

Differences in Union and Nonunion Earnings in Blue-collar and Service Occupations

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An examination of union and nonunion earnings distributions showed that nonunion workers were more apt to be in the lower earnings ranges; the extent of unionization among both blue-collar and service occupations was lower in the private sector than in State and local government.

Although union wages have not risen as fast as nonunion wages in recent years, union workers still earn more, on average, than their nonunion counterparts. Estimates of [Employer Costs for Employee Compensation \(ECEC\)](#), for example, show that in March 2001, wages and salaries for private industry union workers averaged \$18.36 per hour, compared with \$14.81 for nonunion workers.¹ Similarly, data from the [Current Population Survey \(CPS\)](#) show that in 2000, median weekly earnings of full-time wage and salary workers were \$691 for workers represented by unions, compared with \$542 for nonunion workers. Finally, data from the 1999 [National Compensation Survey \(NCS\)](#) show that union workers had average hourly earnings of \$18.31, compared with \$14.76 for nonunion workers.²

Using data from the 1997 NCS, an earlier study by this author examined differences in union and nonunion earnings for major occupational groups within the total economy, private industry, and State and local government.³ In almost all groups, union workers enjoyed a salary advantage over nonunion workers. This article extends the earlier study by using more detailed data from the 1997 NCS to examine union and nonunion earnings distributions for blue-collar and service occupational groups. In addition, the present study examines union and nonunion earnings differences for selected blue-collar and service occupations in the total economy, private industry, and State and local government, and the extent to which workers in these occupations are unionized.

Union Status Defined

In the National Compensation Survey, a worker is in a union occupation when the following conditions are met:

- A labor organization is recognized as the bargaining agent for all workers in the occupation.
- Wage and salary rates are determined through collective bargaining or through negotiations.
- Settlement terms, which must include earnings provisions and may include benefit provisions, are embodied in a signed, mutually binding collective bargaining agreement.⁴

In the 1997 NCS, 23 percent of all workers were unionized. This proportion, however, varied by occupation, as unionized workers made up 18 percent of those in white-collar occupations, 34 percent of those in blue-collar occupations, and 21 percent of those in service occupations.⁵

In contrast to the NCS data on union membership, data from the Current Population Survey indicate that 15.6 percent of all wage and salary workers were represented by unions in 1997.⁶ The higher rate of unionization in the NCS sample may be due to the exclusion of establishments with fewer than 50 employees, which tend to have lower unionization rates than do larger establishments. In addition, the geographic scope of the 1997 NCS was limited to the 48 contiguous States.⁷

Occupational Categories Examined

This study examines union and nonunion earnings distributions for all blue-collar occupations combined, for the four blue-collar major occupational groups,⁸ and for the five largest specific occupations within each major blue-collar group--defined as the five occupations employing the greatest number of workers. In precision production, craft, and repair occupations, the specific occupation electrical and electronic equipment assemblers--one of the largest in the group--was excluded because

only nonunion earnings data were available for that occupation.⁹ The major blue-collar groups and the specific occupations within them that were examined are as follows:

Precision production, craft, and repair occupations:

- Industrial machinery repairers
- Mechanics and repairers, not elsewhere classified
- Electricians
- Supervisors, production

Machine operators, assemblers, and inspectors:

- Fabricating machine operators, not elsewhere classified
- Textile sewing machine operators
- Miscellaneous machine operators, not elsewhere classified
- Assemblers
- Production inspectors, checkers, and examiners

Transportation and material moving occupations:

- Truck drivers
- Driver-sales workers
- Bus drivers
- Industrial truck and tractor equipment operators
- Miscellaneous material moving equipment operators, not elsewhere classified

Handlers, equipment cleaners, helpers, and laborers:

- Groundskeepers and gardeners, except farm
- Stock handlers and baggers
- Freight, stock, and material handlers, not elsewhere classified
- Hand packers and packagers
- Laborers, except construction, not elsewhere classified

This study also examines union and nonunion earnings distributions for the major group service occupations, except private household, as well as for the five specific occupations employing the greatest number of workers in the protective service, food service, and personal service groups, for two occupations in the health service group, and for three occupations in the cleaning service group. In the latter two groups, fewer than five occupations were examined, because wage data were not available for other occupations by union status. These occupational categories and the specific occupations within them that were examined are as follows:

Protective service occupations:

- Firefighting
- Police and detectives, public service
- Sheriffs, bailiffs, and other law enforcement officers
- Correctional institution officers
- Guards and police, except public service

Food service occupations:

- Waiters and waitresses

- Cooks
- Food counter, fountain, and related occupations
- Kitchen workers, food preparation
- Food preparation, not elsewhere classified

Health service occupations:

- Health aides, except nursing
- Nursing aides, orderlies, and attendants

Cleaning and building service occupations:

- Supervisors, cleaning and building service workers
- Maids and housemen
- Janitors and cleaners

Personal service occupations:

- Attendants, amusement and recreation facilities
- Welfare service aides
- Early childhood teachers' assistants
- Child care workers, not elsewhere classified
- Service occupations, not elsewhere classified

Blue-collar Occupations

Earnings distribution. Average hourly earnings for the 142 union blue-collar occupations in the 1997 NCS sample were \$15.07 and ranged from \$7.34 to \$26.81. For the 175 nonunion blue-collar occupations in the sample, average hourly earnings were \$10.95, with a range of \$6.47 to \$21.41.¹⁰

Average hourly earnings were not less than \$5.00 per hour in any of the 317 blue-collar occupations.¹¹ In addition, average hourly earnings were in the range of \$5.00 to \$9.99 per hour in only 5 percent of union occupations, while earnings in almost a third (32 percent) of nonunion occupations fell into that range.¹² Average earnings ranged from \$10.00 to \$14.99 per hour in 43 percent of union occupations, compared with a little more than half (51 percent) of nonunion occupations. In contrast, workers in 52 percent of union occupations earned at least \$15.00 per hour, compared with only 17 percent of nonunion occupations. (See chart 1.)

