

# Occupational wage variation in wood household furniture plants

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In the manufacture of wood household furniture, firms producing upholstered furniture paid higher wages than those making nonupholstered products.<sup>1</sup> The pay advantage—\$4.78 an hour compared with \$4.22—stems primarily from differences in the occupational staffing patterns between the two industries, rather than differences in pay levels for similar types of work.

The survey, conducted in June 1979, is the Bureau of Labor Statistics' first occupational wage study of upholstered furniture factories and a resurvey of the other wood furniture plants.<sup>2</sup> Among the similarities found, both industries were primarily in nonmetropolitan areas, were located in all parts of the country but chiefly in the Southeast, and, for the most part, consisted of nonunion, single-plant firms. Many plants, in fact, man-

ufactured both types of furniture.

In both industries, pay levels were usually higher in metropolitan areas than in smaller communities, in plants of 100 workers or more than in smaller plants, and in union firms than in nonunion firms. Regionally, the highest average earnings usually were found in the Pacific States and the lowest in the South. (See table 1.)

There were also some important differences between the two industries. Plants making nonupholstered furniture had, on the average, larger work forces than the other establishments—136 workers compared with 112 workers. Upholstered furniture plants, on the other hand, had a higher proportion of workers in skilled or incentive-paid occupations—two factors which can contribute to higher wages.

To isolate the effects of certain wage-determining characteristics, multiple regression equations were developed for all production workers and for a number of representative occupations studied separately in the two industries.<sup>3</sup> Included as variables in the analysis were establishment size and community size, unionization, type of furniture manufactured, and region. Also included as variables were sex and method of wage payment for selected occupations.

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**Table 1. Average hourly earnings in factories making upholstered and other wood household furniture, United States and selected regions, June 1979**

Characteristic	United States <sup>1</sup>		Middle Atlantic		Border States		Southeast		Great Lakes		Pacific	
	Upholstered	Other	Upholstered	Other	Upholstered	Other	Upholstered	Other	Upholstered	Other	Upholstered	Other
All production workers	\$4.78	\$4.22	\$5.08	\$4.54	\$4.19	\$3.60	\$4.49	\$3.89	\$5.38	\$4.66	\$5.82	\$5.61
Men	5.01	4.41	5.30	4.69	4.41	3.99	4.71	3.99	5.61	4.89	5.90	5.73
Women	4.38	3.84	4.55	3.93	3.80	.....	4.11	3.70	5.08	4.33	5.87	4.63
Size of community												
Metropolitan areas	5.01	4.51	5.23	4.36	.....	.....	4.43	3.99	5.07	4.77	5.82	5.61
Nonmetropolitan areas	4.61	3.99	.....	4.95	3.90	3.60	4.51	3.83	5.47	4.62	.....	.....
Size of establishment												
20-99 workers	4.71	4.57	4.93	4.28	.....	.....	4.29	3.75	4.72	4.50	5.77	6.15
100 workers or more	4.81	4.14	5.18	4.70	4.39	3.59	4.55	3.91	5.55	4.71	5.89	5.19
Labor-management contract coverage												
Establishment with majority of workers covered	5.46	4.83	4.83	4.90	.....	3.90	.....	3.76	5.60	4.71	6.67	6.77
None or minority of workers covered	4.56	3.96	5.52	4.19	4.18	3.56	4.52	3.92	4.79	4.60	4.95	3.84
<b>Selected occupations</b>												
Assemblers, complete furniture pieces (case goods)	4.82	4.49	.....	5.10	.....	3.65	4.57	3.97	.....	4.87	.....	6.37
Assemblers, chairs	4.54	3.82	.....	.....	.....	3.68	4.34	3.59	.....	4.18	5.15	5.23
Assemblers, upholstery frames, final frame assemblies	4.71	4.33	5.07	.....	4.16	.....	4.49	.....	5.90	.....	5.73	.....
Cushion-stuffing-machine operators	4.87	4.17	4.55	.....	3.34	.....	4.87	3.86	4.74	.....	6.26	.....
Cutters, electric knife	5.54	4.91	5.05	.....	4.32	.....	5.46	4.77	5.55	4.17	7.06	.....
Cut-off-saw operators	4.41	4.69	4.23	4.53	.....	3.78	4.12	4.21	5.67	4.37	4.98	6.61
Maintenance electricians	5.83	5.58	.....	.....	.....	4.54	5.34	5.19	.....	6.01	.....	7.79
Maintenance workers, general utility	4.72	5.25	5.10	5.56	4.03	4.24	4.41	4.74	5.02	5.51	5.98	7.66
Off-bearers, machine	4.05	3.66	4.75	4.23	.....	3.34	3.85	3.50	4.77	4.36	5.48	3.83
Packers, furniture	4.18	4.02	3.98	4.02	3.62	3.50	4.02	3.55	5.65	4.59	4.91	5.18
Router operators, feed only	3.57	4.08	.....	5.03	.....	3.42	3.52	3.94	.....	4.54	.....	4.85
Rubbers, furniture, hand	3.61	3.76	.....	4.59	.....	3.37	3.41	3.58	5.05	4.49	3.57	4.16
Sanders, furniture, hand	3.65	3.97	3.57	4.17	.....	3.26	3.61	3.57	4.29	4.56	3.71	4.39
Sanders, furniture, machine, belt	4.25	4.15	.....	4.77	4.27	3.82	3.72	3.99	5.88	4.78	5.14	4.26
Sewing-machine operators, all-round	4.88	4.35	4.63	.....	4.08	.....	4.67	4.66	5.13	3.86	6.21	.....
Tenoner operators, set up and operate	4.82	4.84	.....	6.09	.....	4.15	4.75	4.27	.....	5.12	.....	6.72
Upholsterers, inside	6.88	6.23	5.74	.....	5.46	.....	7.02	.....	7.06	.....	7.56	.....

