larger firms, which are usually incorporated, the active owners as well as the managerial staff are employees who receive salaries which constitute taxable wages. Thus the average wages for these larger firms tend to be higher partly because of this difference in the form of organization. For these reasons, the present data do not permit significant conclusions on differences in wage levels due solely to the size of the employing organization.

When compared with the corresponding data for 1938 and 1939, the 1940 quarterly tabulations of employment and pay rolls under old-age and survivors insurance give a striking picture of rapid improvement in the labor market. They verify, and are verified by, other statistical series in this field. As a substantial body of reliable data, they provide economists and statisticians with an additional tool in the measurement of economic trends.