

Monthly Labor Review

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OCTOBER 1967 VOL. 90 NO.

10

The Economics of Moonlighting

The 1967 ILO Conference

Prices of Used Cars

Productivity in Manufacturing

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS



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Communications on editorial matters should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, Washington, D.C. 20212. Phone 961-2327 (Area code 202).

Use of funds for printing this publication approved by the Director of the Bureau of the Budget (October 31, 1962).

Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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This Issue in Brief . . .

A NEW ATTEMPT to measure the organization of engineers and engineering technicians is reported by Archie Kleingartner in *Unionization of Engineers and Technicians* (p. 29). "Of the unorganized white-collar and professional categories, engineers and technicians are most likely to be employed in a union setting." Nevertheless, with only 2.4 percent of the engineers and only 3.9 percent of the technicians belonging to unions, organized labor has only just begun to tap this field.

SINCE THE MID-1950's, organized labor's role in Japan has been undergoing a change from one "concerned primarily with political ends" to one devoted to the "use of economic pressure," according to Robert Evans, Jr. in *Shuntō: Japanese Labor's Spring Wage Offensive* (p. 23). Prior to the creation of the Joint Spring Wage Offensive Action Committee, with its main emphasis on increased wages, Japan's largest labor federations were concerned primarily with opposition to employee discharges, income-related disputes, and principal management decisions. Two of Japan's largest labor federations, *Sōhyō* and *Chūrītsūroren*, are the principal adherents of *Shuntō* or Spring Wage Offensive. "It is no surprise that the industries in which the number of disputes has grown are also those industries where many workers are represented by the *Sōhyō* and *Chūrītsūroren* unions."

THE DIVISION of Consumer Prices and Price Indexes investigates seasonal movements of prices of used cars in *Seasonal Demand and Used Car Prices* (p. 12). Price and demand is highest during summer vacation months and just prior to the introduction of the coming year's new models. On the other hand, cold weather brings a drop in both demand and prices. But the demand for used cars is affected by factors other than weather. Used car prices have been rising since the winter of 1965-66 and in June 1967 were about 3.6 percent

above the prices in the corresponding period of June 1966.

THE MIDDLE EAST crisis of early June tended to color the discussion of the Director General's Report to the 51st meeting of the International Labor Organization. H. M. Douty reports on the accomplishments of the conference and on the emergent political issues in *The 1967 International Labor Conference* (p. 6).

MANUFACTURING PRODUCTIVITY rose at an annual rate of nearly 3 percent from 1947 to 1966. Martin Zeigler, in *Productivity in Manufacturing* (p. 1), discusses many of the factors contributing to the cumulative growth in manufacturing in the United States and analyses the effect that short- and long-term fluctuations in the economy have on productivity.

ALMOST ONE-HALF of the private wage and salary labor force is covered by some type of retirement plan. This represents more than 100-percent increase of such coverage since 1950. In *The Administration of Large Pension Plans* (p. 48), Elsie K. Goodman discusses size and employee coverage of the plans, and offers some observations about the manner in which these plans "differ in important respects from the generality of retirement plans."

A STUDY OF MULTIPLE JOBHOLDERS by Harvey R. Hamel in *Moonlighting—An Economic Phenomenon* (p. 17), indicates that moonlighting has not "increased or even changed much in recent years." The primary reason why 3½ million persons hold two or more jobs appears to be economic. For some, moonlighting is a necessity; a second job permits others to live at a higher standard. Typically, moonlighters are comparatively young married men drawn from the ranks of the country's teachers, policemen, firemen, postal workers, and farmers, working an average of 13 hours a week in their second job.

IN AN EFFORT to analyse manpower responses to technological change, the OECD has compiled 29 case studies in a new report. One of the cases is presented in its entirety in *Adjusting Manpower Requirements to Constant Change* (p. 36).

The Labor Month in Review

Equal Employment Opportunity: Probing and Problems

BECAUSE OF THE DEEPEASED difficulties of eliminating unequal job opportunity, Title VII of the Civil Rights Act of 1964 was framed to make a graduated attack upon employment discrimination because of race, religion, sex, or national origin. The mesh becomes finer each year. In fiscal year 1966, the year for which the Equal Employment Opportunity Commission has recently issued its first annual report, it applied to firms or unions with at least 100 employees or members, unions that operate hiring halls, and employment agencies which deal with employers of 100 workers or more. Dropping to 75 persons in 1966-67, and to 50 in 1967-68, the law will apply to organizations with 25 persons or more beginning in July 1968. To end job discrimination, the EEOC depends on investigation, conciliation, promotion of voluntary compliance, and recommendations for Justice Department action.

During its baptismal year (July 1965 to June 1966), the Commission found that the effect of the new law had been grossly underestimated, probably because of too much reliance on the experience of State fair employment practices agencies. There were almost 9,000 complaints of discriminatory practices based on race, religion, color, sex, or national origin, about 4½ times the expected number, and more than double the number all State agencies of similar type had received in any year.

It was expected that the bulk of complaints would allege racial discrimination; about 3 in 5 did. Surprisingly, over a third of the complaints alleged sex discrimination, while comparatively few complaints claimed discrimination because of religion or national origin.

In the opinion of EEOC, the impetus for enactment of the law was primarily toward eliminating

racial discrimination, and in this light, the proportion of such complaints is somewhat low. This should be considered against the backdrop of a finding in a study by the Labor and Industrial Relations Institute of the University of Michigan-Wayne State University of 20 firms that have adopted EEO policies. The investigators found many Negro workers markedly reluctant to file any complaint, since they felt this might jeopardize their employment prospects.

Since the early exploration of the economic and social consequences of Negro migration to the North and West between the World Wars, their employment difficulties have been well-mapped. Despite the amount of this literature, however, there is a striking similarity of findings and, by implication, a similarity of effect on the design of programs to change the situation.

Pause for Assessment. So extensive is the information on obstacles to Negro employment that some researchers are pausing to assess what has been uncovered thus far. In retrospect, these bibliographic surveys, broad-gage studies, and catalogings may mark the end of one family of equal employment studies and the beginning of a new one. Already a creeping rigor of method is becoming evident, best shown in a narrowing of the field of investigation, with more emphasis on spade-work and less on exhortation.

Studies in the field of equal employment opportunity have explored both the landscape and the substrata. Researchers concerned with the terrain have turned to statistical aggregates and proportions. Those concerned with the substrata probe attitudes and equal employment experience.

The statistical approach is probably best exemplified by the aggregate tabulations of occupation, family income, employment, labor force participation, and other such indices by race, color, or national origin. Out of this research, periodically updated, has grown the familiar profile of the average or median Negro: compared with his white counterpart, he is over twice as likely to be unemployed, has about half the income, is about three times as likely to be in a family with income below \$3,000 a year, over four times as likely to be employed as a laborer or private household worker, and only one-third as likely to be in a managerial, professional, or technical occupation, has about three-quarters as much formal schooling (and that

sometimes of poorer quality), and will have lifetime median earnings of about half as much, regardless of schooling.

Such findings were cited by a Congressional committee on the road to enactment of Title VII of the Civil Rights Act: "The evidence before the Committee makes it abundantly clear that job opportunity discrimination permeates the national social fabric—North, South, East, and West."

Attitudinal Research. Once research leaves the relatively secure area of numbers and proportions, it may become what Louis Ferman, research director of the Labor and Industrial Relations Institute of the University of Michigan-Wayne State University, has characterized as "testimonial" in nature. The field of attitudinal or experiential research is much more slippery than that of numbers, because it often probes sensitive feelings. Rigorous approaches are thwarted by exogenous factors, such as when the race, education, speech or demeanor of the interviewer affect results; and the researcher may fall back upon exhortation.

This difficulty arose in the previously cited study of 20 firms which was prepared for the Department of Labor's Office of Manpower Policy, Evaluation, and Research. In a sample survey to test the results of using white or Negro interviewers to question Negro workers concerning equal employment opportunity progress, the Institute found that the workers tended to be more pessimistic and to give more negative responses to Negro than to white interviewers.

Despite the variety of approaches and subject matter, most of the studies arrive at conclusions which are implied by the discrepancies in income, occupation, and other indices: Negroes have progressed economically, particularly since World War II (which saw the pressure of manpower shortages catapult them into jobs they had never held before), but they are still disproportionately employed in low-skilled, low-paying, dead-end jobs—the result of both discrimination and the lack of skills, a heritage of past discrimination. In the words of the EEOC, in its first annual report, "In the North as well as the South, Negroes tend to

be the hewers of wood and drawers of water; they are de facto segregated in the lowest paying jobs."

Programmatic Parallels. In the wake of new legislation, there has been a sharp increase in Government programs both to assure equality of employment opportunity and to provide compensatory education and skill training, so that all individuals will be able to take advantage of these job opportunities. Like the MDTA, Neighborhood Youth Corps, or Job Corps, these programs may attempt to raise the skill level of the individual so that he becomes employable. Like the fair employment covenants of the 1940's or recent Executive Orders, they may seek to reduce job discrimination in activities financed wholly or in part with Federal funds. The implementation of Title VII of the 1964 CRA is the latest and perhaps the most comprehensive attempt to insure equal job opportunities for all. Unlike previous Federal efforts which were primarily directed at Federal contractors, or fair employment statutes which were confined to particular States, Title VII has nationwide scope and is limited in application only by the size of the business or union.

The Complaints. While the general economic position of Negroes is the basis for the general conclusion that racial discrimination exists, some specifics are illuminated by the EEOC report.

According to that report, complaints of discrimination involved three types of acts: Refusal to hire, refusal to promote, and different wage scales for essentially the same work. In the University of Michigan-Wayne State 20-firm survey, Negro workers alleged that much discrimination is subtle and evanescent. An example was their feeling that they received little help from white workers in informal, on-the-job training or job information that might aid promotion.

EEOC experience over the coming years will provide an opportunity not available in attitudinal and experiential research. Benchmarks for the definition of employment discrimination should begin to emerge from the shadowland of deduction, opinion, feelings, and exhortation which has so far clouded our understanding of what measurable job discrimination is and how it takes place.

Productivity in Manufacturing

Trends in Unit Labor Costs
Correspond Closely With
Business Cycle Changes

MARTIN ZIEGLER*

PRODUCTIVITY in the Nation's factories has increased by over 80 percent since the end of World War II, reflecting the cumulative influence of investment in human resources and capital equipment, advances in technology and managerial skills, and interindustry shifts within the manufacturing sector. Between 1947 and 1966, the volume of production (in constant dollars) in manufacturing more than doubled—it increased by over 120 percent—while the man-hours required to produce these goods increased by less than 25 percent. Expressed as average annual rates, output per man-hour increased by 2.9 percent, reflecting an annual gain of 3.6 percent in production and an 0.7-percent gain in man-hours.

The cumulative growth in manufacturing production has been accomplished not only by a more efficient utilization of manpower but also by the creation of more jobs. Total employment in the Nation's factories increased by over 21 percent in the past 19 years, a figure which is about the same as the increase in employment for the entire private sector of the economy. During this same period, the average rate of unemployment has fluctuated considerably, depending on the various phases of the business cycle. However, despite the year-to-year variation, the average rate of unemployment (in all industries) in the United States is virtually the same in 1966 (3.8 percent) as it was in 1947 (3.9 percent).

These are some of the findings from a new series of data on output per man-hour,¹ compensation per man-hour and unit labor costs for the manufacturing sector which have been developed by the Bureau of Labor Statistics (table 1). This series

covers the period 1947–1966 and replaces the indexes for the manufacturing sector published in September 1965.² The data for manufacturing are consistent with the measures for the private and nonfarm sectors released earlier³ and reflect recent revisions in the national income and product accounts as well as revisions of the man-hour estimates.

Long-Term Trends

The growth in manufacturing at 2.9 percent was moderately larger than the average rate for the nonfarm sector (2.6 percent) and somewhat lower than the annual rate for the total private sector of the economy (3.2 percent). (See table 2.)

Within the 19-year period, there were wide fluctuations in the annual rates of change of output per man-hour in the manufacturing sector (table 3). The largest productivity gain was experienced in 1950, following a business recession; output per man-hour rose by 7.2 percent. In contrast, the lowest point reached was in 1956 when productivity actually declined by 1 percent. In 1966, productivity in manufacturing registered a gain of 1.6 percent, ending a cycle (which began in

*Of the Office of Productivity, Technology and Growth, Bureau of Labor Statistics.

¹This output per man-hour series is based on the constant dollar gross product originating in the manufacturing sector. Gross product is the market value of final production exclusive of intermediate materials purchased from other industries. This output measure is not the same as the Federal Reserve Board Production Index because of conceptual differences and dissimilarities in statistical methodology.

²See *Monthly Labor Review*, September 1965, pp. 1056–1060.

³See BLS release of May 1967, "Indexes of Output Per Man-Hour and Unit Labor Costs in the Private Sector and Nonfarm Sector, 1947–66."

TABLE 1. INDEXES OF OUTPUT PER MAN-HOUR, HOURLY COMPENSATION, UNIT LABOR COSTS AND PRICES IN THE MANUFACTURING SECTOR, 1947-66

[1957-59=100]

Year	Output per man-hour			Compensation per man-hour ¹			Real compensation per man-hour			Prices ²			Unit labor costs ³		
	Total	Durable	Non-durable	Total	Durable	Non-durable	Total	Durable	Non-durable	Total	Durable	Non-durable	Total	Durable	Non-durable
1947	72.3	75.1	69.1	52.5	50.7	55.7	67.5	65.2	71.6	73.0	64.5	84.7	72.6	67.4	80.7
1948	76.4	79.8	72.5	57.6	55.9	60.8	68.7	66.7	72.6	77.9	69.6	88.9	75.4	70.0	88.9
1949	79.3	83.0	75.2	60.3	58.7	63.4	72.7	70.7	76.4	79.3	73.8	86.5	76.0	70.7	84.3
1950	85.0	89.5	79.6	63.2	61.6	66.3	75.4	73.5	79.1	79.5	75.5	85.2	74.4	68.8	83.2
1951	86.9	90.0	82.8	69.7	68.4	72.0	77.0	75.6	79.6	85.1	80.5	91.9	80.2	76.0	87.0
1952	87.3	90.7	82.8	74.2	73.4	75.4	80.2	79.4	81.5	86.8	82.6	93.4	84.9	80.9	91.0
1953	90.2	93.5	85.2	78.3	77.4	79.3	84.0	83.0	85.1	87.3	83.6	93.4	86.8	82.8	93.0
1954	91.8	95.2	87.1	81.8	81.0	83.2	87.4	86.5	88.9	89.1	85.6	94.4	89.1	85.1	95.6
1955	97.2	101.1	91.9	85.0	84.6	85.5	91.1	90.7	91.6	90.7	87.7	95.2	87.4	83.7	93.0
1956	96.2	97.2	94.6	90.5	90.0	91.0	95.6	95.0	96.1	94.8	93.0	97.6	94.1	92.6	96.2
1957	98.2	98.8	97.0	95.8	95.4	96.3	97.8	97.3	98.3	97.8	97.9	98.2	97.6	96.5	99.3
1958	98.1	97.5	98.9	100.0	100.4	99.8	99.3	99.7	99.1	100.2	100.4	100.2	101.9	103.0	100.0
1959	103.7	103.6	103.8	104.2	104.6	103.7	102.7	103.1	102.2	101.9	102.0	101.7	100.6	101.0	99.9
1960	105.5	105.1	105.9	108.5	108.7	108.2	105.2	105.4	104.9	102.7	102.3	103.5	102.9	103.6	102.1
1961	107.9	107.5	108.6	111.9	112.0	112.1	107.4	107.5	107.6	103.0	102.3	104.0	103.7	104.1	103.2
1962	114.3	115.0	113.3	116.5	116.9	115.9	110.5	110.9	110.0	102.9	102.5	103.6	102.0	101.6	102.3
1963	118.9	120.2	117.1	120.3	120.7	118.4	112.7	113.1	111.0	103.1	102.3	104.4	101.2	100.5	101.2
1964	124.6	125.4	123.5	126.0	126.2	124.9	116.6	116.7	115.5	103.9	103.4	104.6	101.1	100.7	101.2
1965	128.7	130.5	126.0	129.1	128.9	128.3	117.5	117.3	116.7	104.5	103.3	106.5	100.3	98.8	101.9
1966	130.8	(4)	(4)	135.5	(4)	(4)	119.8	(4)	(4)	(4)	(4)	(4)	103.6	(4)	(4)

¹ Wages and salaries of employees plus employers' contributions for social insurance and private benefits plans. Also includes an estimate of wages, salaries, and supplemental payments for the self-employed.

² Total payments in current dollars per unit of output (implicit deflator).

³ Compensation of all persons per unit of output.

⁴ Data not available.

1962) of 4 successive years of higher-than-average productivity growth rates.

Although the increase in productivity during this period appears to be substantial, the difference between the long-term rates of productivity growth in manufacturing and the nonfarm sector is surprisingly small. Perhaps even more surprising is the fact that this difference has been created only recently. Prior to 1961, the post-war average annual rate of productivity growth in manufacturing (2.7 percent) was about the same as the growth rate for the nonfarm sector as a whole (2.6 percent). However, between 1960 and 1966, there was an exceptionally large increase in manufacturing productivity (3.9 percent); by the end of this 6-year period, the long-term rate of growth was raised from 2.7 percent to 2.9 percent.

The influence of the most recent 6-year period on the trend of manufacturing productivity growth suggests that the manufacturing sector may be more sensitive to short-term fluctuations in the economy than either the total private economy or the nonfarm sector. This sensitivity underscores the fact that the trend rate merely reflects a diversity of movements caused by both secular and cyclical factors.

These diverse movements can be seen more clearly from the data in table 3, which depicts the average rates of change for specific subperiods between 1947 and 1966. An examination of these

data indicates that manufacturing's productivity was severely retarded between 1953 and 1960, when the annual rate of growth was 2.1 percent. This was considerably less than the growth in productivity for either the preceding 6-year period (3.7 percent) or the following 6-year period (3.9 percent).

There is also a striking difference between the growth in manufacturing output in 1953-60 and the output growth which occurred in each of the other two subperiods. Between 1953 and 1960, manufacturing output increased at an average annual rate of 1.4 percent. However, output growth for the manufacturing sector for each of the other two subperiods was more than 4 times larger—6.2 percent in 1947-53 and 6.7 percent in 1960-66.

The above description of developments in three subperiods between 1947 and 1966 also suggests that productivity movements tend to coincide with changes in output—at least in the short run. When manufacturing output increases substantially—as in 1947-53 and 1960-66—productivity also grows vigorously. Conversely, when output growth is retarded, productivity growth is dampened.

Effects of Business Cycles

These short-term fluctuations in output to which productivity is so highly sensitive also tend to coincide with changes in the business cycle. Judging

TABLE 2. AVERAGE ANNUAL RATES OF CHANGE¹ FOR OUTPUT PER MAN-HOUR AND RELATED DATA IN THE TOTAL PRIVATE ECONOMY, NONFARM, AND MANUFACTURING SECTORS, 1947-66 AND SELECTED PERIODS

[Percent]					
Classification	1947-66	1947-60	1947-53	1953-60	1960-66
OUTPUT PER MAN-HOUR					
Manufacturing.....	2.9	2.7	3.7	2.1	3.9
Private.....					
Nonfarm.....	2.6	2.6	3.3	2.2	3.2
Total Private.....	3.2	3.2	4.2	2.6	3.6
COMPENSATION PER MAN-HOUR					
Manufacturing.....	5.0	5.7	6.8	4.9	3.8
Private.....					
Nonfarm.....	4.6	5.1	6.1	4.5	4.0
Total Private.....	4.9	5.3	6.5	4.7	4.5
REAL COMPENSATION PER MAN-HOUR					
Manufacturing.....	3.2	3.7	3.7	3.2	2.3
Private.....					
Nonfarm.....	2.8	3.1	3.0	2.8	2.5
Total Private.....	3.1	3.3	3.4	3.0	2.9
UNIT LABOR COSTS					
Manufacturing.....	2.0	2.9	3.0	2.8	-0.2
Private.....					
Nonfarm.....	1.9	2.5	2.7	2.3	0.8
Total Private.....	1.7	2.1	2.2	2.1	0.9
OUTPUT					
Manufacturing.....	3.6	3.4	6.2	1.4	6.7
Private.....					
Nonfarm.....	3.8	3.7	5.1	2.7	5.3
Total Private.....	3.7	3.5	4.9	2.6	5.2

¹ Based on the least squares trend of the logarithms of the index numbers.

from past experience, therefore, one can assume that the greater-than-average growth in productivity during the period 1960-66 is merely a cyclical phenomenon and does not indicate a significant shift in the underlying trend.

Fortunately, it is not necessary to rely on past experience alone to determine the significance of the change in manufacturing productivity since 1960. It is possible, through regression analysis, to isolate the cyclical movements from the underlying trend by correlating the annual changes in productivity with changes in capacity utilization.⁴ In this regression analysis, the capacity utilization ratio can serve as a variable representing cyclical change.

Separate regression equations were obtained for each of three periods, 1947-66, 1947-60, and 1960-66.⁵ After the cycle phases were isolated, the trend rate (constant term) for each period turned out to be 3.0 in 1947-66, 2.8 in 1947-60, and 2.9 in 1960-66.

Thus, it can be seen that when the cycle is separated from secular movements the trend rate for

each period is approximately the same. By removing the cyclical effects, the trend rate for 1960-66 becomes 2.9 percent instead of 3.9 percent. This confirms the fact that the greater-than-trend growth in productivity during this period was merely cyclical in nature.

Movements in Unit Labor Costs

Unit labor costs rose at an average annual rate of 2.0 percent in manufacturing between 1947 and 1966. The increase in the unit labor cost measure was somewhat larger than the rise in labor costs for the total private economy (1.7 percent) but about the same as the rate of increase for the nonfarm sector (1.9 percent).

The indexes of unit labor costs have been developed by the Bureau of Labor Statistics by relating compensation per man-hour to output per man-hour. Changes in these indexes reflect divergent movements of productivity and hourly compensation and the interaction between these two variables. Thus, the 2.0-percent rise in unit labor costs in manufacturing reflected a 5-percent average annual increase in hourly compensation and a 2.9-percent annual growth in productivity.

In 12 of the 19 years between 1947-66, the increase in hourly compensation was larger than the growth in productivity. During these 12 years, unit labor costs in manufacturing rose. The only years in which unit labor costs declined—prior to 1963—were initial periods following a business recession (1950, 1955, 1959, and 1962). This pattern was broken in 1963, 1964, and 1965 when unit labor costs continued to decline, reflecting larger-than-trend increases in productivity and smaller-than-trend increases in hourly compensation.

⁴ The model used was:

$$Y = a_1 + a_2C$$

where: Y = year-to-year percentage change in productivity
 C = year-to-year percentage change in capacity utilization ratio.

⁵ The equations obtained were as follows, with standard errors in parentheses:

$$1947-66 \quad Y = 2.97 + .22C \\ \quad \quad \quad (.37) \quad (.054) \\ \quad \quad \quad R^2 = .49$$

$$1947-60 \quad Y = 2.77 + .03C \\ \quad \quad \quad (.67) \quad (.08) \\ \quad \quad \quad R^2 = .15$$

$$1960-66 \quad Y = 2.87 + .46C \\ \quad \quad \quad (.73) \quad (.28) \\ \quad \quad \quad R^2 = .34$$

TABLE 3. YEAR-TO-YEAR PERCENT CHANGE IN OUTPUT PER MAN-HOUR AND RELATED DATA, AND ACTUAL CAPACITY UTILIZATION RATE FOR THE MANUFACTURING SECTOR, 1947-66

Year	Percent change from previous year, total manufacturing (all persons)						Actual capacity utilization rate—manufacturing (Percent)
	Output per man-hour	Compensation per man-hour	Real compensation per man-hour	Prices	Unit labor costs	Gross product in constant dollars	
1947-48	5.7	9.7	1.8	6.7	3.9	4.9	87
1948-49	3.8	4.7	5.8	1.8	.8	-5.5	79
1949-50	7.2	4.8	3.7	.3	-2.1	16.0	89
1950-51	2.2	10.3	2.1	7.0	7.8	10.2	93
1951-52	.5	6.5	4.2	2.0	5.9	2.2	90
1952-53	3.3	5.5	4.7	.6	2.2	8.2	94
1953-54	1.8	4.5	4.0	2.1	2.6	-7.0	83
1954-55	5.9	3.9	4.2	1.8	-1.9	11.7	90
1955-56	-1.0	6.5	4.9	4.5	7.7	.4	88
1956-57	2.1	5.9	2.3	3.2	3.7	.4	84
1957-58	-1	4.4	1.5	2.5	4.4	-8.2	74
1958-59	5.7	4.2	3.4	1.7	-1.3	12.3	82
1959-60	1.7	4.1	2.4	.8	2.3	1.4	81
1960-61	2.3	3.1	2.1	.3	.8	-4	79
1961-62	5.9	4.1	2.9	-1	-1.6	10.2	82
1962-63	4.0	3.3	2.0	.2	-8	5.1	84
1963-64	4.8	4.7	3.5	.8	-1	6.8	86
1964-65	3.3	2.5	.8	.6	-8	8.7	89
1965-66	1.6	5.0	2.0		3.3	7.6	91

In comparing the movements of unit labor costs between 1947 and 1966, with compensation per man-hour, and productivity, it is interesting to note the sharp fluctuations in the productivity and unit labor costs measures compared with the rather mild swings in the hourly compensation indexes.

A good example of this characteristic can be seen from the following:

Year	Change in percent points		
	Output per man-hour	Compensation per man-hour	Unit labor costs
1949-50	3.4	0.1	2.9
1954-55	4.1	.6	4.5
1958-59	5.8	.2	5.7
1961-62	3.6	1.0	2.4

These periods were selected because they include turning points in the business cycle. It can be seen that the magnitude of change in unit labor costs approximated the change in productivity, while hourly compensation remained rather stable.⁶ This underscores the influence of cyclical movements of productivity on unit labor costs.⁷

⁶ The coefficient of variation (relative dispersion) of the annual percent changes in unit labor costs was 1.61. For the productivity measure, the coefficient of variation of the annual change was .70 compared with .38 for compensation per man-hour.

⁷ See Leon Greenberg and Jerome A. Mark, "Sector Changes in Unit Labor Costs," in *Conference on Research in Income and Wealth* (New York, National Bureau of Economic Research, Inc., 1966) and Charles L. Schultze and Joseph L. Tyron, *Prices and Costs in Manufacturing Industries in Connection With the Study of Employment, Growth, and Price Levels* (U.S. Congress, Joint Economic Committee, 89th Cong., 1st sess., 1960, Study Paper 17).

A Second Look at Costs

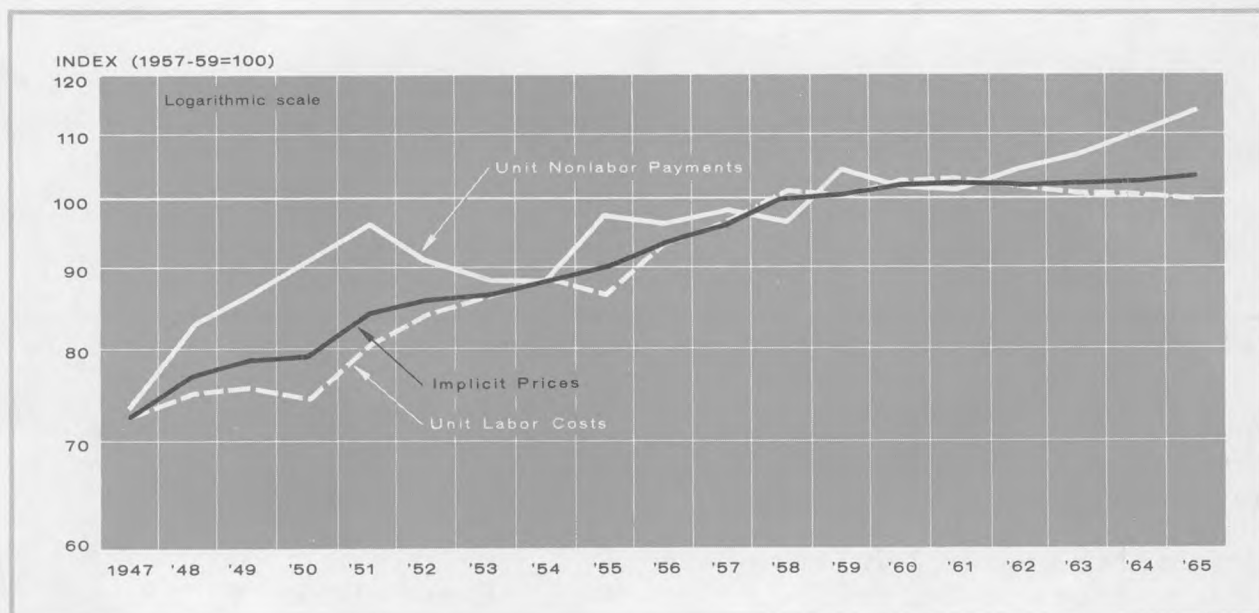
Another way of looking at unit labor costs is to compare their movements with unit nonlabor payments. (See chart.) Nonlabor payments include profits, noncorporate income, depreciation, indirect business taxes, and other miscellaneous items. The sum of unit labor costs and unit nonlabor payments equals "price."

The average annual increase in unit labor costs at 2.1 percent in the period 1947-65 was greater than the increase in unit nonlabor payments for the same period—1.7 percent. Although unit labor costs grew at a faster rate than unit nonlabor payments—over the 18-year period—the differential movements of these two measures seemed to fluctuate in distinct phases.

In each of the 3 years between 1947 and 1950, unit nonlabor payments grew faster than unit labor costs. During this phase, labor's share of total cost (price) dropped from 68 percent to 64 percent. Between 1950 and 1961, the pattern was reversed. In all but 2 years, 1955 and 1959—initial periods of business recovery following a recession—unit labor costs grew faster than unit nonlabor payments. During this phase, labor's share of total cost increased from 64 percent in 1950 to 69 percent in 1961.

The third phase of the movement, 1961-65, again reversed the pattern. In each of the inter-

Indexes of Prices, Unit Labor Costs, and Unit Nonlabor Payments in the Manufacturing Sector, 1947-1965



vening 4 years, unit nonlabor payments grew faster than unit labor costs. During this period, the ratio of labor compensation to price declined from 69 percent to 66 percent.

Real Labor Income

Thus far, this discussion has centered on the relationship between compensation per man-hour and output per man-hour, in the context of costs. Compensation can also be viewed as income, since labor is a consumer as well as a producer of goods and services. By comparing the change in real hourly compensation in manufacturing with the growth in productivity in the private economy, it is possible to determine if labor—as a consumer—has increased its purchasing power commensurate with the increase in labor productivity. In this instance, real hourly compensation reflects the adjustment of compensation per man-hour for changes in the consumer price index.

Real compensation per man-hour in manufacturing rose at an average annual rate of 3.2 percent between 1947 and 1966. This represents the same

rate of growth as the growth in productivity for the total private economy.

The close relationship between real hourly compensation in manufacturing and productivity growth in the private economy has only come about in recent years. During the period 1947-60, for example, real hourly compensation—at 3.7 percent—grew considerably faster than productivity in the private economy. On the other hand, during the past 6 years, the growth in real hourly compensation slackened considerably, increasing at an annual rate of 2.3 percent. During this period, productivity in the private economy increased faster than average while compensation per man-hour grew more slowly than its long-term rate of 5.0 percent.

Although in recent years, the real income of factory workers has not kept pace with gains in productivity for the economy, this appears to be a short-term phenomenon. Over the past two decades, gains in real hourly compensation in manufacturing have actually been identical to the growth in productivity in the private sector—3.2 percent.

The 1967 International Labor Conference

Social Security, Grievance
Procedures and Other Standards
Adopted at the 51st Session

H. M. DOUTY*

As the delegations of 109 Nations streamed into Geneva for the 51st Session of the International Labor Conference, June 7-29, war erupted in the Middle East. Although the International Labor Organization is a technical body concerned with the improvement of working conditions and living standards throughout the world, the Conference could not entirely escape the underlying political aspects of the Middle East crisis. These and other political issues emerged largely in the debate on the Director-General's Report.

The political overtones of the Conference did not impede its basic technical work. Technical committees considered at great length, and the Conference took final action on, international instruments relating to old-age, invalidity and survivors' pensions, grievance procedures and labor-management communications within establishments, and the maximum permissible weight to be carried by one worker. There was a first discussion¹ on the improvement of conditions of life and work of tenants, sharecroppers, and similar categories of agricultural workers. The role of the ILO in technical cooperation programs and in the industrialization of developing countries was considered. Attention was directed to the application by member States of ILO conventions and recommendations, with particular reference to hours of work. The Conference also acted upon a number of resolutions.

The tripartite U.S. delegation took an active and constructive part in all aspects of Conference work.²

Getahun Tesemma, Minister of Community Development and Social Affairs, Ethiopia, was unanimously elected president of the Conference.

The Conference also elected three vice-presidents: L. E. Troclet, Government delegate of Belgium; A. P. Østberg, Employer delegate of Norway; and Abid Ali, Worker delegate of India.

Director-General's Report

General discussion in the Conference centers on the report of the Director-General, which typically deals with a substantive issue as well as with the activities of the ILO during the preceding calendar year.³ Such discussion, in view of the far-flung interests and responsibilities of the ILO, will

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¹Final action on an international instrument (Convention or Recommendation) typically is taken only after the subject is discussed at two conferences. Occasionally, if the matter has been considered by a preparatory technical conference, action is taken on the basis of one discussion.

²Members of the delegation were: *Government*: Delegates—George L-P Weaver (Chairman), Assistant Secretary of Labor for International Affairs, and George P. Delaney, Special Assistant to the Secretary of State and Coordinator of International Labor Affairs; Adviser and Substitute Delegate—Robert B. Bangs, Special Assistant to the Secretary of Commerce; Congressional Advisers—Senators Wayne L. Morse and Jacob K. Javits, and Representatives Frank Thompson, Jr., William H. Ayres, James G. O'Hara, and John M. Ashbrook; Advisers—Harry M. Douty, Leonard O. Evans, John T. Fishburn, John E. Lawyer, Irvin S. Lippe, Margaret Pallansch, Edward B. Persons, James H. Quackenbush, William M. Steen, Floyd A. Van Atta, Gene Wunderlich, and William Yoffee. *Employers*: Delegate—Edwin P. Neilan, President and Chairman of the Board, Bank of Delaware; Advisers—John R. Gilbert, Howard Jensen, Lee E. Knack, Robert S. Lane, Charles H. Smith, and E. S. Willis. *Workers*: Delegate—Rudolph Faupl, International Representative, International Association of Machinists and Aerospace Workers; Advisers—I. W. Abel, William E. Fredenberger, Matthew Guinan, Edward J. Hickey, Jr., David P. McSweeney, W. Vernie Reed, Ralph Reiser, and Bert Seidman.

³Report of the Director-General to the 51st Session of the International Labor Conference, Geneva, 1967. Part I: *Non-Manual Workers: Problems and Prospects*; Part II: *Activities of the I.L.O., 1966*, with Supplement entitled *Fourth Report of the Working Party of the Governing Body of the International Labor Office on the Program and Structure of the I.L.O.* (Geneva, International Labor Office, 1967).

inevitably be broad in scope. Speakers expect and are given wide latitude in presenting their views. At the same time, there has been increasing concern that the injection into the debate of political issues on which the ILO is not in a position to take effective action may "degenerate into mutual recrimination that will destroy rather than create international understanding."⁴

At the beginning of the discussion of the Director-General's report, in which more than 200 speakers participated, the president of the Conference, on behalf of its officers, requested the delegates "to abide by parliamentary language and by the generally accepted procedure, to be relevant to the subject under discussion, and to avoid references to extraneous matters. It is the duty of the presiding officer to enforce these standards," he added, "and none of us will hesitate to do so."

