

# Duration of Employment and Mobility of Workers: Industry Variations, 1947

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THERE is probably no single economic factor that affects a worker's wage and employment record more than his attachment to a particular industry. A construction worker's record, for example, will reflect the employment patterns and wage rates peculiar to the construction industry. If, on the other hand, a worker is employed by a bank or trust company, he will be affected by the far different conditions peculiar to the banking industry.

Because eligibility and benefits under old-age and survivors insurance are related to a worker's length of covered employment and the amount of his taxable earnings, industry characteristics affect the insurance protection provided by the program. The Bureau of Old-Age and Survivors Insurance has therefore classified its statistical data by industry<sup>1</sup> to evaluate the extent to which workers attached to various industries differ in their employment and wage histories and to determine how these differences have been reflected in the proportion of workers insured and uninsured, the age at which workers retire from covered employment, and the monthly benefits they receive. These industry data make it possible to analyze the manner in which existing or proposed old-age and survivors insurance eligibility requirements and

benefit provisions operate, or are likely to operate, with respect to workers in a given industry.

Use of industry data is not limited, however, to these special program purposes. The data are proving of increasing value to management and labor groups concerned with the formulation and actual operation of private pension plans, particularly where the benefits to be paid under the private plans are related to those available under old-age and survivors insurance.

This article describes some of the industrial characteristics of workers in covered employment during 1947, as reflected by 1-percent sample data<sup>2</sup> on employment and taxable earnings tabulated by the Bureau of Old-Age and Survivors Insurance for the year 1947. While data classified into 74 separate industry groups<sup>3</sup> are available, only 68 such groups are included in the analysis. In the other six industry groups, the number of workers in the sample was too small or coverage under the insurance system was too limited to provide data representative of the industries involved.

Table 1 shows the estimated number of workers who were employed in each industry at any time during 1947. While a single-industry worker—one who received taxable

wages during 1947 in only one industry group—is counted only once in the tabulated data, a multi-industry worker—one who received taxable wages in more than one industry group—is counted in each of the industries in which he worked. Because of this duplicate count of workers employed in more than one industry, the total number of workers who had wage credits during 1947 in the United States or in a broad industry division cannot be obtained by adding the figures shown in this table for the individual industry groups.

In table 1, a "4-quarter worker" in an industry group is one who earned taxable wages in that particular industry at some time during each of the 4 calendar quarters in 1947. Similarly, a fewer-than-4-quarter worker is one who earned taxable wages in the specified industry group in 1, 2, or 3 quarters of the year.<sup>4</sup> Thus, in classifying a worker by the number of quarters he was employed in an industry, no account is taken of the employment he may have had during the year in other industry groups.

This method of classification—which may be termed classification by "actual industry"—differs substantially from that used for the data summarized in table 2. In the tabulation from which table 2 was derived, each worker has been allocated to the industry group shown by the first employer report of wages paid to him for the last calendar quarter in which he received wage credits in 1947. This so-called "last-industry" or "as-

<sup>4</sup>Because a multi-industry worker's wage and employment experience is distributed among all the 2-digit industry groups in which he earned wage credits, the proportion of 4-quarter workers shown for an industry is always smaller, and the proportion of fewer-than-4-quarter workers larger, than the corresponding proportions in tabulations that assign all a worker's wages and employment to only one "last" industry.

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<sup>1</sup>Some industry data have been published in the annual editions of the *Handbook of Old-Age and Survivors Insurance Statistics* for each of the years 1944-47, and selected data for the automobile and steel industries have been discussed in the following Bureau of Old-Age and Survivors Insurance Analytical Notes released in 1950: No. 55, *Labor Mobility in the Automobile and Steel Industries During 1947*; No. 57, *Age Characteristics of Multi-Employer and Multi-Industry Steel and Automobile Workers in 1947*; and No. 58, *Annual Earnings of Multi-Industry Steel and Automobile Workers, 1947*.

<sup>2</sup>For an explanation of the methods used in the sampling and tabulating process, see the *Handbook of Old-Age and Survivors Insurance Statistics, 1947* (Bureau of Old-Age and Survivors Insurance), 1950, pp. 1-10.