Unionization. Although a third of all blue-collar workers were unionized, the proportion of unionized blue-collar workers in private industry was lower than the comparable proportion in State and local government (32 percent, compared with 50 percent). Similar patterns were found within the four major (blue-collar) occupational groups. In private industry, the proportion of unionized workers ranged from 5 percent among groundskeepers and gardeners to 61 percent among electricians. In the public sector, the proportion of union workers ranged from 40 percent among miscellaneous machine operators to 62 percent among industrial machinery repairers. (See table 1.)

For all major blue-collar occupational groups, unionized workers in all categories (all industries, private industry, and State and local government) enjoyed a wage advantage over their nonunion counterparts. (See table 2.)

Precision production, craft, and repair occupations. These occupations are involved in the fabricating, processing, and inspecting or repairing of material, products, or structural units. This major group includes mechanics and repairers, the construction trades, and precision production occupations that involve work on a variety of materials such as metal, wood, and textiles.

In 1997, 62 percent of the workers in this major occupational group were not represented by a union. Those workers who were represented by a union had average hourly earnings of \$18.01, with a range of \$10.59 to \$26.81. By contrast, nonunion workers averaged \$14.53 per hour, with a range of \$7.73 to \$21.41. The union earnings advantage of around \$3.50 per hour was also found in private industry and State and local government (where half of all workers were unionized). Most (85 percent) union occupations had average hourly earnings of \$15.00 or more, while almost 70 percent of nonunion occupations averaged less than \$15.00 per hour. (See chart 2.)

Among industrial machinery repairers, unionized workers averaged \$17.75 per hour, compared with \$15.00 per hour for their nonunion counterparts, a pay differential of \$2.75. In private industry, these figures were similar. In State and local government, however, the earnings differential was \$4.68.

Among mechanics and repairers, not elsewhere classified (n.e.c.),¹³ the wage differential was similar for private industry and State and local government workers (\$3.86 and \$3.81, respectively). Average hourly earnings, however, differed by sector, with unionized workers averaging \$18.18 per hour in private industry and \$15.68 per hour in State and local government. Among nonunion workers, these averages were \$14.32 and \$11.87, respectively.

In all three groups, approximately three-fifths of electricians were unionized. In private industry, unionized electricians earned an average of \$21.05 per hour, compared with \$15.11 for nonunion electricians. In the public sector, these figures were \$18.07 and \$13.51, respectively. The wage differential was greater in private industry (\$5.94) than in the public sector (\$4.56).

Production supervisor was the only occupation in which nonunion workers may have had higher average hourly earnings than union workers. These differences, however, were not statistically significant.¹⁴ None of the remaining occupations in the group precision production, craft, and repair was found in the public sector.

Machine operators, assemblers, and inspectors. Typical occupations in this major group are of the "semi-skilled, blue-collar" type in which workers may perform repetitive manual or machine operations, set up and operate machinery, assemble products, or tend to and control the machines.

Union machine operators, assemblers, and inspectors had average hourly earnings of \$13.83, with a range of \$7.85 to \$19.07. Their nonunion counterparts, however, had average hourly earnings of \$9.75, with a range of \$6.80 to \$13.94. None of the occupations had average hourly earnings of less than \$5.00 per hour or earnings of \$20.00 or more per hour. More than half (52 percent) of the nonunion occupations had average hourly earnings in the range of \$5.00 to \$9.99, with the remaining occupations in the \$10.00-\$14.99 range. Most (93 percent) union occupations averaged between \$10.00 and \$19.99 an hour. (See chart 3.)

In private industry, unionized machine operators, assemblers, and inspectors earned \$13.82 per hour, compared with \$9.75 for their nonunion counterparts. In State and local government, unionized workers had average hourly earnings of \$14.42, while nonunion workers had average hourly earnings of \$9.81.

Among miscellaneous machine operators, not elsewhere classified, unionized workers in all groups enjoyed a wage advantage over their nonunion counterparts.

In private industry, unionized workers had higher average hourly earnings than nonunion workers in the following occupations: fabricating machine operators, not elsewhere classified; assemblers; and production inspectors, checkers, and examiners. Although unionized textile sewing machine operators in private industry had higher average hourly earnings than nonunion workers, the difference was not statistically significant.

Transportation and material moving occupations. Workers in these occupations are involved in the operation and performance of vehicles that transport people or material. These workers may also be involved in operating material moving equipment, such as cranes that load cargo onto ships. Unionized workers in this group had average hourly earnings of \$15.62, with a range of \$9.38 to \$24.33, while their nonunion counterparts had average hourly earnings of \$11.65, with a range of \$6.47 to \$17.48. Most (89 percent) nonunion occupations had average hourly earnings of less than \$15.00, with the

remainder in the \$15.00-\$19.99 range. In contrast, two thirds of all union occupations had average hourly earnings of \$15.00 or more. (See chart 4.)

Unionized truck drivers in private industry had average hourly earnings of \$16.70, compared with \$12.71 for nonunion truck drivers. In State and local government, the comparable figures were \$14.58 and \$10.07, respectively. Unionized bus drivers in private industry earned an average of \$11.93 per hour, compared with \$9.27 for their nonunion counterparts. In State and local government, the comparable figures were \$14.61 and \$10.26, respectively. For both bus drivers and truck drivers, the wage differential was greater in the public sector than in the private sector.

Unionized industrial truck and tractor equipment operators in private industry enjoyed a wage advantage over their nonunion counterparts. In State and local government, on the other hand, wage differences between union and nonunion workers in this occupational group were not statistically significant.

The union wage advantage in the category miscellaneous material moving equipment operators, not elsewhere classified, was significant for workers in both the private and public sectors. This wage advantage was \$4.87 in the private sector and \$4.24 in the public sector.

Among driver sales workers (found only in private industry), unionized workers had a wage advantage of \$4.10 over their nonunion counterparts.