<sup>1</sup> Includes data for regions in addition to those shown separately.  
<sup>2</sup> Excludes premium pay for overtime and for work on weekends, holidays, and late

shifts. Dashes indicate that no data were reported or that data did not meet publication criteria.

**Table 2. Net earnings differentials among production workers of wood household furniture plants, June 1979**

Occupation	Metropolitan areas	Large plants	Union plants	Upholstered furniture	Pacific region	Incentive workers
All production workers .....	<sup>1</sup> \$0.05	<sup>1</sup> \$0.04	\$0.48	\$0.54	\$1.34	( <sup>2</sup> )
<b>Selected occupations</b>						
Assemblers, complete furniture pieces, case goods (nonupholstered) .....	<sup>1</sup> .12	.37	.58	<sup>1</sup> .54	1.95	\$0.93
Cut-off-saw operators .....	.53	<sup>1</sup> .19	1.24	<sup>1</sup> .12	1.20	1.21
Electricians, maintenance .....	<sup>1</sup> .28	<sup>1</sup> .20	<sup>1</sup> .08	<sup>1</sup> .16	2.52	<sup>1</sup> .52
Maintenance workers, general utility .....	<sup>1</sup> .07	<sup>1</sup> .29	.44	-.40	2.33	.79
Off-bearers, machine .....	<sup>1</sup> .07	.33	.42	.23	.23	.79
Router operators, feed only .....	.71	.94	.74	<sup>1</sup> .47	<sup>1</sup> .37	<sup>1</sup> .49
Sanders, furniture, machine, belt .....	.21	.64	.36	<sup>1</sup> .02	.55	.91
Sewing-machine operators, all-round (upholstered) .....	<sup>1</sup> .14	<sup>1</sup> .26	.67	<sup>1</sup> .18	1.37	1.01
Upholsterers, inside .....	<sup>1</sup> .09	<sup>1</sup> .04	<sup>1</sup> .13	<sup>1</sup> .09	1.03	2.00

<sup>1</sup> Not statistically significant at a 99-percent confidence level.<sup>2</sup> Not applicable.

The regression coefficients presented in table 2 are estimates of the differentials associated with the characteristic or variable. For example, the table shows that when all other measured characteristics are held constant, union furniture plants pay, on average, 48 cents an hour more than nonunion plants.

The only characteristics typically showing a statistically significant relationship to higher wages among the occupations examined were unionization, location in the Pacific States, and incentive method of pay. Higher pay in upholstered furniture plants seemed to result primarily from the greater proportion of high-paying occupations than in the other industry. Only one of the nine occupations in table 2—machine off-bearers—showed a significant positive differential associated with the product variable, upholstered furniture.

Although unionization was significantly related to higher wages, there were exceptions, including two of the highest paying jobs—inside upholsterers and maintenance electricians. Other BLS wage studies also show that workers in union firms usually earn more than those in nonunion firms, but differences are less distinct among higher paid (higher skilled) workers.

Pay differentials calculated through multiple regression techniques are, for the most part, smaller than differentials found through simple cross-tabulations. This is to be expected because simple cross-tabulations do not isolate the individual effects of wage determinants that are often found in common—such as unionization and location in metropolitan areas.