<sup>3</sup>Classification of the manufacturing industries was made in accordance with *Standard Industrial Classification Manual*, vol. 1, part 1 (Bureau of the Budget), November 1945; other industries were classified according to the *Industrial Classification Code*, vol. 1 (Social Security Board), 1942. The term "industry" or "industry group" as used in this article refers to a 2-digit industry group, such as rubber products, or leather and leather products, or transportation equipment.

signed-industry" classification counts a worker in only one of the industry groups regardless of the number of industries in which he received taxable wages. The workers who had their wage credits in more than one industry group—about one-fourth of all workers with covered employment in 1947—are thus counted only in this "last industry." This assigned-industry classification, while understating the number of workers employed at some time during the year in each industry, makes it possible to obtain a percentage distribution

of workers roughly by the last industry and the last industry division in which they were employed during the year.

### Major Industry Divisions

Of all workers with taxable wages in 1947, 41 percent had their last covered employment in that year in the manufacturing industries (table 2). Next largest in number of covered workers was the wholesale and retail trade division, which accounted for 28 percent of all covered workers in

1947. There were no major differences in the distribution of workers by industry between 1946 and 1947.

For both men and women, the proportion of workers with wage credits in 1947 was largest in manufacturing, but this industry division employed a somewhat larger proportion of the men (43 percent) than of the women (38 percent). Roughly one-third of all women earned their last wage credits in 1947 in wholesale and retail trade as against only one-fourth of the men. The proportions in finance, insurance, and real estate and in the

**Table 1.—Estimated number of workers employed in specified industry groups during the year, percent employed in the specified industry in 4 quarters, percent employed in more than one industry, and percent who were single-industry workers employed in only 1 or 2 quarters, by sex, 1947**