Early in the debate, the president ordered expunged from the record certain remarks considered to be extraneous in speeches by the Venezuelan and Cuban Workers' delegates. Initially, political attacks on the United States were mild. An early address by the U.S.S.R. Minister attending the Conference was largely within the framework of the Director-General's report; little more than passing reference was made to "continuing aggression" in Vietnam. There was some reason to believe that the shock of the rapid Israeli victory in the Middle East produced a brief period of uncertainty in the political line of the Soviet Union and its allies.

This hiatus lasted less than a week. On June 14, the Soviet Workers' delegate accused "American imperialists" of "pursuing a criminal policy of genocide against the people of South Vietnam;" he attacked Israel for "launching aggression against the neighboring Arab states," and assailed "the designs of the imperialists in the Middle East, where the oil monopolies are struggling to force back colonial oppression on Arab lands, employing Israel as their spearhead." George L-P Weaver, Chairman of the U.S. delegation, promptly raised a point of order and demanded that the remarks of the speaker inconsistent with the ruling of the Chair in the Venezuelan-Cuban exchange be expunged from the record. This point of order was sustained by the Officers of the Conference. The other U.S. Government delegate,

George P. Delaney, and the U.S. Workers' and Employers' delegates, also intervened on points of order to protest political remarks.

Government delegates from a number of other countries, as well as spokesmen for the Employers' and Workers' groups, intervened in the discussion to support the basic position that debate within the ILO should be confined to the broad spectrum of issues with which the ILO is competent to deal. Contrary to the assertion of communist delegates, this position has nothing to do with "free speech." As Mr. Weaver pointed out, the Conference has "experienced the irony of being lectured on freedom of speech by the U.S.S.R., a country that denied a winner of the Nobel Prize in literature the right to have his works published in his own country. Under the guise of freedom of speech, they ask for unrestrained liberty to distort our procedures and subvert the purpose of this debate." The effort at the 51st session to confine the general debate to areas of activity germane to the ILO may well have a salutary effect on future Conferences.

On Human Resources

It should not be supposed that the general debate was devoted wholly, or even largely, to extraneous political issues. Indeed, the remarks of most of the delegates were squarely within the terms of reference of the Director-General's report. As previously noted, part I of that report dealt with *Non-Manual Workers: Problems and Prospects*. This study, which was organized within the framework of human resources policy, was prompted in part by the sharp rise in the absolute and relative importance of white-collar workers in the labor forces of advanced countries. Special problems exist with respect to working conditions, rates of pay, employee benefits, union organization, education and training, and adjustment to technological and other changes. The report was also directed to the quite different situation relating to nonmanual workers in underdeveloped countries. In such countries, the critical need is to ensure a growing but occupationally balanced supply of managerial, professional, technical, and other types of white-collar employees required for progress in both agriculture and industry, and in such fields as education and health.

In commenting upon the report, Mr. Weaver, for the U.S. Government, emphasized the impor-

⁴ Supplement to part II of the Report of the Director-General p. 19.

tance of the continued use and refinement of forecasting of manpower requirements; reliance to the greatest possible extent upon monetary and other incentives to secure the occupational composition of the labor force required for economic growth; the need to encourage employee mobility among occupations, industries, and areas; and the national dividends to be derived by investment, through education and training, in human resources. Edwin P. Neilan, for the U.S. employers, stressed the leadership role of employers in industrial development, the need for strict observance of agreements and contracts, the intimate connection between economic and social progress, and the role of incentives to obtain the most effective use of worker skills. Speaking for the U.S. workers, Rudolph Faupl pointed to the rise in unionization among white-collar workers in the United States, and the fact that their underlying interest in organization does not differ materially from that of blue-collar workers.

Technical Committees

The Conference had five substantive items on its agenda. In three cases, the final adoption of international instruments was under consideration. One item was subject to a first discussion, and another involved the formulation of conclusions to guide the ILO in parts of its work.

Each of these items was considered at length by tripartite committees, which presented reports and proposed actions to plenary sittings of the Conference. Where the proposed action involved the adoption of an international instrument, the form could be that of either a Convention or a Recommendation. A Convention, when ratified by a member State, imposes a binding treaty obligation and may require the enactment of implementing legislation. A Recommendation is intended to provide a guide to governments, and to employer and worker organizations, in the development of labor standards.

Social Security. The Conference had before it for a second discussion a proposal to revise six Conventions (Nos. 35-40) adopted prior to World War II on old-age, invalidity and survivors' pensions. This matter was considered by a Committee on Social Security in light not only of the first discussion (50th session of the Conference), but

of the views developed at two prior meetings of a Committee of Experts on Social Security. The Committee on Social Security, which consisted of 113 members, held 20 sittings, of which 3 were devoted to consideration of a supplementary Recommendation. The importance of this highly technical subject to the ILO delegates provoked extensive Committee discussion and debate on numerous amendments proposed to the draft texts.

The Committee submitted two reports to the Conference. The first dealt with a Convention, which it was hoped could be widely ratified by member States. The text of the Convention establishes standards under governmental social security systems for the three types of benefits considered. In view of the wide variation among countries in their capacity to support social security benefits, the Convention provides that ratifying States may accept obligations separately for invalidity, old-age, and survivors' pensions, with a temporary exception, if necessary, in their application to certain agricultural workers. Provision was also made for reduced requirements on the extent of worker protection for countries whose economies are insufficiently developed. Other elements of flexibility are built into the instrument, which sets forth international standards for worker coverage, qualification for benefits, size of benefits in relation to prior earnings, suspension of benefits, and related aspects of protection of the rights of claimants and of social security administration.

After discussion, the Conference adopted the proposed Convention by 240 votes to 5, with 59 abstentions. It was supported by the U.S. Government and Workers' delegates, but opposed by the Employers' delegate who contended that emphasis should be placed on increasing wage levels to minimum standards before a country adopted a social security program, and that the form of the instrument (i.e., a Convention) was inappropriate. The representative of the U.S. Government who served on the Committee argued that the standards were "reasonable, responsible, and flexible, and reflect the progress that has been made and that can and must be made in this field of endeavor."

The Committee's second report dealt with a supplementing Recommendation, which in general covers additional aspects of social security protection that member States may want to consider. The Conference adopted the Recommendation by 192

votes to 45, with 54 abstentions. In opposing the Recommendation, the U.S. Employers' representative adhered to the position of most of the employers that the standards proposed were unrealistically high and that the discussion time was insufficient.

Grievances and Communications. The Committee on Grievances and Communications, which consisted of 142 members, held 12 sittings. Before the Committee for a second discussion were two proposed international instruments dealing with basic industrial relations problems: (1) Grievance procedures and (2) labor-management communications within the enterprise. The Committee determined that each instrument should take the form of a Recommendation. There was comparatively little controversy with reference to the proposed Recommendation on communications, which should serve admirably as a guide to management and workers' organizations in the development of mutually advantageous communications systems. The final record vote on the Recommendation was 321 to 0, with 3 abstentions.

The Committee debate on grievance procedures was more extensive and difficult. This is not surprising, in view of the diversity of existing arrangements among advanced industrial countries, the fact that in some countries such procedures scarcely exist at all, and the close relation of grievance procedures to the administration of working rules and to plant discipline. Particularly knotty problems arose over union and employer roles in the establishment and implementation of grievance procedures, the question of pay for working time lost by employees and their representatives in grievance activity, and the role of workers' organizations in the determination of personnel policy. As it emerged from the Committee, several points in the instrument were unsatisfactory to the Employer group. In a successful effort to reconcile differences that threatened the wide measure of agreement that an ILO instrument on industrial relations should enjoy, three amendments were presented to the delegates in plenary. These were adopted.

The instrument as amended, although providing for substantial flexibility in its implementation, sets forth clear guidelines for the establishment and operation of grievance procedures. It draws to a very considerable extent upon U.S. experience. On the final record vote, the Recommendation was

adopted by 290 votes to 0, with 7 abstentions. All of the U.S. delegates voted for the instrument, but with some reservations expressed by the Employers' representative.

Maximum Weight. In early 1966, a technical conference was held under ILO auspices to consider the subject of the maximum permissible weight to be carried by one worker. In view of the work of this committee, the question of international standards on maximum weight was considered in a single discussion at the 51st session of the Conference. The Committee on Maximum Weight had 66 members and held 15 sittings. Its report proposed that the Conference adopt a Convention and a supplementing Recommendation.

Both instruments relate to the "regular manual transport of loads," including activities in which such transport is intermittent. The Convention sets forth general standards, including consideration of health and safety, training, the use of technical devices where possible, and lower load limits for women and young workers. The Recommendation is more interesting, for it suggests specific standards. Thus, for an adult male worker, 55 kg. (121 lbs.) is recommended as the maximum permissible weight to be transported manually. For a woman worker, the maximum weight should be "substantially less than that permitted for adult male workers," and for young workers substantially less than that permitted for adult workers of the same sex. The Recommendation also deals in some detail with such matters as training, medical examinations, and the packaging of loads.

In the Committee discussion, the U.S. Government representative, supported by the representatives of some other governments, attempted to secure elimination of the distinction based on sex, on the ground that such distinction is contrary to U.S. law and is discriminatory. This was opposed by the Employer and Worker groups and by most governments. There was substantial opposition to the adoption of a Convention. Thus, the U.S. Employers' representative, in view of the highly general language of the proposed Convention and the complexity of the problem, stated: "The Employers believe that the adoption of a Recommendation alone would be a considerable advance in itself over what was recommended by the experts, and that it would be as much of an advance as is practicable."

In the record vote, the Convention was adopted by 196 votes to 74, with 54 abstentions. The U.S. delegation was split on this issue, with the Workers' representative voting in favor, the Employers' delegate against, and the Government delegates abstaining. The Recommendation was adopted by 267 votes to 8, with 50 abstentions. U.S. delegates voted solidly for the Recommendation.

Agricultural Workers. The Committee on Agricultural Workers was composed of 76 members and held 16 sittings. On the basis of a first discussion, it considered measures calculated to improve the conditions of life and work of tenants, sharecroppers, and similar categories of agricultural workers. The problems of hired farm labor were not within its terms of reference. In its deliberations, the Committee was assisted by representatives of the United Nations and of the UN Food and Agriculture Organization.

The conclusions of the Committee were presented to the Conference in the form of a proposed Recommendation. In terms of objectives, member States were urged, while safeguarding the essential rights of landowners, to assist tenants, sharecroppers, and similar workers to become farm operators having major responsibility for managing their holdings; to facilitate access of such workers to land; and to promote voluntary organizations of tenants and landowners. The proposed Recommendation, in its implementing clauses, deals with such matters as the level of farm rentals; protection of tenants against the imposition by landowners of personal services in any form; the form and terms of tenancy contracts; the establishment or strengthening of cooperative organizations (for production, processing, credit, and purchasing); the provision of low-cost credit; programs of education and training; and protection against loss of income from natural calamities.

Without objection, the Conference adopted the report of the Committee and its conclusions. By 221 votes to 2, with 8 abstentions, it decided to place the subject on the agenda of the 52d session of the Conference for a second discussion. It also adopted a resolution urging the Governing Body of the ILO to arrange for consideration of the question of agrarian reform, with particular reference to its employment and social aspects, at future sessions of the Conference.

Technical Aid and Industrialization. The ILO has become deeply involved in the provision of technical assistance to developing countries, particularly in such fields as manpower training, labor standards, labor administration, and statistics. It is also concerned with a wide range of problems relating to the process of industrialization. Accordingly, these two subjects were placed on the agenda of the Conference for discussion. They were considered at 15 sittings by a 141-member Committee on Technical Cooperation and Industrialization. The size of the Committee is indicative of the wide interest among the delegations in these areas of activity. The Committee submitted two reports and proposed two resolutions to the Conference.

With respect to technical assistance, the Committee concluded that "priority should continue to be given to human resources development and in particular to vocational training and management development." It recommended also continuation of technical cooperation activities in the fields of small-scale industries and the tourist industry. Where possible, assistance programs should be planned over long periods of time and should relate to two neighboring countries or more with common problems. Experimental projects should be undertaken. Necessary financial, physical, and staff contributions by beneficiary governments should be assured before programs are undertaken. The recruitment of experts, and of their counterparts in beneficiary countries, is considered. Emphasis is given to the need for evaluation studies of assistance programs, and to the participation of employers' and workers' organizations in program planning, implementation, and evaluation.

On the industrialization of developing countries, emphasis is placed on the contributions that the ILO is particularly qualified to make. These revolve about (1) all aspects of the development of human resources, including training, manpower statistics, labor force projections, and the problem of migration of skilled manpower; (2) the establishment of appropriate working conditions in industry; and (3) the development of social institutions, especially strong employers' and workers' organizations, and the encouragement of progressive personnel policies and good labor-management relations at all levels of industry. The need for collaboration between the ILO and UN agen-

cies concerned with industrialization is stressed. After discussion, the Conference unanimously adopted the two reports and resolutions submitted by the Committee.

Application of ILO Instruments

There is continuous review of the effect given by member countries to ILO Conventions and Recommendations. For this purpose, a Committee of Experts was established in 1927. This group makes detailed examination of reports required of member States, and also undertakes special studies. In addition, a committee is organized at each annual Conference to consider the work of the experts and to report to the Conference. At the 51st session, the Committee on the Application of Conventions and Recommendations consisted of 95 members and held 15 sittings.

The Committee devoted part of its discussion to a special study by the experts of the effect given to four ILO instruments, the earliest of which was adopted in 1919, relating to hours of work. The study covered 93 member States and 30 nonmetropolitan territories. It revealed substantial progress in hours reduction over the past half century, but noted that normal hours of work exceeding 48 were still found in many cases, particularly in service industries.⁵ Attention was also given to average hours actually worked in relation to normal or standard hours.

Among other matters, the Committee examined at length a number of situations in which "governments have encountered serious difficulties in discharging certain of their obligations under the ILO Constitution or under Conventions they have ratified." Special concern was expressed on the application of the Abolition of Forced Labor Con-

vention (1958) by Portugal,⁶ the Freedom of Association and Protection of the Right to Organize Convention (1948) by Greece, and the Fee-Charging Employment Agencies Convention (1949) by Pakistan. Under various criteria, a number of other countries were placed on a "special list," signifying that they were in difficulty with respect to one or more ILO obligations.

Note was taken of the Committee's report after its discussion by the Conference. The work on the application of ILO instruments by the Committee of Experts and by the committee established at each annual Conference represents a unique effort at the supervision of international obligations.⁷

Resolutions

The 129-member Resolutions Committee acted on all but one of the resolutions submitted in accordance with the Standing Orders of the Conference.⁸ In addition, on the basis of a communication from the Governing Body of the ILO, it presented a resolution providing for celebration in 1969 of the 50th anniversary of the creation of the International Labor Organization. The Committee submitted three reports to the Conference.

In addition to the anniversary resolution, the Conference adopted resolutions on occupational health and diseases, with particular reference to the prevention and control of occupational cancer; population growth in relation to training, employment, and worker welfare in developing countries; international cooperation for economic and social development; and the problem of equality of economic and social treatment as between nationals and workers who migrate from one country to another.

The Conference condemned Southern Rhodesia for racial discrimination in employment, occupation, and freedom of association; it also approved a resolution dealing with covenants on human rights adopted in 1966 by the General Assembly of the United Nations in relation to ILO activity. A resolution proposed by the U.S. Workers' delegate for an investigation by the ILO of international action that might be taken on behalf of personnel in the entertainment industry was adopted by the Resolutions Committee, but failed of passage on the record vote at a plenary sitting of the Conference for lack of a quorum.

⁵ The standards embodied in the Hours of Work Recommendation (1962) provided for a normal workweek of 48 hours, with progressive reduction to 40 hours in industrialized countries and, by stages, in developing countries.

⁶ The complicated case of Portugal involves its African territories, and has been considered extensively by the committee in recent years. There was considerable division of opinion within the committee on whether, on the basis of the record, Portugal should be placed on the so-called "special list" of countries this year.

⁷ For a detailed analysis of ILO experience, see E. A. Landy, *The Effectiveness of International Supervision: Thirty Years of I.L.O. Experience* (London, Stevens and Sons, and Dobbs Ferry, N.Y., Oceana Publications, Inc., 1966).

⁸ Two of the submitted resolutions were subsequently consolidated and two were withdrawn.

Seasonal Demand and Used Car Prices

PRICES OF USED CARS tend to follow a seasonal pattern. Usually they rise to peak levels during the summer months, just before the advent of the next year's new models. Demand for used cars is strong during these months with increased summer travel, declining in the fall as vacations end and the next year's new car models are introduced. The onset of fall and cold weather tends to dampen used car demands and prices decline to lows for the year.

Used car prices have been rising, on a seasonally adjusted basis, since the winter of 1965-66. Between December 1966 and June 1967, they rose by 5½ percent, seasonally adjusted, compared with a slight decline during the first 6 months of 1966. In June 1967, they were at about the same level as in 1964 and 1965, but 3.6 percent above June 1966.

This rise in prices resulted from shortages of clean trade-ins during the first half of the year, and the lack of some models of new cars, which shifted consumer demand to late-model used cars. Consumer concern about new car safety and widely publicized predictions of higher new car prices in 1968, due to the addition of new safety features, also tended to shift demand temporarily to the used car market. As a result, prices of used cars continued to rise strongly during the summer and fall months.

Outlook for Used Car Prices

In June 1966, new auto sales passed the 9 million mark for the first time, almost double the 1958 sales of 4.7 million. Usually, this would indicate that there are potentially more used cars on the market. Between 1955 and 1966, the number of passenger cars in use jumped 57 percent, compared with a 26-percent increase in new car sales during the same period.

Numerically, the "replacement demand" is the most important factor in the new and used car market. According to *Ward's Automotive Reports*, replacement demand, out of a 9-million car total output, is about 6 million new or used cars. Junk cars (or "scrappage") come mostly from the 10-year-old and older groups, and replacements for these cars are newer models with additional accessories and more deluxe models, which can command higher prices. Since 1953, the scrappage rate as a proportion of new car sales has varied from about one-half in 1955 to almost four-fifths in 1958.

Coinciding with, or incidental to, the increase in number of cars scrapped is the decline in the average age of cars on the road, which declined from 9 years in 1946 to 5.5 years in 1957, and has varied from 5.5 to 6 years since then.

Thus, high replacement demand and the increase in the number of later model used cars on the road, coupled with the trend toward purchases of higher priced used models which have more extra equipment, should continue to bolster prices over the long run.

Each year at the "birth month," as the older car is dropped from the index and the later model added, extra costs tend to be reflected in higher prices. For instance, during the 1964 model year, about \$500 of optional equipment was added to the average standard-size new car at the factory, and an average of over \$250 to compact and intermediate cars.

Other factors entering the demand outlook for used cars include:

(1) A further increase in the number of households owning more than one car. From 1954 to 1965, the number of multicar households has increased from 4.2 million to 11.8 million. The number of households in the multicar group, as well as the number of cars per household, can very well be expected to continue to accelerate in the years ahead.

(2) Motor travel by passenger cars. This has averaged almost a 4-percent annual increase during 1961-65, and is likely to continue to rise. Short working hours, more liberal vacations, and earlier retirements have made additional leisure hours available for camping, picnicking, and adding

Editor's Note.—This article was prepared in the Division of Consumer Prices and Price Indexes, Bureau of Labor Statistics.

more miles to the family car. The increase in suburban population has also meant more mileage as commuting and shopping distances have increased.

(3) The population expansion. Typically, used car buyers are young—almost half are under 35 years of age, compared with about 30 percent of new car buyers—and not well-to-do. As late as the late 1950's, income of the used car buyer was about one-third less than that of a new car buyer.

(4) Military service. Because the typical used car buyer is young, the draft can affect the demand for used cars, as it removes potential car buyers from the market place. To some extent this effect is diminished by the tendency of many young men awaiting induction to buy a used car instead of a new car.

Balancing out these various influences, it can be assumed that used car sales will continue at a high level. Conditions appear to be favorable not only for a high volume of sales but also for a continuation of rising prices.

Used Cars in the CPI

Prices of used cars have experienced sharp movements, both upward and downward, since they were first priced for the Consumer Price Index in 1953. Since 1963, however, fluctuations have been more moderate.

Used car prices were at high levels when they were introduced into the CPI, partly because of the Korean conflict. Following the end of hostilities, as new car sales rose to record levels, a sharp downward trend in used car prices was apparent until the spring of 1956. Since that time, prices have generally moved upward in line with the general price level. However, a noticeable interruption to this upward trend occurred from September 1959 to March 1961, with a drop of about 15 percent registered. This period both coincided with the influx into the market of lower priced compact cars, and lagged the 1955 period of record new car sales by 5 years (the average age of used cars on the road during this time). Another factor in the temporary lull in the used car market was the 1960 recession in business activity. Used car prices rebounded in 1961 and continued to rise through 1964, reaching an all-time high in December of that year. Increasing prosperity, the

rise in the number of multicar households, and a return to "traditional" price levels from their depressed levels of 1960 all contributed to the upswing in used car prices.

In 1965, prices moved downward about 4½ percent, followed by a further decrease of 3½ percent during 1966. Again, these declines coincided with record new car sales. During 1966, the discussion of automotive safety led to Federal legislation authorizing the setting of vehicle safety standards for new cars. Some observers believe the emphasis on safety has adversely affected new car sales, shifting the demand to late-model used cars, and bringing with it the recent strengthening of prices.

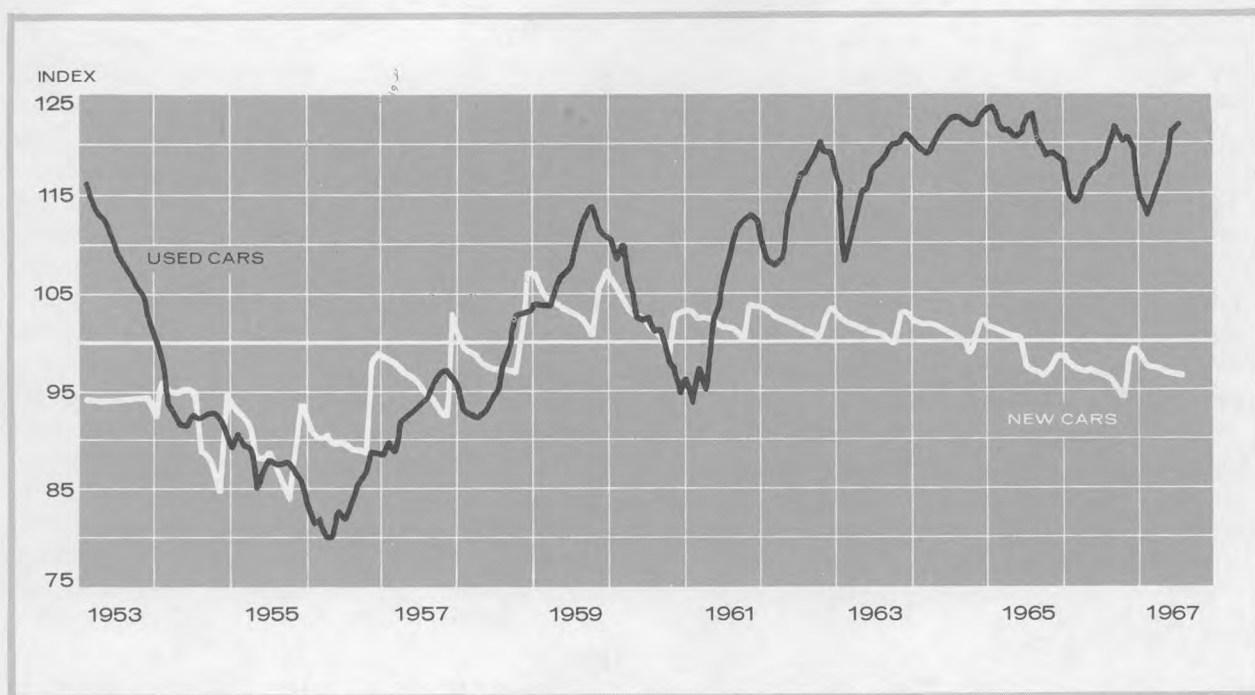
A consistent difference in new and used car price movements was not noticeable in the CPI until 1961. About mid-1961, the spread between new and used car prices became pronounced, and the divergence in price movement was maintained through 1966 and 1967. (See chart.) From March 1961 to June 1967, the used car index increased 29 percent, while the new car index dropped 6 percent.

Used car prices in the Index represent the average change in price for four age groups and two makes of standard-size used cars: 2-, 3-, 4-, and 5-year-old Chevrolets and Fords. Specification pricing is not practicable, because of the lack of established prices for uniform quality cars. The Bureau of Labor Statistics therefore uses average prices for a broad range of models, based on actual sales by dealers, by State, as reported to the National Automobile Dealers Association (NADA). Used cars, of course, decline in value simply because of the passage of time, and the Bureau attempts to offset this "aging bias" so as to measure price change for cars of a constant age, by a procedure described in detail later in this article.

Calculation Procedures

Prices, which are received monthly from NADA, represent average transaction prices by State. They are furnished separately for 5 model years which are updated each year to represent the 2-, 3-, 4-, and 5-year-old "index" cars and also 1-year-old cars, for use in the adjustment for aging bias. Cars of a given model are con-

Consumer Price Index, New and Used Cars, 1953 to June 1967 [1957-59=100]



considered to be 1 year older in November¹ of each year. Thus, a 1962 car was considered a 3-year-old car (actually 3 years and 11 months) in October 1966, and a 4-year-old car beginning in November.

As originally constituted, the used car index included prices for the three cars which accounted for the largest percentage of domestic production—Chevrolets, Fords, and Plymouths—and for 3-, 4-, and 5-year-old cars. By January 1962, Plymouths were deleted from the Index when it became apparent that a sufficient number of reported sales of the specified models were not available because of declining production a few years earlier. Two-year-old cars were added in the 1964 revision of the CPI.

Before computing the State average prices according to BLS broad specifications, the reporter (NADA) eliminates the extreme values, defined as the upper and lower deciles of the array. Data received from NADA is reviewed by the Bureau's commodity specialist, and city or SMSA prices are estimated by BLS from the appropriate State or State's price.²

The average city prices are then multiplied by the appropriate national adjustment factor to off-

set depreciation. National average prices needed for this adjustment are derived by combining prices for 34 States using weights based on number of sales of 2- to 9-year-old cars of each make among the States included.

An adjustment factor is calculated separately for each of the four ages and two makes (eight cars in all). A price ratio (representing a full year's aging) is first calculated by comparing the current national price for a car of a given age with the current price for the 1-year-newer model. The appropriate monthly depreciation factor is then calculated by multiplying the annual difference by successively larger twelfths (i.e., 1/12, 2/12, 3/12) from December through October. To illustrate the calculation: In November 1966, the 1964 Fords were introduced for the first time to represent 3-year-old Fords. In December they were 3 years and 1 month old, and so on, until by October 1967 they will be 3 years and 11 months old. To offset

¹ The month for the annual transition of 1-year-newer cars was changed in 1964 from January to November, in order to approximate more nearly the industry model-year pattern.

² For SMSA's which spread into more than one State and some small cities in States having limited sales, average prices are derived by combining the State prices with weights representing the proportion of sales occurring within contiguous States.

the effects of this aging, the effects of a full year's aging are estimated each month by comparing the current national price of a 3-year-old Ford with the current price of a 2-year-old model. In June 1967, for example, the 1964 (3-year-old) models were compared with the 1965 models.

To minimize the effects of monthly irregularities in the data, the ratios of current prices to year-older prices are calculated as 3-month moving averages, i.e., the June 1967 ratio was averaged with the ratios calculated for April and May. This estimate of a full year's depreciation was then prorated over the 7 months that had been added to the age of the cars between the month they were introduced (November 1966) and June 1967. The June prices for each city were then adjusted upward by 7/12 of the estimated annual depreciation.

After adjustment for aging, average city prices for Chevrolet and Ford in each age category are combined, using weights of 60 and 40 percent, respectively.

To continue the illustration of the 3-year-old cars, the 1964 Fords introduced in November 1966 will have become a full year older by November 1967. At that time they will, of course, become the 4-year-old cars. The 1965 models will be introduced into the Index as the 3-year-olds. Their prices in November 1967, without adjustment of depreciation, will be compared directly with the October adjusted prices in each city for 1964 Fords. This corrects for any error in monthly estimates for depreciation during the year.

Extra Equipment

The movement of used car prices over the years may have been biased upward slightly by the fact that the Bureau did not take into account changes in quality for used cars,³ particularly those resulting from the increasing installation of extra-cost options over the years (prices for one model year are compared directly with those of a year earlier when the newer models are introduced).

To evaluate the extent of this bias, values of selected options were estimated for the 4-year

period, 1961 through 1964, using available price data on options and data on proportion of new cars produced with specific options, as described below. This seemed logical, because most new cars eventually enter the used car market, so that the proportions of new cars produced with options provide a fair measure of proportions of used cars sold later with these options. In any month-to-month comparison, however, the proportions may not be similar. There are also cases where optional equipment is added after the initial purchase, but it was felt that the number of these would be insignificant.

The estimates of values for the 1961 to 1964 period were derived as follows: Prices for five important optional equipment items, as listed in the National Automobile Dealers Used Car Guide, were multiplied for each year by the proportion of new cars equipped with the items originally. Production data were obtained from *Ward's Automotive Yearbooks*. The cars involved were 3-, 4-, and 5-year-old Chevrolets, Fords, and Plymouths; the five optional items were automatic transmission, power steering, air conditioning, 8-cylinder engines, and overdrive. Prices were estimated market values for the optional equipment included on used cars of a certain year, as listed in the add-on section of the NADA guidebook, except for 8-cylinder engines. Prices for this option were derived as the average difference in price between the standard 6- and 8-cylinder car list prices of used cars in the guidebook.

After adjusting each option value by the proportion of production, total accumulated adjustments for the five options were subtracted from the index price for each age-make for each year to derive adjusted prices of stripped cars. The net adjustment and the total cumulative net adjustment for each age-make for the 4 years were also derived. Year-to-year relatives of change in prices, both before and after adjustment, were also calculated.

The Adjusted Indexes

The use of the adjustments for all makes would have increased prices over this period by the net effect of the declining production of overdrive, but would have reduced prices because of increasing production of automatic transmission, power steer-

³ New car prices have been adjusted since 1959 for quality changes, generally following the guidelines most recently discussed in "Introductory Prices of 1966 Automobile Models." *Monthly Labor Review*, February 1966, pp. 178-181. Before 1959, most adjustments were based upon changes in optional equipment only.

ing, and air conditioning. Ford prices would have been adjusted upward because of a decline in the proportion of Fords equipped with 8-cylinder engines. This adjustment was large enough to outweigh downward adjustments for the same item for the Chevrolet and Plymouth cars.

For the selected ages and makes combined, the adjustments ranged from a low of \$88 in 1963 to a high of \$115 in 1964. Total adjustments as a percentage of index prices ranged from 8.4 percent in 1963 to 12.3 percent in 1961 when combined by ages and makes.

If this adjustment procedure had been followed at the time, the used car index would have declined from 1960 to 1961 about 2 percent more than it did; in 1962 and 1963, it would have risen by about 2 percent and 1 percent more, respectively; and in 1964, the advance would have been about 1½ percent less. The net effect in this 4-year period would have been a very slight dampening of the rise—about five-tenths of 1 percent. Even though this long-term effect is negligible, the year-to-year changes were fairly significant. Moreover, effects might have been larger if it had been possible to take all options into account.

An adjustment procedure was introduced into the used car index in November 1966. Adjustments are confined to those options which are separately valued and shown for 2 successive years in the NADA guidebooks. Adjustments are made separately for each make and age of car based on the guidebook prices, adjusted by the difference in the proportion of "incoming" and "outgoing" models equipped with each option. A national ratio is calculated of the total adjustment for all options to the respective U.S. average price for each car. Finally, the October prices of the outgoing models are adjusted separately for each car in each city by the ratios thus obtained, to make their prices comparable with the November prices of the incoming models. This adjustment will be made annually.

It has been suggested that the same types of adjustments for quality changes made in prices of new cars be applied to used car prices. However, the size of the adjustments for new cars does not seem to warrant this type of adjustment on cars that have depreciated from 2 to 5 years. For example, the total new car quality adjustment on the 1961 model Chevrolet was only 0.4 percent of the average purchase price.

Moonlighting—An Economic Phenomenon

The Primary Motivation Appears
To Be Financial Pressure, Particularly Among
Young Fathers With Low Earnings

HARVEY R. HAMEL*

MOONLIGHTING HABITS of the American worker have not increased or even changed much in recent years. The most recent survey of dual jobholding shows that 3.6 million workers, just under 5 percent of all employed persons, held two jobs or more in May 1966. This proportion was somewhat smaller than those revealed by the 1964 and 1965 surveys.

The typical multiple jobholder is a comparatively young married man with children who feels a financial squeeze. He has a full-time primary job and moonlights about 13 hours a week at a different line of work. Teachers, policemen, firemen, postal workers, and farmers are most likely to moonlight. Many of them work for themselves on their extra jobs (operating farms or small businesses) while many others are sales or service workers.

One of the major subjects explored in this article is the relationship between moonlighting and weekly earnings, data on which is available for the first time. There is also an analysis of the association between moonlighting and hours of work, an indication of some of the possible reasons for moonlighting, and a discussion of the industries and occupations of moonlighters.¹

A Quest for Higher Earnings

Why do over 3½ million persons hold two jobs or more? The primary reason seems to be economic. Many moonlighters need, or believe they need, additional income. For some, a second job is a

necessity. A second job enables others to live at a higher standard.

For still others, a second job may be the means by which they are able to maintain a standard of living that would otherwise be lost because of, for example, sudden large expenses, loss of wife's income, or a decline in earnings on the primary job.

Because financial reasons are a prime factor motivating moonlighters, the Bureau of Labor Statistics collected data on the usual weekly wage

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¹Data in the current report are based primarily on information from supplementary questions to the May 1966 monthly survey of the labor force, conducted for the Bureau of Labor Statistics by the Bureau of the Census through its Current Population Survey. The data relate to the week of May 8 through 14.

This is the seventh in a series of reports on this subject. The most recent was published in the *Monthly Labor Review*, February 1966, pp. 147-154, and reprinted with additional tabular data and explanatory notes as Special Labor Force Report No. 63, which also includes a complete listing of earlier reports and their coverage.

For purposes of this survey, multiple jobholders are defined as those employed persons who, during the survey, (1) had jobs as wage or salary workers with two employers or more; (2) were self-employed and also held a wage or salary job; or (3) worked as an unpaid family worker, but also had a secondary wage or salary job. The primary job is the one at which the greatest number of hours were worked. Also included as multiple jobholders are persons who had two jobs during the survey week only because they were changing from one job to another. This group was measured in the December 1960 survey and was found to be very small—only 2 percent of all multiple jobholders.