Handlers, equipment cleaners, helpers, and laborers. Workers in these occupations perform unskilled, simple duties that primarily are manual, that may be learned in a short amount of time, and that involve little or no independent judgment. These occupations usually require little or no experience and may involve moderate to strenuous exertion.

Unionized handlers, equipment cleaners, helpers, and laborers had average hourly earnings of \$11.76, with a range of \$9.77 to \$21.40. Their nonunion counterparts had average hourly earnings of \$8.33, with a range of \$6.50 to \$15.78. The unskilled nature of the jobs in this major occupational group is reflected in the earnings distribution for both union and nonunion occupations: 95 percent of nonunion occupations and 83 percent of union occupations had average hourly earnings of less than \$15.00. (See chart 5.)

In private industry, unionized handlers, equipment cleaners, helpers, and laborers had average hourly earnings of \$11.56, compared with \$8.25 for their nonunion counterparts. In State and local government, the comparable figures were \$13.16 and \$9.73, respectively. Unionized groundskeepers and gardeners, except farm, in private industry had average hourly earnings of \$11.72, compared with \$8.09 for their nonunion counterparts. Among those in the public sector, the comparable figures were \$12.75 and \$9.09, respectively.

Unionized stock handlers and baggers and unionized laborers, except construction, not elsewhere classified, in both the private and public sectors enjoyed a wage advantage over their nonunion counterparts. In private industry, unionized freight, stock, and material handlers, not elsewhere classified, earned an average of \$13.22 an hour, compared with \$9.19 for their nonunion counterparts. In State and local government, average hourly earnings figures for this occupation were available only for nonunion workers. Among hand packers and packagers (found only in private industry), union workers had a wage advantage of \$2.13 over their nonunion counterparts.

Service Workers

Workers in this major occupational group provide a range of services to individuals and establishments. The group includes protective service occupations, food service occupations, health service occupations, cleaning and building service occupations, and personal service occupations.

Earnings distribution. Unionized service workers had average hourly earnings of \$13.44, with a range of \$5.61 to \$26.02. Nonunion service workers averaged \$7.81 per hour, with a range of \$3.95 to \$19.13.

Although union workers in service occupations had a wage advantage over their nonunion counterparts, many of the occupations in this major occupational group had modest average hourly earnings. One nonunion occupation (waiters and

waitresses) even had hourly earnings of less than \$5.00, not including tips.¹⁵ Nearly 70 percent of union occupations had earnings in the range of \$5.00 per hour to \$14.99 per hour, while the earnings of 85 percent of nonunion occupations fell into this range.¹⁶ (See chart 6.)

Unionization. Although 21 percent of all service workers were unionized, this proportion was lower in private industry than in State and local government (12 percent compared with 48 percent). Among private industry occupations, unionized workers ranged from 3 percent of supervisors, cleaning and building service workers to 27 percent of janitors and cleaners. Among public sector occupations, unionized workers ranged from 19 percent of kitchen workers, food preparation, to 67 percent of police and detectives, public service. (See table 3.)

In the protective, food, health, personal, and cleaning and building service occupational subgroups, unionized workers in all categories (all industries, private industry, and State and local government) enjoyed a wage advantage over their nonunion counterparts. (See table 4.)

Protective service occupations. Most of the individual protective service occupations examined--firefighting; police and detectives, public service; sheriffs, bailiffs, and other law enforcement officers; and correctional institution officers--were found in the public sector only.¹⁷ In all of these occupations, unionized workers enjoyed a wage advantage over nonunion workers. For guards and police, except public service, unionized private industry workers earned an average of \$11.10 per hour, compared with \$7.76 for their nonunion counterparts. Among public employees, the comparable figures were \$13.07 and 10.26, respectively.

Food service occupations. Among waiters and waitresses (found only in private industry), unionized workers averaged \$5.61 per hour, compared with \$3.95 per hour for nonunion workers. Among the other individual food service occupations examined (cooks; food counter, fountain, and related occupations; kitchen workers, food preparation; and food preparation occupations, not elsewhere classified), unionized workers in all groups enjoyed a wage advantage over their nonunion counterparts.

Health service occupations. Among health aides, except nursing, and nursing aides, orderlies, and attendants, reported average hourly earnings for unionized workers were higher than those reported for nonunion workers in all groups. For all three occupations, differentials were higher in State and local government than in private industry.

Cleaning and building service occupations. In private industry, unionized supervisors of cleaning and building service workers had average hourly earnings of \$12.48, compared with \$9.55 for nonunion workers. These differences, however, were not statistically significant. In State and local government, however, unionized supervisors of cleaning and building service workers earned an average of \$17.64 per hour, compared with \$13.06 earned by their nonunion counterparts. Only 3 percent of private industry supervisors were unionized, compared with 35 percent of supervisors in State and local government.

Among maids and housemen and janitors and cleaners, reported average hourly earnings for unionized workers were higher than those reported for nonunion workers in both private industry and State and local government. For both occupations, differentials were greater in State and local government than in private industry.

Personal service occupations. In private industry, only nonunion earnings data were available for the occupational category attendants, amusement and recreational facilities. Union and nonunion earnings differences reported for this occupation in all industries and State and local government were not statistically significant.

In private industry, unionized welfare service aides had average hourly earnings of \$8.35, compared with \$6.60 for their nonunion counterparts. These differences, however, were not statistically significant. In State and local government, unionized welfare service aides had average hourly earnings of \$11.74, compared with \$7.89 for their nonunion counterparts. Virtually all (98 percent) welfare aides in private industry were nonunion, compared with 80 percent of their public sector counterparts.

For early childhood teachers' assistants, the union and nonunion earnings differences found in private industry and State and local government were not statistically significant. In private industry, there was no statistically significant difference in the average hourly earnings of union and nonunion child care workers, not elsewhere classified. In State and local government, unionized child care workers, not elsewhere classified, had higher average hourly earnings than their nonunion counterparts (\$10.18 compared to \$8.14). In both private industry and State and local government, unionized service workers, not elsewhere classified, had higher average hourly earnings than their nonunion counterparts.