Industry	Estimated number (in thousands) <sup>1</sup>			Female workers as percent of all workers	4-quarter workers (percent)			Multi-industry workers (percent)			1-quarter or 2-quarter single-industry workers (percent)		
	Total	Male	Female		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (unduplicated count).....	48,908	32,741	16,167	33.1	64.0	68.7	54.4	26.2	28.7	21.1	19.9	16.1	27.6
<b>Mining:</b>													
10 Metal mining.....	155	149	6	3.9	48.6	48.7	*44.6	41.0	41.2	*35.7	11.5	11.1	*(*)
11 Anthracite mining.....	100	98	2	2.0	73.0	73.0	*76.5	15.8	15.6	*23.5	*9.3	*9.3	*(*)
12 Bituminous and other soft-coal mining.....	654	641	13	2.0	60.8	61.1	*43.9	26.5	26.5	*25.2	12.0	11.7	*26.8
13 Crude-petroleum and natural-gas production.....	354	331	23	6.5	47.2	46.8	52.7	43.4	43.8	*38.4	12.7	12.7	*12.9
14 Nonmetallic mining and quarrying.....	204	196	8	3.9	36.9	36.2	*54.7	53.0	54.0	*26.7	11.1	11.0	*(*)
<b>Contract construction:</b>													
15 Building construction—general contractors.....	1,998	1,952	46	2.3	20.6	20.5	24.3	70.4	70.8	52.5	13.4	13.3	*18.2
16 General contractors, other than building.....	1,399	1,371	28	2.0	14.5	14.2	*28.6	71.4	71.9	48.0	15.3	15.2	*18.7
17 Construction—special-trade contractors.....	2,056	1,983	73	3.6	27.9	27.9	28.7	63.0	63.5	48.6	11.2	10.9	19.6
<b>Manufacturing:</b>													
19 Ordnance and accessories.....	81	55	26	32.1	52.4	55.1	46.5	41.8	42.9	39.4	*7.5	*4.9	*13.0
20 Food and kindred products.....	3,367	2,311	1,056	31.4	32.4	36.2	24.0	46.7	50.0	39.6	20.0	14.6	31.8
21 Tobacco manufactures.....	199	86	113	56.8	43.1	41.4	44.4	35.7	45.4	28.3	16.9	13.1	19.7
22 Textile-mill products.....	1,984	1,083	901	45.4	58.0	61.5	53.8	26.1	30.1	21.2	13.1	8.6	18.4
23 Apparel and other finished products made from fabrics and similar materials.....	1,941	486	1,455	75.0	42.4	49.3	40.2	31.4	37.4	29.5	18.9	10.6	21.7
24 Lumber and wood products (except furniture).....	1,677	1,566	111	6.6	31.2	31.2	31.4	44.9	45.5	37.7	20.9	20.7	23.7
25 Furniture and fixtures.....	689	564	125	18.1	34.3	35.1	31.0	54.2	55.7	47.7	11.8	10.3	18.7
26 Paper and allied products.....	750	528	222	29.6	48.0	50.5	42.0	41.1	41.8	39.4	9.7	7.5	15.0
27 Printing, publishing, and allied industries.....	1,120	722	398	35.5	50.1	56.3	38.8	36.8	34.6	40.7	12.6	10.1	17.2
28 Chemicals and allied products.....	1,150	900	250	21.7	50.1	51.7	44.4	41.8	42.8	38.1	9.3	7.9	14.4
29 Products of petroleum and coal.....	368	335	33	9.0	58.7	59.1	54.7	39.2	39.9	32.6	5.5	5.0	*11.2
30 Rubber products.....	417	295	122	29.3	58.3	62.9	47.3	34.5	35.5	32.2	8.8	5.5	16.7
31 Leather and leather products.....	707	349	358	50.6	46.1	51.1	41.2	37.0	37.7	36.4	13.6	9.7	17.4
32 Stone, clay, and glass products.....	927	756	171	18.4	42.7	42.7	42.5	46.9	49.6	35.1	10.4	9.0	16.8
33 Primary metal industries.....	1,836	1,695	141	7.7	56.7	58.0	42.1	37.5	37.6	35.6	7.6	6.5	19.9
34 Fabricated metal products (except ordnance, machinery, and transportation equipment).....	1,838	1,482	356	19.4	42.1	43.3	37.0	51.7	53.2	45.2	8.6	7.0	15.4
35 Machinery (except electrical).....	2,352	1,993	359	15.3	52.2	53.4	45.3	43.1	43.8	39.7	7.6	6.6	13.3
36 Electrical machinery, equipment, and supplies.....	1,426	841	585	41.0	50.1	53.9	44.6	40.4	42.8	36.8	9.9	6.2	15.3
37 Transportation equipment.....	2,020	1,799	221	10.9	51.5	51.9	48.0	44.3	45.2	37.7	8.0	7.4	13.2
38 Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks.....	434	276	158	36.4	52.2	56.5	44.7	40.1	40.4	39.5	8.5	6.2	12.5
39 Miscellaneous manufacturing industries.....	966	565	401	41.5	36.2	40.1	30.8	49.9	51.6	47.5	13.4	9.6	18.9
<b>Transportation, communication, and other public utilities:</b>													
41 Local railways and bus lines.....	246	232	14	5.7	61.3	61.8	*53.2	32.6	33.1	*24.8	5.0	*4.2	*17.0
42 Trucking and warehousing for hire.....	1,254	1,165	89	7.1	29.6	29.8	27.7	60.7	61.6	49.2	11.3	10.7	19.7
43 Other transportation, except water transportation.....	579	508	71	12.3	38.7	38.8	38.1	50.5	51.9	40.8	10.8	10.0	16.2
44 Water transportation.....	400	350	50	5.0	34.8	34.8	*34.4	57.1	57.8	*42.9	12.3	11.8	*23.3
45 Services allied to transportation, not elsewhere classified.....	410	379	31	7.6	26.1	25.7	*31.5	73.0	74.3	57.0	10.0	9.9	*11.5
46 Communication: telephone, telegraph, and related services.....	930	313	617	66.3	60.7	62.9	59.6	26.7	31.7	24.1	12.4	9.7	13.8
48 Utilities: electric and gas.....	638	553	85	13.3	61.6	61.8	60.2	32.5	33.6	25.0	8.4	7.7	13.1
49 Local utilities and local public services, not elsewhere classified.....	44	39	5	11.4	40.1	39.1	*48.9	49.5	52.8	*22.2	*13.4	*12.3	*(*)

See footnotes at end of table.

service industries were also larger for women than for men. As might be expected, the proportions of women in mining and in contract construction were negligible.