Persons employed only in private households (as a maid, laundress, gardener, babysitter, etc.) who worked for two employers or more during the survey week were not counted as multiple jobholders. Working for several employers was considered an inherent characteristic of private household work rather than an indication of multiple jobholding. Also excluded were self-employed persons with additional farms or business, and persons with second jobs as unpaid family workers.

and salary earnings of dual jobholders on their primary job and of single jobholders. These data show that generally the level of a worker's earnings determines his propensity to moonlight. Multiple jobholding rates for men 25 to 54 years old are highest at the lowest earnings level—under \$60 a week. As the level of earnings rises, the incidence of dual jobholding declines (see chart 1). The lowest rates were found among workers with the highest weekly earnings—\$200 or more.

The close association between multiple jobholding and earnings is most evident from the data for married men 25 to 54 years old, the group for whom family financial responsibilities are usually the greatest. Among these men, the moonlighting rate for those earning less than \$60 a week was 12.5 percent, more than twice as high as the 5.3 percent for men earning \$200 or more a week.

Data available for the first time show that among men who are heads of households, there is a close relationship between the multiple jobholding rates, the number of young children, and usual weekly earnings. The moonlighting rate tends to increase with the number of children under age 18. The rate for men with at least five children was nearly twice that for men with no young children, as shown in the following tabulation:

*Multiple jobholding rates for men who were heads of households, May 1966
Children under age 18*

Total.....	7.9
None.....	5.4
1 child.....	8.3
2 children.....	9.1
3 or 4 children.....	9.8
5 children or more.....	10.3

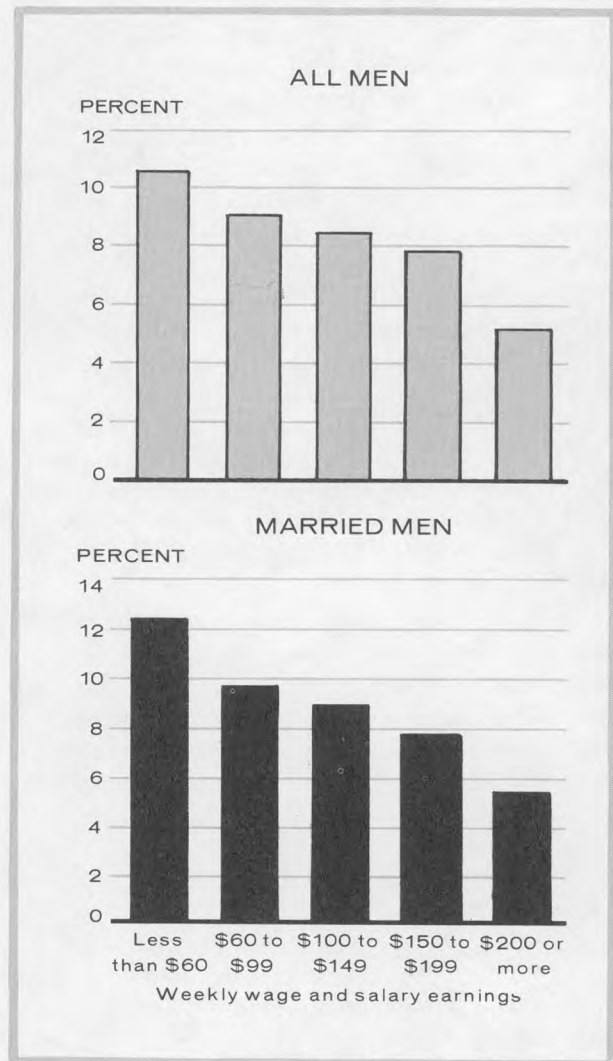
Within each of these groupings, multiple jobholding rates tended to decrease as earnings increased. For example, among men who were household heads with three or four children, the rate was 16 percent for those who earned under \$60 weekly, about double that for those with earnings of \$200 or more.

Financial pressure, however, is not the only reason why workers moonlight. There are several other considerations. Some workers with a regular wage or salary job want to continue or try their hand at working for themselves on a part-time basis while still maintaining their basic source of income. One-third of the multiple jobholders are self-employed on their second job. They moonlight at their own business or devote a few hours to pro-

viding some professional service in their spare time without committing large resources or all their time to the venture. Moreover, the fact that half of this self-employed group operates a farm as their second job suggests that some of these dual jobholders have chosen not to abandon the farm way of life even though economic reasons force them to work at a full-time wage or salary job. Others may have moved to the country and taken advantage of the opportunity to do a little farming on the side.

Some persons moonlight because they are interested in another line of work. They experiment with a second job, but still maintain their primary

Chart 1. Multiple Jobholding Rates for Men
25 to 54 Years Old, May 1966



job until they determine whether they like the work on their new job and decide whether it is feasible to make a change to this new line of work. Still others moonlight because there is a shortage of their particular skill (for example, teachers and skilled craftsmen) and they find it very easy to make extra money.

The basic characteristics of moonlighters have remained about the same in the course of several BLS surveys. The majority are men. Their multiple jobholding rate is about three times that for women workers. (See table 1.) A smaller proportion of Negro than white workers were multiple jobholders.²

The incidence of holding two jobs or more was highest among men 25 to 44 years old. This age group accounted for 43 percent of all employed men, but over half of all men holding more than one job. Moonlighting was least likely among the very young (14 to 19 years old), most of whom are attending school, and among workers 65 years old and over. Married men were twice as likely to be moonlighters as single men.

In sum, the data suggest that the typical moonlighter is a highly motivated and energetic young married man with a growing family, who works at two jobs or more primarily to provide additional income for his family but also for a variety of other reasons: to try his hand at working for himself; to keep busy; to obtain satisfaction; to experiment with another line of work; or to supply his skills that are in demand in his community. The moonlighter aspires to a better living and is willing to work hard to obtain his goal.

Work-Hours on Both Jobs

Although the rate of multiple jobholding has remained substantially the same in recent years, the question still arises as to whether a shortened workweek would lead to higher moonlighting rates among workers who are affected by the cutback in hours. There is no question that when hours are shortened the opportunity to hold an extra job increases. However, an individual's decision on how to use his free time—to moonlight or do something else—involves many factors other than the number of hours worked.

One way of examining the relationship between moonlighting and the length of the workweek is

TABLE 1. EMPLOYED PERSONS WITH TWO JOBS OR MORE, BY SEX, 1956-66

Month and year	Persons with two jobs or more			
	Number (thousands)	Multiple jobholding rate ¹		
		Both sexes	Men	Women
May 1966.....	3,636	4.9	6.4	2.2
May 1965.....	3,756	5.2	6.7	2.3
May 1964.....	3,726	5.2	6.9	2.1
May 1963.....	3,921	5.7	7.4	2.4
May 1962.....	3,342	4.9	6.4	2.0
December 1960 ²	3,012	4.6	5.9	2.0
December 1959.....	2,966	4.5	5.8	2.0
July 1958.....	3,099	4.8	6.0	2.2
July 1957.....	3,570	5.3	6.6	2.5
July 1956.....	3,653	5.5	6.9	2.5

¹ Multiple jobholders as percent of all employed persons.

² Data for Alaska and Hawaii included beginning 1960.

to compare the dual jobholding rates of men working shorter hours with those on a longer workweek. The data show that in nonfarm industries persons who worked 35 to 40 hours on their main job were no more likely to be multiple jobholders than those who had worked 41 to 48 hours:

Hours worked on primary job	Multiple jobholding rates for men, May 1966		
	All industries	Agriculture	Nonfarm industries
Total.....	6.5	8.7	6.3
1 to 21 hours.....	7.3	9.0	7.0
22 to 34 hours.....	10.3	14.1	9.6
35 to 40 hours.....	6.8	9.7	6.7
41 to 48 hours.....	6.7	14.6	6.4
49 hours or more.....	4.5	5.8	4.3

This suggests that reducing the workweek by only a few hours would not in and of itself substantially affect the incidence of multiple jobholding provided there was no cutback in earnings. No significant inverse relationship exists between moonlighting and the length of the workweek. This finding accords with the conclusions of a recent study of rubber workers in Akron, Ohio.³ It seems reasonable, therefore, to assume that among full-time workers, factors other than the length of the workweek determine whether a man looks for a second job.

Men working part time (22 to 34 hours) were more likely to be moonlighters than men with a

² Data for nonwhites will be reported as data for Negroes, who constitute about 92 percent of all nonwhites in the United States.

³ John Dieter found no statistically significant difference in multiple jobholding rates for Akron workers on a 36-hour workweek and those on a 40-hour workweek. He concluded that the high incidence of moonlighting in Akron for many years may reflect an established custom of these workers, and that other factors (primary job income, number of children in the family, and employment of the spouse) offered better explanations of moonlighting. See "Moonlighting and the Short Workweek," *The Southwestern Social Science Quarterly*, December 1966, pp. 309-315.

full-time job (but since most men work full time, the majority of multiple jobholders are full-time workers). The rate was lowest for men working over 48 hours a week on their main job. Dual jobholding rates for men who worked less than 22 hours weekly were relatively low, reflecting the fact that men working so few hours a week are mainly students or older men unlikely to be interested in a second job.

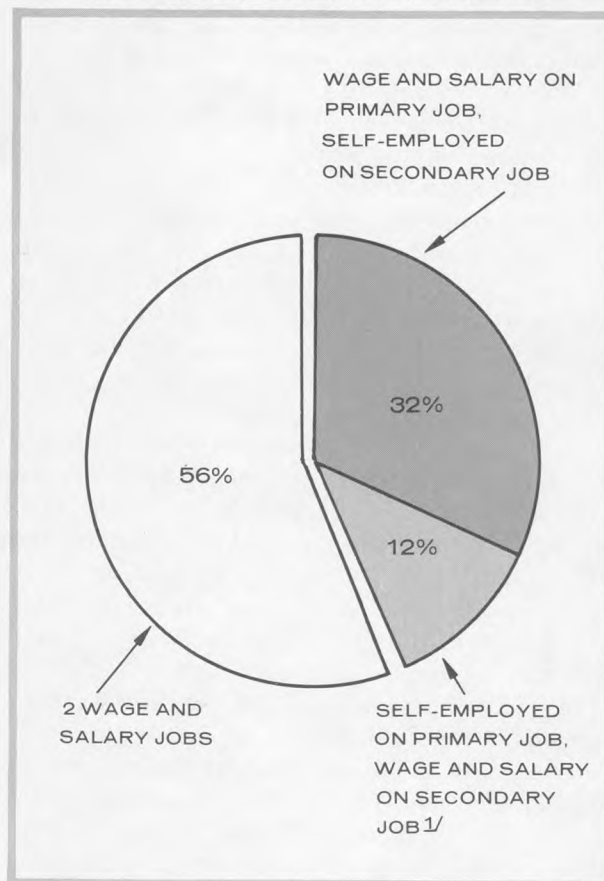
Typically, multiple jobholders worked full time on their principal job and part time on their extra job; about one-fourth worked part time on both jobs; and 8 percent worked full time on both. On the average, they worked a total of 52 hours, only 13 of which were on their second job. The 39 hours on the primary job paralleled the 39 hours that single jobholders worked on their only job. Of all multiple jobholders, those who were farmers or factory workers on their primary jobs worked the longest total workweeks—59 and 57 hours, respectively. Men worked much longer hours than women on their extra jobs, 14 compared with 9 hours. Men who had additional wage or salary jobs worked longer at these jobs than those who were self-employed on their extra jobs, 15 hours and 12 hours, respectively.

Moonlight Industries

One of the most significant aspects of moonlighting is the high incidence of self-employment. About 1.5 million or more than 2 out of 5 multiple jobholders operated their own farms or businesses or were self-employed professionals on the first or second job (chart 2). About half of them were farmers, typically holding down a regular blue-collar job and running their farms in their spare time (table 2). Workers who operated farms as their normal line of work were nearly twice as likely to have a second job as the average worker. About 25 percent of the 200,000 moonlighting farmers had second jobs as a hired hand on someone else's farm; 40 percent worked on construction or transportation jobs or in factories.

On the other hand, the multiple jobholding rate for nonfarm self-employed workers was low. This reflected both their relatively high earnings and the fact that businessmen and self-employed professional people often do not have the time for a second job. The majority of the dual jobholders

Chart 2. Class of Worker of Primary and Secondary Jobs for Multiple Jobholders, May 1966



¹ Includes a small proportion of multiple jobholders who were unpaid family workers on their primary jobs.

had two wage or salary jobs. Of salaried employees, public administration workers were more likely to moonlight than workers in any other major nonfarm industry. The dual jobholding rate is particularly high for postal workers (1 out of 10), a proportion which has remained consistently high over the years (table 3). Other nonfarm wage or salary workers with higher than average multiple jobholding rates included those working in educational services, entertainment and recreation, transportation, construction and forestry, fisheries, and mining.

One-third of all the secondary jobs were in either farm or nonfarm self-employment. Another 43 percent of the moonlighters had paid jobs in the trade or service industries, which can use many part-time workers. Usually, moonlighters did not work in the same industry on their second job as

TABLE 2. TYPE OF INDUSTRY AND CLASS OF WORKER OF PRIMARY AND SECONDARY JOBS, FOR PERSONS WITH TWO JOBS OR MORE, MAY 1966

[Numbers in thousands]

Type of industry and class of worker of primary job	Total employed	Persons with two jobs or more		Type of industry and class of worker of secondary job					
		Number	Percent of total employed	Agriculture			Nonagricultural industries		
				Total	Wage and salary workers	Self-employed workers	Total	Wage and salary workers	Self-employed workers
Total.....	73,764	3,636	4.9	721	139	582	2,915	2,335	580
Agriculture.....	4,292	335	7.8	120	83	37	215	212	3
Wage and salary workers.....	1,326	88	6.6	56	19	37	32	29	3
Self-employed workers.....	2,253	200	8.9	49	49	(1)	151	151	(1)
Unpaid family workers.....	713	47	6.6	15	15	(2)	32	32	(2)
Nonagricultural industries.....	69,472	3,301	4.8	601	56	545	2,700	2,123	577
Wage and salary workers.....	62,529	3,110	5.0	599	54	545	2,511	1,934	577
Self-employed workers.....	6,371	177	2.8	2	2	(1)	175	175	(1)
Unpaid family workers.....	571	14	2.5	---	---	(2)	14	14	(2)

¹ Self-employed persons with a secondary business or farm, but no wage or salary job, were not counted as multiple jobholders.

² Persons whose primary job was as an unpaid family worker were counted as multiple jobholders only if they also held a wage or salary job.

NOTE: Because of rounding, sums of individual items may not equal totals.

they did on their primary job. Except for service and trade workers, only a small proportion had two jobs in the same industry.

There was a sharp difference in the kinds of second jobs held by white and Negro dual jobholders. About one-third of the white moonlighters were self-employed on the second job, and one-fourth worked in service industries. Among Negroes, however, fewer than 20 percent were self-

employed and nearly half worked in service industries.

Occupations of Moonlighters

Multiple jobholding rates vary with the worker's main occupation. As in prior surveys, moonlighting rates in May 1966 were highest among men who were teachers—1 out of 5 had a second

TABLE 3. INDUSTRY GROUP AND CLASS OF WORKER OF PERSONS WITH ONE JOB AND WITH TWO JOBS OR MORE MAY 1966

Industry group and class of worker	Percent distribution			Multiple jobholding rate ¹
	Persons with one job	Persons with two jobs or more		
		Primary job	Secondary job	
All industries.....	100.0	100.0	100.0	4.6
Agriculture.....	5.6	9.2	19.8	7.8
Wage and salary workers.....	1.8	2.4	3.8	6.6
Self-employed workers.....	2.9	5.5	10.0	8.9
Unpaid family workers.....	.9	1.3	(2)	6.6
Nonagricultural industries.....	94.4	90.8	80.2	4.8
Wage and salary workers.....	84.7	85.5	64.2	5.0
Forestry, fisheries, and mining.....	.8	1.0	.4	6.0
Construction.....	5.2	6.5	4.2	6.1
Manufacturing.....	27.0	23.8	6.2	4.4
Durable goods.....	15.7	15.4	3.0	4.9
Nondurable goods.....	11.3	8.4	3.2	3.7
Transportation and public utilities.....	6.0	7.3	5.3	5.9
Wholesale and retail trade.....	15.5	11.9	16.8	3.8
Wholesale.....	3.1	2.8	1.2	4.5
Retail.....	12.4	9.1	15.6	3.7
Eating and drinking places.....	2.6	1.4	3.9	2.8
Other retail trade.....	9.8	7.7	11.8	3.9
Service and finance.....	25.3	25.4	26.6	4.9
Finance, insurance, and real estate.....	4.0	3.9	4.2	4.8
Business and repair services.....	2.1	2.4	2.8	5.6
Private households.....	3.6	.7	3.2	1.0
Personal services, except private households.....	2.2	1.7	2.2	3.9
Entertainment and recreation.....	.9	1.1	3.3	6.2
Educational services.....	6.3	9.6	4.8	7.3
Professional services, except education.....	6.1	5.9	6.2	4.7
Public administration.....	4.9	9.5	4.7	9.2
Postal services.....	4.8	1.7	.9	10.1
Other public administration.....	4.1	7.9	3.8	9.0
Self-employed workers.....	8.8	4.9	16.0	2.8
Unpaid family workers.....	.8	.4	(2)	2.5

¹ Persons with two jobs or more as percent of all employed persons in industry of primary job.

² Persons whose only extra job was as an unpaid family worker were not counted as dual jobholders.

TABLE 4. OCCUPATIONAL DISTRIBUTION OF PERSONS WITH TWO JOBS OR MORE, AND RATE OF MULTIPLE JOBHOLDING, BY OCCUPATION AND SEX, MAY 1966

Occupation group	Persons with two jobs or more—			
	Percent distribution		Multiple jobholding rate ¹	
	Primary job	Secondary job	Men	Women
All occupations.....	100.0	100.0	6.4	2.2
Professional, technical, and kindred workers.....	17.8	15.1	8.9	3.5
Medical and other health workers.....	1.8	1.6	8.3	2.1
Teachers, except college.....	5.2	1.8	19.7	3.8
Other professional, technical, and kindred workers.....	10.8	11.6	7.4	4.1
Farmers and farm managers.....	5.5	16.1	9.5	2.2
Managers, officials, and proprietors, except farm.....	7.8	10.6	4.2	2.1
Clerical and kindred workers.....	10.4	7.4	6.5	2.1
Sales workers.....	5.2	8.2	5.4	1.7
Retail trade.....	2.1	4.9	4.4	1.3
Other sales workers.....	3.1	3.3	6.1	3.8
Craftsmen, foremen, and kindred workers.....	15.8	9.8	6.0	4.7
Operatives and kindred workers.....	17.0	11.4	6.0	4.9
Private household workers.....	7	2.2	(²)	1.1
Service workers, except private household.....	11.7	11.4	9.6	2.7
Protective service workers.....	3.8	1.3	16.8	(²)
Waiters, cooks, and bartenders.....	2.3	3.7	6.4	3.3
Other service workers.....	5.7	6.3	7.5	2.4
Farm laborers and foremen.....	3.2	3.0	6.7	6.2
Laborers, except farm and mine.....	4.9	4.7	4.8	3.1

¹ Persons with two jobs or more as percent of all employed persons in occupation of primary job.

² Percent not shown where base is less than 100,000.

job (table 4). Some elementary and high school teachers may moonlight because they have an opportunity to take evening jobs at school in some professional activity, but other evidence suggests that the most likely explanation is their comparatively low earnings of teachers.⁴ The dual jobholding rate for other male professional and technical workers is high, but less than half that of teachers.

A very high proportion of men employed in protective services (policemen, firemen, and guards) had an extra job in May 1966—1 out of every 6. Their flexible work schedules make moonlighting possible and their relatively low earnings often make it necessary. Other service workers (including barbers, cosmetologists, janitors, attendants, and other workers) also had higher than average moonlighting rates. Men who were managers, officials and proprietors—an occupation group which typically works long hours and whose earnings are generally above average—were least likely to be multiple jobholders. Non-farm laborers and retail sales workers were also unlikely to be multiple jobholders. Moonlighting rates were generally higher for white than Negro men, particularly among blue-collar and service workers.

⁴ Harold W. Guthrie suggests that the teaching profession is an economically deprived one and men teachers, particularly those who are married with a nonworking wife, must moonlight to maintain a standard of living commensurate with their professional status. See "Who Moonlights and Why?" *Illinois Business Review*, March 1965, p. 8.

A large proportion of the moonlighters (42 percent) earned their supplementary income as professional and technical workers or managers, or by operating their own farm or nonfarm businesses. Much smaller proportions of the moonlighters were craftsmen or operatives on their second than on their first job. One of the principal differences in the types of jobs held by white compared with Negro moonlighters is that a much larger proportion of Negroes work in lower paying service occupations, including private household service, while a much smaller proportion of Negro moonlighters hold white-collar jobs on either their main or their extra jobs.

The majority of second jobs were in occupations different from the moonlighter's main line of work, but usually within the same major occupation group as their first job. Half the professional and technical workers had a second job in the same occupation group, and half the farm laborers were farm workers on their second job. About one-third of the clerical and the service workers, and one-fourth of the managers and the craftsmen, had second jobs in the same broad occupation groups. On the other hand, the manual skills of farmers and blue-collar workers made a common moonlighting combination. Half the self-employed farmers had a second job in a blue-collar occupation and about one-fourth of the craftsmen, operatives, and laborers ran their own farm as a sideline.

Shuntō: Japanese Labor's Spring Wage Offensive

ROBERT EVANS, JR.*

DURING THE PAST 13 YEARS, the labor scene in Japan has been enlivened by the speeches, publications, and activities of two of the principal labor federations, *Sohyo* and *Chūritsūoren*, as they have engaged in *Shuntō*, or Spring Wage Offensive. The adoption of this system is indicative of a gradual change in the role of organized labor from one concerned primarily with political ends to one devoted to the economic benefit of its members.

These years of transition, however, have been marked by a curious pattern of industrial conflict. While the number of disputes and work stoppages has been rising, man-days lost, a principal measure of strike effects, has shown wide fluctuations from year to year, as can be seen in table 1.

Coordinated Bargaining

In 1950-56 the number of work stoppages reached about 600 a year and total disputes about 1,300 a year.¹ In 1957 the number of disputes and work stoppages began to rise. The year before, the Joint Spring Offensive Action Committee, directly representing 830,000 union members, and indirectly 550,000 more, coordinated its first set of negotiations. In subsequent years, the number of union members represented increased, but, with a growing work force, the proportion whose wages were determined by this method became fairly stable at about 30 percent.² By 1960 *Shuntō*'s influence on industrial relations was recognized by special tabulations in the dispute statistics. Thus,

since 1960, it is possible to observe the growing importance of *Shuntō* in the number of labor disputes. For example, between 1960 and 1966, there was an increase of about 200 work stoppages (20 percent), but during *Shuntō* alone there was an increase of about 190 (65 percent).

Shuntō's role can also be seen in the changing causes of disputes, for, prior to the creation of the Joint Spring Offensive Action Committee, with its primary emphasis on increased wages, the principal concern of *Sohyo* was opposition to employee discharges. Wage negotiations were left to the individual enterprise unions.³

Table 2 presents the key issues in disputes and indicates that a marked shift in the composition of these issues has taken place. Comparing the 1965-66 period with 1958-60, wage-related causes have increased to approximately 80 percent from 65 percent, while those concerning management decisions, largely discharge and reinstatement, have declined to 10 percent from 30 percent. More important, within the classification of wages, all of the rise is associated with general wage increases. The growth in the proportion of general wage demands to 50 percent from 25 percent is evidence of the influence of *Shuntō*.

Additional support may be found in the industrial distributions. The number of work stoppages in mining has declined, while that in transportation and communication has almost doubled. Manufacturing, with 60 percent of the stoppages, is the dominant sector and has remained in the same rel-

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¹For statistical purposes, the Japanese Government defines a labor dispute as a disagreement, connected with the status of a worker, between a worker's organization and an employer in which a third party intervenes through conciliation, mediation, or arbitration, or which is accompanied by an act of dispute. A work stoppage is a strike or lockout which lasts more than 4 hours.

²Yoko Sano, "Waga Kuni no Shuntō Soba no Bunseki to Yosoku" [An Analysis and Prediction of *Shuntō* in Japan] Keio University, Management and Labor Series (Japanese) No. 195, 1966-67, p. 3.

³An enterprise union is one whose members are all employed by a single firm (usually) or at a single location. It is the basic unit of Japanese trade unionism. Its role is a combination of that of the local and the international in the United States.

A unit union and an enterprise union are essentially equivalent terms, except that the unit union is a term used by the government for statistical purposes, and enterprise union is used by scholars to describe functions, characteristics, etc. Thus, all enterprise unions are unit unions, but in a few cases a unit union is not an enterprise one.

TABLE 1. DISPUTES AND WORK STOPPAGES, 1950-66

Year	Disputes			Work stoppages			Man-days lost (in millions)
	Number	Those attributed to <i>Shuntō</i>	Number of workers involved (in millions)	Number	Those attributed to <i>Shuntō</i>	Number of workers involved (in millions)	
1950	1,487		2.3	584		.8	5.5
1951	1,186		2.8	576		1.2	6.1
1952	1,233		3.7	590		1.6	15.1
1953	1,277		3.4	611		1.3	4.3
1954	1,247		2.6	647		.9	3.8
1955	1,345		3.7	659		1.0	3.5
1956	1,330		3.4	646		1.1	4.6
1957	1,680		8.5	830		1.6	5.7
1958	1,864		6.4	903		1.3	6.1
1959	1,709		4.7	887		1.2	6.0
1960	2,222	425	7.0	1,063	297	.9	4.9
1961	2,483	700	9.0	1,401	503	1.7	6.2
1962	2,287	746	7.1	1,299	501	1.5	5.4
1963	2,016	586	9.0	1,079	366	1.2	2.8
1964	2,422	776	8.0	1,234	514	1.1	3.2
1965	3,051	1,081	9.0	1,542	701	1.7	5.7
1966 ¹	3,687	826	10.9	1,252	458	1.1	2.7

¹ In October 1966, labor disputes in support of opposition to the war in Vietnam were carried out. This accounts for perhaps 320 disputes.

SOURCE: *Rōdō Sōgi Tōkei Chōsa Nen Hōkoku, 1952-66*, [Yearbook of Labor Dispute Statistics] Japan Ministry of Labor, 1961, 1965, and 1966, *Yearbook of Labor Statistics and Research, 1961*.

ative position. Within manufacturing, there are the expected differences. In 1965, for example, there was only 1 stoppage in furniture, but 140 in machinery and 114 in chemicals. In 1966, there were 2 in furniture, 123 in machinery, and 63 in electrical machinery. The number of work stoppages during 1955-66 has increased at about the same rate in the food, lumber, pulp and paper, chemical, rubber, ceramic materials, fabricated metals, machinery, electrical machinery, and transportation equipment industries, while the rate for the remaining 10 manufacturing industries appears to have been relatively constant. It is no surprise that the industries in which the number of disputes has grown are also those industries where many workers are represented by *Sohyo* and *Chūrītsūroren* unions.

It may be argued that other factors account for the rise in disputes. The accompanying chart shows that during 1950-56, when dispute activity was reasonably stable, union membership remained at about 5.8 million, while the estimated rate of union organization declined to 34.8 percent from 46.2 percent. The proportion of members covered by collective agreements, however, increased to 77.1 percent from 58.8 percent. For unit unions, the increase was to 63.7 percent from 45.1 percent. Union membership, along with disputes, began to grow in 1955-56, yet the estimated rate of organization remained almost constant. More significantly, coverage did not improve, remaining almost constant at 78 percent for members and 64

percent for unit unions. Neither of these factors would then appear to be related to the growth in disputes.

Finally, one cannot explain the labor trend in Japan by the recent history of union growth. The percentage of union members employed by manufacturing increased to 37 percent in 1966 from 32 percent in 1954, while the distribution by size of firm was essentially the same in 1960, 1963, and 1966. From a political view, the acceptance by the Diet of a number of International Labor Organization conventions, including number 87,⁴ and the gradual decline in the Liberal-Democratic party's control of the Diet is hardly suggestive of an atmosphere hostile to unions. Thus, the rise in conflict appears to have been generated neither by an expanding and aggressive labor movement, nor by a growing resistance to the concept of unionism. Consequently, we can conclude that *Shuntō* is the basic cause of the rapid increase in the number of industrial conflicts.

How *Shuntō* Works

To explain the relationship between *Shuntō* and industrial disputes, it will be useful to begin with a brief description of the system, using the 1967

⁴ ILO convention 87 deals with rights of association. Of particular concern in Japan were the rights of employees of several employers to belong to the same union, and the right of a union to choose its bargaining representatives. See Alice H. Cook, "The International Labor Organization and Japanese Politics," *Industrial and Labor Relations Review*, October 1965, pp. 41-57.

negotiations.⁵ On November 15, 1966, the *Sohyo* and *Chūritsurōren* Joint Spring Offensive Action Committee issued a white paper on "An Offensive to Initiate the Prospect of a High Wage Era by Fighting for High Wage Rates in a Period of Prosperity." It proposed an increase in wages of ¥10,000 (\$27.78) a month (about 30 percent). At the same time, it urged a vigorous drive for a

⁵ The 1963 round is described in Alice H. Cook, *Japanese Trade Unionism* (Ithaca, N.Y., Cornell University Press, 1966), chapter 6. A summary view is contained in "A Decade of the Spring Offensive," *Japan Labor Bulletin*, May 1965, pp. 3-8.

statutory flat-rate national minimum wage, the extension of social security, tax reductions, opposition to the rise in government monopoly product prices, the restoration to government employees of the right to strike, and opposition to any rationalization which might be introduced in the wake of wage increases.

On January 17, *Nikkeiren* (Japan Federation of Employers' Associations) responded with its white paper, "The New Stage of Liberalization (of capital imports) and Wage Issues." It said

Trade Union Membership In Japan

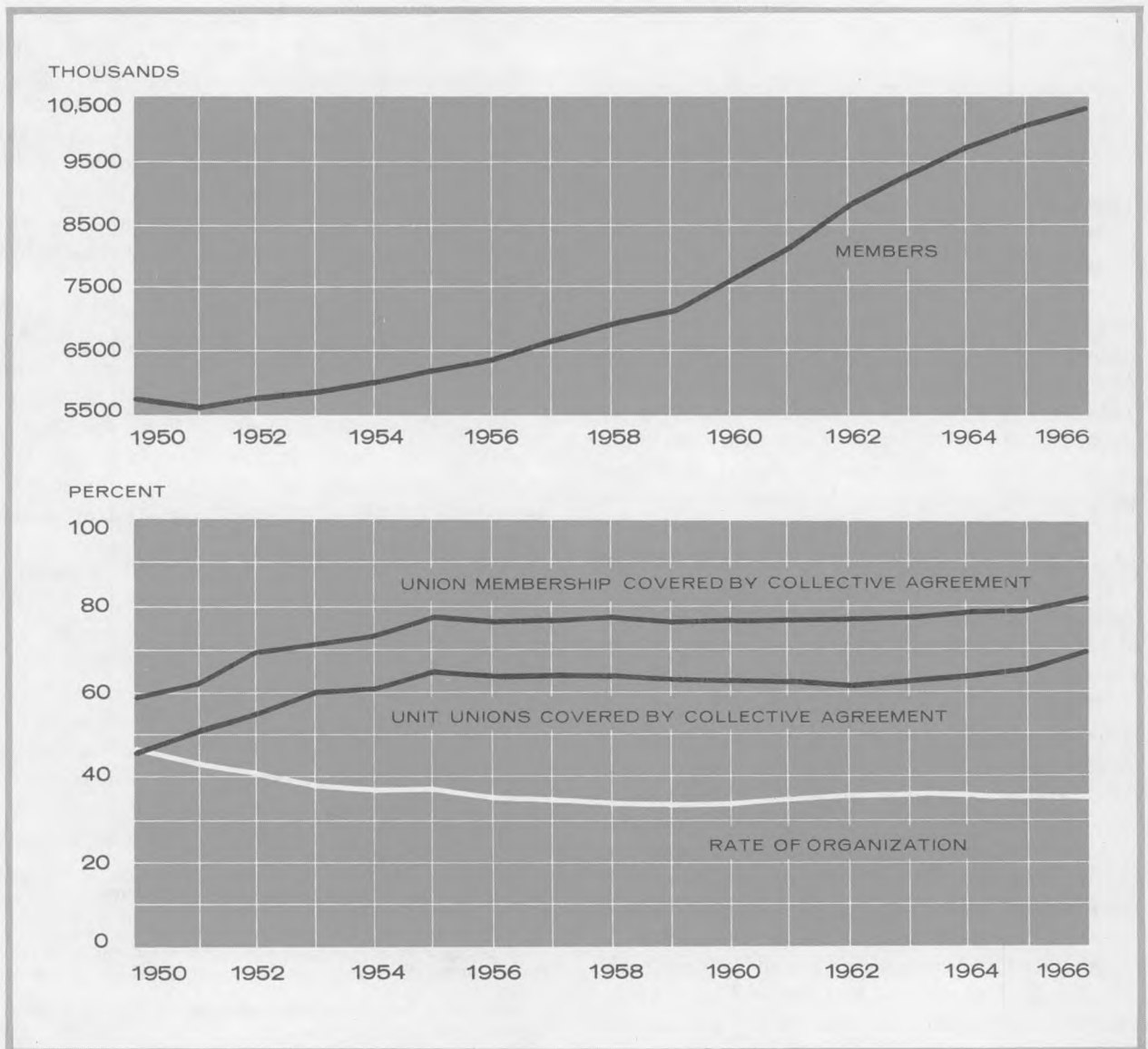


TABLE 2. PRINCIPAL ISSUES IN DISPUTES 1955-66

[In percent]

Year	Number of issues ¹	Income-related	General wage increase	Principal management decisions concerning labor	Opposition to discharge and for reinstatement
1955	1,538	71.1	17.4	17.2	12.4
1956	1,419	72.3	25.0	16.8	11.4
1957	1,768	72.4	29.5	14.9	9.2
1958	1,874	59.6	22.9	18.4	11.6
1959	1,711	67.4	27.3	12.6	8.4
1960	2,222	70.0	36.2	6.9	4.2
1961	2,566	80.9	43.0	7.3	4.6
1962	2,313	83.4	48.7	9.1	5.9
1963	2,068	88.9	40.7	8.4	4.5
1964	2,474	81.9	41.8	7.2	4.1
1965	3,144	82.1	50.2	7.7	4.2
1966	3,613	76.2	52.0	6.2	3.6

¹ The ratio of issues per dispute is essentially stable at 1.05.

SOURCE: 1955-66 *Rōdō Sōgi Tōkei Chōsa Nen Hōkoku* [Yearbook of Labor Dispute Statistics] Japan Ministry of Labor, 1961, 1966.

that wages should be set on the basis of long-term prospects, and not on the expected prosperity of the spring of 1967.

In each *Shuntō*, a "top batter" union is selected. This union begins negotiations first, and is expected to be the first to reach agreement; the hope is that the terms will be highly favorable and can be emulated. Thus, a union whose economic position is favorable and whose spirit is strong is selected. In 1967, such a union was *Tekkōrōren* (Federation of Iron and Steel Workers Unions). *Tekkōrōren's* February convention decided to demand ¥5,000 (\$13.89) from major firms and ¥6,000 (\$16.67) from minor ones, increased retirement pay, a boost of 35 percent in overtime rates, and the introduction of a minimum rate of ¥20,000 (\$55.56). The demands would be submitted on March 6, the strike ballot would be held on April 6, management's offer would be received about April 10, and the target date for the completion of negotiations would be April 15, 1967.