Although there was some variation among groups, an examination of union and nonunion earnings distributions among blue-collar and service occupations in all industries showed that nonunion workers were more apt to be in the lower earnings ranges. For example, the only occupation with average hourly earnings of less than \$5.00 was for nonunion workers in the service occupation of waiters and waitresses. Blue-collar workers in 52 percent of union occupations earned \$15.00 or more per hour, compared with 17 percent of nonunion occupations. Service workers in 30 percent of union occupations earned \$15.00 or more per hour, compared with 15 percent of nonunion occupations.

In most of the individual blue-collar and service occupations examined, union workers in all sectors had higher average hourly earnings than did nonunion workers.¹⁸ In the previous article on this topic, however, the author uncovered instances of unionized white-collar workers in executive, administrative, and managerial occupations and in retail sales occupations with lower average hourly earnings than their nonunion counterparts.¹⁹ A detailed examination of individual occupations is needed to shed light on union and nonunion wage differences among white-collar workers.

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Notes

¹ [Employment Cost Index](#) (ECI) data show that during the period from June 1991 to December 1999, the average annual percent change in wages for nonunion workers was 3.8 percent, compared with 3.3 percent for their union counterparts. During the period from December 1999 to December 2000, wages for nonunion workers increased 4 percent compared with 3.4 percent for union workers. For more information, see [Employment Cost Indexes, 1975-99](#), Bulletin 2532 (Bureau of Labor Statistics 2000) and [Employment Cost Index-December 2000](#), USDL 01-31, January 25, 2001. For more information on the Employer Costs for Employee Compensation program, see [Employer Costs for Employee Compensation-March 2001](#), USDL 01-194, June 29, 2001.

² Although the nature of the union and nonunion relationship is similar in both surveys, the actual dollar amounts found in the CPS and NCS are not strictly comparable. One reason is that the NCS data are for *mean*, or average hourly earnings, while CPS data are for *median* earnings. A second reason is that the NCS is an establishment survey and the CPS is a household survey. In addition, CPS earnings data are for full-time workers, while NCS data are for all workers, both full and part time. For more on CPS union and nonunion data, see [Union Members in 2002](#), USDL 03-88 (Bureau of Labor Statistics) February 25, 2003. For more information on NCS union and nonunion data, see [National Compensation Survey: Occupational Wages in the United States, 2001](#), Bulletin 2552 (Bureau of Labor Statistics, January 2001).

³ For more information, see Ann C. Foster, "Union-nonunion Wage Differences, 1997," *Compensation and Working Conditions*, Spring 2000, pp. 43-46.

⁴ The NCS definition is the same as that used in the ECI and Employer Costs for Employee Compensation. For more information, see [Employment Cost Indexes, 1975-99](#), Bulletin 2532 (Bureau of Labor Statistics, September 2000), Appendix A, "Technical Note," pp. 170-75.

⁵ The NCS is designed to support estimates of occupational earnings. Estimates of the number of workers provide a description of the size and composition of the labor force included in the survey. These estimates are not intended for comparison with other statistical series to measure employment trends or levels.

⁶ [Union Members in 1997](#), USDL 98-26 (U.S. Department of Labor), January 30, 1998.

⁷ For more information on the 1997 NCS sample, see [Occupational Wages in the United States, 1997](#), Bulletin 2519 (Bureau of Labor Statistics, 1999).

⁸ The four major occupational groups making up the blue-collar occupations are precision, production, craft, and repair occupations; machine operators, assemblers, and inspectors; transportation and material moving occupations; and handlers, equipment cleaners, helpers, and laborers. In the NCS, a major occupational group refers to a particular occupation group used in the survey. The major occupational groups are based on the Census Bureau's occupational classification system. BLS combines the 13 Census Bureau occupational groups into 11 major occupational groups, 9 of which are in scope for the NCS. For more information on the classification system, see [Occupational Classification System Manual](#), on the Internet at <http://www.bls.gov/ncs/ocs/ocsm/commain.htm>.

- 9 Only nonunion data were available because data for union workers did not meet BLS publication standards and therefore were not available to use in this study.
- 10 In this analysis, the number of occupations with union earnings data may not equal the number of occupations with nonunion earnings data. One reason is that some occupations, such as camera, watch, and musical instrument repairers, had no union members. Another reason is that for some occupations, such as roofers, earnings data for union members did not meet standards for publication and were not included in the data available for analysis.
- 11 The current Federal minimum wage for covered, nonexempt employees is \$5.15 per hour. The Federal minimum wage provisions are contained in the [Fair Labor Standards Act \(FLSA\)](#). Many states also have minimum wage laws. When an employee is subject to both the State and Federal minimum wage laws, the employee is entitled to the higher of the two. For more information on the minimum wage, see the minimum wage page of the U.S. Department of Labor's website, on the Internet at <http://www.dol.gov/dol/topic/wages/minimumwage.htm>.
- 12 For the analysis of earnings distributions, union occupations are those occupations for which earnings data for union workers were available. Similarly, nonunion occupations are those occupations for which earnings data for nonunion workers were available.
- 13 In the NCS certain occupations are designated "not elsewhere classified" or "n.e.c." Such categories capture the occupations not specifically classified or included in a separate Census occupation category. For more information, see [Occupational Classification System Manual](#), on the Internet at <http://www.bls.gov/ncs/ocs/ocsm/commain.htm>.
- 14 Because NCS data are estimates from a scientifically selected probability sample, they are subject to sampling errors because observations are not from an entire population. The sample used for this survey is one of a number of possible samples that could have been selected using the sample design. Estimates derived from the different samples would differ from each other. A measure of the variation among these differing estimates is the *standard error*, which indicates the precision with which an estimate from a particular sample approximates the average results of all possible samples. The *relative standard error* is the standard error divided by the estimate. It can be used to calculate a *confidence interval* around a sample estimate. In this article, an estimate is considered statistically significant if the confidence interval is at the 90-percent level. In theory, this means that if all possible samples were selected to estimate the population value, the interval from each sample would include the true population value approximately 90 percent of the time. For more information, see [Employment Cost Indexes, 1975-99](#), Bulletin 2532 (Bureau of Labor Statistics, September 2000), Appendix A, "Technical Note," pp. 170-75.
- 15 Nonunion waiters and waitresses had average hourly earnings of \$3.95. The Fair Labor Standards Act allows an employer to pay tipped employees (those who customarily and regularly receive more than \$30 a month in tips), less than the minimum wage of \$5.15 an hour. For more information, see [Handy Reference Guide to the Fair Labor Standards Act](#), WH Publication 1282, (U.S. Department of Labor, 1998).
- 16 In the National Compensation Survey, individual blue-collar occupations are classified into four major occupational groups. Because service workers are classified into one major occupational group only, no additional wage distribution analyses were done. For more information, see [National Compensation Survey: Occupational Wages in the United States, 1998](#), Bulletin 2529 (Bureau of Labor Statistics, September 2000), Appendix A, "Technical Note," pp. 170-75.
- 17 While some estimates were provided for private industry nonunion police and detectives, public service, these represented less than 0.5 percent of the all industries sampled.
- 18 Differences in union and nonunion earnings could reflect factors other than union representation. Among these factors are the specific mix of occupational categories, the ratio of full- to part-time workers, and the establishment size, industry, and geographic location of an employer.
- 19 Foster, "Union-nonunion Wage Differences, 1997."