### Industry Variations in Proportion of Women Workers

Of the estimated 48.9 million persons who at some time in 1947 earned taxable wages in industries covered by the old-age and survivors insurance program, 16.2 million (33 percent) were women and 32.7 million were men. There were wide differences, among the various industry groups in the proportion of women employed at some time during the year (table 1).

Relatively few women were em-

ployed in any of the industry groups in the major divisions of mining and contract construction. The proportion of women workers was also small—from 2.0 percent to 9.7 percent of all workers—in the manufacture of lumber and wood products (except furniture), the primary metals industries, local railways and bus lines, trucking and warehousing for hire, water transportation, retail filling stations, and automobile repair services.

At the other extreme were the medical and other health services, in which women constituted 82 percent of all workers; law offices and related services (77 percent); retail general merchandise (71 percent); manufacture of apparel and other finished products (75 percent); telephone, tel-

egraph, and related services (66 percent); retail apparel and accessories (66 percent); and establishments described as insurance agents, brokers, and services (63 percent).

The other industry groups in which women accounted for 50 percent or more of the total number of workers were tobacco manufactures, leather and leather products, eating and drinking places, banks and trust companies, finance agencies not elsewhere classified, insurance carriers, personal services, and educational institutions and agencies.

It should be noted, however, that the industries having the largest proportions of women among their employees were not necessarily those that employed the largest numbers of women during the year. The follow-

**Table 1.—Estimated number of workers employed in specified industry groups during the year, percent employed in the specified industry in 4 quarters, percent employed in more than one industry, and percent who were single-industry workers employed in only 1 or 2 quarters, by sex, 1947—Continued**