Other unions then adjusted their demands and schedules, reflecting *Tekkōrōren's* leadership role, so that they could insist upon an equivalent settlement. The plan received something of a jolt when, on April 6, the employees of the Yawata Iron Works voted against giving national executives control of an industrywide strike, thus making the proposed "united strike" impossible. The Joint Action Committee then directed other unions to be prepared to "struggle" without regard to the outcome in steel, since it was feared that the steel union's wage position was seriously weakened. All

turned out well, however, since the steel management's offer was unexpectedly high (¥4,300 or \$11.94).

Ceremonial Aspects

The apparent need for programmed work stoppages and disputes and for the increase in their number is understandable only in the context of the labor scene in Japan, which has always been marked by short strikes and by the extensive use of statute labor commissions as conciliators and mediators.⁶ This stems from a variety of factors: (1) in a system of lifetime commitment, neither party wishes to risk prolonged and open conflict;⁷ (2) the use of symbolic force is a deeply ingrained cultural trait; and (3) few workers can engage in lengthy work stoppages. Given this type of dispute pattern, it is easy to see how it can be incorporated into *Shuntō*, where one like that of the United States, for example, could not be. The major question, however, concerns the rationale of applying it before, rather than after, a stalemate has been reached.

Some insight may be gained if we consider the functional problems of a union as it prepares for negotiation. The successful union must convince the employer that it truly represents the members and that the members firmly support the union's position. Conversely it must also convince the members that they will be adequately represented. In the United States the legitimacy of the union is based upon its day-to-day presence in the plant, its utilization of the grievance procedure, and its generally singleminded devotion to the problems of the membership. These same factors also convince management that the workers stand behind the union. Further, through meetings, activities of the International, and so forth, basic trade union education is carried forward on a year-round basis. Therefore special efforts at contract time are not necessary, although additional grievances are often filed, efforts are made to improve

⁶ See Solomon B. Levine, *Industrial Relations in Postwar Japan* (Urbana, Ill., University of Illinois Press, 1958), pp. 108-136. The mechanism of conciliation and mediation is briefly described in Kichieon Ishikawa, "The Role of Government in Labor Relations in Japan," in *Proceedings of the Second International Conference* (Tokyo, Japan Institute of Labor, 1967).

⁷ "Wages in Japan and the United States," *Monthly Labor Review*, April 1967, pp. 25-28.

attendance at monthly meetings, and a ritual strike vote is taken.

Now consider Japan. First, the principal union officers are concerned chiefly with national political activities and with their relationships to the socialist parties. In both legislative debates and general elections, the pragmatic needs of union members are often sacrificed in order to advance the cause of socialism. Second, unions do not play an important role in the settlement of plant grievances, which in the United States forms the core of the grievance system. In Japan, the vast majority of these issues are handled between the foreman and the worker. Thus, except for wage and bonus negotiations, the union within the plant ceases to exist. Last, the functions of education, coordination, and the generation of solidarity, activities regularly performed by the International in America, tend to be ignored.

In such a context, the union needs an alternative system which will allow it to draw together diverse elements, educate the workers, impress the management with its legitimacy, and strengthen the solidarity of workers.⁸ The *Shuntō* system, with its early definition of goals, followed by an educational campaign of speeches, meetings, and so forth, and building up to limited work stoppages with the promise of more strikes to come if demands are not met, is one such alternative. *Shuntō* also fulfills the related need of insuring the integrity of the workers' representatives, for the prenegotiation tactics closely tie the honor of the representative to the success of the bargaining, and, thus committed, he will persevere. Viewed

more broadly, *Shuntō* represents both an imaginative use of the strike as negotiating tactic, and the alteration of Western concepts, to the needs of the Japanese industrial relations system.

Shuntō's virtues are sufficient to explain the initial increases in work stoppages, but do they necessarily imply a fairly rapid growth over the next 10 years? Probably not, although an appropriate explanation is, at best, complex. In Japan a dispute between a combination of enterprise unions and their employers would be counted as one dispute. If, however, the activity were only coordinated, and each enterprise controlled its own strike, each strike would be counted separately.⁹ Thus, the continued increase in the number of disputes might be associated with changes in the degree of centralized control or by a movement into small and medium firms. Data on these are presented in table 3. This shows that the potential for an increase due to the location of control is not a problem. Nor is there any clearly apparent trend in the data on firms of various sizes, especially during the *Shuntō* period.

Another possibility is that its own success is the cause. Somewhat like the boy with the tiger by the tail, union leaders dare not risk changing an apparently successful system. A number of scholars believe this to be true and support for it can be found in the statements by some union leaders.

⁸ See, for example, Keizo Fujibayashi, *Roshi Kankei to Roshi Kyogisei* [Industrial Relations and Industrial Consultation], Tokyo, 1964, chapter 7.

⁹ Coordination usually means identical demands, timing, and consultation over responses to management decisions. It does not include joint bargaining in the sense that we know it in the United States.

TABLE 3. DISPUTES BY SIZE OF FIRM, 1955-66
[In percent]

Year	Firms per dispute	All disputes			Firms per dispute	<i>Shuntō</i> disputes		
		Number of employees				Number of employees		
		500 and over	100-499	0-99		500 and over	100-499	0-99
1955	1.05	40.7	27.7	31.6				
1956	1.33	42.4	27.4	30.2				
1957	1.75	40.3	23.8	35.9				
1958	2.02	37.2	28.7	34.0				
1959	1.46	45.4	25.1	27.6				
1960	1.43	34.4	27.6	37.6	1.25	45.4	32.2	
1961	1.80	35.3	32.4	34.3	1.83	38.4	31.5	
1962	1.80	30.6	31.5	37.9	2.60	33.2	31.8	
1963	2.17	33.7	33.2	31.8	3.20	37.0	33.5	
1964	1.85	29.8	34.3	35.9	2.77	33.2	37.0	
1965	1.86	33.1	36.0	31.0	2.18	44.4	37.2	
1966	1.65	29.9	33.3	36.3	3.00	42.2	35.7	

SOURCE: *Rōdō Sōgi Tōkei Chōsa Nen Hōkoku* [Yearbook of Labor Dispute Statistics], Japan Ministry of Labor, 1961, p. 13; 1964, p. 39; 1965, pp. 11,

48-49; 1966, pp. 10, 48-49.

If this is the case it would not be the first time that the Japanese culture has maintained the form of a once meaningful action even after much of the meaning and necessity have departed.

There is also a possible economic explanation. Table 4 shows the *Shuntō* wage increase, the starting wage for middle school graduates, profits per employee, and the proportionate increases in the income to private corporations and to employee compensation. These figures suggest that since about 1961 the Japanese workers have been obtaining an increasingly larger share of profits. Thus, the starting wage, which had increased by about 30 percent between 1955 and 1960, more than doubled between 1960 and 1966. The level of the *Shuntō* increase has also risen, as has the rate of growth in the compensation of employees. Turning to profits, however, a different picture is revealed. Profits per employee have been roughly stable since 1960, and the rate of increase in the income of private corporations generally has lagged behind that of the compensation of employees since that time. It is reasonable to expect that one result was an increase reluctance on the part of management to grant healthy wage increases.

The Probable Course

The development of a new system of annual wage negotiation incorporates institutionalized conflict during the course of negotiations as a means of educating and strengthening the economic functions of an otherwise politically oriented union movement. In terms of absolute and relative wage gains it appears to have been a productive system.

There is some evidence to indicate that a new equilibrium level of institutionalized conflict may have been reached in the large firms and that the continued rise in the number of strikes is associated with the situation in smaller firms (those employing 100 to 299 persons). The continued rise is also probably closely linked with the wage-profit relationship in Japanese industry, and to the general difficulty of changing an apparently successful system.

Given the complex of forces it is difficult to suggest the probable future growth in the level of disputes and strikes. The probable course, however,

TABLE 4. WAGE AND PROFITS, 1955-67

Year	<i>Shuntō</i> average monthly wage increase ¹ (yen)	Monthly starting wage (yen) ²	Profits ³ per employee manufacturing (thousand yen)	Percentage increase in—	
				Compensation of employees	Income of private corporations ⁴
1955	-----	4,966	114	108.6	87.9
1956	1,063	5,230	180	113.7	121.9
1957	1,518	5,570	186	113.1	164.8
1958	1,050	5,700	145	109.2	91.5
1959	1,281	5,630	233	112.1	110.2
1960	1,792	6,470	301	116.1	164.8
1961	2,970	7,490	299	120.1	118.9
1962	2,515	8,880	241	117.5	105.4
1963	2,237	9,860	309	117.6	104.4
1964	3,305	11,070	298	115.6	116.5
1965	3,014	13,070	251	115.9	95.2
1966	3,273	13,820	-----	-----	-----
1967	4,206	-----	-----	-----	-----

¹ This includes the periodic increase as well as the general increase.

² This is for male middle school graduates employed by firms of 500 employees or more.

³ For principal firms only.

⁴ Income of private corporations is equal to the sum of dividends from resident corporations, corporate transfers to households and private institutions, direct taxes and charges on private corporations, and the savings of private corporations.

SOURCE: *Shuntō* average monthly wage increase, from unpublished tabulations, Japan Ministry of Labor. Monthly starting wage, from "Shoninkyū Chōsa" (Census of Initial Salaries), Japan Ministry of Labor.

Profits per employee, from *Shuyō Kigyō Keiei Bunseki* (Analysis of the Management of Principal Firms) Bank of Japan, 1955-66.

Percentage increase in compensation of employees and income of private corporations, from *Kokumin Shotoku Tōkei Nenpyō*, 1967 (Annual Report on National Income Statistics), Japan Economic Planning Agency.

is for a moderation in the rate of increase, and perhaps some decline. The factors favoring moderation are economic, structural, and personal. The economic factors are the increased liberalization in the importation of capital and the concern over effect of a rapid increase in money wages and prices upon the balance of payments. The structural factor is the growing recognition on the part of employers and unions that annual wage negotiations and semiannual bonus negotiations, especially those utilizing the *Shuntō* pattern, involve a degree of instability which is undesirable. The personal factor is that the introduction of *Shuntō* followed Kaoru Ohta's becoming chairman of *Sōhyō*. Since his replacement in 1966 by Toshikatsu Horii, another shift in policy emphasis may be in the offing, perhaps already foreshadowed by the mildness of 1967's "struggle." Yet it should be remembered that ranged against moderation is the feeling of many union leaders that in *Shuntō* they have a winning combination. Furthermore, the locus of power within *Sōhyō* lies with those unions which bargain with the government and who are thus more immune to economic pressures which might moderate their behavior, and perhaps more in need of highly visible bargaining tactics.

Unionization of Engineers and Technicians

ARCHIE KLEINGARTNER*

AT THE CENTER of the American technological revolution stand the 850,000 engineers and 650,000 engineering and allied technicians employed in the United States today. Much sought after by unions, their response has so far been unenthusiastic, although of all the unorganized white-collar and professional categories, engineers and technicians are most likely to be employed in a union setting. Indeed, some engineers and many technicians started as blue-collar workers and were once members of production units.

This article describes an attempt to determine as completely as possible the numbers of engineers and engineering technicians in the United States who (1) are represented by unions in collective bargaining, and (2) are members of unions.¹ For our purposes, any organization which attempts to obtain exclusive recognition is classified as a union. This definition includes those professional organizations that reject the label union, but bargain collectively, and excludes those engineering societies and associations—of which there are well over a hundred—that claim the capacity to represent the entire spectrum of job and professional needs of their members, but do not seek recognition as bargaining representatives.²

A second major purpose is to show the distribution of organized engineers and technicians among alternative union forms. The range of available organizations goes from the single plant unions (substitute association or guild) not affiliated with AFL-CIO, which organize only professional engi-

neers and scientists, to the affiliated industrial or multioccupational unions such as the IUE and UAW.³

Union activity related to engineers and engineering technicians is dispersed among organizational forms varying substantially in structure, style, and behavior. The alternative forms may be conveniently classified into four types: The unaffiliated professional union, the unaffiliated mixed professional-nonprofessional union, the AFL-CIO affiliated craft union, and the AFL-CIO affiliated industrial union.⁴

All four types seek recognition as collective bargaining agent. It is this more than anything else that distinguishes them from the numerous professional associations operating among engineers, and frequently in direct competition with the bargaining organizations.⁵

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¹ It is appropriate at this point to take note of some of the specific limitations on the scope of this research. Our basic interest is in the unionization of professional engineers and the sub-professional engineering and allied technicians. We made no attempt to advise the unions on how to define engineers and engineering technicians, how to distinguish between them, or how to distinguish both groups from scientists and production workers. There are certain to be variations among unions in their approach to this matter. Thus, while we talk of engineers and technicians it should be understood that other categories of workers will be included in our figures. It is likely that our data include almost all organized scientists.

² Similarly excluded are the "sounding board" type of organizations found at some 12 different locations of the General Electric Co., as well as at a few other firms. Sounding boards, single plant communication mechanisms, take an interest in the professional and job problems of engineers, but do not bargain collectively and accept as members engineers who are in management positions. Their future has been made somewhat uncertain by a Supreme Court decision which held that such organizations are "labor organizations" within the meaning of the Taft-Hartley Act. For a discussion of these issues, see *Engineer-Management Communications: The Sounding Board Approach* (Washington, National Society of Professional Engineers, 1965), NSPE Publications 1409.

³ George Strauss has classified the associations available to engineers into seven types: "(1) learned societies, which seek only to advance knowledge; (2) technical societies, which aim to advance both knowledge and the professional interests of those who wish this knowledge; (3) professional organizations (such as the National Society of Professional Engineers), which are concerned purely with professional advancement; (4) 'sounding boards,' which meet with management to discuss personnel problems, but which are not certified collective bargaining agents; (5) certified unions which admit only professional engineers and are not affiliated with AFL-CIO unions; (6) unaffiliated unions which admit both engineers and technicians; and (7) unions affiliated with the AFL-CIO." George Strauss, "Professionalism and Occupational Associations," *Industrial Relations*, May 1963, p. 27. Our interest extends only to the last three of these categories.

⁴ *Ibid.*

⁵ See "Professional Associations: An Alternative to Unions?" *Contemporary Labor Issues*, Walter Fogel and Archie Kleingartner, eds. (Belmont, Calif., Wadsworth Publishing Co., 1966), pp. 249-256.

Union Structural Forms

The "unaffiliated professional union" will generally restrict its membership to engineers and scientists on the premise that an organization which serves professionals should have a clear professional identity. The "unaffiliated mixed professional-nonprofessional unions," while eschewing affiliation with the AFL-CIO, tend to view technicians as an important element in organizing and bargaining effectiveness.⁶ The "affiliated craft union" category was created to encompass the American Federation of Technical Engineers. The AFTE is of importance because it holds the AFL-CIO charter to organize engineers and scientists. It does not as a rule organize production or clerical workers and is jealous of its formal jurisdiction. However, its claims are not always respected by other affiliated unions. "Affiliated industrial unions" have shown increasing interest in expanding their activity to include engineers and technicians. Of particular importance in this connection are the UAW, USW, IUE, and IAM. Some industrial unions have established separate units to organize and service their white-collar membership.

The longrun significance of alternative union forms competing for the large number of unorganized engineers and technicians is likely to keep this an area of turbulent unionism for years to come.

A Potential Barely Tapped

To summarize the data developed in this study, unions of all kinds represent approximately 45,927 engineers in collective bargaining (see table). Of this number, approximately 20,224 or 44 percent are members.⁷ In the case of technicians, approximately 49,334 are represented by unions, of whom some 25,567 or 52 percent are members of unions. Combining engineers and technicians (including 807 for whom we did not get an occupational breakdown), we have a total of 96,068 engineers and technicians represented by unions, of whom 46,598 or 49 percent are members.

If we use 850,000 as the total number of engineers employed in the United States (and a rough indicator of the union potential), then we can see that only around 5.4 percent of all employed engineers are represented by unions and only 2.4

percent are union members. It must be concluded that unions thus far are a negligible force among salaried engineers, although they fare somewhat better among technicians. Using the BLS figure of 650,000 engineering technicians as the union potential, we have approximately 7.6 percent of the potential represented by unions and around 3.9 percent as members. Clearly, in the case of both engineers and technicians the organizable potential has barely been tapped.

The Pattern of Organization

Data could have been developed in one or more of several different ways. Classification by union types was chosen because it raises the central question of what will be (and perhaps should be) the pattern of union organization if and when engineers and engineering technicians begin joining unions in large numbers. Unionization in these groups is still so limited that there does not seem to be a real basis for prediction about the future.

What does stand out is the very limited effect of the affiliated industrial unions. There is, it would appear, a good likelihood that in the future the dominant form of unionism among engineers and engineering technicians will be separate from, and perhaps in direct conflict with, the aims of the broader labor movement. As the leader of one independent union put it:

In the eyes of organized scientists and engineers, there is no more unity and there are no more advantages within the AFL-CIO than they now possess within their own independent organizations.⁸

This view is widely shared among leaders of independent unions. The issue is not simply one of complete domination by independent unions or by

⁶ However, this is not always true. In some cases mixing of engineers and technicians was an historical accident, or a marriage of convenience to avoid association with production workers. In a number of cases with which the author is acquainted, the association is an unhappy one. In others, either the engineers or technicians are relegated to a subordinate status in union affairs.

⁷ Dvorak estimated in 1963 that unions possibly represented as many as 41,100 engineers, of whom some 23,200 were members. While precise comparisons cannot be made between his figures and the ones presented in this paper, it would seem to suggest that a slight increase in representation and a slight decrease in membership has taken place over the past 4 years. Eldon J. Dvorak, "Will Engineers Unionize?" *Industrial Relations*, May 1963, p. 60.

⁸ Henry J. Andreas, a report to the conference on *Collective Bargaining for Professional and Technical Employees*, Institute of Labor and Industrial Relations, University of Illinois, May 20-21, 1965, p. 6.

AFL-CIO unions. There may be a middle way. Kassalow has discussed one possibility:

Successful engineering unionism in the United States will, ultimately, be closely related to industrial unionism in the great American industries. Common bargaining needs and pressures in dealing with the great manufacturing corporations will make this a necessity. Whether the result will be complete integration of professional and high-level technical workers into the ranks of large industrial unions, I am not quite certain. Even should this be the route, however, there will doubtless be a need for institutions which can establish occupational bonds of an interindustry character among these groups of workers who have such a strong desire for purely professional association.⁹

Some would argue that for real progress to be made in organizing, the industrial unions should give all necessary support (with no expectation of domination) to the independent and affiliated craft unions in the interests of expanding unionism rather than trying to organize them directly. With justification, it can be argued that industrial unions have tried the latter approach without any appreciable effect.

The present position of unions among engineers and engineering technicians is not an auspicious one. This is not to imply that things will not change. Indeed, if history is a good teacher the odds are heavily in favor of their joining protective organizations in large numbers, as many other professional and semiprofessional workers have already done. What is not clear is when and under what conditions this will occur, or the pattern that this will take. At present, organization is so limited that it would be sheer guesswork to hazard a prediction on the basis of existing representation and membership data.

Details of the classification of unions by type and the development of membership and representation data are given below.

Going Alone

Some unions attempt to restrict their membership to professional workers. Clearly, some of the 18,699 engineers represented would be more accurately classified as scientists or technicians, but the number is probably small. These unions would generally deny that they have technicians as members and would exaggerate the number of scientists. All try to give a distinct occupational

character to their organizations. They do not call themselves unions, but rather professional organizations that perform union functions. Solomon and Burns have speculated that ". . . if unionization of engineers and scientists should expand to substantial proportions, the probabilities are that the expansion will be through an occupational union rather than through inclusion in primarily blue-collar industrial unions."¹⁰

The Seattle Professional Engineering Employees' Association (SPEEA) at Boeing, the largest union in this category, represented technicians until 1959. In that year it revised its qualifications for membership to specify that no one will be accepted as a full member without having completed all of the fundamental courses normally included in the first 2 years of the major engineering curricula. The change further provided that no one will be accepted as a full member unless his employer has claimed for him an exemption as a professional employee under the provisions of the Fair Labor Standards Act. Prior to this, any individual could become a member of the union if he had worked for 8 years in a bargaining unit job. The SPEEA has never struck or taken a strike vote. It rejects the philosophy of trade unions that there is an inherent conflict of interest between management and employees.¹¹

However, it would not be correct to label all of the unions in this category as shying away from the tactics and terminology of unionism. The Executive Secretary of the Association of Scientists and Professional Engineering Personnel at RCA speaks of the more militant side of professional unionism:

A review of early negotiation records of our Association has disclosed that the major reliance for bargaining results was placed on logic, reason, and moral suasion, and very little on raw economic pressure. But during the past few years the pendulum has swung and the use and the threat of strike action has been recognized as the more effective force in bargaining.¹²

⁹ Everett M. Kassalow, "New Union Frontier: White-Collar Workers," *Harvard Business Review*, January-February 1962, p. 51.

¹⁰ Benjamin Solomon and Robert K. Burns, "Unionization of White-Collar Employees: Extent, Potential and Implications," *The Journal of Business*, April 1963, p. 164.

¹¹ Bureau of National Affairs, *White Collar Report*, August 10, 1959. For an interesting discussion of several aspects of the SPEEA, see Dvorak, *op. cit.*, pp. 49-54.

¹² Andreas, *op. cit.*, p. 5.

In a broad sense we can label the unions in this category as the most conservative wing of technical worker unionism. This would be appropriate, at least in the sense that these unions reject ties or responsibility for subprofessional technical and blue-collar workers. However, it would not necessarily apply to the tactics they employ to obtain specific gains and settle specific grievances. These unions can be militant, including use of the strike, when the interests of their own members leave no other recourse.

A Composite Type

A number of unions, while not affiliated with the AFL-CIO, do have as members the subprofessional technicians. Some of them also organize clerical workers; so far as we were able to ascertain, none were interested in manual workers.

Almost all the 19 unions in this category are single-firm unions. The largest is the Westinghouse Salaried Employees Association, whose membership is distributed among 51 local unions. Some of the unions in this category represent mostly engineers, while others consist almost entirely of subprofessional technicians. In one or two unions, clerical workers are in the majority. While more engineers than technicians are represented, a somewhat higher proportion of technicians elect to become members. Few organizations in this category would call themselves unions, a pattern also observed among the unaffiliated professional unions.

Some of the larger unions in the category, such as the Engineers and Scientists Guild at Lockheed Aircraft, were affiliated with the Engineers and Scientists of America before that organization went defunct in 1960. In good part the reason for the ESA's demise was the very question of whether technicians should be given full membership rights.

The collective bargaining behavior of these organizations varies considerably. Arthur Shostak has described the Westinghouse Salaried Employees Association as ". . . unique for its active intra-company organizing campaign, its successful integration of engineers and clerical workers, and its strained labor relations."¹³ However, there exist a number of other patterns. Some of the unions are little more than sounding boards. Per-

haps a majority of them exist at the sufferance of management.¹⁴

Affiliated With a Craft

Originally chartered by the AFL in 1917, the American Federation of Technical Engineers (AFTE) retains the AFL-CIO charter to organize scientists and engineers. It restricts its activities to these groups and to the subprofessional technicians.

The AFTE, in contrast to many of the organizations in the categories described earlier, is outside the debate of whether it should be considered a union, a professional association, or something in between. It is a union, does not disguise this fact, and has no interest in being considered anything else but a union. The AFTE shows relatively little interest in making a special appeal to the status ambitions of engineers. Nevertheless, it portrays optimism about its future in this area. Historically, the bulk of the AFTE membership was concentrated among draftsmen in ordnance and shipyard establishments.¹⁵ In recent years it has branched out, but financial and other problems prevent it from engaging in the intensive recruiting of new members.

Since the AFTE membership is scattered among 81 local unions, it was difficult to assemble a complete set of membership figures. With the cooperation of the AFTE national office, questionnaires were mailed to the local unions, and around 25 percent responded with usable information. To give a more complete picture of representation and membership, we took the total membership for the AFTE in 1965 of 15,000 reported by the Bureau of Labor Statistics¹⁶ and projected total engineer and technician representation and membership from our questionnaire replies. This procedure assumes

¹³ Arthur B. Shostak, *America's Forgotten Labor Organization: A Survey of the Role of the Single-Firm Independent Union in American Industry*, Industrial Relations Section, Department of Economics (Princeton University, 1962), p. 89.

¹⁴ This view has been expressed to the author by an executive of one of the largest unions in this category. I am inclined to agree.

¹⁵ See Everett M. Kassalow, "White-Collar Unionism in the United States," *White-Collar Trade Unions: Contemporary Developments in Industrialized Societies*, Adolf Sturmthal, ed. (Urbana, Ill., The University of Illinois Press, 1966), pp. 343-344.

¹⁶ *Directory of National and International Labor Unions in the United States, 1965* (BLS Bulletin 1493, 1966), p. 19. This figure is somewhat higher than other estimates. Kassalow, for example, puts AFTE membership at 11,000; *ibid.*, p. 344.

REPRESENTATION AND MEMBERSHIP OF SELECTED TYPES OF UNION ORGANIZATIONS AMONG ENGINEERING AND RELATED PERSONNEL

Type of organization	Representation			Membership			Membership as a percentage of representation		
	Total	Engineers	Technicians	Total	Engineers	Technicians	Total	Engineers	Technicians
Unaffiliated professional engineering unions ¹	18,699	18,699	-----	8,023	8,023	-----	43.0	43.0	-----
Mixed professional-nonprofessional unions ²	³ 28,993	17,254	10,932	³ 18,280	9,436	7,987	62.9	54.7	73.1
American Federation of Technical Engineers, AFL-CIO	41,452	8,638	32,814	15,000	2,034	12,966	36.2	23.5	39.5
AFL-CIO affiliated industrial unions ⁴	6,924	1,336	5,588	5,345	731	4,614	77.2	54.7	82.6

¹ Includes 8 unions: (1) Research and Engineering Professional Employees Association, (2) Seattle Professional Engineering Employees' Association, (3) Association of Scientists and Professional Engineering Personnel, (4) Westinghouse Engineers Association—National, (5) Association of Engineers and Scientists, (6) Association of Industrial Scientists, (7) Wichita Engineering Association, and (8) Professional Engineers and Scientists Association. Data for (1) through (6) were obtained directly from the union; for (7), from the NSPE *Tabulation of Unions Representing Engineering and Technical Employees, 1965*; and for (8), from the NSPE *Engineering Employment Practices Newsletter, April 1963*.

² Includes 19 unions: (1) Newark Dupont Employees' Union, (2) Independent Association of Technical and Clerical Personnel, (3) Association of Technical and Professional Employees, (4) Syracuse Draftsmen's Association, (5) Society of Engineers, (6) York Engineering Employees' Association, (7) Association of Engineers and Engineering Assistants, (8) Sun Research and Engineering Employees Association of Philadelphia, (9) Southern California Professional Engineering Association, (10) Engineers and Scientists

Guild, (11) Independent Engineers and Draftsmen's Association, (12) United Association of Office, Sales, and Technical Employees, (13) Engineers and Architects Association, (14) California Association of Professional Employees, (15) Westinghouse Salaried Employees Association, (16) Lockheed International Engineers Association, (17) Railway Technical Engineers, (18) Technical Engineers Association, and (19) TVA Engineers Association. Data for (1) through (15) were obtained directly from the unions; for (16) through (19) from the NSPE *Tabulation of Unions Representing Engineering and Technical Employees, 1965*. Complete information on the procedures used in compiling the figures in the table will be furnished by the author upon request.

³ Includes 807 for whom occupational data were not available.

⁴ Includes those locals of the UAW and IUE identified by the research departments of the parent body as representing engineers or technicians, and IAM lodges shown in a general index as representing professional or technical workers.

that the questionnaire replies showed an accurate distribution of the actual representation and membership of engineers and technicians in the union. There are a number of grounds on which this claim might be disputed. On the other hand, the further assumption that the AFTE membership consists entirely of engineers and technicians is probably correct.¹⁷ The AFTE's own membership estimates vary only slightly from those in the table, according to AFTE president James Woodside.

Professionals in the Industrial Unions

Affiliated industrial unions have long sought to expand their membership and influence among technical workers. Present membership in these unions is, by any standard, quite small, but estimates vary widely. The whole question was given renewed emphasis in March 1967, when 17 affiliated unions formed the Council of AFL-CIO Unions

for Scientific, Professional, and Cultural Employees (SPACE). The labor movement considers this a major effort and has budgeted substantial resources to make it an effective organizing device.¹⁸ The AFL-CIO Director of Organization told the Council's charter convention:

You are publicly constructing unionism whose near-total purpose has to be the coming to grips with the problem of making unionism attractive to those millions of workers in professional, technical, and kindred fields who are eligible for unionism but who have never joined.¹⁹

The cynics will remain unimpressed and reply that they have heard all this before, and indeed they have.²⁰ Yet this is the first time that so many of the major affiliated unions operating in the professional area have been able to agree on a unified action program. A number of individual unions have also established special organizing units and councils to deal with the needs of technical personnel.

A consistent series of data for the unions in this category was extremely difficult to develop, because engineers and technicians constitute only a small part of an industrial union's membership, are sometimes part of a production worker bargaining unit which makes recordkeeping difficult, and are likely to be scattered in many plants and locations. Additionally, the table presents information for only three unions, the UAW, IAM, and IUE, as we were unable to obtain systematic data for other affiliated unions that should be included.²¹

¹⁷ The NSPE in its 1965 tabulation of technical worker unionism, op. cit., shows 1,000 AFTE members as professionals and 11,450 as nonprofessional employees.

¹⁸ The constitution adopted by the Council provides that, "Each affiliate, national or international union, shall pay an initiation fee of \$250 and shall pay monthly a per capita tax of 1 cent per member per month upon its affiliated membership."

¹⁹ William L. Kircher, quoted in Bureau of National Affairs, *White-Collar Report*, March 16, 1967, p. A-12.

²⁰ See, for example, *Policy Resolutions*, adopted December 1965, by the Sixth Constitutional Convention AFL-CIO, Publication No. 3D, March 1966.

²¹ Unions in this category would include the American Federation of State, County and Municipal Employees, American Federation of Government Employees, Oil, Chemical and Atomic Workers, and the United Steelworkers.

Thus, it is almost certain that the table understates the actual strength of industrial unions among engineers and technicians, but there is no way of knowing by exactly how much. In all probability the error is greater for technicians than for engineers.

Reconciliations

Since these figures are smaller than other available estimates, more detailed comparisons were made. Of special importance are the estimates developed by Eldon Dvorak.²² Working from figures originally compiled by the NSPE, he estimated that in 1961 AFL-CIO unions represented 19,127 technical workers, and that of these 4,900 were professional engineers and scientists. Projecting the percentage of membership of those represented for whom data were available (91 percent), he estimated that 4,500 of the 4,900 engineers represented by AFL-CIO unions were members. These figures are substantially higher than our own estimates.

However, after adjusting Dvorak's figures to take account of differences in our approaches and more recent developments, many of the apparent discrepancies are removed. The NSPE tabulation on which he based his estimates includes the AFTE, shown as representing 12,450 technical workers; the Engineers Association of Bosch Arma (IUE Local 418), shown as representing 1,544 technical workers; and the Engineers Association (an IUE affiliate) at Sperry Gyroscope, listed as representing 3,400 technical workers. The engineers in the IUE affiliate at Sperry decertified in an NLRB election in 1962.²³ Today the IUE unit at Bosch Arma represents no more than 325 technical workers.²⁴ In the NSPE tabulation, the AFTE and the two IUE locals are shown as representing a total of 17,394 technical workers. If we subtract 17,069 (the 12,450 AFTE members, here treated separately; the Sperry group; and all but 325 of the Bosch Arma unit figure) from Dvorak's 19,127, the total representation of technical workers by AFL-CIO industrial unions is 2,058.

Professor Dvorak estimated that roughly 26 percent of all technical workers represented by AFL-CIO unions are professional engineers or scientists. In developing this ratio he included the

AFTE which is known to be heavily biased in favor of the nonprofessional technicians, and to use this same proportion after excluding the AFTE would perhaps present a distortion. Let us assume, therefore, that 50 percent is the proportion of "technical workers" represented by industrial unions who are in fact professional scientists or engineers. Applying this percentage to the adjusted total representation of 2,058 leaves the AFL-CIO industrial unions representing 1,000 professional engineers and scientists—a figure comparing favorably with the 1,336 that we were able to identify.

Projecting NSPE figures further, Dvorak estimated that 91 percent of the engineers and scientists represented by industrial unions are members. He concluded, therefore, that 4,500 engineers and scientists are members of AFL-CIO unions. A 91-percent ratio of membership to representation seems high. In the first place, the NSPE tabulation listed the AFTE as having as many members (12,450) as it represented in bargaining, which is almost certainly not the case. There are few engineers in bargaining units that have the union shop. A more realistic estimate is that around 50 percent of engineers represented are members.²⁵ Fifty percent of the adjusted representation figure of 1,000 would leave AFL-CIO industrial unions with 500 engineers as members. In light of these adjustments, the 731 members shown in the table are not as much of an understatement as might seem at first blush.

Both our estimates and those of the NSPE differ considerably from membership figures given by the industrial unions themselves. For example, the Assistant Director of the Technical Office and Professional Department of the UAW recently reported that the UAW has approximately 50,000 white-collar members, of whom some 15,000 are in technical and professional occupations. He cautions however that:

It is difficult to break this number down further, because of the national debate going on as to where the technical occupations begin above the level of

²² Dvorak, *op. cit.*, pp. 59-60.

²³ The engineers voted 1,669 to 1,069 against continued representation. The technicians in the unit, on the other hand, voted to retain the IUE by a vote of 345-198. See Bureau of National Affairs, *White-Collar Report*, May 31, 1962, p. A-1.

²⁴ This figure was obtained directly from the local.

²⁵ As the table shows, among the independents, the ratio for engineers varies between 40 and 55 percent.

skilled trades and where they end at the top or professional end of the spectrum.²⁶

The NSPE takes sharp issue with the membership claims of industrial unions. The NSPE asserts that in 1957, when the UAW apparently claimed to represent 10,000 engineers, its own checks showed the UAW to represent less than 100 professional engineers. The NSPE concludes: "Obviously, to the union the great bulk of the 10,000 involved were engineers, but were in fact technicians or skilled production workers."²⁷

Discrepancies in the Data

There is no simple way of erasing the discrepancies in the various membership estimates. It would be a difficult if not impossible task to make precise determination of the numbers of engineers and technicians in industrial unions, since the basic matter of setting boundaries as to what con-

stitutes engineers and technicians is not the only problem that would have to be faced.

The inherent difficulties in union membership studies have been variously noted.²⁸ Ultimately, all figures must come from the unions themselves. With all the known (and some unknown) variations among unions in the criteria they use in defining a member, the accuracy of their record-keeping, and their willingness to divulge membership information, the sources of error are numerous. We had to consider these problems plus some others as a consequence of our interest in data on representation, and because of our interest in specific occupations within multioccupational unions.

Several methods were used to obtain representation and membership figures. First, a short questionnaire was mailed to every independent union in the country which we had reason to feel might have engineers or engineering technicians as members.

For addresses we relied heavily on the *Register of Reporting Labor Organizations*.²⁹ In the case of affiliated unions, the cooperation of the nationals was solicited both for figures and the addresses of locals active in the technical area. In addition to direct contact with unions, the BNA *White-Collar Report*, union publications, newspapers, and published studies were searched for membership information. Of particular help in this connection were the tabulations of technical worker unionism compiled by the National Society of Professional Engineers. In those cases where there was a discrepancy between questionnaire replies and figures from other sources, we generally used the questionnaire data.