Table 1. Percent distribution of blue-collar workers by bargaining status, 1997

Occupation	All industries		Private industry		State and local government	
	Union	Nonunion	Union	Nonunion	Union	Nonunion
All blue-collar occupations	34	66	32	68	50	50
Precision production, craft, and repair occupations	38	62	37	63	51	49
Footnotes: (1) n.e.c. = not elsewhere classified.						
NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.						

Occupation	All industries		Private industry		State and local government	
	Union	Nonunion	Union	Nonunion	Union	Nonunion
Industrial machinery repairers	39	61	38	62	62	38
Mechanics and repairers, n.e.c. (1)	37	63	35	65	47	53
Electricians	61	39	61	39	60	40
Supervisors, production	8	92	7	93	47	53
Machine operators, assemblers, and inspectors	31	69	31	69	65	35
Fabricating machine operators, n.e.c.(1)	44	56	44	56	--	--
Textile sewing machine operators	10	90	9	91	--	--
Miscellaneous machine operators, n.e.c.(1)	34	66	34	66	40	60
Assemblers	35	65	35	65	--	--
Production inspectors, checkers, and examiners	21	79	22	78	--	--
Transportation and material moving occupations	39	61	36	64	50	50
Truck drivers	33	67	32	68	56	44
Driver-sales workers	45	55	45	55	--	--
Bus drivers	51	49	47	53	52	48
Industrial truck and tractor equipment operators	44	56	44	56	51	49
Miscellaneous material moving equipment operators, n.e.c.(1)	54	46	57	43	43	57
Handlers, equipment cleaners, helpers, and laborers	29	71	28	72	46	54
Groundskeepers and gardeners, except farm	17	83	5	95	43	57
Stock handlers and baggers	30	70	30	70	56	46
Freight, stock, and material handlers, n.e.c.(1)	32	68	32	68	--	58
Hand packers and packagers	24	76	24	76	--	--
Laborers, except construction, n.e.c.(1)	26	74	25	75	42	58

Footnotes:
 (1) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria.
 Overall occupational groups may include data for categories not shown separately.

Table 2. Mean hourly earnings(1) by blue-collar occupational group and collective bargaining status, 1997

Occupation	All industries			Private industry			State and local government		
	Union	Non-union	Differential(2)	Union	Non-union	Differential(2)	Union	Non-union	Differential(2)
All blue-collar occupations	\$15.07	\$10.95	\$4.12	\$15.00	\$10.89	\$4.11	\$15.63	\$11.83	\$3.80
Precision production, craft, and repair occupations	18.01	14.53	3.48	18.10	14.59	3.51	17.49	13.90	3.59
Industrial machinery repairers	17.75	15.00	2.75	17.73	15.01	2.72	18.87	14.19	4.68
Mechanics and repairers, n.e.c. (3)	17.49	13.87	3.62	18.18	14.32	3.86	15.68	11.87	3.81
Electricians	20.55	14.85	5.70	21.05	15.11	5.94	18.07	13.51	4.56
Supervisors, production	17.17	18.52	-1.35	17.64	18.52	-0.88	15.07	18.19	-3.02
Machine operators, assemblers, and inspectors	13.83	9.75	4.08	13.82	9.75	4.07	14.42	9.81	4.61
Fabricating machine operators, n.e.c.(3)	15.14	10.64	4.50	15.14	10.64	4.50	--	--	--
Textile sewing machine operators	8.30	7.04	1.26	8.29	7.04	1.25	--	--	--
Miscellaneous machine operators, n.e.c.(3)	14.40	10.08	4.32	14.37	10.08	4.29	--	--	--
Assemblers	14.46	9.26	5.20	14.46	9.26	5.20	--	--	--
Production inspectors, checkers, and examiners	14.16	9.72	4.44	14.16	9.72	4.44	--	--	--
Transportation and material moving occupations	15.62	11.65	3.97	15.81	11.81	4.00	14.94	10.57	4.37
Truck drivers	16.47	12.60	3.87	16.70	12.71	3.99	14.58	10.07	4.51
Driver-sales workers	15.29	11.19	4.10	15.29	11.19	4.10	--	--	--
Bus drivers	13.68	9.80	3.88	11.93	9.27	2.66	14.61	10.26	4.35
Industrial truck and tractor equipment operators	13.25	10.48	2.77	13.27	10.47	2.80	11.61	11.11	0.50

Footnotes:

(1) Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

(2) Differentials are obtained by subtracting nonunion earnings from union earnings.