Industry	Estimated number (in thousands) <sup>1</sup>			Female workers as percent of all workers	4-quarter workers (percent)			Multi-industry workers (percent)			1-quarter or 2-quarter single-industry workers (percent)		
	Total	Male	Female		Total	Male	Female	Total	Male	Female	Total	Male	Female
Wholesale and retail trade:													
50 Full-service and limited-function wholesalers.....	2,788	2,080	708	25.4	37.1	38.8	32.3	51.0	52.4	46.8	12.3	10.5	17.9
51 Wholesale distributors, other than full-service and limited-function wholesalers.....	1,849	1,407	442	23.9	40.2	41.8	35.0	48.8	50.0	45.0	11.9	10.3	17.1
52 Wholesale and retail trade combined, not elsewhere classified.....	762	700	62	8.1	28.6	27.9	36.5	60.1	61.7	41.9	12.1	11.5	19.1
53 Retail general merchandise.....	3,172	931	2,241	70.6	31.3	33.8	30.2	41.4	52.1	37.0	24.5	14.3	28.7
54 Retail food and liquor stores.....	2,382	1,638	744	31.2	33.8	36.5	27.7	46.2	47.2	44.0	17.3	14.8	22.9
55 Retail automotive.....	977	879	98	10.0	39.1	39.3	37.9	49.8	50.3	45.8	11.5	10.9	16.7
56 Retail apparel and accessories.....	1,148	393	755	65.8	34.0	39.1	31.4	43.6	48.2	41.2	19.0	13.3	22.0
57 Retail trade, not elsewhere classified.....	2,678	1,772	906	33.8	32.1	34.2	28.0	49.9	51.6	46.7	16.4	13.6	22.0
58 Eating and drinking places.....	3,267	1,600	1,667	51.0	23.4	25.9	21.1	49.9	56.7	43.4	23.2	16.9	29.4
59 Retail filling stations.....	601	566	35	5.8	21.5	21.4	*23.1	64.3	65.0	52.6	14.0	13.5	*21.1
Finance, insurance, and real estate:													
60 Banks and trust companies.....	498	246	252	50.6	65.4	71.0	59.9	26.2	27.5	24.9	10.1	7.1	13.0
61 Security dealers and investment banking.....	83	54	29	34.9	61.2	65.3	53.5	33.0	30.0	38.7	*7.6	*7.1	*8.5
62 Finance agencies, not elsewhere classified.....	170	81	89	52.4	49.3	58.6	40.8	45.4	44.8	45.9	11.0	*8.4	13.4
63 Insurance carriers.....	695	343	352	50.6	57.1	64.8	49.6	33.1	31.0	35.2	10.9	8.0	13.8
64 Insurance agents, brokers, and services.....	194	71	123	63.4	45.1	49.6	42.5	42.9	41.8	43.6	11.8	*9.4	13.2
65 Real estate.....	904	664	240	26.5	35.1	33.6	39.2	54.2	59.2	40.3	13.4	11.6	18.1
66 Real estate, insurance, loans, law offices: any combination.....	126	72	54	42.9	40.7	37.5	45.0	47.4	53.0	40.0	13.3	*12.7	*14.0
67 Holding companies (except real estate holding companies).....	41	29	12	29.3	44.9	47.5	*38.8	49.6	51.8	*44.6	*10.0	*6.5	*18.2
Service industries:													
70 Hotels, rooming houses, camps, and other lodging places.....	1,268	665	603	47.6	22.0	22.4	21.6	53.8	61.4	45.4	21.6	16.3	27.5
72 Personal services.....	1,767	718	1,049	59.4	34.4	38.7	31.5	39.1	43.9	35.8	20.9	14.2	25.4
73 Business services, not elsewhere classified.....	902	586	316	35.0	33.4	35.3	29.8	52.5	53.7	50.3	14.6	12.4	18.6
74 Employment agencies and commercial and trade schools.....	80	50	30	37.5	23.9	23.4	*24.7	59.2	62.5	53.7	16.2	*15.7	*16.9
75 Automobile repair services and garages.....	503	471	32	6.3	28.3	28.4	*27.3	59.2	59.6	49.7	12.4	11.8	*21.1
76 Miscellaneous repair services and hand trades.....	329	297	32	9.7	25.5	25.9	*20.8	64.2	65.0	57.1	10.9	9.9	*19.6
78 Motion pictures.....	542	342	200	36.9	28.3	31.0	23.8	52.9	54.9	49.4	19.4	17.0	23.3
79 Amusement and recreation and related services, not elsewhere classified.....	880	736	144	16.4	15.6	15.6	15.6	62.2	63.3	56.7	22.5	21.9	25.6
80 Medical and other health services.....	471	87	384	81.5	36.9	33.1	37.8	28.8	44.8	25.2	26.8	20.5	28.2
81 Law offices and related services.....	145	33	112	77.2	48.5	52.6	47.2	35.3	35.3	35.2	15.6	*14.9	15.8
82 Educational institutions and agencies.....	56	24	32	57.1	27.7	*27.6		39.3	51.7	29.8	28.5	*20.3	34.8
83 Other professional and social service agencies and institutions.....	239	206	33	13.8	28.9	29.1	*27.4	58.6	59.6	52.6	14.0	13.0	20.3
86 Nonprofit membership organizations.....	520	372	148	28.5	33.6	34.1	32.4	61.1	65.9	49.2	12.2	9.8	18.2

\* Fewer than 100 workers in sample.  
<sup>1</sup> Based on 1-percent sample.  
<sup>2</sup> Base contains fewer than 100 persons.

ing tabulation lists the industries that employed 500,000 or more women during the year and shows the estimated number and proportion of women among all workers employed in each such industry during 1947.

Industry	Number <sup>1</sup> (in thousands)	Percent
Retail general merchandise	2,241	70.6
Eating and drinking places	1,667	51.0
Apparel and other finished products	1,455	75.0
Food and kindred products	1,056	31.4
Personal services	1,049	59.4
Retail trade, not elsewhere classified	906	33.8
Textile mill products	901	45.4
Retail apparel and accessories	755	65.8
Retail food and liquor stores	744	31.2
Full-service and limited-function wholesalers	708	25.4
Telegraph, telephone, and related services	617	66.3
Hotels, rooming houses, camps, and other lodging places	603	47.6
Electrical machinery	585	41.0

<sup>1</sup> Some women earned taxable wages in more than 1 industry group at some time during the year.