²⁶ Hubert H. Emerick in a report to the conference on *Collective Bargaining for Professional and Technical Employees*, Institute of Labor and Industrial Relations, University of Illinois, May 20-21, 1965, p. 13. In a recent communication, Mr. Emerick pointed out that applying a strict interpretation of "professional employee," the UAW decided that 1,000 was the proper number to affiliate with the new AFL-CIO Council on Scientific, Professional, and Cultural Employees.

²⁷ *Tabulation of Unions Representing Engineering and Technical Employees*, op. cit., p. 2.

²⁸ For a discussion of some of these problems see Irving Bernstein, "The Growth of American Unions, 1945-1960," *Labor History*, Spring 1961, pp. 131-157.

²⁹ *Register of Reporting Labor Organizations* (U.S. Department of Labor, Office of Labor-Management and Welfare-Pension Reports, Washington, D.C., 1964.) It ". . . contains the names of all unions which had reports on file . . . as of January 1, 1964." Questionnaires were mailed to 65 unaffiliated unions; 35 usable questionnaires were returned. In a number of cases unions we contacted had been decertified or were no longer in existence. Others did not have engineers or technicians as members. Our response rate was better than a simple percentage would indicate.

Adjusting Manpower Requirements To Constant Change

IN AN EFFORT TO ANALYSE manpower responses to technological change, the Organization for Economic Cooperation and Development (OECD) has compiled 29 case studies in a new report edited by Solomon Barkin.¹ The principal concern of the OECD was to determine how a firm's industrial relations could be "brought into harmony with, or . . . reinforce, a national active manpower policy."

The 29 case studies deal with methods of reconciling manpower levels to technological change in eight countries—Austria, Canada, France, West Germany, Norway, Sweden, United Kingdom, and the United States. The studies provide an examination of each firm's response to a specific managerial, technical or economic change within the firm. In 1963, a committee of the OECD met at Paris to establish criteria for the case studies. A uniform set of rules and questions for the conduct of the studies, "A Guide for Case Analysis," was the product of the Paris meetings. The many questions asked of each firm cannot be listed here and the reader is referred to the full text of the OECD report for a transcript of the "Guide."

The planning and introduction of new investments and the implementation of changes in production and operations can be coordinated with the programing for the adjustment and recruitment of manpower in an enterprise, with benefit both to the latter and its employees, without interference or costly adaptations to the programs for business changes. Moreover, while medium and long-term planning of manpower operations are feasible, the administrators should retain the possibilities of adapting them to new developments and operating needs. Such flexibility will be facilitated by long-term planning and careful study in defining objectives and alternative tools, techniques, and procedures. The formulation of a system of adjustments in advance of the changes also helps in coordinating technical change, and moreover tends to create an

established procedure and common outlook between the people responsible for the innovation and those primarily concerned with the impact on manpower. It is particularly helpful to those who carry both responsibilities since it enables them systematically to take account of the imperatives both of the organization as an institution and of the people employed in it. Each system of adjustment should contain a variety of tools and techniques, since changes are usually continuing and diverse and the best method of adjustment may differ.

The long-term results of careful planning of adjustments and coordination of the programs of change appear to be greater acceptance to change by employees and therefore lower resistance; these favorable attitudes will continue to be associated with real efforts at hard bargaining on the sharing of the benefits of these changes. Continuing consultation and active participation by employees and their representatives in the process of effecting change, and the terms and conditions under which they are performed, reinforce this positive disposition to change. Careful planning of such changes permits enterprises both to make the best use of public facilities and to coordinate their programs with services to be provided by the public agencies either to the enterprise or the employees.

The majority of the OECD's case studies examine manpower problems as they evolve from a one-time change. They deal also with the problem of manpower reductions as a consequence of such change. The United States' experience with the problems raised by these studies has been presented to the readers of the *Monthly Labor Review* in the past. For an account of two recent studies, see "Manpower Planning at an Electric and Gas Utility," *Monthly Labor Review*, August 1965, pp. 965-967, and "Productivity in an Expanding Industry," *Monthly Labor Review*, April 1965, pp. 373-377.

One of the studies in the OECD report departs radically from this norm. Manpower stability, rather than reductions, is discussed by M. Durand of the French Institute of Social Sciences and Labor in "A Policy of Continuous Change with a Stable Staff," despite a continuity of managerial, technical, and economic change in the firm. This case, presented below, details a less familiar situation and offers a somewhat different prescription for managing change.

¹ See Solomon Barkin, ed., *Technical Change and Manpower Planning* (Paris, Organization for Economic Cooperation and Development, 1967), Industrial Relations Aspects of Manpower Policy, Series 4.

The Anonymous Firm

This firm, a limited company, is run as a family business by Mr. X and his nephews, who between them manage the various sales and administrative departments. It is one of the 15 largest textile businesses in France, and one of the foremost in its particular field, that of hosiery and knitwear, with an annual turnover of around 7.0 million francs (US \$1.4 million).

The firm is expanding. In 1950, it employed 600 people; in 1963, it had two factories at Y, employing 1,350, one factory at C with a staff of 500, and it has just bought all the shares of a firm in the same field with 250 employees, thus bringing the total to 2,100.

In addition to the factories, it runs a mechanical engineering workshop employing 150 people.

A sales network of 50 sole representatives covers the whole of France. At the head office there are about 40 people working either in the general management department, or the advertising department.

The firm works in direct competition with other firms, both as regards sales and labor.

The sales of goods manufactured by the firm are subject to fluctuations caused by changes in fashion, and French and foreign competition has an influence on cost, on the use of new materials and new techniques, and on the creation of models.

As regards the labor situation, the firm's production is centered in town Y, which for generations (since 1850) has been traditionally involved in the hosiery and knitwear trade, and has a large population of skilled workers. Ten years ago, the firm was able to recruit skilled staff, but for several years now there has been a shortage of manpower caused by the expansion in the hosiery and knitwear trade, and by the other industries which have been set up in the town.

Economies of Scale

The firms in the town are going through a process of concentration brought about by the need for a constant increase in the rate of investment

for modernization: small firms disappeared first, and at the present time even medium-sized firms, employing between 200 and 250 people, are disappearing.

With this background of fierce competition, it is imperative for the firm to undergo continuous change, as much in technical and administrative areas as in production.

In this study we have tried to assimilate the experience gained by the firm of all types of change. One of the firm's conditions of survival is its ability to keep up an accelerated rate of change. It seemed to us that it would be more fruitful to observe the firm "on its own ground," i.e., in the context of continuous change, rather than to concentrate on a specific technical change. Moreover, this gave us an opportunity to show how changes in general organization were integrated into the normal life of a firm.

Technical change in the firm is directed towards expansion, the diversification of goods, and adjustment to economic conditions. It brings about continued changes in production processes, equipment, and working methods.

Before 1953, the firm manufactured exclusively articles of hosiery. In that year, after mechanization had been introduced into production processes, one of the firm's activities disappeared—the repair of stockings. The corresponding workshop, with about 30 employees, became superfluous. The firm then tried to retrain the hosiery repair workers, so that they could start in a new branch, that of underwear. To begin with, staff were selected according to age, the oldest being transferred to other workshops. Some workers adapted quicker to underwear work than others, but the technical department considers that the success achieved was due to a large extent to the "cooperation of the workers, who were fully aware of the risk they were taking."

In 1954, a new workshop was opened for the small-scale mass production of pullovers, the aim being to obtain competitive selling prices. This entailed techniques which were very different from normal making-up processes. However, from the staff angle, it was merely an addition to current

production, and did not cause any great changes: the firm recruited experienced staff.

In 1963, it could be seen that production of these new goods had expanded to a point where it was overtaking that of the old goods. Hosiery now represents 20 percent of the firm's turnover, underwear 25 percent, and pullovers 50 percent.

In 1964, after a neighboring firm had been taken over, two new lines were begun.

Alongside the launching of these new lines, the firm had to follow market trends by developing current production.

Seamless Stockings

An important typical case of change was the disappearance of the seamed stocking, whose sales graphs dropped almost vertically by 70 percent between 1961 and 1962, in favor of seamless stocking. Production methods were different. A change was made from the "Reading" machine to small circular "Scott standard" machines, and, because of the qualifications required it was not possible to consider the transfer of hosiery and knitwear operatives from one machine to the other. This led to a transfer of manpower from one factory to another within the trade, actually within town Y.

The firm had not expected this new line to have any future in France, and furthermore, since the firm was already firmly established on the market, current production and stocks of the old lines sold well for a long time. The result was that the firm did not immediately notice the drop in sales of its seamed stockings, and was a year or two late in starting retraining, compared with its competitors.

This delay gave the firm time to equip a machine shop with seamless stocking machines and to obtain the necessary staff, i.e., recruit new staff and train young people. However, this situation left little scope for the transfer and retraining of the hosiery and knitwear operatives.

The firm had a surplus of 74 hosiery and knitwear operatives who worked only on the old looms. First, all retraining possibilities inside the firms were exploited, and secondly, voluntary departures and recategorization outside the firm were encouraged by making them financially advan-

tageous. The age for the retirement fund was lowered from 60 to 50. In spite of all this, the firm had to dismiss some 20 of these operatives.

Modernization Through Computers

Several dates stand out:

1948-50: appearance of the "Reading" or "Cotton" loom, which required more highly-skilled operatives.

1958: first large purchase of automated looms at the Brussels Exhibition.

But characteristic of the firm are the continual changes in techniques used for new products to increase productivity. A pointer here is that from 1955 to 1963 the firm did not change the selling price per unit of its main product. The increase in productivity has made up for the differences in cost due to increases in the price of raw materials and the wage increases during this period.

This increase in productivity is primarily attributed to the improvement of the technical side of mechanization. The firm has a workshop which designs and constructs prototype machines for each type of product.

Alongside research into new machines of new production processes, work simplification studies and the corresponding teaching methods are undertaken.

The firm makes use of specialists. For example, a German expert redesigned a machine produced by the firm so as to increase its productivity. This research consisted of: (1) a motion study of equipment and materials used; (2) a study into methods for teaching operatives to apply the results of the motion study.

So as to adjust its production rate to demand fluctuations, the firm had to have at its disposal accurate information on sales, stocks, and orders for each article. Planning at this stage means basically planning time, that is to say, in the short-term. In 1960, with this aim in view, the firm installed a computer to deal with sales statistics.

This brought about increased speed and efficiency in the sales department, made new tools available for estimating the success of a particular product and the quantities to be produced, and increased the firm's flexibility within its market.

In this branch of the consumer industry, trade forecasts determine the whole of the firm's activity. The acquisition of a computer symbolizes the determination to put trade forecasts on a scientific basis. The firm programs and controls its adjustment to market conditions with the accuracy required by this type of production. At the end of the production cycle, statistics of stocks and orders keep production accurately geared to demand.

The sales department is responsible for orders and their execution. The production department, whose approach is more empirical, is responsible for all the intervening stages: (1) planning for and constructing machines suitable for each product; (2) redeploying and training staff; (3) ensuring that production is kept within certain cost limits.

Forecasting

Within the firm, two different forecasting ranges may be distinguished: (a) development and modernization forecasts connected with the general long-term expansion of the firm; (b) short-term operating forecasts from the sales curve for each particular product.

Expansion forecasts comprise forecasts of purchases of land or property, or of investment in heavy equipment ordered from other firms. So, when buying a loom, the firm is dependent on the delivery times imposed by the manufacturers; it takes a year to get a loom. In the same way, electronic management aids have to be ordered at least 3 years in advance.

Business forecasts are essentially short-term sales forecasts. They are made for 1 year. For example, in December 1963, the sales department forecast 1964 sales for each type of product, after which the production department worked out the effect on equipment, staff, and their distribution. Similarly, forecasts are made just for a year for all the workshops; in the case of the disappearance of fully-fashioned stockings, steps were taken to reclassify the staff, where necessary, roughly a year in advance.

When a new product is put on the market, the following forecasts are made :

(a) sales forecasts, in consultation with representatives; (b) investment forecasts, in consultation with the technical department, which decides upon the machines required, and plans workshop layout, staff, and job classification.

The production programs for each workshop are decided upon once a month. Stock and order statistics determine the priority which the workshops will give to the order.

Hiring From Within

It is the firm's policy at present not to take on staff from outside; "whenever a job falls vacant, it is filled from inside the factory."

"We have a large permanent staff, very many of whom have been with the firm for a long time; it is not unusual to find people who have been with us for 15 or 20 and even 30 years. This makes for certain restrictions: it is difficult to put people from outside in positions of authority over the older employees."

"The same thing happens when a new product is brought out; at first everybody accepts it, and takes on more work; in principle, no new staff are taken on."

Precautions are taken so that no workshop is allowed to amass a surplus of unskilled labor which the firm will not necessarily require in the long-term: for example, for one particular range of goods, the production of rib borders for pullovers required an operation to be carried out on each border. In view of the expansion of sales, the very short-term forecast was that this workshop would require a staff of 60. This unskilled, monotonous work was done by old people, and if the staff of this workshop had been allowed to expand, serious reemployment difficulties would have been encountered when this particular range was stopped. The technical department therefore developed a machine which would handle 700 rib borders simultaneously. Only three operatives are now required in this section.

Changes in production are rapid and require continual and immediate mechanization of production processes. Mechanization means fewer changes in staff strength and avoids problems arising from

continual staff transfers and periodic hiring of new staff.

It can be seen that employment policy, though it is empirical and cannot be forecast in the long-term, is a policy of prudence and economy, based on trying to prevent problems of staff strength and staff transfers.

Automation has not brought about an increase in qualifications required of employees.

It is estimated by the personnel department that, under conditions of expansion, a 20-percent increase in the number of workers would be accompanied by a 10-percent increase in the number of technicians.

The vast majority of the workers employed by the firm are specialized workers for whom experience is more necessary than actual qualifications, which explains why the changes have not, on the whole, brought with them difficult training problems.

Training of specialized workers is short; it takes the form of a 6- to 14-week training course. Afterwards, the firm considers that 1 year's working experience is required for "normal" productivity to be reached.

For training, the firm uses what was originally an employer's training center, the "Hosiery and Knitwear Center," an accelerated apprentice center for female operatives. Trainees are paid by the Ministry of Labor. In addition there is the Productivity Center, where courses are given for technicians and supervisors on timekeeping, method organization, teaching methods and an introduction to scientific management. Training is carried out partly at the school and partly in the factory.

Employee Attitudes

The Board meets every month, at which time staff representatives are informed of new projects as and when decisions are made. They are also informed of sales curves and are made aware of slack periods or backlogs in the various workshops, and of the future of all the products.

Product changes are in general welcomed by the staff: "the work is very repetitive, and it breaks

the monotony." Then again, when one particular branch of production stops, the employees know the risks involved and, apart from age considerations, the firm generally obtains their cooperation when trying to integrate them into a new work field.

The staff is well aware that these changes are a necessary economic part of the firm's life. They know that similar firms are disappearing and that in the long run their security of employment depends upon the firm being dynamic. It is lack of change which would be disturbing.

The firm is consequently in a state of continuous change, while keeping a permanent staff. Within the firm itself staff are not interchangeable, not particularly because jobs are specialized, but for psychological reasons: female employees refuse to change workshops or even cloakrooms, since they feel at home where they are. They do not easily settle in under a new supervisor. Since the workshop is a psychological unit, each type of product has to be allocated within the workshop.

Adapting to Changes

From the very start of this industry, piecework has been the traditional method of payment since it seemed most suited to the extreme division of labor and to the repetitive nature of the jobs. Moreover, it appeared to be a fair method, as each is paid according to his work.

This naturally only concerns staff working on an hourly basis, since mechanics and fitters, being highly skilled, are on a monthly basis.

In 1953-54, the firm was the first in its field to adopt a two-part wage system, with a relatively large proportion as fixed wages, representing about two-thirds of the wage, and only one-third remaining as piecework.

This wage system appeared to have certain advantages for the staff, particularly in the circumstances in which it was adopted—in a new workshop using a new material which had only just been brought out. This made for a reduction in technical risks and avoided fluctuations in wages.

But after being the first with the "two-part wage system," the firm came back to piecework following the technical changes of 1958-59.

The major drawback of the two-part wage system was that it did not give enough incentive to the most expert workers, and it encouraged them to move to other firms. The output of one operative could in fact be as much as twice that of another.

However, according to the personnel department, the piecework system is not satisfactory: "each time a method is changed, the operative starts by losing money, but in the end she benefits after a period of recoupment during which we guarantee her wages (and we guarantee this as long as progress can be made in adapting to the new work)." After progress has been made in mechanization or method study, operatives manage to produce 25 to 30 percent more without any extra effort. This leads to wage disputes which to some extent act as a brake on technical progress.

The firm has to recover part of its investment in machines or design by higher productivity. But the individual operative has no hand in this improvement in her output, and selection of operatives for working the new machines is likely to be questioned by the other operatives who remain at their old output. Consequently the firm lowers the piecework rates for the new machines, thereby causing discontent among the workers.

The present shortage of labor in this field makes this problem of wage settlement even more acute. Other firms in town Y follow a much freer and

more fluctuating employment policy: in certain circumstances, they take on people at any price, only to dismiss them again a few months later if this proves to be necessary.

On the production side, the firm's manpower policy is one of quick adaptation to changing needs. This is possible only because the production department is to a certain extent self-sufficient as regards the means of production. Using data and orders from the sales department, the production department provides for and decides upon the means of production, and constructs them as and when required, thus allowing a production rate to be followed without dependence on outside agents. Consequently it organizes, selects and trains staff, and it coordinates and controls all production.

The indivisibility of jobs which there is at this level is based on the knowledge that the production department has of its staff and of the techniques used. Production changes are carried out with a permanent stable staff used to repetitive tasks.

This empirical method used by the firm when adapting to changes proves particularly effective in the case of short-term changes. More sweeping changes require more detailed and longer-term programming. Retrained hosiery and knitwear operatives for example, could not be reabsorbed by the normal machinery of the firm, which had to resort to special measures.

Common Paradox: White-Collar Organization in Britain

EDITOR'S NOTE.—*The following is taken from chapters II and III of "Trade Union Growth and Recognition," Research Paper 6 of the Royal Commission on Trade Unions and Employers' Associations, written by George S. Bain of Nuffield College.*

THE GROWTH of the white-collar labor force¹ is one of the most outstanding characteristics of the economic and social development of the twentieth century. In every major industrial country in the world the number of white-collar workers is rapidly increasing. This growth is both absolute and relative; not only are the total number of white-collar workers increasing, but also the proportion of these workers in the labor force.

While the growth of the white-collar occupations has not been as large in Britain as in some other countries, it nevertheless has been significant. Between 1911 and 1961, the number of white-collar workers increased by 147 percent, while the number of manual workers increased by only 2 percent, having actually decreased in numbers since 1931. The disparate growth of these two groups is reflected in the increasing relative importance of the white-collar occupations. The white-collar section of the labor force increased from 18.7 percent to 35.9 percent of the total between 1911 and 1961, while the manual share decreased from 74.6 percent to 59.3 percent. During this same period the remaining section of the labor force, the employers and proprietors, showed a slight tendency to decline, this decline being balanced to some extent by an increase in the number of managers and administrators.²

Proportion of Labor Force

Although the white-collar labor force as a whole has increased enormously, there are significant differences in the amount of growth of its constituent occupational groups. It is clear that the clerks have claimed most of the ground yielded by the manual workers. During the period under review clerical occupations grew by 260 percent and

increased their share of the total labor force from 4.5 percent to 12.7 percent. The growth in the proportionate share of the other white-collar occupational groups has been more moderate: The shop assistants maintained a remarkable constancy; the foremen and inspectors increased their share from 1.3 percent to 2.9 percent; the managers and administrators from 3.4 percent to 5.4 percent; the lower professionals and technicians from 3.1 percent to 6.0 percent; and the higher professionals from 1 percent to 3 percent.

The very broad occupational classifications tends to obscure the extraordinary increase in the scientific and technical occupations. Although the total number of such workers is relatively small, they are increasing more rapidly than any other component of the white-collar work force. It was not until the 1921 Census of Population that draftsmen and laboratory assistants were considered sufficiently important groups to merit a separate classification. Since that time the number of draftsmen has increased by 376 percent, professional scientists and engineers by 688 percent, and laboratory technicians by 1,820 percent. If the high growth rates of these occupations continue, the occupational composition of the future white-collar labor force will be considerably changed.

The large and growing proportion of women in the white-collar labor force is one of its most

¹ In this paper the concept of the white-collar labor force has been taken in its widest context, and where there has been any doubt as to whether an occupation was white-collar or manual (e.g., foremen and shop assistants) it has been included in the white-collar group. More specifically, the following broad occupational categories have been taken as composing the white-collar group: government administrators and executive officials; foremen, overlookers, and supervisors; professionals; scientists, technologists, and technicians; specially "creative" occupations such as artists, musicians, and entertainers; clerical and administrative workers; salesmen, commercial travellers, and shop assistants; and security personnel. Where the government's occupational classification systems permit, managerial grades in private industry have been excluded from the white-collar employee group. In modern, large-scale private industry it is the managers who generally control the operation of the business and direct the labor force. Functionally, therefore, they perform the role of employer and cannot be realistically considered part of the trade union potential. To date, only managerial grades in the public sector have shown any general desire to join trade unions.

² This decline in the employer and proprietor group should be interpreted with caution. Although there is a legal distinction between an employer and a manager, in social science the dividing line is more imaginary than real, for an employer becomes a manager as soon as his business is incorporated. The trend towards the incorporation of business enterprises is at least part of the explanation for the decline in employers and proprietors and the increase in managers and administrators. On this point see Guy Routh, *Occupation and Pay in Great Britain* (Cambridge, Cambridge University Press, 1965), pp. 19-21.

noticeable characteristics. Between 1911 and 1961 the proportion of women in white-collar jobs increased from 29.8 percent to 44.5 percent. Although there were relatively few women in the higher professions or the managerial and supervisory grades, they formed a majority among the lower professionals,³ shop assistants, and clerical workers. The most significant substitution of women for men occurred among clerical grades during the First World War. Between 1911 and 1921, the number of male clerks increased a little more slowly than the occupied population, while the number of female clerks increased more than three times. In general terms, the increased number of women in the white-collar occupations is explained by: the increased demand for white-collar skills in the face of relatively full employment, shorter hours, earlier marriage, mechanization of housekeeping, improved educational opportunity, and the particular attraction and suitability of many of the white-collar occupations for women.

Part of the increase in white-collar employment can be explained by the shift of total employment from the primary sector, and to a much lesser extent from the secondary sector, to the tertiary or service sector of the economy—that sector with the highest proportion of white-collar employees. The primary or agricultural sector of the economy has steadily declined while the service sector has increased. During the period 1881 to 1951, gains in the service sector were made primarily at the expense of the agricultural labor force. Contrary to popular belief, neither the rise of white-collar employment nor the decline of manual employment can be explained by any serious decline in the secondary or manufacturing sector, the traditional manual stronghold. Although manufacturing employment as a percentage of total employment has fluctuated, it has held up remarkably well over the whole period.

³ The high proportion of women among the lower professionals at such an early date is explained by the preponderance of the traditional female occupations—teaching and nursing—in this occupational group. Likewise, the decline in the proportion of women in this group over the years is largely explained by the influx of men into these “female” occupations. Men accounted for almost the entire increase in the number of teachers between 1911 and 1961. Even in nursing, men accounted for almost 10 percent of the total in 1961.

⁴ Routh, *op. cit.*, pp. 41–2. Salesmen and shop assistants were not classified separately so it is not possible to determine the industrial effect on this group.

While manufacturing employment as a whole has remained fairly constant, there are considerable differences between the growth rates of one manufacturing industry and another. For example, the growth of the chemical industry which has a very high proportion of white-collar employees, and the decline of the clothing and footwear industry which has a very low proportion of white-collar employees, have obviously worked in favor of increased white-collar employment. One scholar who has analyzed the effects of industrial change on occupational distribution in much greater detail than is permitted by the scope of the present study concludes:

For both lower and higher professionals, the growth of industries has been more potent than their proportions within each industry; for clerical workers and foremen, the reverse has been true—it is their increased proportions within industries that have given the strongest impetus to their growth.⁴

A more detailed picture of the white-collar labor force in manufacturing is given below, not only because statistical data are more plentiful for this sector of the economy than for others, but also because manufacturing industries are the major “commanding height” of the economy and offer the trade union movement the largest untapped potential of white-collar employees.

Strategic Sector

Between 1907 and 1963 the white-collar work force in manufacturing increased by 377 percent whereas the manual work force grew by only 32 percent, having actually decreased in numbers since 1954. The growth of white-collar occupations in manufacturing is also reflected in the fact that over this period their share of the labor force increased from 8 percent to 23.8 percent.

The system of industrial classification has been changed so often since the turn of the century that it is not possible to obtain a picture of the changing composition of the work force in individual manufacturing industries over any length of time. The changing composition of the labor force is most marked in the chemical industry and to a lesser extent in the engineering; vehicle; and paper, printing, and publishing industries. The industries least affected by the development are clothing and footwear; textiles; leather, leather goods and fur.

The most outstanding characteristic of the occupational distribution is the overwhelming numerical importance of clerks in the white-collar labor force of every manufacturing industry. In manufacturing as a whole, clerks comprise just short of 50 percent of total white-collar employment: Their share ranges from a low of 31.6 percent in shipbuilding to over 60 percent in leather, leather goods, and fur; timber and furniture; and paper, printing, and publishing. The rest of the labor force is divided fairly equally between foremen (16.2 percent); scientists, technologists, and technicians (17.8 percent); and other white-collar workers (16.5 percent). There are significant variations from these overall trends in the different industries. Scientists, technologists, and technicians are of much greater importance in engineering, chemicals, vehicles, and shipbuilding than in the other industries; foremen are of greater importance in textiles and shipbuilding than elsewhere.

As in the economy as a whole, women form a significant proportion, 36.8 percent in 1964, of the manufacturing white-collar labor force. But in manufacturing their numbers are largely restricted to one occupational group—clerks. Women are relatively unimportant in the scientific, technical, and supervisory occupations, except in the clothing and footwear, and to a lesser extent, in the textile industries where there are a high proportion of females in all the white-collar occupations.

Importance to the Labor Movement

The number of white-collar workers in Britain is rapidly increasing. Already almost 4 out of 10 workers are white-collar employees. There is every likelihood that this trend will continue and that the future is to be one dominated by white-collar workers. The American economy has already reached a point where the white-collar employees outnumber the manual employees, and if present occupational trends continue in Britain, this point will be reached here during the 1980's.

The relevance of these labor force trends to the question of trade unionism requires little elaboration. The power and influence of the trade union movement largely depends upon the size of its membership and, in particular, upon the "density" of its membership in various industries and occu-

pations. If the trade union movement is to maintain its relative position in the power structure of Britain, it will have to organize these white-collar workers. If it does not or cannot, the best it will achieve is numerical stability within an increasingly narrow band of the occupational distribution, and its ability even to advance the interests of its manual membership will be seriously impaired.

Union Growth

Viewed over the long run the growth of British trade unionism is most impressive. Although total union membership has fluctuated widely with changes in the social and economic environment, the long-run trend has been steadily upwards. (See table.) Between 1892 and 1964 trade union membership increased from 1.5 million to slightly over 10 million, while the number of employees increased from 14.1 million to 23.6 million. Union

TOTAL UNION MEMBERSHIP IN THE UNITED KINGDOM, 1892-1964

(Numbers in thousands)

Year	Labor force	Annual percent change in labor force	Total union membership	Annual percent change in union membership	Density of union membership (percent)
1892	14,126	-----	1,576	-----	11.2
1901	15,795	-----	2,025	-----	12.8
1911	17,555	-----	3,139	-----	17.9
1921	17,618	-----	6,633	-----	37.6
1931	19,328	-----	4,624	-----	23.9
1933	19,498	-----	4,392	-----	22.5
1938	20,258	-----	6,053	-----	29.9
1948	20,767	-----	9,362	-----	45.1
1949	20,818	+0.2	9,318	-0.5	44.8
1950	21,096	+1.3	9,289	-.3	44.0
1951	21,222	+6	9,535	+2.6	44.9
1952	21,322	+5	9,588	+6	45.0
1953	21,401	+4	9,527	-6	44.5
1954	21,718	+1.5	9,566	+4	44.0
1955	21,990	+1.3	9,738	+1.8	44.3
1956	22,230	+1.1	9,776	+4	44.0
1957	22,382	+7	9,827	+5	43.9
1958	22,346	-2	9,636	-1.9	43.1
1959	22,404	+3	9,621	-.2	42.9
1960	22,764	+1.6	9,832	+2.2	43.2
1961	23,037	+1.2	9,893	+6	42.9
1962	23,354	+1.4	9,883	-.1	42.3
1963	23,470	+5	9,928	+5	42.3
1964	23,616	+6	10,065	+1.4	42.6

¹ This figure relates to 1891.

SOURCE: The trade union membership figures are those published annually by the Ministry of Labour. The latest figures published can be found in "Membership of Trade Unions in 1964," *Ministry of Labour Gazette*, November 1965, pp. 480-1. The labor force figures for 1959-64 are from the "Number of Employees (Employed and Unemployed) June 1964," *Ministry of Labour Gazette*, February 1965, pp. 61 and 64. The figures for 1948-58 were supplied from unpublished data by the Ministry of Labour and are on a comparable basis to the 1959-64 series. The figures exclude employers, self-employed, and members of the armed forces, but include the unemployed. The labor force figures for 1891, 1901, 1911, 1921, 1931, 1933, and 1938 were derived in modified form from A. L. Bowley, *Wages and Income in the United Kingdom Since 1860* (Cambridge, Cambridge University Press, 1937), pp. 134-5 and his *Studies in the National Income 1924-1938* (Cambridge, Cambridge University Press, 1944), p. 56.

membership therefore increased by 539 percent while potential union membership increased by only 67 percent. As a result, the overall density of unionization⁵ increased from a little over 11 percent to almost 43 percent.

Viewed over the immediate short run the growth of British trade unionism is much less impressive. Lately many signs have appeared which suggest that an area of stabilization is following upon the last great upsurge of union growth which began around 1933. During the 15 years between 1933 and 1948, actual union membership increased by 113 percent while potential union membership increased by only 6.5 percent. But, during the 16 years between 1948 and 1964, union membership increased by only 8 percent while potential union membership increased by 14 percent.

These disparate increases in actual and potential union membership are reflected by changes in the density of unionization. Although union density figures are not continuously available prior to 1948, it is fairly clear that union density increased steadily from 1933 to 1946-47 when it reached a peak of 45-47 percent. Since that time, there has been a gradual but certain decline in union density. For density to increase, actual union membership must grow faster than potential union membership. This condition has only existed in 5 of the 16 years from 1948 to 1964, and, for the period as a whole, potential union membership increased almost twice as much as actual union membership. Consequently, the overall density of unionization declined from 45.1 percent in 1948 to 42.6 percent in 1964.

There are two major reasons for the decline in the growth rate of unionism and in overall union density. The first is the changing pattern of employment which was described above. There has been a shrinkage of employment in a number of basic industries which have a long tradition of union activity and the highest density of membership—railways, coal mining, national government, cotton, and manual employment in general.⁶ At the same time there has been a steady expansion of employment in those areas which have proved most difficult to organize and have a relatively low density of unionization—professional and business services; insurance, banking, and finance; distribution; chemicals; food, drink, and tobacco; and

white-collar occupations in all industries. But not all the industrial redistribution of employment has worked against the unions. Employment in agriculture, a low density industry, declined while employment in metals and engineering and in paper, print, and publishing expanded, although a large proportion of this increase was composed of white-collar employees. Nevertheless, it is clear that on balance the industrial tide has been running against the trade union movement. In the 10 areas where employment expanded most rapidly between 1948-64, density of unionization was in every case less than 60 percent and in three of these areas it was 20 percent or less. In the 10 industries where employment expanded the least or declined, density of unionization was in every case over 20 percent and in five of these areas it was over 60 percent. Clearly, union density is highest in the declining industries and lowest in the expanding industries, and this is causing the overall density of unionization to fall.

The second factor explaining the diminishing growth rate of unionism and the decrease in overall density is that the unions are not recruiting members quickly enough among the expanding areas of employment, in particular among the white-collar occupations, to offset the decline in the traditional industries and among manual workers generally. Density of unionization declined in 8 of the 14 expanding industries between 1948-60. Moreover, in spite of the increase in trade unionism among white-collar employees between 1948-64 being over thirty times greater than the increase among manual workers, this growth was not sufficient to increase or even maintain the overall density of unionization. In order to maintain, let alone extend, its numerical strength, the labor movement must increase even further its rate of growth among white-collar employees.

⁵ The "density" of union membership is given by the following formula: Actual Union Membership/Potential Union Membership (Number of Civil Employees) \times 100. This concept has also been referred to as the "percentage organized," "real membership," the "degree of unionization," and "completeness." The "density of union membership" is the accepted British terminology and is generally used throughout this study. Sometimes the term "real membership" is used.

⁶ The fact that employment has declined in these industries does not necessarily mean that union density has also declined. In spite of a decline in employment in cotton, agriculture, coal mining, and national government, the density of unionization in these industries has increased.

Increase in White-Collar Membership

To assess the growth and present extent of white-collar unionism in Britain is a most difficult task. It is necessary to obtain the membership figures of each of almost 600 unions operating in Britain and classify them into manual and white-collar categories. Moreover, more than 20 percent of total white-collar union membership belongs to partially white-collar unions, and they do not always compile separate figures for their white-collar membership. In a sense, almost every manual union in Britain is a partially white-collar union because most of them take foremen into membership. Unfortunately very few of these unions keep separate membership figures for this occupational category. In spite of all these difficulties some conclusions regarding the growth and extent of white-collar unionism can be drawn.

Of the 591 unions operating in the United Kingdom in 1964, there were approximately 280 purely white-collar unions and at least 19 partially white-collar unions. Forty-three of the purely white-collar unions and all the partially white-collar unions were affiliated to the Trades Union Congress (TUC). Total white-collar union membership in 1964 was 2,623,000 and close to 1,711,000 of this total was affiliated to the TUC; this represented almost 20 percent of total TUC membership. In short, one in four trade unionists are white-collar employees and slightly more than 65 percent of them are affiliated to the TUC.

The growth of white-collar unionism has been an extremely important factor in the post-war development of the TUC. In fact, almost the entire expansion of the TUC since the war has been due to the increase in its affiliated white-collar membership. Between 1948-64 the affiliated membership of the TUC expanded by 11 percent. This average overall expansion resulted from an increase of 79 percent in the affiliated membership of purely white-collar unions, and an increase of only 4 percent in the affiliated membership of manual and partially white-collar unions.

Although the above TUC figures exaggerate the actual growth of white-collar unionism, it has nevertheless increased substantially in total amount since 1948. Between 1948-64, the "adjusted" white-collar membership affiliated to the TUC expanded by 36.2 percent while that portion of the total which remained unaffiliated grew by 29 per-

cent. Total white-collar unionism increased by 33.6 percent as opposed to an increase in total manual unionism of only 0.6 percent.

Taken by themselves these white-collar growth figures are most impressive. To determine their real significance, however, changes in the white-collar labor force during the post-war period must also be taken into account. Although the government does not publish figures of the number of white-collar employees in the economy as a whole, it is possible to obtain some rough estimates by performing a few arithmetical manipulations. During the period 1948-64 when total white-collar union membership increased by 33.6 percent, the white-collar labor force increased by 32.4 percent. During this same period when manual union membership increased by 0.6 percent, the manual labor force increased by 4.6 percent. In other words, the overall density of white-collar unionism has increased only very slightly while the overall density of manual unionism has fallen slightly.