(3) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Occupation	All industries			Private industry			State and local government		
	Union	Non-union	Diff-erential(2)	Union	Non-union	Diff-erential(2)	Union	Non-union	Diff-erential(2)
Miscellaneous material moving equipment operators, n.e.c.(3)	15.98	11.19	4.79	16.09	11.22	4.87	15.32	11.08	4.24
Handlers, equipment cleaners, helpers, and laborers	11.76	8.33	3.43	11.56	8.25	3.31	13.16	9.73	3.43
Groundskeepers and gardeners, except farm	12.58	8.40	4.18	11.72	8.09	3.63	12.75	9.09	3.66
Stock handlers and baggers	9.85	7.57	2.28	9.82	7.56	2.26	12.08	9.30	2.78
Freight, stock, and material handlers, n.e.c.(3)	13.22	9.19	4.03	13.22	9.19	4.03	--	8.83	--
Hand packers and packagers	9.77	7.64	2.13	9.77	7.64	2.13	--	--	--
Laborers, except construction, n.e.c.(3)	11.33	7.96	3.37	11.07	7.92	3.15	12.65	8.44	4.21

Footnotes:

(1) Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

(2) Differentials are obtained by subtracting nonunion earnings from union earnings.

(3) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Table 3. Percent distribution of workers in service occupations by bargaining status, 1997

Occupation	All industries		Private industry		State and local government	
	Union	Nonunion	Union	Nonunion	Union	Nonunion
All service occupations	21	79	12	88	48	52
Protective service occupations	37	63	7	93	55	45
Firefighting occupations	58	42	--	--	59	41
Police and detectives, public service	66	34	--	100	67	33

Footnotes:

(1) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Occupation	All industries		Private industry		State and local government	
	Union	Nonunion	Union	Nonunion	Union	Nonunion
Sheriffs, bailiffs, and other law enforcement officers	44	56	--	--	44	56
Correctional institution officers	46	54	--	--	48	52
Guards and police, except public service	10	90	7	93	59	41
Food service occupations	10	90	7	93	35	65
Waiters and waitresses	4	96	4	96	--	--
Cooks	10	90	4	96	39	61
Food counter, fountain, and related occupations	9	91	7	93	39	61
Kitchen workers, food preparation	20	80	20	80	19	81
Food preparation occupations, n.e.c.(1)	12	88	5	95	42	58
Health service occupations	20	80	15	85	45	55
Health aides, except nursing	18	82	9	91	48	52
Nursing aides, orderlies, and attendants	21	79	17	83	45	56
Cleaning and building service occupations	29	71	22	78	47	53
Supervisors, cleaning and building service workers	11	89	3	96	35	65
Maids and housemen	15	85	15	85	27	73
Janitors and cleaners	34	66	27	73	49	51
Personal service occupations	17	83	10	90	38	62
Attendants, amusement and recreation facilities	5	95	--	98	20	80
Welfare service aides	11	89	7	93	32	68
Early childhood teachers' assistants	26	74	4	96	41	59
Child care workers, n.e.c.(1)	25	75	7	93	45	55
Service occupations, n.e.c.(1)	11	89	6	94	40	60

Footnotes:
 (1) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Table 4. Mean hourly earnings(1) by service occupational group and collective bargaining status, 1997

Occupation	All industries			Private industry			State and local government		
	Union	Non-union	Diff-erential(2)	Union	Non-union	Diff-erential(2)	Union	Non-union	Diff-erential(2)
All service occupations	\$13.44	\$7.81	\$5.63	\$9.81	\$7.19	\$2.62	\$15.71	\$10.72	\$4.99
Protective service occupations	18.38	10.62	7.76	11.12	8.07	3.05	18.85	13.46	5.39
Firefighting occupations	16.07	11.16	4.91	--	--	--	16.07	11.19	4.88
Police and detectives, public service	20.27	15.58	4.69	--	15.74	--	20.27	15.58	4.69
Sheriffs, bailiffs, and other law enforcement officers	18.39	13.02	5.37	--	--	--	18.39	13.03	5.36
Correctional institution officers	16.71	11.10	5.61	--	--	--	16.71	11.32	5.39
Guards and police, except public service	11.73	7.82	3.91	11.10	7.76	3.34	13.07	10.26	2.81
Food service occupations	8.79	6.29	2.50	8.28	6.17	2.11	9.90	8.11	1.79
Waiters and waitresses	5.61	3.95	1.66	5.61	3.95	1.66	--	--	--
Cooks	10.50	8.02	2.48	10.61	8.00	2.61	10.40	8.25	2.15
Food counter, fountain, and related occupations	8.00	5.71	2.29	7.71	5.68	2.03	8.96	6.55	2.41
Kitchen workers, food preparation	8.92	7.06	1.86	8.74	7.01	1.73	9.97	7.34	2.63
Food preparation occupations, n.e.c.(3)	8.99	6.25	2.74	8.49	6.14	2.35	9.44	7.34	2.10
Health service occupations	10.11	7.99	2.12	8.80	7.92	0.88	12.14	8.48	3.66
Health aides, except nursing	12.19	8.86	3.33	10.99	8.85	2.14	12.90	8.87	4.03
Nursing aides, orderlies, and attendants	9.62	7.73	1.89	8.51	7.66	0.85	11.81	8.29	3.52

Footnotes:

(1) Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

(2) Differentials are obtained by subtracting nonunion earnings from union earnings.

(3) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.