A comprehensive survey report including data on occupational earnings and selected employee benefits (BLS Bulletin 2087) is available from the Bureau of Labor Statistics, Washington, D.C. 20212, or any of its regional offices. □

———— FOOTNOTES ————

<sup>1</sup> See *Standard Industrial Classification Manual*, upholstered furniture, industry 2512, nonupholstered furniture, industries 2511, 2517, and 2435.

<sup>2</sup> For an account of a November 1974 survey of nonupholstered furniture, see Carl Barsky, "Pay relationship in the furniture industry," *Monthly Labor Review*, April 1976, pp. 46-47.

<sup>3</sup> See Martin E. Personick and Albert E. Schwenk, "Analyzing earnings differentials in Industry Wage Surveys," *Monthly Labor Review*, June 1974, pp. 56-59, for an explanation of regression techniques used in industry wage surveys.

### Local-transit workers' union wages advance 8.8 percent during 1978-79

Average union wage rates for local-transit operating employees in large cities increased 8.8 percent between July 1, 1978, and July 1, 1979. It was the industry's third largest annual gain during the 1970's.<sup>1</sup> The average increase was 9.0 percent for operators of surface cars and buses during the survey period, and 7.4 percent for elevated and subway equipment operators. During the last 5 years, increases have been larger for bus operators than for subway operators, narrowing the average wage-rate difference between the two groups from 11 percent in 1974 to less than 1 percent on July 1, 1979.

Slightly more than nine-tenths of local-transit operating employees received wage rate increases during the year ending July 1, 1979. Nearly one-eighth received between 4 and 6 percent; one-fourth, between 6 and 8 percent; slightly more than one-fifth, between 8 and 10 percent; and about one-third, at least 10 percent.

Union wage rates for local-transit operating employees averaged \$8.17 per hour on July 1, 1979: for operators of surface cars and buses, about seven-eighths of employees covered by the survey, the average was \$8.16, and for operators of elevated and subway equipment, \$8.21. However, of the nine cities permitting comparison, wage rates for surface car and bus operators, and elevated and subway equipment operators, were the same in five: Atlanta, Cleveland, Newark, Philadelphia, and Washington; D.C. Wage rates were

**Table 1. Average wage rates of local-transit operating employees in selected cities, July 1, 1978-July 1, 1979**

City and region <sup>1</sup>	Average hourly rate <sup>2</sup>	Change from July 1, 1978		City and region <sup>1</sup>	Average hourly rate <sup>2</sup>	Change from July 1, 1978	
		Cents per hour	Percent			Cents per hour	Percent
All cities	\$8.17	66	8.8	Great Lakes	\$8.99	92	11.4
New England	8.42	79	10.4	Akron, Ohio (III)	6.60	56	9.3
Boston, Mass. (II)	9.29	82	9.7	Chicago, Ill. (I)	10.14	122	13.7
New Bedford, Mass. (IV)	6.69	81	13.8	Cincinnati, Ohio (III)	7.46	58	8.4
New Haven, Conn. (IV)	7.10	72	11.3	Cleveland, Ohio (II)	8.47	85	11.2
Providence, R.I. (IV)	7.32	77	11.8	Columbus, Ohio (II)	7.38	67	10.0
Stamford, Conn. (IV)	7.30	74	11.3	Detroit, Mich. (I)	8.31	40	5.1
Middle Atlantic	7.91	54	7.4	Flint, Mich. (IV)	6.01		
Albany, N.Y. (IV)	6.97	65	10.3	Grand Rapids, Mich. (IV)	6.59	59	9.8
Buffalo, N.Y. (III)	7.33	51	7.5	Hammond, Ind. (IV)	7.51	69	10.1
New York, N.Y. (I)	7.86	51	6.9	Indianapolis, Ind. (II)	7.04	26	3.8
Newark, N.J. (III)	8.45	39	4.8	Milwaukee, Wis. (II)	8.13	60	8.0
Philadelphia, Pa. (I)	7.56	49	7.0	Minneapolis-St. Paul, Minn. (III)	8.79	102	13.1
Pittsburgh, Pa. (II)	9.01	94	11.6	Rockford, Ill. (IV)	8.18	58	7.6
Rochester, N.Y. (III)	7.90	71	9.9	Toledo, Ohio (III)	7.51	69	10.1
Scranton, Pa. (IV)	6.70	70	11.7	Middle West	7.71	22	4.0
Border States	8.57	94	12.3	Kansas City, Mo. (II)	8.20		
Baltimore, Md. (II)	8.75	108	14.1	Omaha, Nebr. (III)	6.24		
Louisville, Ky. (III)	7.41	65	9.6	St. Louis, Mo. (II)	8.64		
Norfolk, Va. (III)	7.52	63	9.1	Wichita, Kans. (III)	4.85	50	11.5
Washington, D.C. (II)	9.22	108	13.2	Mountain	6.89	61	9.7
Southeast	7.22	61	9.2	Denver, Colo. (II)	8.30	82	11.0
Atlanta, Ga. (III)	8.28	85	11.4	Phoenix, Ariz. (I)	7.27	68	10.3
Chattanooga, Tenn. (IV)	7.01	45	6.9	Salt Lake City, Utah (IV)	6.11	49	8.7
Jacksonville, Fla. (II)	7.24	62	9.4	Pacific	8.39	53	6.8
Memphis, Tenn. (II)	7.83	74	10.4	Fresno, Calif. (IV)	7.44	83	12.6
Miami, Fla. (III)	7.15			Honolulu, HI. (III)	7.58		
Nashville-Davidson, Tenn. (III)	7.33	42	6.1	Long Beach, Calif. (III)	8.20	43	5.6
St. Petersburg, Fla. (IV)	4.39	20	4.8	Los Angeles, Calif. (I)	8.61	52	6.4
Southwest	6.82	47	8.1	Portland, Oreg. (III)	9.25	95	11.4
Fort Worth, Tex. (III)	5.75	40	7.5	Riverside, Calif. (IV)	8.61	52	6.4
Houston, Tex. (I)	7.62			Sacramento, Calif. (III)	7.71		
New Orleans, La. (II)	6.52	50	8.3	San Diego, Calif. (II)	9.53	65	7.3
San Antonio, Tex. (II)	6.45	51	8.6	San Francisco, Calif. (II)	8.00	8	1.0
				Santa Ana, Calif. (IV)	8.13	138	20.4
				Seattle, Wash. (II)	9.19	85	10.2
				Spokane, Wash. (IV)	7.82	81	11.6