In fact, the density of total white-collar unionism only increased from 28.8 percent to 29.0 percent between 1948-64, while the density of manual unionism declined from 53.1 percent to 51.0 percent. There is also a significant difference in the density of unionism between men and women. Density of unionization among both manual and white-collar female workers is considerably less than among male workers. Moreover, the density of unionization among female white-collar workers has remained more or less constant since 1948.

Because of a lack of detail in the systems of classifying both labor force and union membership figures, it has only been possible to obtain rough estimates of the real growth of white-collar unionism. Nevertheless, the relative changes in the size of white-collar union membership and the white-collar labor force are so nearly equal that, even granted an error of a few percentage points, it is obvious that at the very best the density of white-collar unionism in the economy as a whole could have increased only very slightly.

Marking Time

The growth of union membership in the post-war period will hardly excite or reassure a realistic supporter of trade unionism. The trade union movement must do much better than simply keep up with changes in the labor force. Even if both

white-collar and manual membership had increased sufficiently to maintain their respective densities, the density of total union membership would still have declined because the high density manual sector of the labor force was contracting while the low density white-collar sector was expanding. Thus the trade union movement is at present faced with the paradoxical situation that in order simply to mark time, it must advance.

The degree of unionization among white-collar employees is considerably less than that found among manual workers. In Britain only 3 out of 10 white-collar workers belong to a union whereas 5 out of 10 manual workers are members. Moreover, the vast majority of white-collar union membership is concentrated in the public sector of the economy. While roughly 8 out of 10 white-collar employees in public employment belong to a trade union, only 1 out of 10 are union members in private manufacturing employment.

Since 1948, the absolute amount of white-collar unionism has increased greatly. This has prompted many people to speak of a boom in white-collar unionism. Such people are suffering from a growth illusion which results from considering changes in union membership in isolation from changes in the labor force. In real terms this membership boom is nonexistent. In spite of the phenomenal growth of some white-collar unions, white-collar unionism in general has done little more than keep abreast of the increasing white-collar labor force, and the density of white-collar unionism has not increased significantly during the post-war period. Of even greater importance, the growth of trade unionism among white-collar employees has not been sufficient to offset a decline in the density of manual unionism or to prevent a decline in the density of total unionism. Thus despite all the recruiting activity of white-collar unions during the post-war period, the real membership strength of white-collar unions in general is roughly the same today as it was in 1948, while the real membership

strength of manual unionism and the trade union movement as a whole has actually decreased.

It would be a mistake to underestimate the importance of manual workers to the trade union movement. They still constitute a majority of all employees and in many areas they are still poorly organized. If union membership among manual workers could be expanded to its numerical limit, this alone would greatly increase the strength of the trade union movement. But it would be strategically unwise for the union movement to ignore the expanding white-collar labor force and concentrate on increasing its membership among the remaining pockets of unorganized manual workers. There are already close to 9 million white-collar employees in Britain and they are increasing so rapidly that by the 1980's they should outnumber the manual workers. If trade unions focus their attention on the manual labor force, they will be concentrating on the least dynamic group in modern society—a group which is constantly losing its younger and abler members to other sections of society. They will run the risk of becoming “the increasingly outdated representatives of a declining industrial minority.”⁷

At this juncture in the history of the British trade union movement, its ability to be a dynamic and expanding force in our society is in doubt. Yet from the viewpoint of the trade union movement expansion is essential. It has been well argued by a former official of the American labor movement that:

... an institution that does not grow tends to stagnate and atrophy, and that the trade union movement cannot adequately serve its following if it is not expanding. Restrictions on the area of union organization necessarily circumscribe the movement's economic power and political prestige even in the sectors where it is most powerful. It must constantly seek to capture the leadership of new unorganized groups in order to maintain the buoyancy of social leadership, the role of innovator in working conditions and employee benefits, and the position of social and industrial critic to which it is committed.⁸

Whether the British trade union movement stagnates or expands in the second half of the twentieth century will largely depend upon its willingness and ability to organize white-collar employees.

⁷ William McCarthy, *The Future of the Unions* (London, Fabian Society, Tract No. 339, 1962), p. 4.

⁸ Solomon Barkin, *The Decline of the Labor Movement and What Can Be Done About It* (Santa Barbara, Calif., Center for the Study of Democratic Institutions, 1961), p. 6.

The Administration of Large Pension Plans

ALTHOUGH THE NATION'S 100 largest retirement plans account for less than one-half of 1 percent of the total number, their assets represent more than half the assets of all self-insured plans.¹ In addition, these 100 plans cover over 5 million workers and their dependents. According to reports filed with the Office of Labor-Management and Welfare-Pension Reports (LMWP) of the Department of Labor during 1960-64, the large plans have certain characteristics which differ from the other programs.²

Assets of the Plans

The enormous rise in the assets of the 100 largest retirement plans over the 5-year period (to \$26.4 billion from \$17.9 billion) is paralleled by the rise in assets for all private pension and deferred profit-sharing plans (to \$51.9 billion from \$33.1 billion) as reported in data from the Securities and Exchange Commission.³ The overall financial picture for the 100 largest retirement plans is set forth in table 1.

The value of common stock held totaled \$6.5 billion in 1960 and accounted for 36 percent of total assets, compared with a total of \$11.9 billion in 1964 which accounted for 45 percent of total assets. Among all private plans included in the SEC universe, the proportion of assets invested in common stock was 32 percent in 1960 and 40 percent in 1964.

Those plans with profit-sharing, savings, and stock purchase provisions tended to weight the proportion of common stock held by the 100 plans as a whole. In 1964, the 100 included 17 with profit-sharing, savings, and stock purchase provisions; their investments in common stock represented 77 percent of their total assets, as compared with 34 percent for plans without profit-sharing, savings, and stock purchase provisions. As an illustration of this difference, among the four plans which reported assets of \$1 billion or more in 1964, there was one plan, a savings and profit-sharing plan, which reported 95 percent of its total assets invested in common stock. Another plan of the same magnitude, which enabled employees to supple-

ment their future pension benefits through voluntary participation in a savings and stock purchase fund, reported 73 percent of its total assets invested in common stock. On the other hand, two plans with \$1 billion or more in assets, which did not include such provisions, reported 39 percent and 37 percent of their assets invested in common stock in 1964.

Changes in Rank

The composition of the 100 largest plans and their ranking within the group changed from year to year, but there were 90 plans which remained within the group in each of the 5 years. In 1964, as shown below, 74 of the plans had assets of \$100 million or more, compared with 44 plans of this size in 1960:

Assets by size of plan	Number of plans		Percent of assets	
	1964	1960	1964	1960
Total, 100 largest retirement plans.....	100	100	100.0	100.0
\$1 billion or more.....	4	3	25.3	21.5
\$500 to 999 million.....	7	4	18.5	13.6
\$250 to 499 million.....	15	11	20.2	20.9
\$100 to 249 million.....	48	26	27.2	22.5
Less than \$100 million.....	26	56	8.8	21.5

The 10 plans which ranked highest in assets in 1964 retained the same relative position they had held 5 years earlier. At the low end of the scale, there was considerable shifting in the relative rank and size of the plans.

¹ Self-insured plans are those which hold their assets in a trust or separately maintained fund as opposed to plans funded through an insurance carrier.

² The Welfare and Pension Plans Disclosure Act (WPPDA) requires that plan administrators must file plan descriptions (Form D-1) for all plans covered by the law. Annual financial reports (Form D-2) also are required of plan administrators for plans with 100 participants or more. This article summarizes a forthcoming LMWP bulletin.

³ See *Private Noninsured Pension Funds, 1964* (U.S. Securities and Exchange Commission, 1965), Statistical Series, Release 2053. Coverage of plans included in the SEC statistical series is narrower than that required by the WPPDA. The SEC coverage, like that of the WPPDA, includes pension plans which provide a stated level of benefits for life, and deferred profit-sharing plans, but excludes some savings plans. Under the WPPDA, however, such plans must be disclosed when they are deferred savings plans, the benefits of which are payable, in whole or in part, at or after retirement. The SEC statistical series presents both the book value and market value of funds. The amounts reported to LMWP, however, may represent either book or market value depending on the basis the plan is required to use in valuing investments. Despite these limitations on comparability, there are striking similarities in the trends illustrating retirement plan growth and distribution of assets, which may be derived from the two sets of data.

TABLE 1. ASSETS OF THE 100 LARGEST RETIREMENT PLANS AT END OF YEAR, BY TYPE OF ASSET, 1960-64

Type of asset	1964	1963	1962	1961	1960
Millions of dollars					
Total assets.....	\$26,442	\$23,811	\$21,566	\$20,208	\$17,916
Cash.....	310	278	251	216	166
Government obligations.....	1,294	1,306	1,223	1,186	1,164
Non-Government bonds.....	10,119	9,480	8,886	8,477	8,157
Preferred stocks.....	168	189	213	236	258
Common stocks.....	11,880	10,184	8,916	8,255	6,519
Other investment assets.....	2,305	2,022	1,752	1,529	1,365
All other assets.....	366	352	325	309	287
Percentage distribution					
Total assets.....	100.0	100.0	100.0	100.0	100.0
Cash.....	1.2	1.1	1.2	1.1	0.9
Government obligations.....	4.9	5.5	5.7	5.9	6.5
Non-Government bonds.....	38.3	39.8	41.2	41.9	45.6
Preferred stocks.....	.6	.8	1.0	1.2	1.4
Common stocks.....	44.9	42.8	41.3	40.8	36.4
Other investment assets.....	8.7	8.5	8.1	7.6	7.6
All other assets.....	1.4	1.5	1.5	1.5	1.6

Size of Assets

There were 56 plans in 1960 with assets under \$100 million, which together accounted for slightly over one-fifth of the total \$17.9 billion held by the 100 plans. By 1964, there were only 26 plans which held assets totaling less than \$100 million and the value of their combined assets was less than a tenth of the total \$26.4 billion held by the entire group. The plan ranking 100th in 1964 had assets of \$80.4 million, compared with the \$48.2 million held by another plan in the same position in 1960.

In some instances, the change in asset size of a plan resulted from the consolidation of several retirement plans by corporations which had merged the funds of subsidiaries into a common fund. The American Telephone and Telegraph Company, however, and the subsidiaries of the Bell Telephone System, which have identical plans, report the pension plans of the parent company and each subsidiary separately. The 16 Bell System plans included in the study for 1964 had trust funds ranging in amount from about \$100 million to about \$900 million. According to the company's annual report, the combined pension trust funds of the Bell Telephone System amounted to \$4.3 billion in 1963.⁴ A later report available from the company stated that for 1965 the combined trusts had risen to \$5.3 billion.⁵

The 1964 list also included plans of 11 corporate employers with two or three types of plans, each reported separately. For example, General Motors had three retirement plans each of which ranked among the 100 largest: a plan for hourly rated

employees, a plan for salaried employees, and a savings and stock-purchase plan.

Party-in-Interest

In 1962, 45 of the plans reported some party-in-interest investments and loans.⁶ Thirty-six of the plans held some investments in stocks or bonds reported as party-in-interest investments. Of the nine remaining plans, three disclosed loans to the employer or other party-in-interest, and six plans reported a combination of party-in-interest investments and loans.

Primarily, these investments were in "listed" stocks or bonds traded on exchanges subject to SEC regulations, or in securities subject to other regulatory supervision by a Federal agency. The proportion of the fund invested in such stocks and bonds ranged from less than one-half of 1 percent all the way up to 99 percent, but in each case where the investment in stocks and bonds was greater than 20 percent of the fund the plan was one with some profit-sharing, savings, or stock purchase provisions.

Number of plans with party-in-interest investments and loans, 1962

Percentage of fund in party-in-interest investments or loans	Total plans	Plans with profit-sharing, savings, or stock purchase provisions	Other plans
Total, all plans.....	45	16	29
80.0 percent or more.....	7	7	-----
60.0 to 79.9 percent.....	3	3	-----
40.0 to 59.9 percent.....	1	1	-----
20.0 to 39.9 percent.....	2	2	-----
10.1 to 19.9 percent.....	2	-----	2
10.0 percent or less.....	30	3	27

The 10-percent limitation on party-in-interest investments recommended in 1965 by the President's Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs⁷ was exceeded by one-third of the 45 plans report-

⁴ Moody's Investors Services, Ltd., *Moody's Public Utility Manual, 1964* (New York, Moody's, 1964), p. 166.

⁵ *Private Pension Plans, Part I: Hearings Before the Subcommittee on Fiscal Policy, April 26-27, May 2, 1966* (Joint Economic Committee, 89th Cong., 2d sess.), p. 288.

⁶ The WPPDA requires the reporting of financial transactions which involve those who are deemed to be a "party-in-interest." The term "party-in-interest" is defined by the act to mean "any administrator, officer, trustee, custodian, counsel, or employee of any employee welfare benefit plan or employee pension benefit plan, or a person providing benefit plan services to any such plan, or an employer any of whose employees are covered by such a plan or officer or employee or agent of such employer, or an officer or agent or employee of an employee organization having members covered by such plan."

⁷ See *Public Policy and Private Pension Programs* (President's Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs, January 1965), p. xvi.

ing party-in-interest investments and loans in 1962; 13 of the 15 plans so reporting were plans with profit-sharing, savings, and stock purchase provisions.

In an unpublished study by the Office of Labor-Management Policy Development involving a small random sample of 174 retirement plans reporting party-in-interest investments in 1963, 30 percent of the pension benefit plans in the sample reported such investments exceeding 10 percent of their funds, but of the profit-sharing retirement funds in this sample, 57 percent reported party-in-interest investments exceeding 10 percent. Although the 10-percent recommendation cited above referred to future investments of "retirement" funds, the President's Advisory Committee on Labor-Management Policy, referred to a 10-percent limitation on the investment of "pension" funds.⁸ This difference in terminology may be meaningful or simply a problem in semantics, but it focuses on the distinct differences in party-in-interest funds held by pension benefit plans versus profit-sharing or stock-purchase retirement benefit plans.

Coverage

In 1962, the retirement plans provided coverage for 5.4 million active and retired employees. This figure represents about 21 percent of the Social Security Administration estimate⁹ of 25.2 million workers and beneficiaries covered by all types of plans, and about 28 percent of the estimated 19.4 million workers and beneficiaries covered by non-insured plans. Sixty-one of the 100 largest plans, with almost 64 percent of the employees, were in manufacturing. The 20 plans in communication and utilities accounted for another 13 percent of the total number of employees, as seen in table 2.

Management of Plans

To what extent did the administration of the 100 largest plans and their financial support differ

⁸ Ibid., appendix D, p. 9.

⁹ Alfred M. Skolnik, "Ten Years of Employee-Benefit Plans," *Social Security Bulletin*, April 1966, table 5.

¹⁰ See *Characteristics of 161,750 Plans Filed as of July 1, 1963* (U.S. Department of Labor, Office of Labor-Management and Welfare-Pension Reports), table 4.

¹¹ Ibid., table 7.

TABLE 2. NUMBER OF PLANS AND NUMBER OF EMPLOYEES COVERED, 1962

Industry division	Number of plans	Employees ¹	
		Number (In thousands)	Percentage
Total.....	100	5,381.5	100.0
Mining.....	1	191.1	3.5
Construction.....	2	424.0	7.9
Manufacturing.....	61	3,432.0	63.8
Transportation.....	5	324.0	6.0
Communication and other public utilities.....	20	697.2	13.0
Wholesale and retail trade.....	6	281.2	5.2
Finance, insurance and real estate.....	5	32.0	.6
Services.....			

¹ Includes active and retired employees but excludes duplicate coverage under more than 1 plan offered by the same employer.

from that of all retirement plans on file with LMWP? In 1962, 94 of the 100 largest plans were administered by an employer or employer association; by comparison, as of July 1, 1963 (the nearest date for which these figures are available), 77 percent of all the 33,000 retirement plans on file with LMWP were administered by an employer or employer association.¹⁰ Only 4 of the 100 largest plans were administered by a joint employer-employee board of trustees, compared with 20 percent for all retirement plans. There was one union plan, administered by the International Brotherhood of Electrical Workers (IBEW) AFL-CIO, among the 100 largest, matching a 1-percent figure for all retirement plans administered by unions in 1963.

Contributions were made by employers in 99 out of the 100 plans that ranked as the largest in assets in 1962; one plan, that of the IBEW, was financed solely by the union membership. There were 57 noncontributory plans to which employers alone made payments and 42 contributory plans to which payments were made by both employers and employees. The proportion of contributory plans among the 100 largest was significantly higher than that for all retirement plans. As of July 1, 1963, only 24 percent of the retirement plans on file with LMWP received contributions from both employers and employees.¹¹

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Foreign Labor Briefs*

AT MIDYEAR, the economic sluggishness of many West European countries was reflected primarily in the flattening of economic growth, increased unemployment (some of it resulting from the efforts to redeploy labor), and the weakening of domestic demand. Price and wage pressures, decline in profits, and hesitancy in private investment due to mixed economic indicators were additional manifestations of the lagging economy. In fact, the Austrian Institute of Economic Research described the condition of most Western countries in general as being "in the trough of the economic cycle." Increases in unemployment were particularly pronounced in Great Britain and West Germany. Apart from general monetary and fiscal measures, efforts made in individual countries to cope with this trend of the last few months included increased stress on wage-price policy (Britain, France, and Italy) or voluntary wage-price restraint (Germany), and more rigid control of manpower migration (particularly Germany, Italy, Portugal, and Sweden). Among the measures were stepped up programs to improve labor productivity (Britain); improvements in unemployment, sickness, dismissal, and retirement benefits (Britain and France, for example); and greater emphasis on other manpower adjustment measures, such as retraining, improved counseling, and placement services (Britain, France, and Sweden).

The austerity in several countries of the Near East and North Africa was an outgrowth of the recent war, or represented an increase in taxes and expenditures for rearmament. In Indonesia and Argentina measures to curb inflation have included the freezing of government salaries and reduction in force, respectively. The Dominican Republic extended its July 1966 austerity program for another year.

France—*Manpower Adjustment*

The Government recently issued a series of decrees designed to ease employment problems and

increase labor mobility. It created a National Employment Agency (with provisions for the operation of private employment agencies meeting certain criteria), to improve the services to job-seekers and to function as the statistical repository for employment data. Under the new provisions, employed workers may be eligible to receive retraining allowances if their training is for critical occupations, and partially unemployed workers, in addition to those fully unemployed, may be granted unemployment benefits. Moreover, the previously voluntary contributions to a supplemental insurance scheme for all employers and workers in commerce and industry were made compulsory. Another measure provided for a 2-month (instead of the previous 1-month) notice period to precede the layoff of an employee with at least 2 years of seniority, and set the minimum severance indemnity at one-twentieth of the employee's monthly pay for each year of service.

Australia—*Wages*

The Commonwealth Conciliation and Arbitration Commission has recently abandoned a 50-year practice of considering separately two wage components, the basic wage and the margin (differential based on difficulty of the job and skill level), and for the first time adopted the "total wage" concept, in which the two elements are considered simultaneously by a single panel. Under the old system, the establishment of basic wages was followed by arbitration awards of increases in the margins, which made the margins larger than the original proportion of the total. Employers have pushed for adoption of the total wage concept as a means of avoiding the imbalance; the unions have opposed the concept as less rewarding to the workers. The total wage will now be set annually after a comprehensive review of the economic situation.

India—*Growth of Modern Sector*

Employment in the modern sector (all public establishments and private nonagricultural establishments) increased nearly 28 percent—from 12,090,000 to 15,460,00—during the Third Five

*Prepared in the Office of Foreign Labor and Trade, Bureau of Labor Statistics, on the basis of material available in early August.

Year Plan (1961-65). In 1961, the modern sector included only 6.4 percent of the total labor force of 188 million. Despite this sector's annual growth at the rate of 5.6 percent during the Third Plan period, the great majority of Indian workers are still active in the traditional sector of small, family-operated establishments, primarily in agriculture, and in household industries, trade, and services.

As a result of greater investment in the public than in the private industries during the Third Plan period, employment in the former increased 32.8 percent, compared with 21 percent in the latter. The average annual growth rate during the period has shown a decelerating tendency in the most recent years, particularly in the private group, where it was 1 percent in 1966. Annual employment growth (14 percent) in the public segment has been greatest in establishments controlled and financed entirely or substantially by Central and State Governments.

South Africa—*Artisan Training*

All labor leaders speaking at a recent conference in Pretoria agreed that not enough young men were undergoing apprenticeship training, owing mainly to low wages and lack of motivation. T. P. Murray, president of the multiracial Trade Union Council of South Africa, the largest of the country's three national trade union centers, stated that not only should artisan wages be increased but artisan training programs should be improved and modernized so that future workers could better cope with the industrialization taking place. The president of the Railways Artisan Staff Association said that all the unions concerned should meet to discuss the best possible methods of dealing with the shortage of artisans.

Hungary—*Hours of Work*

The Council of Ministers has approved a plan for the gradual reduction of the 6-day workweek from 48 to 44 hours over a 2½-year period, beginning July 1, 1968. About 1.6 million persons employed in the "socialist sector" (cooperative and state-owned) of the economy will be affected. Any

enterprise will be permitted to reduce its workweek, provided there will be no decline in its production, no increase in costs, and no cut in wages.

Japan—*Trade Unions*

The Secretary General of the General Council of Trade Unions of Japan (*Sohyo*, 4.4 million members) presented to the organization's annual convention a draft "action policy" statement promising large scale "struggles" this autumn against the war in Viet-Nam and for the return of Okinawa to Japan, attacking "foreign monopolies" for allegedly pressuring Japan to liberalize the import of capital, and condemning leaders of the moderate Japanese Confederation of Labor (*Domei*) for "undermining" *Sohyo*, calling them "fifth columnists for capital." The Convention accepted the proposal.

Indonesia—*Civil Service Salaries*

The Minister of Economics and Finance has announced that civil service salaries are to be frozen as part of the effort to stabilize the economy by restraining increases in the money supply and Government spending. He pointed out that between October 1966 and August 1967, public servants' salaries had increased 300 percent, but prices in the same period rose only 80 percent. The Minister also said that the Government was pledged to limit further price increases in 1967 to 65 percent. However, he acknowledged that despite the raises, Government salaries remained low.

Tunisia—*Seminar on Cooperatives*

A seminar on the Tunisian cooperative movement, held in Tunis on July 8 under the direction of the National School of Cooperation, was designed basically to highlight the expansion that has been achieved in Tunisia's cooperative system. In the opening address, the Secretary of State noted that the number of cooperatives in the country has risen from 130 in 1960 to about 990 in 1967, and that a significant percentage of the population is currently grouped into cooperatives of one type or another.

Significant Decisions in Labor Cases*

Apprenticeship Programs

IN A CASE¹ OF INITIAL JUDICIAL APPLICATION of the provision in the National Apprenticeship Act of 1937 (section 50),² granting authority to the Secretary of Labor to establish apprenticeship standards, a Federal district court ruled that a group of nonunion employers had no standing under the act to compel registration of their apprenticeship program which had been rejected by the Department of Labor as there already was an approved program in the area. The court found that the Department's decision was within the discretionary bounds under the act, the employer group had suffered no legal harm, and no right of review had been granted by any relevant legislation.

Under the National Apprenticeship Act (NAA) the Secretary of Labor, through the Administrator of the Bureau of Apprenticeship and Training, had registered a joint management-labor apprenticeship program for the area in question. A group of nonunion employers refused to join in the registered program, and, instead, sought approval for a separate program of their own. When this was denied by the Administrator, the employers instituted suit to compel the Department of Labor to accept the program. As a basis for their suit, they alleged that since only apprentices in registered programs could be used in work on Government contracts,³ the denial would cause them to suffer a legal harm because, it was argued, they would have to pay the higher journeymen rates and thus could not bid competitively against contractors with registered apprentices. The Federal Government opposed the suit on the ground that the employers had no legal basis to compel the registration of their program.

The court read section 10 of the Administrative Procedure Act (APA) as requiring the employers to show that the Administrator's determination was an abuse of discretion, that they suffered a

legal harm, or that they were "adversely affected or aggrieved" within the meaning of some relevant statute.

Rejecting the employers' implication that "the APA requires an express statement that the agency action involved is committed to the agency's discretion," the court found the Apprenticeship Act to be broadly worded and to grant the Administrator great latitude in making decisions in an area requiring the exercise of his expertise. The court also found the employers had not suffered a legal wrong under the Davis-Bacon Act, as Congress in enacting the legislation intended to protect laborers and not to grant rights to contractors. In neither the apprenticeship statute nor the Davis-Bacon Act did Congress explicitly grant the authority to sue, without which even economic injury as a result of government action is insufficient to confer standing, nor had Congress implicitly provided for it, the court held.

The court parenthetically denied that a Bureau circular authorizing its agents to assist nonunion employers in the institution of apprenticeship programs created any legal right in the employers. The court held that the circular had stated only that the Bureau's assistance was offered in starting programs, but that the decision of whether or not assistance would be rendered was within the Bureau's discretion. The court also pointed out that the circular had not been published in the *Federal Register* as is required for substantive rules of general application.

*Prepared in the U.S. Department of Labor, Office of the Solicitor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

¹ *Gregory Electric Co., Inc. v. U.S. Department of Labor* (D.C.—S.C., May 30, 1967).

² Reading in part, "The Secretary of Labor is authorized and directed to formulate and promote the furtherance of labor standards necessary to safeguard the welfare of apprentices, to extend the application of such standards by encouraging the inclusion thereof in contracts of apprenticeship, [and] to bring together employers and labor for the formulation of programs of apprenticeship . . ." 29 U.S.C. 50

³ Secretary of Labor's regulation 29 CFR 5.5(a)(4), promulgated by the authority of the Davis-Bacon Act (section 276a(2)). Generally, the act gives the Secretary the authority to determine from legally prevailing wages the minimum wages to be paid various classes of laborers and mechanics covered by government construction contracts. 40 U.S.C. 276a—276a-7.

Disclosure of Information

In the first labor case decision⁴ interpreting a recent act to facilitate public access to government information,⁵ a Federal district court ruled that a company that had been investigated by the National Labor Relations Board pursuant to unfair labor practice charges had no right under the law to obtain witnesses' statements until after they had testified at the Board's hearing. The court concluded that these statements were specifically exempted by the act.

During the course of an investigation under the Labor Management Relations Act, and before the effective date of the act forming the basis of this suit, the company requested the NLRB to make available for their inspection "any statements or evidence" obtained during the investigation. After the Board denied this request and the act had become effective—but prior to the Board's hearing—the company instituted suit to compel the production of these files, which consisted of statements given by company employees to NLRB representatives concerning the unfair labor practice charges being investigated by the Board.

The NLRB contended, and the court found, that section 3(e)(7) of the act, pertaining to investigatory files compiled for law enforcement purposes, and section 3(e)(4) dealing with confidential statements, exempted the Board's files from the act.

Stating that, under the Jencks Act,⁶ a criminal law enforcement agency would not be obligated to produce similar information under these circumstances, the court found it "inconceivable" that Congress could have intended to give greater rights of inspection to those charged with violating Federal regulatory statutes than those accused of violating Federal criminal law.

In treating the statements as confidential and exempt under section 7(e)(4) of the act, the court recognized that an employee would be much less willing to furnish an investigator information if he knew that his employer would learn the con-

tents of that statement prior to the employee's testimony at a Board hearing.

The judge stated that for lack of sufficient time, because of the impending Board hearing, he could not prepare a formal opinion on "overall impact" of the new law upon the work of law enforcement agencies such as the NLRB, and was compelled to resort to "this abbreviated Memorandum of Decision and Order. . . ."

Equal Employment Opportunity

In a "pattern and practice" suit⁷ brought by the Attorney General under Title VII of the Civil Rights Act of 1964, a U.S. district court held that a union's restriction of new membership to sons and close relatives of members, and its requirement that applicants be endorsed by three members and approved by a majority of the membership of the all-white union, constituted a pattern and practice of discrimination. The court further held the act requires affirmative and mandatory preliminary relief and ordered the union to admit certain named Negro applicants, to otherwise cease admitting new members to the union until a plan employing objective criteria for membership has been approved by the court, and to refer nonmembers for employment, at first on an alternate white-Negro basis, the register of applicants permitting, and subsequently in chronological order of applications for work.

The case arose from charges made to the U.S. Equal Employment Opportunity Commission that the union refused to admit Negroes and Mexican-Americans to membership and to refer them for employment in the asbestos and insulation trade. After investigating the charges and finding reasonable cause to believe that they were true, and after its attempts to conciliate the matter had failed, the EEOC referred the case to the Department of Justice, which brought this suit.

The court found that the union controlled employment and training opportunities in the trade in the New Orleans-Baton Rouge area in Louisiana. It was the bargaining agent of employees of all major employers, and operated a system whereby it approved or referred all journeymen and helpers hired in the trade. No Negroes or Mexican-Americans were members of the union.

⁴ *Barceloneta Shoe Corp. v. Raymond J. Compton* (D.C.-P.R., July 31, 1967).

⁵ Public Law 89-487, 80 Stat. 250, revising 5 U.S.C. 552.

⁶ 18 U.S.C. 3500.

⁷ *United States v. Local 53, International Association of Asbestos Workers* (D.C.-E.D. La., May 31, 1967).

The court found it to be the union's policy not to refer Negroes for employment or to consider them for membership. The union required that applicants for membership be recommended in writing by three members and obtain approval of a majority of the members of the union. A longstanding policy was to accept as new members only sons and close relatives of union members.

The court held that each of the three requirements of the traditionally all-white union effectively denied to Negroes and Mexican-Americans the opportunity to join the union. A preliminary injunction was granted, enjoining the union from excluding applicants on the basis of race, color, or national origin and from maintaining the three

discriminatory membership requirements. The court further ordered the union to admit certain minority group members to membership; to refer certain named persons for employment immediately; and to refer, for a period of several months, white and Negro applicants alternately, one white and one Negro, subsequently reverting to the normal chronological order of job applications. Finally, it ordered the union to develop a plan for the admission of persons to membership, using objective criteria related to the trade. The court said that such objective criteria may include experience of working at the trade, but credit may only be given for experience gained after the issuance of this court order.

Chronology of Recent Labor Events

August 1, 1967

AN APPEALS COURT in New York ruled that a bylaw of Local 6 of the Motel and Club Employees Union concerning qualifications for union office was not within the purview of the Secretary of Labor, who could neither establish such qualifications, nor determine the validity of existing ones. (The case was *Wirtz v. Hotel, Motel and Club Employees*.)

A DISPUTE between members of the Social Service Employees Union and the New York City Department of Social Services (formerly Department of Welfare), was settled through mediation, thus ending a 6-week work stoppage by about half of the 5,800 caseworkers. In the compromise settlement, all outstanding issues are to be resolved through continued mediation, the planned suspensions of 29 employees are canceled, and any transfers of these employees will also be subject to mediation, and, possibly, arbitration. (See p. 64, this issue.)

THE NATION'S leading textile producers announced an overall wage increase, reportedly of 6½ percent, for non-union workers. The new terms, effective early in September, will cover mainly employees of companies who have manufacturing facilities in the South. (See p. 58, this issue.)

August 7

COLT INDUSTRIES, INC. and UAW Local 376 concluded a 3-year contract affecting 1,700 workers and providing a maximum increase of 5.9 percent a year in case of cost-of-living adjustments, or 5.3 percent with no escalator clause changes. The agreement ended a strike which began July 1 and which had interrupted production of the M16 rifle.

August 9

TEMPORARILY SETTLING a dispute between the New York Telephone Co. and the Communications Workers of America (CWA), the company agreed to provide escorts of fellow workers for installers, repairmen, and other telephone employees assigned to work in "high-crime" areas.

If negotiations during the next 45 days prove futile, the issue of protection will be submitted to arbitration by a three-man panel. At its height, the dispute involved a 9-day statewide walkout of the 25,000-member CWA. The suspensions of three union officials involved in the strike have also been withdrawn temporarily. (See p. 61, this issue.)

August 16

IN THE FIRST RULING under the "freedom of information" amendment to the Administrative Procedure Act, the U.S. District Court for Puerto Rico decided that the law did not oblige the NLRB to open its files to parties to a proceeding. The suit was brought by the *Barceloneta Shoe Corp.*, which the Board was investigating for unfair labor practice. The case was *Barceloneta Shoe Corp. v. Compton*. (See p. 54, this issue.)

August 22

AN APPEALS COURT in Philadelphia ruled that a 1963 contract provision between the Teamsters and trucking associations in the Philadelphia area is in violation of section 8(e) of the Taft-Hartley Act. The clause states that leased equipment must be operated by an employee of the carrier, and, in the view of the Court, this would change the status of owner-operators and fleet owners from independent contractors to employees, requiring them to join the union under union shop arrangements. The case was *A. Duic Pyle, Inc., et al. v. NLRB*.

AFTER A YEAR OF NEGOTIATIONS, the city of Detroit and the 3,300-member Detroit Police Officers Association signed a collective bargaining agreement covering noneconomic matters, and specifying binding arbitration in case of an unresolved issue. The agreement was ratified by the Detroit City Council on August 30.

August 23

GOVERNOR NELSON A. ROCKEFELLER of New York named a three-man committee to negotiate contracts for the State under the Public Employees Fair Employment Act, effective September 1. This act replaces the Condon-Wadlin law and guarantees the right of collective bargaining to public employees. (See MLR June, 1967, p. 79.)

August 24

THE NLRB ruled that 84 petitions by the International Society of Skilled Trades for representation elections among skilled workers at the plants of General Motors Corp., Ford Motor Co., and Chrysler Corp. did not justify an election, and that no proof was furnished showing that the United Auto Workers engaged in unfair practices.

Major Agreements Expiring in November

EDITOR'S NOTE.—As a service to its readers, the *Monthly Labor Review* will publish each month a list of collective bargaining agreements ending during the following month. The listing will include almost all agreements¹ covering 1,000 workers or more.

Copies of Major Collective Bargaining Agreement Expirations, covering the entire year, are available upon request to the Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212, or to any of the Bureau's regional offices.