Occupation	All industries			Private industry			State and local government		
	Union	Non-union	Differential ⁽²⁾	Union	Non-union	Differential ⁽²⁾	Union	Non-union	Differential ⁽²⁾
Cleaning and building service occupations	10.76	7.75	3.01	9.70	7.46	2.24	12.07	8.84	3.23
Supervisors, cleaning and building service workers	16.29	10.11	6.18	12.48	9.55	2.93	17.64	13.06	4.58
Maids and housemen	9.61	6.58	3.03	9.55	6.57	2.98	10.43	6.78	3.65
Janitors and cleaners	10.65	7.63	3.02	9.66	7.33	2.33	11.72	8.44	3.28
Personal service occupations	12.47	8.09	4.38	15.02	8.05	6.97	10.25	8.31	1.94
Attendants, amusement and recreation facilities	7.31	6.15	1.16	--	6.05	--	7.32	7.09	0.23
Welfare service aides	10.16	6.78	3.38	8.35	6.60	1.75	11.74	7.89	3.85
Early childhood teachers' assistants	8.67	7.31	1.36	7.92	6.64	1.28	8.73	8.06	0.67
Child care workers, n.e.c.⁽³⁾	9.71	7.81	1.90	7.88	7.70	0.18	10.18	8.14	2.04
Service occupations, n.e.c.⁽³⁾	10.49	6.85	3.64	9.70	6.72	2.98	11.34	8.96	2.38

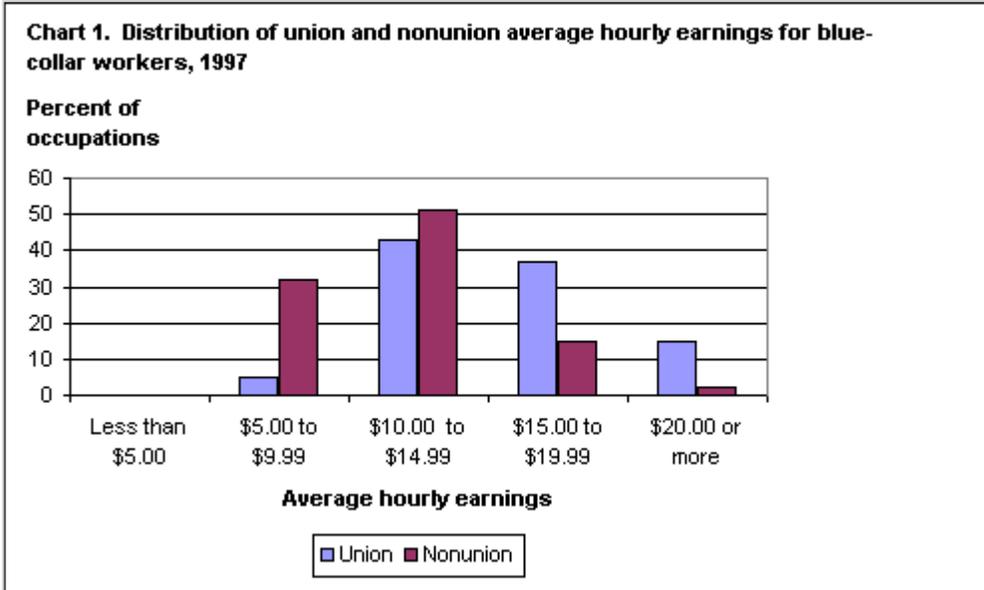
Footnotes:

(1) Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, and hazard pay. Excluded are premium pay for overtime, vacations, holidays, nonproduction bonuses, and tips. The mean is computed by totaling the pay of all workers and dividing by the number of workers, weighted by hours.

(2) Differentials are obtained by subtracting nonunion earnings from union earnings.

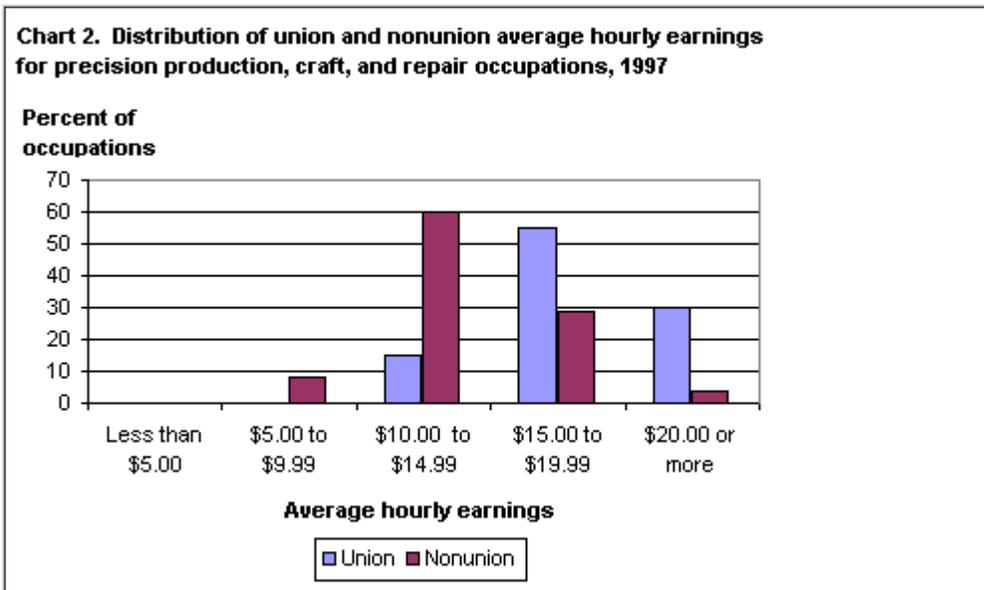
(3) n.e.c. = not elsewhere classified.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately.