### Industry Variations in Duration of Employment

The tabulated data show the number of calendar quarters in which an individual has been paid taxable wages of \$1 or more.<sup>9</sup> From the employers' quarterly wage reports it is not possible to determine the amount of time an employee worked during a quarter, but the workers receiving wage credits in all 4 calendar quarters of the year in a given industry can be presumed, as a group, to have been the most regularly employed during the year and those receiving wage

<sup>9</sup> In the tabulations a worker who received wage credits of \$3,000 in a year is deemed to have been employed in covered employment in each calendar quarter of that year after his first quarter with wage credits in the year. A worker who earned \$3,000 in the industry group classified as electric and gas utilities, for example, is shown as a 4-quarter worker in this industry group if he earned wage credits in electric or gas utilities employment in the first calendar quarter of 1947. If this same worker had taxable wages of less than \$3,000 in another industry group in the first quarter and received his first wage credits in electric and gas utilities in the second quarter of 1947, he would be shown as a 3-quarter worker in electric and gas utilities and a 1-quarter worker in the other industry.

**Table 2.—Percentage distribution of workers with wage credits in 1947 and 1946 by last industry division in which employed and by sex**

Industry division	1947			1946		
	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mining	2.5	3.6	0.3	2.4	3.5	0.3
Contract construction	7.0	10.2	0.7	5.5	8.1	0.5
Manufacturing	41.2	42.6	38.3	40.2	41.8	36.9
Transportation, communication, and other public utilities	6.6	7.4	5.0	6.5	7.3	5.0
Wholesale and retail trade	27.7	23.8	35.6	27.6	23.7	35.1
Finance, insurance, and real estate	4.1	3.3	5.6	4.2	3.4	5.6
Service industries	9.9	8.0	13.8	10.6	8.8	14.1
Other	1.0	1.2	0.7	3.0	3.4	2.5

credits in fewer than 4 quarters to have had, on the whole, a shorter period of employment in the industry.

Of all workers with taxable wages during 1947, 64 percent worked in covered employment in all 4 quarters of the year.<sup>6</sup> Among the 68 industry groups, however, there were only seven that employed as many as 60 percent of their workers in all 4 quarters of the year—anthracite mining (73 percent); banks and trust companies (65 percent); bituminous and other soft-coal mining (61 percent); security dealers and investment banking houses (61 percent); electric and gas utilities (62 percent); local railways and bus lines (61 percent); and telephone, telegraph, and related services (61 percent). These seven groups included industries whose productive operations are generally least subject to seasonal fluctuations or that require relatively large numbers of technical or skilled personnel. Among the many other factors responsible for the high proportions of 4-quarter workers are relatively high wage rates and, in some instances, location in geographic areas where there are relatively few alternative employment opportunities.

In 12 additional industry groups—all but one of them manufacturing industries—the proportion of 4-quarter workers was as high as 50 percent. In half the industry groups the 4-quarter proportion was less than 40 percent, with two industries—general contractors other than building, and miscellaneous amusements and recre-

<sup>6</sup> Unduplicated count; all taxable wages included whether earned in only one industry group or in more than one.

ation and related services—having a proportion of less than 20 percent.

### Men and Women Four-Quarter Workers

Among the 52 industries for which a sex comparison can be made,<sup>7</sup> 20 employed half or more of their male workers in all 4 quarters of the year, but in only seven industry groups were as many as half the women workers employed in 4 quarters. This large difference is attributable at least in part to such factors as the tendency in many industries to draw upon female labor reserves for temporary work during peak production periods; the fact that women in some industries have on the whole lower seniority than men and are therefore the first to be laid off; the heavy and unpleasant nature of many production processes, which increases the turn-over among women workers; and the pressure of household responsibilities. Wage differentials that exist in some industries may also make

<sup>7</sup> Sixteen industries for which the 1-percent sample included fewer than 100 women workers have been excluded from the analysis—metal mining, anthracite mining, bituminous and other soft-coal mining, nonmetallic mining and quarrying, general contractors other than building, local railways and bus lines, water transportation, miscellaneous services allied to transportation, miscellaneous local utilities and local public services, retail filling stations, holding companies, employment agencies and commercial and trade schools, automobile repair services and garages, miscellaneous repair services and hand trades, educational institutions and agencies, and other professional and social service agencies and institutions.