<sup>1</sup> The regions used in this study include: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota; *Mountain*—Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*—Alaska, California, Hawaii, Nevada, Oregon, and Washington. Population size of city is shown in parentheses as follows: group I—1,000,000 or more; group II—500,000 to 1,000,000; group III—250,000 to 500,000; and group IV—100,000 to 250,000.

<sup>2</sup> Wage rates used to calculate these averages represent those available and payable only on July 1, 1979, and do not include later increases retroactive to that date or before. Such retroactive increases are included in the wage rates reported in the following year's survey. Averages were developed by weighting the top rate of length-of-service progressions that ended at 3 years or less for each occupation in each contract by the number of union members at that rate on the survey date. In seven cities where progressions extended beyond 3 years, all contract-stipulated rates, and associated union membership, at steps of 3 years or beyond were included in the averages.

NOTE: Variations in the size of annual increases from survey to survey may reflect, in part, timing of negotiations. Dashes indicate no change in rate or a revised wage progression.

higher for bus operators in three cities: Boston, Chicago, and New York, and higher for subway operators in only one, San Francisco.

Local transit operating employees in the Great Lakes region recorded the highest average hourly rate, \$8.99, and those in the Southwest, the lowest, \$6.82 (table 1).

Union contracts commonly provide for pay differentials by length of service. Rate averages in table 1 are based largely on the highest rate of the pay structure as reported in each labor-management agreement within an individual city of the survey.<sup>2</sup> To develop averages, the Bureau of Labor Statistics weighted the rates at or near the top of the progression by the number of local-transit operating employees at those rates, about 67,100 total. Distribution of wage rates developed by the study, and year-to-year wage changes also relate only to union members at those rates. For national and regional wage averages, the 62 cities studied were appropriately

weighted to reflect union rates of local transit operating employees, in each city with a population of 100,000 or more.

A comprehensive report, *Union Wages and Benefits: Local-Transit Operating Employees, 1979*, BLS Bulletin 2074, is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. □

FOOTNOTES

<sup>1</sup> Higher increases were reported during 1973-74 (11.5 percent) and 1974-75 (11.3 percent). Union wage rates included in the BLS surveys are the straight-time hourly rates agreed upon through collective bargaining between employers and unions. They do not include employer payments for vacations, holidays, or other purposes. Thus, they may not represent actual amounts earned by employees.

<sup>2</sup> A single top rate was used whenever the progression ended at 3 years or less, in 55 out of 62 cities. For progressions extending beyond 3 years, contract-stipulated rates and associated union membership, at steps of 3 years or beyond, were included.