Data for Chart 1. Distribution of union and nonunion average hourly earnings for blue-collar workers, 1997

Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Union	--	5	43	37	15
Nonunion	--	32	51	15	2



Data for Chart 2. Distribution of union and nonunion average hourly earnings for precision production, craft, and repair occupations, 1997

Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Union	--	--	15	55	30

Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Nonunion	--	8	60	29	4

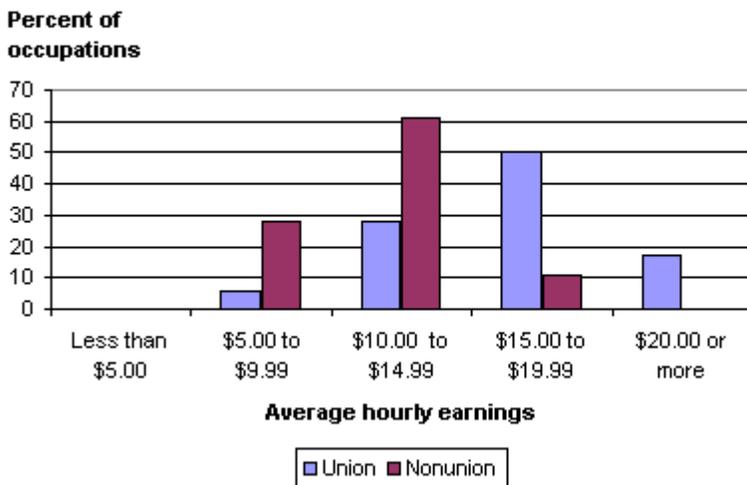
Chart 3. Distribution of union and nonunion average hourly earnings for machine operators, assemblers, and inspectors, 1997



Data for Chart 3. Distribution of union and nonunion average hourly earnings for machine operators, assemblers, and inspectors, 1997

Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Union	--	7	76	17	--
Nonunion	--	52	48	--	--

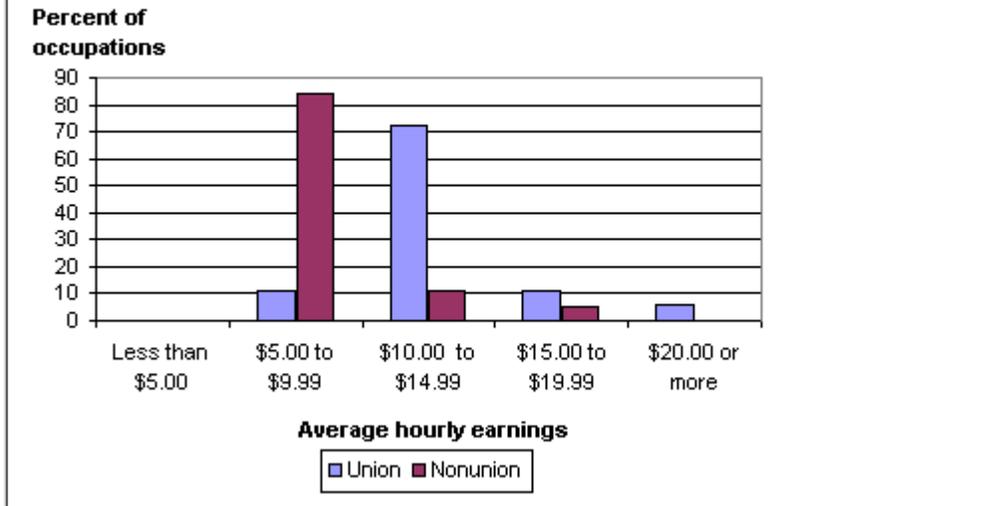
Chart 4. Distribution of union and nonunion average hourly earnings for transportation and material moving occupations, 1997



Data for Chart 4. Distribution of union and nonunion average hourly earnings for transportation and material moving occupations, 1997

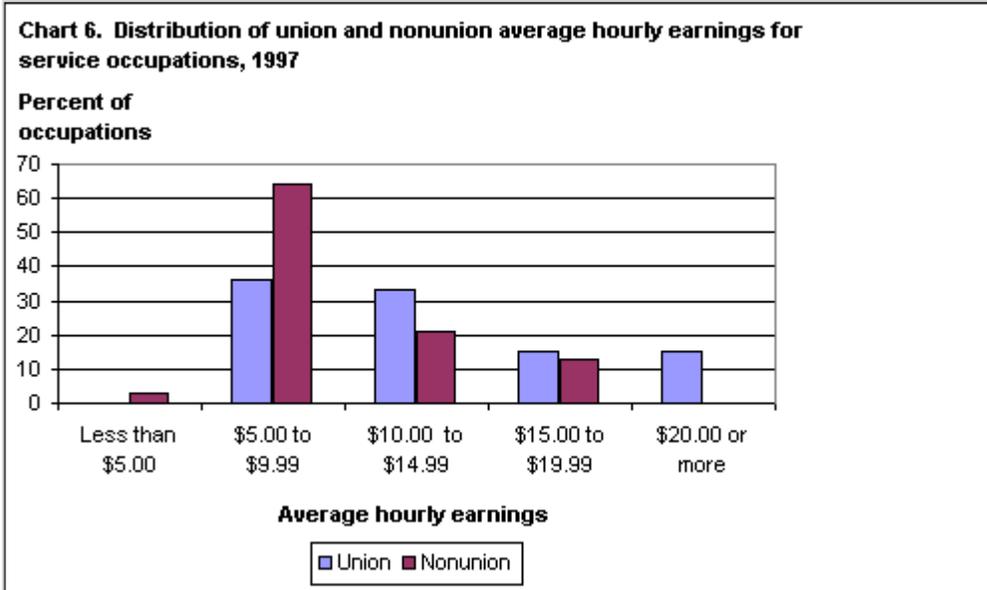
Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Union	--	6	28	50	17
Nonunion	--	28	61	11	--

Chart 5. Distribution of union and nonunion average hourly earnings for handlers, equipment cleaners, helpers, and laborers, 1997



Data for Chart 5. Distribution of union and nonunion average hourly earnings for handlers, equipment cleaners, helpers, and laborers, 1997

Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Union	--	11	72	11	6
Nonunion	--	84	11	5	--



Data for Chart 6. Distribution of union and nonunion average hourly earnings for service occupations, 1997

Percent of occupations	Less than \$5.00	\$5.00 to \$9.99	\$10.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Union	--	36	33	15	15
Nonunion	3	64	21	13	--