"regular" employment less attractive to women than it would be if they were paid the same wages as men.

The proportion of 4-quarter workers was higher for men than for women even in some of the industries where the relative number of women was large. For example, in the communication group (telegraph, telephone, and other related services), where roughly two-thirds of all workers were women, the proportion of women 4-quarter workers was high (60 percent) but that of men was higher (63 percent). Similarly in banks and trust companies, where 51 percent of all workers were women, the proportion of 4-quarter workers was 60 percent for women but 71 percent for men. Women made up 75 percent of all workers in the apparel group, but only 40 percent of them were 4-quarter workers; the proportion of men 4-quarter workers was 49 percent. In only two of the industry groups where the majority of all workers were women was the proportion of 4-quarter workers higher for women than for men, and the difference was substantial in only one of them—medical and other health services, where women represented 82 percent of all workers; in this industry group, 38 percent of the women as compared with 33 percent of the men were 4-quarter workers. The other group was tobacco manufacturing, where 57 percent of all workers were women and 44 percent of the women and 41 percent of the men were 4-quarter workers.

Notwithstanding these differences, the number of quarters of employment for women appeared, like that for men, to be more a reflection of the general employment pattern of the industry than a result of their characteristics as workers. The data show that the industry groups that employed a relatively large proportion of their men workers in all 4 quarters of the year also employed a comparatively large proportion of their women workers in all 4 quarters. Conversely, where the proportion of male 4-quarter workers was small, the proportion of women 4-quarter workers was also small. These relationships are shown by the following figures for five industries in which the proportion of

4-quarter workers was high and five in which the proportion was low.

Industry	4-quarter workers (percent)	
	Men	Women
Electric and gas utilities.....	62	60
Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks.....	57	45
Ordnance and accessories.....	55	47
Transportation equipment.....	62	48
Apparel and other finished products.....	49	40
Furniture and fixtures.....	35	31
Real estate establishments.....	34	39
Retail trade, not elsewhere classified.....	34	28
Hotels, rooming houses, camps, and other lodging places.....	22	22
Miscellaneous amusement and recreation and related services.....	16	16

Furthermore, despite the fact that in most industry groups the proportion of 4-quarter workers was generally higher for men than women, in all but the 10 industries shown below, the difference between the two proportions was less than 10 percentage points.

Industry	4-quarter workers (percent)	
	Men	Women
Miscellaneous finance agencies.....	59	41
Printing and publishing.....	56	39
Primary metals.....	58	42
Rubber products.....	63	47
Insurance carriers.....	65	50
Food and kindred products.....	36	24
Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks.....	57	45
Banks and trust companies.....	71	60
Security dealers and investment bankers.....	65	54
Leather and leather products.....	51	41

### Industry Mobility

Industry data based on old-age and survivors insurance records afford at least a partial measure of the extent to which workers shift from one industry to another within a calendar year. The data therefore shed additional light on the whole problem of employment stability and on differences in employment patterns by industry. They also may be of value in determining the extent to which such mobility of workers may limit the protection afforded by private

pension plans, which ordinarily require as a condition of eligibility that a worker have a stated minimum number of years of employment within a particular industry and be employed in that industry at the time of retirement. The basic records, however, do not permit the tabulation of data that would provide specific answers to such questions as (1) why workers shift from one covered industry to another, (2) whether an industry shift may also involve an occupational shift, or (3) whether the shift is directly to another covered industry rather than first to noncovered employment, or to unemployment, or to nonworker status. Furthermore, although the data tabulated for 1947 show whether the worker shifted from one industry group to another, they do not show whether a worker shifted within an industry group—for example, from meat products to dairy products within the food and kindred products industry group.