Company and location	Industry	Union ²	Number of workers
Allis-Chalmers Manufacturing Co. (West Allis, Wis.)	Machinery	Auto Workers	5,400
Allis-Chalmers Manufacturing Co. (Independence, Mo.)	Machinery	Steelworkers	1,500
Allis-Chalmers Manufacturing Co. (Springfield, Ill.)	Machinery	Auto Workers	3,000
Beaunit Corp. Fibers Division (Childersburg, Ala.)	Textiles	United Textile Workers	1,000
Coleman Co., Inc. (Wichita, Kans.)	Fabricated metals	Mine Workers District 50 (Ind.)	1,000
Dana Corp. (Interstate)	Transportation equipment	Auto Workers	6,000
First National Stores, Inc. (New England area)	Retail trade	Meat Cutters	9,000
Food Employers Council, Inc.; Meat Dealers Assn. of So. Calif., Inc.; Associated Meat Jobbers; Southern California Employers Council; and Independent Retail Meat Operators. 4 agreements (Southern California).	Retail trade	Meat Cutters	9,800
Fruehauf Corp., Strick Trailers Division (Fairless Hills, Pa.)	Machinery	Auto Workers	1,100
General Dynamics Corp., Stromberg-Carlson Division (Rochester, N.Y.)	Electrical products	Electrical Workers (IUE)	2,400
Hotel and Motel Assn. of Greater St. Louis (St. Louis, Mo.)	Hotels	Hotel and Restaurant Employees	3,000
Hughes Aircraft Co. (California)	Electrical products	Carpenters	3,000
I-A ³ Cab companies (New York, N.Y.)	Local transit	Directly Affiliated Local Union	20,000
-A ³ Hotels (Boston, Mass.)	Hotels	Hotel and Restaurant Employees	3,000
I-A ³ Independent packinghouses (Philadelphia, Pa.)	Food products	Meat Cutters	3,500
I-A ³ Metropolitan Milk Industry Agreement (New York and Connecticut)	Food products	Teamsters (Ind.)	1,000
I-A ³ Office buildings (Pittsburgh, Pa.)	Miscellaneous business services	Building Service Employees	2,000
International Smelting and Refining Co. (Perth Amboy, N.J.)	Primary metals	Steelworkers	1,100
Jefferson Electric Co. (Hillside and Bellwood, Ill.)	Electrical products	Electrical Workers (IBEW)	1,000
Labor Relations Advisory Assn. (Interstate)	Trucking	Teamsters (Ind.)	4,500
Louisville Gas and Electric Co. (Louisville, Ky.)	Utilities	Independent Protective Assn. of Utility Workers (Ind.)	1,750
Maytag Co. (Hampton and Newton, Iowa)	Electrical products	Auto Workers	2,150
Montgomery Ward, Department Store Division (Detroit, Mich.)	Retail trades	Retail Clerks	1,000
Olin-Mathieson Chemical Corp. (Saltville, Va.)	Chemicals	Mine Workers District 50 (Ind.)	1,050
RCA Communications, Inc. (Interstate)	Communication	Communications Assn. (Ind.)	1,900
Rockwell Standard Corp. (Interstate)	Transportation equipment	Auto Workers	5,100
Rockwell Standard Corp. (Detroit, Mich.)	Transportation equipment	Auto Workers	1,000
United Restaurant Liquor Dealers of Manhattan, Inc. (New York, N.Y.)	Restaurants	Hotel and Restaurant Employees	1,750
United States Potters Assn. (Interstate)	Stone, clay, and glass products	Potters	4,000
West Virginia Pulp and Paper Co. (Virginia, Maryland and Pennsylvania)	Paper	Papermakers and Paper Workers	3,800
Wisconsin Electric Power Co. (Milwaukee, Wis.)	Utilities	United Assn. of Office, Sales and Technical Employees (Ind.)	1,150

¹ Excludes government, airlines, and railroads.

² Unions affiliated with AFL-CIO except where noted as independent (Ind.).

³ Industry area (group of companies signing same contract).

Developments in Industrial Relations*

THE NUMBER OF INDUSTRYWIDE collective bargaining settlements declined from July, but wage decisions were announced for important groups of nonunion employees and for government workers. A new round of wage increases was effected at the end of July and in early August for over 200,000 unorganized workers in southern textile mills. California's 100,000 State employees were among the public employees receiving pay increases.

Strike idleness in July amounted to 4,710,000 man-days, compared with 3,100,000 the previous July and 3,670,000 in July 1965. Idleness was 0.43 percent of the estimated total working time, compared with 0.29 percent in July 1966 and 0.34 percent in the previous July.¹

Textiles and Apparel

The fifth round of wage increases in 4 years in the southern textile industry was initiated on July 31 when Greenwood Mills in Greenwood, S.C. announced a wage increase for some 6,000 employees, effective September 4. An announcement from Burlington Industries, Inc., of an increase effective in September for 45,000 of its 69,000 employees followed shortly, and by August 3 at least 20 other firms had announced plans to raise wages in September for nonunion employees. At some of the firms, wage negotiations were under way for employees represented by unions.

Among the companies announcing pay increases were J. P. Stevens, for 40,000 workers; Deering Milliken, Inc., for all hourly production and maintenance employees; West Point-Pepperell, Inc., for almost all of its 20,000 employees; Bibb Manufacturing Co., for most of its 8,500 employees; Collins and Aikman Corp., for 4,000 of 5,600 employees; Fieldcrest Mills, Inc., for 3,200 workers; Dan River Mills, Inc.; Fulton Cotton Mills; M. Lowenstein & Sons; Cannon Mills; Cone Mills Corp.; Abney Mills; and Graniteville Co. Industry

sources indicated that raises could be as high as 6½ percent.

Some spokesmen for the industry said that the increases were granted—in spite of recent declines in sales and earnings—because of a shortage of workers and the rise in the Federal minimum wage (to \$1.60, from \$1.40) scheduled for February 1, 1968.

The previous round of changes in southern textiles occurred in mid-1966, when most major firms granted increases of about 5 percent. Earlier in 1967, several small companies announced increases of about 5 percent;² however, this did not start a general round of increases. Wage increases were made earlier this year at some divisions of Burlington Industries, Inc.; these divisions are not to participate in the current round of increases.

The Ladies' Garment Workers and four associations³ of knitgoods manufacturers agreed July 1 on a 3-year contract for 14,000 workers in the New York City area. Wages were increased by 7 percent (maximum \$10 a week) effective July 17, with an additional 6-percent (\$8-a-week maximum) effective on July 16, 1968. Minimum rates for 26 crafts were increased as much as \$26 a week in 2 steps; Good Friday was made a paid holiday; and improvements were made in provisions for absence resulting from sickness, pregnancy, military service, or jury duty.

Negotiating under a cost-of-living wage reopener, the California Sportswear and Dress Association, Inc. and the Ladies' Garment Workers signed a 3-year contract in July that will expire July 3, 1970, replacing one scheduled to expire February 28, 1968. Some 2,000 workers in Los Angeles received wage increases of \$3 a week each year effective July 10, 1967, and in July of 1968 and 1969. Craft minimums were increased in three steps; the lowest minimum was to be maintained at least 20, instead of 15 cents, above the Federal minimum wage; a seventh paid holiday was

*Prepared in the Division of Wage Economics, Bureau of Labor Statistics, on the basis of published material available in late August.

¹ 1967 figures are preliminary.

² See *Monthly Labor Review*, May 1967, p. 63 for announcement by Alamo Industries, Inc., and June 1967, p. 76 for wage increases at Opp and Micolás Mills and South Carolina Cotton Mills.

³ United Knitwear Manufacturers League, Inc.; Association of Knitted Fabrics Manufacturers, Inc.; Knitted Accessories Group, Inc.; and Passementerie and Trimming Manufacturers Association, Inc.

added; the employer contribution to the vacation, health, and severance pay fund was increased to 9½ percent of payroll, from 9 percent; and provision was made for wage bargaining when the Consumer Price Index rises 2 percentage points.

Metalworking

A 5-week strike at the Hartford, Conn., plant of Colt Industries, Inc., ended on August 8 when members of Local 376 of the Auto Workers accepted a 3-year contract. The strike by the 1,700 workers had interrupted production of the M-16 rifle used in Vietnam. Wage increases of 17 to 29 cents an hour were effective the first year, with increases of 11 to 18 cents and 10 to 22 cents in the second and third years, respectively. The escalator clause was modified and shift differentials were improved. Two additional half holidays brought the number to 10. Also improved were vacations, pensions, and insurance, with the company assuming the full cost of employees' insurance and adding coverage for dependents.

About 11,000 of Westinghouse Electric Corp.'s retirees received increases in monthly pensions averaging \$16, as a result of a June 30 company announcement that minimum benefits were being advanced to \$3 for each year of credited service, effective July 1. The previous minimums for these retirees ranged from \$2.15 to \$2.80 a year, depending on their preretirement wage and salary level, and the date of retirement. About 3,000 other retirees were not affected because they were receiving vested or disability benefits or had retired recently; benefits of recent and future retirees were increased to more than \$3 in late 1966.

Additional information received on the July 9 settlement⁴ between Fairchild Hiller Corp.'s Republic Aviation Division and the Machinists indicates that wages will be increased a total of 12 cents on July 10, 1967, and 11 cents each in July 1968 and again in July 1969. The wage increase effective on each of these dates will consist of two parts: A general wage increase and a prepaid cost-of-living escalator increase. Of these wage increases, the cost-of-living component will consist of 4 cents in each of the first 2 years and 5 cents

the third year, regardless of the course of the CPI. Quarterly cost-of-living reviews tied to the Index were continued; however, increases are not to be granted until they exceed the prepaid increase. Agreement on such an escalator clause in effect earmarks part of each year's wage increase as a cost-of-living adjustment and makes the escalator clause serve as a hedge against an unusually large increase in the CPI.

Bargaining under a reopening provision, the Briggs and Stratton Corp. (makers of gasoline engines) and Local 232 of the Allied Industrial Workers reached agreement in early August on a 2-year contract for 6,000 workers in Milwaukee. Provisions included an immediate 6 percent wage increase, a 5-percent increase in 1968, additional wage adjustments for some classifications, and improvements in shift differentials, pensions, insurance, and jury duty and funeral leave.

The Trane Co. of LaCrosse, Wis., manufacturer of heating and air conditioning equipment, and the Machinists agreed July 30 on two 3-year contracts, one for 1,900 production workers and the other for 90 toolroom workers. The production worker agreement provided 12- to 29-cent-an-hour wage increases effective August 3 and a total of 34 to 45 cents over the term, increased shift differentials, a ninth paid holiday, a fifth week of vacation after 25 years, improvements in the non-contributory pension plan, and increases in insurance coverage. The toolroom agreement provided an immediate 18-cent wage increase, 16 cents in 1968, and 18 cents in 1969; an additional paid holiday; and improvements in insurance, pensions, shift differentials, and funeral leave. The company also settled with the Office and Professional Employees, representing 90 employees. Terms were not reported.

Food

In early June, members of two Teamster locals ratified 3-year contracts with Piel Bros., Inc. and the Brewers Board of Trade, Inc.,⁵ covering 4,800 workers in the New York City area. The new agreements, effective June 1, 1967, provided weekly wage increases of \$8.50, \$10, and \$6.75 in the first, second and third years respectively for inside employees, and \$3.50, \$5, and \$1.75 for drivers. Employer contributions to the pension fund were

⁴ See *Monthly Labor Review*, September 1967, p. 71.

⁵ Composed of Rheingold Breweries, Inc., the F & M Schaefer Brewing Co., and Jos. Schlitz Brewing Co.

increased to \$2.30 from \$2 per compensable day for each employee in the first year, and further increased to \$2.95 in the third year. In separate negotiations, several craft unions representing 600 employees accepted 3-year contracts which provided \$10 wage and benefit packages in each year.

In California, the threat of a statewide brewery strike ended on July 27, when Teamster members ratified a 3-year contract with the California Brewers Association. The agreement, which covered 6,000 drivers, bottlers, salesmen, warehousemen, and production workers, provided wage increases totaling 39 to 53 cents an hour; new medical and dental benefits for employees, retirees and their dependents; and improvements in other benefits.

In June, the Holly Farms Poultry Industries, Inc., of North Wilkesboro, N.C., announced hourly wage increases of 5, 10, and 5 cents effective on July 1, 1967, October 1, 1967, and January 1, 1968, respectively, for its 3,000 employees in North Carolina, Virginia, and Maryland.

Furniture

In mid-July, the Upholstered Furniture Manufacturers' Association of California, representing 43 companies, signed a 3-year contract with the Upholsterers Union covering 4,000 workers in the Los Angeles area. Wages were not increased during the first contract year, reportedly because of the poor economic condition of the industry in the area. The workers will, however, receive a 1968 bonus equal to a day's pay in return for the wage concession. The contract also provided 10-cent wage increases in both 1968 and 1969 and improvements in fringe benefits. In the past, settlements with the association have set the pattern for a number of independent firms.

In July, MPI Industries, Inc. (a manufacturer of television and stereo cabinets) and the Carpenters signed a 31-month agreement affecting 2,700 workers in Jackson, Miss. The contract pro-

vided hourly wage increases of 12 cents, 4 cents, 8 cents, and 6 cents effective July 3, 1967, February 1, 1968, July 1, 1968, and July 1, 1969, respectively. Shift differentials, holiday and vacation provisions, sick leave pay and funeral leave were also improved.

Other Manufacturing

The Armstrong Rubber Co. and the United Rubber Workers (URW) in early August agreed on a 3-year contract covering 3,000 employees in four plants. Mansfield Tire and Rubber Co., Mansfield, Ohio, also concluded a 3-year contract in mid-August with Local 17 of the URW. Terms for both agreements were similar to the settlements with the Big 5 producers.⁶

The General Tire and Rubber Co. and the United Rubber Workers agreed in early August on a 3-year contract covering some 325 workers at the Company's Industrial Products Division plant in Evansville, Ind. The contract, which was negotiated under a reopening provision, was similar to the July settlement⁷ for two tire plants, including a 15-cent wage increase retroactive to July 1, another 15 cents in 1968, 13 cents in 1969, and improvements in fringes, including vacations, pensions, and SUB.

United States Steel Corp.'s Universal Atlas Cement Division and the Cement, Lime and Gypsum Workers reached agreement on July 26 on a 2-year contract, ending a 1-month strike by 1,000 workers at five of the six plants affected by the settlement.⁸ Terms included wage increases totaling 35.5 cents an hour, matching the increases the union had gained in earlier settlements with other firms.⁹

Negotiating under a reopening provision, Hercules, Inc., and the Oil, Chemical and Atomic Workers in mid-July agreed on a 11- to 17-cent wage increase for 6,000 workers at the Radford army ammunition plant in Virginia. The increase averaged 14.6 cents.

Transportation and Utilities

The Pacific Maritime Association and the Masters, Mates and Pilots signed a memorandum of understanding on June 30 which provided an 8.02-percent (\$4.49 per man-day) increase to be used for wage and fringe improvements by joint agreement. The 8.02-percent increase, secured

⁶ See *Monthly Labor Review*, September 1967, pp. 69-70.

⁷ See *Monthly Labor Review*, September 1967, p. 70. In that issue it was incorrectly reported that General Tire does not have any nontire plants. None of the nontire plants was affected by the July settlement.

⁸ The five struck plants were located in Hudson, N.Y.; Northampton, Pa.; Leeds, Ala.; Hannibal, Mo.; and Waco, Texas; the sixth was in Independence, Mo.

⁹ See *Monthly Labor Review*, August 1967, p. 68.

under a "me too" clause common in the industry.¹⁰ was in addition to the 3.2-percent annual increase effective June 16, 1967 under the 4-year contract negotiated in 1965. Other maritime units had recently obtained similar revisions.

The increase was distributed as a 5.212-percent increase in base wages, effective June 16, 1967, a \$210 instead of \$156.66 a month non-watch standing allowance, and a \$4.43 instead of \$3.14 an hour penalty time rate. These improvements amounted to \$3.52 a man-day, leaving 97 cents still to be allocated in further negotiations.

In the most recent "me too" maritime arbitration award, David L. Cole granted the Marine Engineers Beneficial Association (MEBA) \$1.78 a man-day in addition to the \$4.395 he awarded in February 1967.¹¹ The award covered about 3,500 licensed engineers on the Atlantic and Gulf Coasts employed by the Maritime Service Committee, Inc. and the Tankers Service Committee, Inc.

After the award, MEBA offered to forgo the \$1.78, provided the other unions¹² involved in the series of "me too" increases would not seek further increases. MEBA said it was making the offer because it was concerned with "the sound economic structure of the industry and prefers not to cause unnecessary imbalance." Jesse M. Calhoun, MEBA president, referring to the endless round of increases, said his union felt that "this madness" could not go on.

In early August, Trans World Airlines, Inc., reached a 29-month agreement with the Transport Workers Union covering 3,500 stewardesses and pursers. In addition to lump sum payments equal to 5½ percent of the employee's gross earnings between March 2, 1967 and July 31, 1967, the pact provided wage increases which, on a percentage basis, amounted to:

Effective date	Type of pay	Percent increase		
		Domestic Stewardesses	International Stewardesses	Flight Pursers
August 1, 1967	Base pay.	4.9-19.5	6.8-7.1	5.9-6.1
	Overtime.	2.4-15.0	6.8-7.1	5.9-6.3
July 1, 1968	Base pay.	4.7-12.0	7.0-7.1	5.9-6.0
	Overtime.	4.6-12.0	7.0-7.1	5.9-6.0

Other terms included increased operational duty pay and senior purser pay, increased company contributions to the pursers' trust fund, and

improved vacation and health and welfare benefits.

A 2-year agreement reached on July 17 between the Public Service Electric and Gas Company of New Jersey and the independent Utility Co-Workers Association provided wage increases of 5.183 percent retroactive to May 1, and an additional 4.927 percent effective May 1, 1968 for 1,800 clerical employees throughout the State. Minimum rates were increased and the night shift premium was raised to 15 cents, from 14 cents, and to 16 cents effective in 1968. Four weeks of vacation was provided after 18 instead of 20 years of service, and after 17 years in 1968; the company's contribution toward hospital insurance was increased to \$5.41 a month (from \$4.79); the company agreed to begin contributing \$1 a month toward dependent insurance and to increase the contribution to \$2 in 1968; and major medical and medical-surgical benefits were improved. Pension improvements included a reduction in the years of service required for early retirement. Meal allowances were also increased.

A statewide strike of installers and repairman ended on August 8 when an agreement was reached between the Communications Workers (CWA) and the New York Telephone Company. The strike, which lasted 9 days and ultimately involved some 25,000 workers, was precipitated by the shooting and attempted holdup of a payphone coin collector¹³ in the Bedford-Stuyvesant section of Brooklyn.

This incident triggered a walkout by members of three CWA locals who refused to go out alone on assignments in areas having a high crime rate. At issue was the interpretation of an oral agreement reached in 1962 between the company and the union, which provided for the escort of workers in dangerous areas. The union contended that the agreement left the decision as to whether an escort was needed up to the worker, while the company maintained the decision must be made by a supervisor.

¹⁰ These clauses obligate employers to grant increases equal to any amount in excess of 3.2 percent a year gained by other seagoing unions. See *Monthly Labor Review*, May 1967, pp. 63 & 64; August 1967, p. 69; and September 1967, p. 69 for increases for other unions.

¹¹ See *Monthly Labor Review*, May 1967, pp. 63 and 64.

¹² The Masters, Mates and Pilots and the American Radio Association.

¹³ The employee was a member of the independent Telephone Workers Union.

A second issue arose when the union protested the suspension of the presidents of the three striking locals for their part in the walkout.

The settlement provided that the company and union would seek to resolve the problem of work in high crime-rate areas through negotiations. If the issue remained unresolved after 45 days, the agreement called for binding arbitration by a 3-man board.¹⁴ The company also temporarily lifted the suspension of the 3 union leaders and agreed to submit this issue to the same 3-man arbitration board.

A 3-year agreement on economic terms reached on May 23 had also been preceded by a brief walkout over the crime issue.¹⁵

Construction

Under a reopening provision, Local 825 of the Operating Engineers and the Associated General Contractors (AGC) of New Jersey in July negotiated a contract to expire June 30, 1970, replacing one that was to expire June 30, 1968. Terms included a 35-cent-an-hour increase in the employer payment to the vacation and out-of-work fund (in place of the 20- to 35-cent deferred wage increase scheduled for July 1 under the widely publicized 1966 settlement¹⁶) and 7-percent wage-fringe increases in both 1968 and 1969.

Other recent construction settlements included:

A contract between the Painters and the Painting and Decorating Contractors Association of Houston, Tex., ending a 1-week strike, provided a 70-cent, 2-year package for 1,700 workers.

Agreement between the Laborers and 6 employer associations¹⁷ in Oregon and southwest Washington, called for a 93-cent to \$1.08, 3-year package for 4,000 workers.

A settlement between Teamsters Joint Council 37 and the AGC Chapters in Portland, Oreg., and Vancouver and Longview-Kelso, Wash., provided a 96-cent to \$1.06, 3-year package for 3,000 workers.

An agreement between the Plumbers and Pipefitters in the Columbus, Ohio, area and the Mechanical Contractors Association of Central Ohio, which ended a 2-month strike, and provided a \$3.445, 3-year package for journeymen.

Accords between the Plumbers and Pipefitters in Kansas City, Mo., and the AGC and the Mechanical Contractors Association, which ended 2½-month strikes at some firms, and provided \$1.65, 2-year packages for 2,200 workers.

The Sheet Metal Workers and the Houston Sheet Metal Workers Contractors Association agreed on a \$1.45, 3-year package for 1,000 workers in 21 Gulf Coast counties of Texas.

A settlement between the Carpenters and the AGC of Columbus, Ohio, provided a \$3, 5-year package for 1,800 workers.

Services, Trade, and Insurance

After 7 months of bargaining, 31 unions reached agreement with Walt Disney Productions, Inc., on 5-year contracts for 4,800 workers at Disneyland. The 1,850 permanent employees received a 20-cent wage increase retroactive to March 1, 1967, 19 cents in 1968, and 18 cents in 1969. Seasonal employees received the initial 20-cent increase and are to receive 5-cent increases in 1968 and 1969 if they return for those seasons. Fringe improvements costing 19 cents were also provided, including an increase to \$200 from \$120 in the maximum monthly pension. The agreement may be reopened after the third year on economic terms.

In early July, the Association of Motion Picture Producers, Inc. and the three major television networks (ABC, CBS, and NBC) agreed to contracts with the Screen Actors Guild (SAG) expiring in July 1971.¹⁸ The settlement, which affected 18,000 employees, raised minimum rates by 12 percent on July 1, 1967 for television work and on April 1, 1968 for motion picture work and by 8 percent effective July 1, 1969, for both. Domestic rerun rates were automatically raised by the same percentages, while the minimums and the formula were revised to include payment for up to 10 instead of 6 showings. Rerun rates on foreign telecasts were also improved.

Other terms included a 6½ instead of 5 percent employer contribution to the pension and welfare fund to be allocated by the union for increased benefits. Most of the 11½-percent increase was expected to be used to improve pensions and one-

¹⁴ Consisting of James McFadden, a special mediator for the State of New York and one member each from the Commerce and Industry Association of New York City, and the City's Central Labor Council.

¹⁵ See *Monthly Labor Review*, July 1967, p. 61.

¹⁶ See *Monthly Labor Review*, September 1966, pp. 990-993 and 1007, and December 1966, pp. 1400-1401 for further details of the original settlement and subsequent recommendations.

¹⁷ Oregon-Columbia Chapter, AGC; Vancouver Contractors Association; Longview-Kelso Contractors Association; Eugene Contractors Association; Concrete Contractors Association; and the Portland Homebuilders Association.

¹⁸ In the past, SAG negotiated two separate contracts—one for motion picture production and one for television. In 1967, this practice was modified to provide a common expiration date by negotiating a 4-year television contract (instead of the usual 3 years), and by extending the motion picture contract (due to expire on July 31, 1969) another 2 years.

fourth of a percent was earmarked for a new insurance program covering accidents on the job. Under the contemplated plan, an injured worker would receive up to \$350 a week (after the first week of disability) for at least 1 year.

On July 6, after a 4-day strike-lockout, members of the Hotel and Restaurant Employees Union ratified a 3-year contract with San Mateo County (California) Restaurant Owners. The contract provided for nontipped employees an 8-percent wage increase retroactive to January 1, 7 percent in the second year, and 6 percent in the third year, and for tipped employees 5-, 5- and 4-percent increases on the corresponding dates. Health and welfare benefits were improved.

Also in early July, the Hotel and Restaurant Employees reached agreement with the East Bay Restaurant Association, Inc. and the California Licensed Beverage Association, Inc., on a 4-year contract for 7,500 restaurant and tavern employees in northern Alameda County. The agreement provided for 5-percent wage increases in each of the first 3 years, for wage bargaining in the last year, and for improvements in health and welfare benefits.

A week later, the union settled with the two associations on a similar contract for 2,800 workers in the southern part of the county.

About 1,500 workers in Santa Clara County, Calif., were affected by a late July settlement between the Peninsula Employers Council, representing 35 dining and lodging establishments, and the Hotel and Restaurant Employees Union. The 3-year agreement provided total wage increases in excess of 16 percent for nontipped workers and 17 percent for tipped workers, including 8 percent increases retroactive to June 1.

This agreement was similar to an earlier one the union negotiated with the Santa Clara County Hotel and Restaurant Association.

In early August, the Hotel and Restaurant Employees and the Oregon Food and Beverage Industry, which represents 80 culinary firms in the Portland area, reached agreement on a 3-year contract. About 6,000 workers were affected. Terms included a 10-cent wage increase retroactive to July 16, 8 cents in 1968, and 7 cents in 1969; 2

paid holidays, Christmas Eve and Christmas Day (paid at double-time rates if worked or at straight-time if not worked);¹⁹ \$12.50 instead of \$7.50 a month company contributions for health and welfare benefits; and 2 cents an hour employer contributions beginning in 1968 to establish a pension plan, with an additional 3 cents effective in 1969.

The State Farm Mutual Automobile Insurance Co., the Nation's largest automobile insurer, on August 22 announced plans to establish two non-commission mutual funds for its 17,600 employees and 10,300 agents. Under the proposal, which was subject to approval by the Securities and Exchange Commission, employees would be allowed to contribute part of their earnings to a savings plan, matched in part by company contributions that would vary with corporate profits. The new plan provides three employee options: investment in United States savings bonds, a mutual fund intended to provide capital appreciation, or a fund to provide investment income. The funds would be managed by a new company subsidiary.

Government and Minimum Wage

A 4.9-percent salary increase for California's 100,000 civil service employees was approved by the State Personnel Board on July 7. About 5,000 of the workers received additional equity adjustments ranging from 2.5 to 5 percent. The increases were retroactive to July 1.

The Los Angeles City Council in early July approved a 5.5-percent salary increase for the city's 8,700 policemen and firemen.

San Francisco's 3,400 policemen and firemen received wage increases effective July 1. The increase was \$21 a month for patrolmen and their equivalent in the fire department, bringing their base salary to \$797, and 2.7 percent for higher ranks.

In Oregon, the 23,000 classified State employees were affected by a 2-step wage increase—an average 10-percent increase on July 1, 1967, and an increase, as yet undetermined, to be effective July 1968. In another legislative act, pensions were improved for these employees.

In Detroit, Mayor Jerome P. Cavanagh on August 22 signed a collective bargaining agreement between the city and the 3,300-member Detroit Police Officers Association. The agreement, which was limited to noneconomic matters, com-

¹⁹ Under the previous agreement, there were 3 unpaid holidays, the Fourth of July, Labor Day, and Christmas Day, on which employees received time and one-half pay if they worked.

mitted both sides to binding arbitration of unresolved grievances. The contract is to be reviewed annually and was subject to approval by Detroit's Common Council. Earlier in the month, the city reinstated 186 policemen who had been suspended during a recent wage dispute.²⁰ At the time of the contract signing, the parties were awaiting the results of a study of the wage issue undertaken by a factfinding committee.

On July 1, policemen and firemen in Memphis, Tenn., received monthly salary increases averaging \$35 and other city employees received \$20 increases. A total of 2,200 workers were affected.

New York City welfare workers returned to their jobs on August 1 after a 6-week work stoppage. The 6,500-member Social Services Union had called a strike in January 1967 over a wage dispute, but returned to work after 3 days when the city and the union agreed to submit the wage issue to factfinding.²¹ Although a \$1,300 pay increase over 2 years resolved the wage issue, the union's insistence that other issues be submitted

to factfinding led to a work stoppage in June, which resulted in the suspension of 625 case-workers. These remaining issues were matters that the city administration believed were policy matters and not within the scope of collective bargaining.²² The administration offered to withdraw suspensions of all except 29 workers, whom the city wanted to suspend for 10 days after the resumption of work and transfer to new work locations as a penalty for allegedly destroying city property. Through the mediation efforts of Dr. Walter Eisenberg of Hunter College, a compromise was reached under which it was agreed that the city would withdraw all suspensions, the question of transfers would be studied by Dr. Eisenberg for possible submission to arbitration, and the workers would return to their jobs. Negotiations on the unresolved issues continued.

In San Antonio, Tex., a State District Court Judge ruled on August 10 that a city ordinance establishing a minimum wage of \$1.25 an hour was constitutional and valid. The ruling came as the court denied a temporary injunction sought by a city businessman to prohibit the city from making effective the ordinance approved in a referendum on July 15.

²⁰ See *Monthly Labor Review*, August 1967, p. 71.

²¹ See *Monthly Labor Review*, March 1967, p. 60.

²² See *Monthly Labor Review*, August 1967, p. 71.

Book Reviews and Notes

In Sickness and in Health

Bargaining for Health: Labor Unions, Health Insurance, and Medical Care. By Raymond Munts. Madison, Wis., University of Wisconsin Press, 1967. 320 pp. \$7.50.

Raymond Munts wrote the volume under review in the belief that there is "enough evidence for concern about the quality of care that Americans receive. . . . If we add the evidence of untreated disease among the poor generally; and the longevity and mortality statistics which show shocking differences between whites and Negroes, we then begin to see that the 'best medical care in the world' is a rare commodity." Further, in his view, "our egalitarian ideals impose a moral urgency for organized consumer pressure wherever the medical profession itself is fighting the requirements of progress."

Mr. Munts describes in some detail the background from which union bargaining related to health and medical care sprang. He notes and describes the involvement of early 19th century unions in welfare programs and the more recent involvement of unions (such as the Mine Workers, Steel and Auto Workers, some segments of the Teamsters, and unions in the needle trades) in much more sophisticated and complex negotiated programs for prepayment of hospital and medical care, the establishment of union health centers, and other efforts.

The author recognizes that unions are primarily labor market institutions that have been in the labor market primarily to negotiate the conditions under which workers sell labor. Such experience does not apply very well to negotiating for better medical care programs. Even so, responsible unions must act (and acquire experience as they undertake a new goal) to help their members meet the more pressing problems they face such as rising costs of health protection.

This new dimension to the activities of unions has taken them into a field of great complexity; their advances admittedly have been small. Further, the unions have encountered strong opposition from doctors and medical associations who fear any encroachment of collectivism in the medical field. Mr. Munts notes that some of the more successful multiemployer bargaining for prepaid health programs has come in areas such as St. Louis where the faculty of a good medical school (not quite so closely aligned with the private medical practitioner) was drawn upon for assistance.

Mr. Munts is aware that the manner in which collective bargaining has evolved in the United States does not lend itself to effective bargaining on health and medical care. Bargaining done on an industrial or craft basis that may cover only small segments of a total community does not relate very closely to adequate medical care. Persons get sick and need to be treated in communities, and many of the nonindustrial illnesses and diseases are not at all closely related to the craft or industry of customary employment, and such illness perhaps is not best attacked on the basis of craft and industry negotiations. Here, in the view of Mr. Munts, a central labor body (or better still a communitywide or areawide organization) would be a better agency for attacking the problem of adequate health and medical care.

Despite the inexperience of unions and the modest achievements of negotiations for health and medical care, Mr. Munts' book is significant and worthwhile in describing the efforts and exploring the problems of some unions in attempting to meet one of the more pressing consumer problems of working people. The rapid rise in the cost and the lack of adequate medical care for many of the economically less fortunate groups is well known. It is reassuring to know that unions from a wide variety of industries and sections of the nation have turned their attention to this problem and that considerable progress is being made.

There is every reason to assume that, despite the problems that have appeared in these negotiations, the effort and achievements will go forward. Even so, the type of effort which Mr. Munts describes and analyzes may prove by the end of the century to be only an interesting chapter in union history, but not a union policy of great importance at that time. Even at the present we are told that

government is purchasing from one-fourth to one-third of the medical services and supplies consumed in the United States. Certainly the move toward widespread publicly financed medical care has gone a long way, and it may go much farther.

Of course, even if that were to occur, progressive unions may believe (as is true today in areas such as unemployment compensation) that the level of publicly financed protection is not sufficient and that negotiated employer-financed supplements are called for. If so, the type of activities described by Mr. Munts may be a prelude to the policies of society and future unions.

—GLENN W. MILLER

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Purely Elemental

Labor Relations. By Arthur A. Sloane and Fred Witney. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1967. 450 pp. \$8.95.

Textbooks which derive from the actual classroom experience of the authors are likely to benefit greatly in clarity, organization, and student appeal. Professors Sloane and Witney have produced such a book and it is a good one. The work has many evidences of contributions made by inquiring and participating students.

The organization of the material is without major surprises but it is clean and logical. Beginning with a general chapter which sets the overall labor-management scene and explores managerial ideology, the authors follow with a chapter on trade union history, one on labor law, and one on union structure and government. The last six chapters are devoted to the processes and issues of collective bargaining. Of these, the sections on wage issues and fringes are exceptionally good.

In addition to the general level of sensible competence which characterizes the book, the collective bargaining portion is particularly good. It contains a series of 10 well-chosen and useful case studies of grievance and arbitration proceedings. Also included is material for a mock negotiation to be staged by members of the class, complete with suggested organizing and teaching techniques for the instructor. Although it is clearly stated in the preface that the text is designed for "business

school students who seek a one-semester introduction to the field," instructors may regret the complete absence of material describing traditional wage and employment theory.

The concluding statement of the authors summarizes their general position: "[Collective bargaining] does not *create* the problems of the employment relationship; issues such as wages, hours and overtime, vacations, holidays discipline, job classification, promotions, and employee safety and health exist with or without collective bargaining. . . . But if collective bargaining does not create the problems of the employment relationship, it *does* establish a definite procedure wherein they are handled and resolved."

This is a very elementary proposition. But so is the level of understanding carried into the introductory class.

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Where There's a Will

Automation and Economic Progress. Edited by Howard R. Bowen and Garth L. Mangum. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1966. 170 pp. \$4.95.

Technology, Economic Growth and Public Policy. By Richard P. Nelson, Merton J. Peck, and Edward D. Kalachek. Washington, Brookings Institution, 1967. 238 pp. \$6.

Technological innovation is no longer regarded as a nightmare or an event which will force a spontaneous resolution of the problems it brings in its wake. The processes of making and introducing changes and adjusting to them are subject to man's control. He must have the will to adapt to these changes. The Report of the National Commission on Technology, Automation and Economic Progress, summarized in the first book, shows that this will exists among progressive leaders in business, the trade unions, community organizations, and academic life.

The Commission's Report is significant because it reveals the degree of consensus which exists among these leaders on a broad range of issues. Besides reflecting unanimity on the potential blessings of newer technology and confidence in man's capacity to master the economic and social

forces for positive ends, the report adopts a clear position on the Government's responsibility to become an employer of last resort for the active population. It also clears up the confusion about the relation of job demands and technology, concluding that the former are malleable and can be made to fit the labor supply. It recommends a permanent monitoring group to follow up and recommend action on future technical developments.

It has not, however, adopted its own prescription of applying systems approaches for its own analysis, recommendations, and programs. In part this may be because the Report undertook to round up a vast number of recommendations, some of which are still at the incubation stage while others have been considered more adequately elsewhere. The diversity of the Commission's membership also may have deterred the drafters from undertaking such a task.

Besides a summary of the Commission's Report, the Bowen-Mangum publication contains 8 of the 41 studies published by the Commission. This reviewer believes that it would have been more helpful to make the summary a separate publication and place in this book either short summaries of all individual studies or, preferably, an integrated presentation of the materials to serve as an annotated supplement to the Report. This could indicate divergencies in views, conclusions, and recommendations. The latter would be very worthwhile for facilitating further understanding and debate.

The second book is an appropriate complement to the first, since it deals primarily with the factors which determine the volume and direction of expenditure on technological innovation. There is a highly conservative bias in current industrial research and development which the authors believe "may be less desirable for the economy as a whole." It "distorts the process of technological advance." The attrition rate of new ideas is high; the "diffusion process" is producing wide differences in practices among firms. Society as a whole is not benefiting sufficiently from our available stock of basic scientific and technical knowledge.