### Multi-Industry Workers

Of the total number of workers with taxable wages during 1947, 26 percent (based on an unduplicated count) worked in covered employment in at least two different industry groups during the year. In specific industry groups the proportion of such multi-industry workers varied widely, ranging from a low of 16 percent for the workers in anthracite mining to 71 percent for the workers employed by general contractors, other than building, and 73 percent for the workers in miscellaneous allied transportation services. In about one-third of the industry groups in 1947 at least half the workers also earned taxable wages in at least one other industry during the year.

As would be expected, the industries having the lowest proportions of multi-industry workers during 1947 were generally those with high proportions of 4-quarter workers; that is, most of them were industries least affected by seasonal variations. For example, among the industries where the proportion of multi-industry workers was less than one-third were bituminous and other soft-coal mining, anthracite mining, banks and

trust companies, local railways and bus lines, electric and gas utilities, and telephone, telegraph, and related services. On the other hand, among the industries with 50 percent or more of such workers were construction, trucking and warehousing, water transportation, automobile repair services and garages, real estate, and hotels, rooming houses, camps, and other lodging places.

In most industry groups the relative number of multi-industry workers was larger for men than for women. In the 59 groups examined,<sup>3</sup> the proportion of multi-industry workers was 50 percent or more in 30 industries for men as compared with only eight industries for women. Usually, however, the proportion of female multi-industry workers was highest in the industries where the proportion of male multi-industry workers was also relatively high and lowest in the industries where the proportion for male workers was lowest.

### *One- and Two-Quarter Single-Industry Workers*

Of interest by way of contrast to both the proportion of multi-industry workers and the proportion of 4-quarter workers is the proportion of workers who earned taxable wages

<sup>3</sup> Groups in which there were at least 100 men and women each in the multi-industry cells. The excluded groups were the five mining industries; local railways and bus lines; water transportation; holding companies (except real estate holding companies); and local utilities and local public services, not elsewhere classified.

in only one industry and in not more than 2 quarters of the year. These were the workers whose employment during the year, not only in the industry but also in all covered occupations, was shortest in duration. The combined group of 1-quarter and 2-quarter single-industry workers comprised one-fifth of all covered workers during 1947.

The largest proportions of such workers were in the industries that draw heavily upon labor reserves during periods of peak operation—manufacturing industries such as lumber and wood products (21 percent), food and kindred products (20 percent), apparel and other finished products (19 percent), and tobacco (17 percent); and nonmanufacturing groups such as educational institutions and agencies (29 percent), medical and other health services (27 percent), retail general merchandise (25 percent), eating and drinking places (23 percent), amusements and recreation and related services (23 percent), and hotels, rooming houses, camps, and other lodging places (22 percent). Among the industries with the smallest proportions of workers shown to have short-time employment were local railways and bus lines (5.0 percent), products of petroleum and coal (5.5 percent), the primary metals industries (7.6 percent), nonelectrical machinery (7.6 percent), and transportation equipment (8.0 percent).

### *Summary*

Of the 49 million persons with taxable wages during 1947, approximately 33 percent were women. Among

workers in specified industry groups, however, the proportions of women varied widely—from 2.0 percent of all covered workers in anthracite mining to 82 percent of all workers with taxable wages in medical and other health services.

There was also considerable variation among industry groups in the proportions of workers employed in the industry in all 4 quarters of the year. In only 19 of 68 such groups did 4-quarter workers constitute as many as half of the total number of workers with taxable wages during the year. The proportion of 4-quarter workers in particular industry groups was generally higher for men than for women. The highest 4-quarter proportions for women were, however, in the same industries where the proportions for men were highest, and the lowest where those for men were lowest, indicating that duration of employment within particular industries is more a function of the nature of the industry groups themselves than of sex characteristics.

The proportions of multi-industry workers within industry groups ranged from 16 percent in anthracite mining to 71 percent in general contractors, other than building, and 73 percent in miscellaneous allied transportation services. The largest proportions of 1-quarter and 2-quarter single-industry workers were in manufacturing and nonmanufacturing industries that, because of their essentially seasonal nature, draw heavily upon labor reserves during periods of peak operation.