The authors offer five proposals for correcting the deficiencies in the present allocation of the research and development effort. Both the authors and the Commission agree generally on the need for an experimental procurement service, industry

research programs, and large-scale systems development projects. The authors further urge the creation of a National Institute for Technology and an industrial extension service. The book is a competent, carefully developed appraisal of available research in the field. Its footnotes provide ready access to differences in findings, conclusions, and approaches among economists on important aspects of the problem.

—SOLOMON BARKIN

Organization for Economic Cooperation
and Development

Customer Rights

Consumer Choice in the American Economy. By Carolyn S. Bell. New York, Random House, Inc., 1967. 429 pp. \$7.95.

Since books on consumer economics appear so rarely, each one that is written must be regarded as a worthwhile addition to the literature on this subject. The author's purpose is to "apply economic analysis to the study of consumer choice and market competition." The discussion centers mainly around two models: the traditional theory of individual choice as developed by Marshall, Hicks, Allen, and others, with the household as the principal decisionmaking unit; and the theory of monopolistic competition as originally developed by Professor Chamberlain.

Chapter 1 traces the change in consumer spending on goods and services since 1900, and chapter 2 reports the change in family income and income distribution since 1929. In the third chapter, the allocation of family income among alternative uses by income class, size of family, and other factors is presented, relying mainly upon the 1960-61 Survey of Consumer Expenditures of the U.S. Departments of Labor and Agriculture. Finally, a model of consumer choice based upon indifference curves is presented in chapter 4.

The next four chapters focus attention on the selling aspect of the consumer choice problem. They contain a descriptive account of retailing practices; the well-known model of monopolistic competition which characterizes most retail markets; and a discussion of the significance of non-price competition.

The author insists that institutional arrangements have created a situation of relative price

conformity and stability that encourages nonprice competition. She maintains that concentration on nonprice competition has created more problems, rather than less, for the consumer. With an increase in variety of goods and change in their quality, consumers are less able to judge what types of goods best satisfy their wants. Thus, consumers are viewed as abandoning the notion of maximizing utility in favor of what some authors have called "satisficing." According to this concept consumers are satisfied with a choice that is "good enough" and compatible with the information and evaluation capacities of the consumer. In many cases the consumer is viewed as giving up his decisionmaking ability altogether and relying upon the judgment of the technician who is more fully informed than the average consumer on the merits of various goods and services.

According to Miss Bell, the consumer's own experience offers the most reliable and informative basis for consumer choice. Therefore, she advocates increased consumer protection by Government in cases where consumer experience is not a reliable guide, and in cases of new products about which consumer experience must be gained for the first time. Such consumer protection includes welfare payments which would enable the consumer to buy specific quantities of certain goods, increased control over advertising, and the setting of more rigid standards for merchandising products.

This is an interesting and informative book. The author does not use any of the formal mathematical techniques that are currently available for analyzing statistical data. Nevertheless, her conclusions seem to be in line with those of other research workers.

—JOSEPH ZAREMBA

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Machine Management

The Impact of Computers on Management. Edited by Charles A. Myers. Cambridge, Mass., The M.I.T. Press, 1967. 310 pp. \$10.

The Advance Against Paperwork: Computers, Systems, and Personnel. By Leonard Rico. Ann Arbor, University of Michigan, 1967. 330 pp. \$6.

Professor Myers' concise review of the findings of the various contributors makes my job fairly easy. This book of readings is concerned with the impact of computers on organizational structure and the concomitant management decisionmaking process.

Thomas Whisler suggests that computerization will lead to more centralized decisionmaking. This has not occurred already because firms have not yet decentralized; it is impossible, therefore, for them to recentralize. However, the future may see structural changes wherein home offices may become information processing centers leaving personal interaction to the field offices.

George Delehanty agrees with Whisler that computers have stimulated little so far in the way of centralization. He attributes this to the fact that most firms still confine decisionmaking to top management. But, to Delehanty, a fascinating aspect of centralization lies in the insurance industry where field offices may become more autonomous than home offices. Moreover, Delehanty foresees a drastic reduction in the manpower needs of this industry in the next decade.

The development of information technology, its effects on managerial decisionmaking and the implications for the organization are discussed by Donald Carrol. He agrees with Whisler and Delehanty that information systems will "cut a swath through middle management."

Not all of the contributors are in agreement, however. John Dearden, for example, does not see how computers will have such a dramatic effect on an organization's distribution of authority, since much of the information about people (which is necessary for decisionmaking) isn't translatable into computer language. This notion is enforced by Jay Forrester's comment that 90 percent of what concerns a business organization can be put in the EDP system, but that 90 percent of what matters to the successful business is outside the EDP system.

This all leads up to an exciting and very human chapter by Charles DeCarlo. Mr. DeCarlo emphasizes that we must not forget the "nonfunctional or the human, emotional man." All cognition and no effect makes Jack a very dull boy. There are many aspects of man which cannot be stored in the computer and our concern for rationalization and specialization may foster a breed of managers who

can identify every tree in the forest, but can't tell whether they are in an orchard along the Niagara River or in the lush mountain country surrounding Bethel, Maine.

Professor Myers has put together a good book of readings. The discussions at the end of the chapters are refreshing and illuminating, and the case study by Edgar Huse which appears in the appendix is quite interesting.

The second book, however, is not so good. Professor Rico focuses on the impact of computers on information processing, management, and personnel policies. He surveyed 12 Boston area firms between 1959 and 1960 and 6 firms in the Philadelphia area in 1965. It is hard to figure out, though, whether Mr. Rico collected empirical data on these visits or if he simply made a subjective analysis of the impact of computers on each firm.

The author relies on the typical dissertation style of extended quotes, and this detracts from his own findings. Although he touches on a wide range of topics, some are not developed very well, nor are they very convincing. For example, in his discussion of the union's response to changing technology the author states that "the unions had little or no effect on the rate or cost of computerization." I'm not so sure of this.

Other findings seem to be either trivial or already accepted truths. For example, he found that the effect of computers on the conditions of work was to improve "work organization, lighting and ventilation. However, a great deal more walking and bending was necessary with the new operations." In addition, Professor Rico finds that "since 1950 EDP has rapidly grown" and that this trend will continue. Moreover, he finds that technological change generates occupational changes in the composition of the labor force. And so on.

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Summaries of Recent Books

Labor Relations Yearbook—1966. Washington, Bureau of National Affairs, Inc., 1967. 531 pp. \$9.50.

This book provides extensive reference and research material on what happened in the labor relations field in 1966. Following a brief chronology of summaries of important developments, there is a section on collective bargaining and industrial practices which covers general bargaining information as well as special issues such as pension and welfare practices, bargaining problem techniques, and special contracts.

There are reports on labor relations conferences and studies, activities of labor organizations, and the role of the Federal Government in labor relations.

Comprehensive statistical tables contain economic data of the year's developments.

Economic and Social Security. By John G. Turnbull, C. Arthur Williams, Jr., and Earl F. Cheit. New York, Ronald Press Co., 1967. 671 pp., bibliographies. 3d ed. \$8.

As in the two previous editions, the authors treat and evaluate "not only the customary fields of social insurance and assistance but also private insurance and substandard conditions." The general format of the book and the subareas of economic security have not been essentially changed. However, since the field is widening and becoming more complex, this edition places the emphasis upon broader features of problems and programs (both public and private) and upon basic principles rather than upon detailed facts. Newer analytical methods have been incorporated where useful.

The general area of poverty not treated before is included in this volume. The causes, possible cures, and the major characteristics of its problems and programs are outlined. Areas where the war on poverty plays an important part in planning and programing are discussed. The growth and shifts of older programs as well as new ones are evaluated.

National Economic Planning. Edited by Max F. Millikan. New York, National Bureau of Economic Research, 1967. 413 pp. (Conference Series 19.) \$10, Columbia University Press, New York.

Action Under Planning: The Guidance of Economic Development. Edited by Bertram M. Gross. New York, McGraw-Hill Book Co., 1967. 314 pp. \$12.

The first book contains a compilation of papers (with commentary) about some of the problems encountered by planners, and then goes on to discuss the varied experiences of the Soviet Union, France, India, and Yugoslavia. The book does not provide clear conclusions since no economic tools have yet been devised to measure the influence and utility of planning on a country's development.

Bertram Gross has also collected some papers on economic planning. His discussions deal more with the socio-political problems than with the economic ones encountered in planning a country's development. In the first part, the implementation of plans (decisions) is covered; the problems of plan-making are discussed in the second section of the book.

Profile of the U.S. Economy: A Survey of Growth and Change. By Emma S. Woytinsky. New York, Frederick A. Praeger, Publishers, 1967. 601 pp. \$12.50.

For a comprehensive statistical summary of the American economy, one need go no further than this volume by Mrs. Woytinsky. The material is presented on a broad historical basis and is organized topically. Every pertinent aspect of each topic appears to be included.

Subjects covered are the basic environmental factors (land, water, air), population, health and education, the work force, prices and wages, spending habits, national income and wealth, social security, all industries, and science and technology. The last chapter is on the election of the President and the Congress.

The book is documented with many tables, charts, and maps which have been interpreted to show their relevance to America's economic and social development.

Other Recent Publications

Education and Training

The Role of the Secondary Schools in the Preparation of Youth for Employment: A Comparative Study of Vocational, Academic, and General Curricula. By Jacob J. Kaufman and others. University Park, Pa., Pennsylvania State University, Institute for Research on Human Resources, 1967. Various pagings.

The Role of the Secondary Schools in the Preparation of Youth for Employment: Summary, Conclusions, and Recommendations. By Jacob J. Kaufman and others. University Park, Pa., Pennsylvania State University, 1967. 20 pp.

Education and Social Crisis: Perspectives on Teaching Disadvantaged Youth. Edited by Everett T. Keach, Jr., Robert Fulton, William E. Gardner. New York, John Wiley & Sons, Inc., 1967. 413 pp. \$7.95.

Symposium of Rates of Return to Investment in Education. (In *Journal of Human Resources: Education, Manpower, and Welfare Policies*, University of Wisconsin Press, Madison, Wis., Summer 1967, pp. 291-374. \$2.)

Your Career in Computer Programming. By I. J. Seligsohn. New York, Julian Messner, 1967. 222 pp. bibliography. \$3.95.

Health and Safety

Health Characteristics by Geographic Region, Large Metropolitan Areas, and Other Places of Residence, United States, July 1963-June 1965. Washington, U.S. Department of Health, Education, and Welfare, Public Health Service, 1967. 58 pp. (Vital and Health Statistics Data From the National Health Survey; PHS Publication No. 1000-Series 10-No. 36.) 40 cents, Superintendent of Documents, Washington.

Work Injuries and Accident Causes in School Lunchrooms. By T. H. Rockwell and David Kandel. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1967. 71 pp. (BLS Report 316.)

Industrial Relations

Industrial and Labor Relations. Edited by A. Fraser Isbester. Boston, D. C. Heath and Co., 1967. 118 pp. (New Perspectives in Business Economics.) \$1.95, paperbound.

Labor-Management Relations: Selected Readings and References. Washington, U.S. Department of Labor, Library, May 1967. 8 pp.

Labor Relations in the Motor Industry: A Study of Industrial Unrest and International Comparison. By H. A. Turner, Garfield Clack, Geoffrey Roberts. London, George Allen & Unwin Ltd., 1967. 365 pp. 55s.

Collective Bargaining in the Postwar Period. By Robert M. MacDonald. (In *Industrial and Labor Relations Review*, Ithaca, N.Y., July 1967, pp. 553-577. \$1.75.)

Teachers, School Boards, and Collective Bargaining: A Changing of the Guard. By Robert E. Doherty and Walter E. Oberer. Ithaca, N.Y., Cornell University,

New York State School of Industrial and Labor Relations, 1967, 139 pp. (ILR Paperback No. 2.) \$2.

Collective Bargaining in Education: The Anatomy of a Problem. By William R. Hazard. (In Labor Law Journal, Chicago, July 1967, pp. 412-419. \$1.35.)

A Guide to Collective Negotiations in Education. By Charles T. Schmidt, Jr., Hyman Parker, Bob Repas. East Lansing, Mich., Michigan State University, School of Labor and Industrial Relations (in cooperation with Michigan State Board of Education), 1967. 85 pp., bibliography. \$1.50.

Pitfalls of Collective Bargaining in Public Employment. By Jack R. Clary. (In Labor Law Journal, Chicago, July 1967, pp. 406-411. \$1.35.)

Collective Bargaining in Transition: 1, Coalition Bargaining and Union Power. By Guy Farmer. New York, Industrial Relations Counselors, Inc., 1967. 59 pp. (IRC Research Monograph 27.) \$2.50.

Collective Bargaining in African Countries. By R. C. Roberts and L. Greyfié de Bellecombe. London, Macmillan and Co., Ltd., 1967. xviii, 158 pp. (International Institute for Labor Studies publication.) \$7.25, St. Martin's Press, New York.

The Development of Judicial Arbitration in Labor-Management Disputes. By Paul Prasow and Edward Peters. Los Angeles, University of California, Institute of Industrial Relations, 1967. 10 pp. (Reprint 169; from California Management Review.)

The Early American Labor Conspiracy Cases: Their Place in Labor Law—A Reinterpretation. By Marjorie S. Turner. San Diego, Calif., San Diego State College Press, 1967. 86 pp. (Social Science Monograph Series, Vol. 1, No. 3.) \$2.50, paperbound.

Current Proposals for Dealing With Strikes Affecting the National Interest. Princeton, N.J., Princeton University, Industrial Relations Section, July 1967. 4 pp. (Selected References 136.) 40 cents.

Party, Government and the Labor Movement in Mexico: Two Case Studies. By Frederic Meyers. Los Angeles, University of California, Institute of Industrial Relations, 1967. 31 pp. (Reprint 170; from Industrial Relations and Economic Development.)

Labor Force

Concepts and Methods Used in Manpower Statistics From the Current Population Survey. Washington, U.S. Department of Labor, Bureau of Labor Statistics and U.S. Department of Commerce, Bureau of the Census, 1967. 20 pp. (BLS Report 313.)

Migration and Changes in the Quality of the Labor Force. By Thomas W. Gavett. Morgantown, West Virginia University, Bureau of Business Research, 1967. 53 pp.

World Competition for Skilled Labor. By Richard L. Worsnop. Washington, Editorial Research Reports, 1967. 17 pp. (1967, Vol. I, No. 20.) \$2.

Background Facts on Women Workers in the United States, Washington, U.S. Department of Labor, Women's Bureau, 1967. 17 pp.

Scientific Manpower Utilization, 1967. Hearings before the Special Subcommittee on the Utilization of Scientific Manpower of the Committee on Labor and Public Welfare, U.S. Senate, 90th Congress, 1st session, on S. 430 and S. 467. Washington, 1967. 377 pp.

Scientists and Engineers From Abroad, 1962-64. Washington, National Science Foundation, 1967. xii, 58 pp. (NSF 67-3.) 45 cents, Superintendent of Documents, Washington.

Economic Impact of Defense Programs. By Vernon M. Buehler. (In Statistical Reporter, Bureau of the Budget, Office of Statistical Standards, Washington, July 1967, pp. 1-9.)

Workshop on Nonprofessional Careers for Disadvantaged Youth: Summary of Proceedings. New York, New York University, Graduate School of Social Work, Center for the Study of Unemployed Youth, 1967. 141 pp. \$1.

Changes in Employment Among School Leavers: A Sample Study of One Cohort of Secondary Modern Boys. By Joan Maizels. (In British Journal of Industrial Relations, London School of Economics and Political Science, London, July 1967, pp. 211-221. \$2.80.)

The Foreign Worker: Adaption to Industrial Work and Urban Life. By R. Descloitres. Paris, Organization for Economic Cooperation and Development, 1967. 173 pp., bibliography. (Labor Mobility Series, 4.) \$3. Distributed in United States by OECD Publications Center, Washington.

Labor Inspection in Agriculture. Geneva, International Labor Office, 1967. 77 pp. (Report V(1) prepared for International Labor Conference, 52d session, 1968.) \$1. Distributed in United States by Washington Branch of ILO.

Estimates and Projections of the Labor Force and Civilian Employment in the U.S.S.R., 1950-1975. By Ritchie H. Reed. Washington, U.S. Department of Commerce, Bureau of the Census, 1967. 39 pp. (International Population Reports, Series P-91, No. 15.) 30 cents, Superintendent of Documents, Washington.

Prices and Consumption Economics

The Framework of Price Theory. By Clark Lee Allen. Belmont, Calif., Wadsworth Publishing Co., Inc., 1967. 373 pp.

What Is Consumer Psychology? By George Katona. (In American Psychologist, Washington, March 1967, pp. 219-226. \$1.)

Clothing for Urban Families: Expenditures Per Member by Sex and Age, 1960-61. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1967. 149 pp. (Bulletin 1556.) 75 cents, Superintendent of Documents, Washington.

Changing Patterns of Spending Power. By Fabian Linden. (In Conference Board Record, National Industrial Conference Board, New York, August 1967, pp. 20-22.)

Productivity and Technological Change

Collective Bargaining for Greater Productivity: Some Factors in the American Labor Relations System Possibly Generating Greater Productivity. By M. S. Ryder. (In British Journal of Industrial Relations, London School of Economics and Political Science, London, July 1967, pp. 190-197. \$2.80.)

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Current Labor Statistics

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¹ Tables A-7 and A-8 appear quarterly in the February, May, August, and November issues of the *Review*.

NOTE: With the exceptions noted, the statistical series here from the Bureau of Labor Statistics are described in *BLS Handbook of Methods for Surveys and Studies* (BLS Bulletin 1458, 1966).

A.—Labor Force and Employment

TABLE A-1. Summary employment and unemployment estimates, by age and sex, seasonally adjusted

[In thousands]

Employment status, age, and sex	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
TOTAL															
Total labor force	81,160	80,954	80,681	79,645	80,189	79,959	80,443	80,473	80,154	79,934	79,360	79,268	79,247	78,893	77,178
Civilian labor force	77,701	77,505	77,237	76,189	76,740	76,523	77,025	77,087	76,764	76,612	76,081	76,039	76,069	75,770	74,455
Employed	74,718	74,489	74,147	73,289	73,910	73,747	74,137	74,255	73,893	73,897	73,199	73,195	73,141	72,895	71,088
Agriculture	3,992	3,856	3,727	3,652	3,890	3,855	3,890	4,015	4,011	3,892	3,779	3,886	3,935	3,979	4,361
Nonagricultural industries	70,726	70,633	70,420	69,637	70,020	69,892	70,247	70,240	69,882	70,005	69,420	69,309	69,206	68,915	66,726
Unemployed	2,983	3,016	3,090	2,900	2,830	2,776	2,888	2,832	2,871	2,715	2,882	2,844	2,928	2,875	3,366
MEN, 20 YEARS AND OVER															
Total labor force	48,365	48,273	48,196	47,920	48,033	47,921	48,081	48,591	47,842	47,604	47,493	47,465	47,506	47,437	47,115
Civilian labor force	45,559	45,433	45,314	45,021	45,140	45,047	45,222	45,239	44,987	44,797	44,723	44,736	44,822	44,787	44,857
Employed	44,479	44,338	44,156	43,922	44,092	44,010	44,236	44,227	43,898	43,711	43,654	43,655	43,688	43,667	43,422
Agriculture	2,835	2,791	2,726	2,753	2,870	2,795	2,875	2,861	2,884	2,807	2,800	2,875	2,852	2,894	3,174
Nonagricultural industries	41,644	41,547	41,430	43,169	41,222	41,215	41,361	41,366	41,014	40,904	40,854	40,780	40,836	40,773	40,246
Unemployed	1,080	1,095	1,158	1,099	1,048	1,037	986	1,012	1,089	1,086	1,069	1,081	1,134	1,119	1,435
WOMEN, 20 YEARS AND OVER															
Civilian labor force	25,557	25,516	25,177	24,730	25,023	24,862	25,071	25,221	25,139	25,145	24,884	24,938	24,504	24,427	23,687
Employed	24,558	24,421	24,094	23,773	24,002	23,834	24,057	24,128	24,167	24,278	23,891	23,994	23,556	23,507	22,630
Agriculture	705	624	681	537	625	628	636	702	729	663	593	645	652	675	748
Nonagricultural industries	23,853	23,797	23,513	23,236	23,377	23,206	23,421	23,426	23,438	23,615	23,298	23,349	22,904	22,832	21,882
Unemployed	999	1,095	1,083	957	1,021	1,028	1,014	1,093	972	867	993	944	948	919	1,056
BOTH SEXES, 16-19 YEARS															
Civilian labor force	6,585	6,556	6,746	6,438	6,577	6,614	6,732	6,627	6,638	6,670	6,474	6,365	6,743	6,557	5,910
Employed	5,681	5,730	5,897	5,594	5,816	5,903	5,844	5,900	5,828	5,908	5,654	5,546	5,897	5,721	5,036
Agriculture	452	441	420	362	395	432	379	452	398	422	386	366	431	410	439
Nonagricultural industries	5,229	5,289	5,477	5,232	5,421	5,471	5,465	5,448	5,430	5,486	5,268	5,180	5,466	5,310	4,598
Unemployed	904	826	849	844	761	711	888	727	810	762	820	819	846	836	874

TABLE A-2. Seasonally adjusted rates of unemployment

Selected unemployment rates	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Total (all civilian workers)	3.8	3.9	4.0	3.8	3.7	3.6	3.7	3.7	3.7	3.5	3.8	3.7	3.8	3.8	4.5
Men, 20 years and over	2.4	2.4	2.6	2.4	2.3	2.3	2.2	2.2	2.4	2.4	2.4	2.4	2.5	2.5	3.2
Women, 20 years and over	3.9	4.3	4.3	3.9	4.1	4.1	4.0	4.3	3.9	3.4	4.0	3.8	3.9	3.8	4.5
Both sexes, 16-19 years	13.7	12.6	12.6	13.1	11.6	10.7	13.2	11.0	12.2	11.4	12.7	12.9	12.5	12.7	14.8
White workers	3.5	3.5	3.5	3.3	3.3	3.1	3.3	3.3	3.3	3.1	3.4	3.2	3.3	3.3	4.1
Nonwhite workers	6.9	7.2	7.8	7.8	7.3	7.4	7.1	6.6	7.6	6.9	7.4	7.2	8.0	7.9	8.1
Married men	2.0	1.8	2.0	1.9	1.9	1.7	1.6	1.7	1.7	1.7	1.9	1.9	2.0	1.9	2.4
Full-time workers	3.6	3.6	3.9	3.5	3.3	3.1	3.0	3.1	3.3	3.4	3.4	3.4	3.4	3.4	3.5
Blue-collar workers	4.4	4.7	4.7	4.6	4.6	4.2	4.1	4.2	4.3	4.3	4.1	4.1	4.5	4.3	5.3
Experienced wage and salary workers	3.6	3.7	3.8	3.6	3.4	3.4	3.4	3.5	3.5	3.4	3.5	3.6	3.7	3.5	4.3
Labor force time lost ¹	4.3	4.3	4.5	3.8	4.0	4.1	4.0	4.1	4.1	3.8	4.1	4.2	4.2	4.2	5.0

¹ Man-hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force man-hours.

Beginning in the March issue, the 1965 and 1966 statistics on the labor force were revised to take account of the lower age limit change from 14 to 16 years of age. The 1967 data reflect all the definitional changes which became effective in January 1967. (See the February 1967 *Employment and Earnings and Monthly Report on the Labor Force*, Vol. 13, No. 8.) Although these data are not strictly comparable with those published prior to January 1967, they may be treated by most users as continuing the previous series.

TABLE A-3. Rates of unemployment, by age and sex, seasonally adjusted

Age and sex	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
TOTAL															
16 years and over.....	3.8	3.9	4.0	3.8	3.7	3.6	3.7	3.7	3.7	3.5	3.8	3.7	3.8	3.8	4.5
16 to 19 years.....	13.7	12.6	12.6	13.1	11.6	10.7	13.2	11.0	12.2	11.4	12.7	12.9	12.5	12.7	14.8
16 and 17 years.....	15.3	14.4	14.0	13.7	14.8	12.0	16.4	13.1	13.8	12.9	14.7	14.8	14.2	14.8	16.5
18 and 19 years.....	12.7	11.4	13.1	12.8	10.9	9.8	11.0	9.5	10.8	10.6	11.4	11.2	11.3	11.3	13.5
20 to 24 years.....	5.5	6.2	5.8	5.2	5.1	5.4	5.2	5.6	5.6	5.0	5.4	5.2	5.4	5.3	6.7
25 years and over.....	2.5	2.6	2.8	2.6	2.6	2.6	2.5	2.6	2.6	2.5	2.6	2.6	2.7	2.6	3.2
25 to 54 years.....	2.6	2.7	2.9	2.7	2.7	2.6	2.6	2.6	2.5	2.5	2.7	2.6	2.7	2.6	3.2
55 years and over.....	2.5	2.3	2.3	2.7	2.5	2.5	2.2	2.9	2.5	2.4	2.5	2.5	2.6	2.6	3.2
MALE															
16 years and over.....	3.1	3.1	3.3	3.2	3.0	2.9	3.0	2.9	3.2	3.0	3.1	3.1	3.2	3.2	4.0
16 to 19 years.....	12.4	11.6	12.3	12.9	11.8	10.1	12.6	11.1	12.2	10.5	11.7	12.3	10.9	11.7	14.1
16 and 17 years.....	15.3	14.5	14.2	14.5	16.8	11.3	14.8	13.9	13.8	11.5	14.1	14.1	12.5	13.7	16.1
18 and 19 years.....	10.2	9.2	10.3	11.8	10.8	9.0	10.3	8.8	10.8	9.7	9.9	10.2	9.7	10.2	12.4
20 to 24 years.....	5.0	5.0	5.1	4.9	4.0	4.2	3.6	4.2	5.3	4.9	4.3	4.3	4.7	4.6	6.3
25 years and over.....	2.0	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.1	2.2	2.3	2.2	2.8
25 to 54 years.....	2.0	2.0	2.1	2.0	2.0	2.0	1.9	1.8	2.0	2.1	2.1	2.1	2.2	2.1	2.7
55 years and over.....	2.4	2.3	2.5	2.8	2.6	2.4	2.2	2.8	2.3	2.4	2.1	2.6	2.7	2.7	3.3
FEMALE															
16 years and over.....	5.1	5.3	5.2	4.8	4.9	4.9	5.1	5.0	4.7	4.4	5.0	4.8	5.0	4.8	5.5
16 to 19 years.....	15.4	13.8	13.0	13.4	11.3	11.6	13.9	10.8	12.2	12.6	13.9	13.6	14.6	14.1	15.7
16 and 17 years.....	15.4	14.3	13.8	12.4	12.0	13.1	18.7	11.9	13.7	14.9	15.7	15.8	16.8	16.6	17.2
18 and 19 years.....	15.4	13.8	12.4	13.8	11.0	10.7	11.7	10.2	10.7	11.5	13.0	12.2	13.0	12.6	14.8
20 to 24 years.....	6.1	7.6	6.8	5.5	6.6	6.9	7.3	7.4	6.1	5.2	6.9	6.5	6.4	6.3	7.3
25 years and over.....	3.5	3.7	3.9	3.4	3.6	3.6	3.5	3.8	3.5	3.1	3.5	3.3	3.4	3.3	4.0
25 to 54 years.....	3.7	4.1	4.5	4.0	3.9	3.9	3.7	4.0	3.6	3.4	3.8	3.6	3.7	3.6	4.3
55 years and over.....	2.7	2.2	1.7	2.6	2.4	2.8	2.1	3.3	3.0	2.3	3.1	2.3	2.3	2.4	2.8

TABLE A-4. Employed persons, by age and sex, seasonally adjusted

[In thousands]

Age and sex	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
TOTAL															
16 years and over.....	74,718	74,489	74,147	73,289	73,910	73,747	74,137	74,255	73,893	73,987	73,199	73,195	73,141	72,895	71,088
16 to 19 years.....	5,681	5,730	5,897	5,594	4,816	5,903	5,844	5,900	5,828	5,908	5,654	5,546	5,897	5,721	5,036
16 and 17 years.....	2,341	2,322	2,363	2,201	2,346	2,478	2,399	2,389	2,427	2,362	2,233	2,229	2,311	2,269	2,074
18 and 19 years.....	3,331	3,402	3,491	3,388	3,470	3,465	3,465	3,516	3,487	3,537	3,386	3,304	3,587	3,452	2,962
20 to 24 years.....	8,612	8,604	8,571	8,420	8,418	8,348	8,355	8,228	8,126	8,062	7,977	7,916	7,937	7,963	7,702
25 years and over.....	60,393	60,128	59,678	59,300	59,650	59,516	60,000	60,125	59,886	59,925	59,593	59,761	59,294	59,212	58,351
25 to 54 years.....	46,709	46,471	46,062	46,044	46,295	46,391	46,616	46,742	46,541	46,399	46,146	46,119	45,845	45,944	45,318
55 years and over.....	13,632	13,563	13,627	13,244	13,360	13,224	13,450	13,468	13,405	13,544	13,332	13,417	13,394	13,268	13,033
MALE															
16 years and over.....	47,712	47,555	47,448	47,050	47,273	47,358	47,475	47,533	47,116	47,011	46,824	46,769	47,036	46,919	46,340
16 to 19 years.....	3,233	3,217	3,292	3,128	3,176	3,348	3,239	3,306	3,218	3,300	3,170	3,114	3,348	3,252	2,918
16 and 17 years.....	1,436	1,399	1,403	1,324	1,351	1,512	1,444	1,453	1,463	1,451	1,369	1,347	1,405	1,380	1,284
18 and 19 years.....	1,786	1,810	1,856	1,766	1,825	1,854	1,852	1,867	1,802	1,858	1,790	1,778	1,934	1,862	1,634
20 to 24 years.....	4,891	4,856	4,881	4,750	4,771	4,762	4,812	4,721	4,588	4,594	4,586	4,570	4,592	4,599	4,583
25 years and over.....	39,566	39,468	39,266	39,177	39,306	39,276	39,474	39,493	39,259	39,098	39,085	39,090	39,087	39,069	38,839
25 to 54 years.....	30,638	30,584	30,425	30,402	30,558	30,645	30,697	30,776	30,519	30,331	30,313	30,302	30,311	30,378	30,240
55 years and over.....	8,889	8,860	8,870	8,738	8,717	8,670	8,777	8,758	8,767	8,805	8,741	8,748	8,738	8,691	8,599
FEMALE															
16 years and over.....	27,006	26,934	26,699	26,239	26,637	26,389	26,662	26,722	26,777	26,887	26,375	24,426	26,105	25,976	24,748
16 to 19 years.....	2,448	2,513	2,605	2,466	2,640	2,555	2,605	2,594	2,610	2,608	2,484	2,432	2,549	2,469	2,118
16 and 17 years.....	905	923	960	877	995	966	955	936	964	911	864	882	906	879	790
18 and 19 years.....	1,545	1,592	1,635	1,592	1,645	1,611	1,643	1,649	1,685	1,679	1,596	1,526	1,653	1,590	1,328
20 to 24 years.....	3,721	3,748	3,690	3,670	3,647	3,586	3,543	3,507	3,538	3,688	3,391	3,346	3,345	3,364	3,119
25 years and over.....	20,827	20,660	20,412	20,123	20,344	20,240	20,526	20,632	20,627	20,827	20,508	20,671	20,207	20,143	19,512
25 to 54 years.....	16,071	15,887	15,638	15,642	15,737	15,746	15,919	15,966	16,022	16,068	15,833	15,817	15,534	15,566	15,078
55 years and over.....	4,743	4,703	4,757	4,506	4,643	4,554	4,673	4,710	4,688	4,739	4,591	4,669	4,656	4,577	4,434

TABLE A-5. Unemployed persons, by duration of unemployment, seasonally adjusted

[In thousands]

Duration of unemployment	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Less than 5 weeks	1,660	1,805	1,649	1,371	1,468	1,408	1,678	1,542	1,562	1,397	1,493	1,523	1,576	1,535	1,628
5 to 14 weeks	945	876	919	877	900	986	771	787	760	789	900	831	891	804	983
15 weeks and over	441	435	444	414	436	560	439	485	496	484	517	493	462	536	755
15 to 26 weeks	231	265	298	271	251	354	249	282	269	287	293	291	254	245	404
27 weeks and over	210	170	146	143	185	206	190	203	227	197	224	202	208	241	351
15 weeks and over as a percent of civilian labor force .....	.6	.6	.6	.5	.6	.6	.6	.6	.6	.6	.7	.6	.6	.7	1.0

TABLE A-6. Full- and part-time status of the civilian labor force, not seasonally adjusted

[In thousands]

Full- and part-time employment status	1967								1966		Annual average	
	August	July	June	May	April	March	February	January	December	November	1966	1965
FULL TIME												
Civilian labor force	71,134	71,058	70,195	65,538	65,640	65,425	65,445	65,610	66,205	66,312	66,943	66,145
Employed:												
Full-time schedules ¹	66,264	65,909	64,688	61,978	61,447	60,916	60,793	60,953	62,285	62,713	62,734	61,144
Part time for economic reasons	2,486	2,499	2,507	1,573	2,079	2,209	2,283	2,195	1,875	1,632	1,894	2,209
Unemployed, looking for full-time work	2,384	2,650	3,000	1,987	2,114	2,300	2,369	2,462	2,045	1,967	2,315	2,792
Unemployment rate	3.4	3.7	4.3	3.0	3.2	3.5	3.6	3.8	3.1	3.0	3.5	4.2
PART TIME												
Civilian labor force	7,978	8,413	8,825	10,557	10,471	10,088	10,246	9,710	10,047	10,261	8,830	8,310
Employed (voluntary part time)	7,421	7,813	8,197	10,086	9,920	9,433	9,432	9,013	9,439	9,650	8,279	7,735
Unemployed, looking for part-time work	557	600	628	471	551	655	814	697	608	611	560	575
Unemployment rate	7.0	7.1	7.1	4.5	5.3	6.5	7.9	7.2	6.1	6.0	6.2	6.9

¹ Employed persons with a job but not at work are distributed proportionately among the full- and part-time employed categories.

TABLE A-9. Employees in nonagricultural establishments, by industry¹

Industry	1967								1966				Annual average		
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
	Total employees.....	66,473	66,139	66,514	65,594	65,215	64,843	64,491	64,531	66,087	65,559	65,351	65,017	64,607	63,982	60,832
Mining	619	636	633	618	614	607	606	611	622	624	627	634	645	625	632
Metal mining.....	90.2	90.6	90.6	88.3	87.4	87.7	86.9	85.9	86.3	86.4	87.9	89.1	89.1	86.5	83.8
Iron ores.....	28.4	28.8	27.9	27.1	27.2	26.9	26.1	26.6	26.8	26.8	27.3	27.2	26.3	25.9	
Copper ores.....	32.9	33.0	32.2	32.2	32.3	32.1	31.9	31.6	31.8	31.5	32.0	32.5	31.7	30.0	
Coal mining.....	140.0	142.4	140.2	139.0	140.2	141.4	141.5	142.0	141.5	142.4	141.4	141.1	137.7	141.4	
Bituminous coal and lignite mining.....	133.2	135.4	133.2	131.8	132.9	133.8	134.1	134.6	134.1	135.0	133.9	133.5	129.9	131.8	
Oil and gas extraction.....	277.4	273.6	267.9	269.1	266.1	267.3	272.1	275.8	274.3	274.5	278.1	286.6	279.8	287.1	
Crude petroleum and natural gas fields.....	154.7	152.4	148.6	148.8	148.7	148.5	148.6	148.7	149.4	150.0	152.6	156.5	152.4	156.6	
Oil and gas field services.....	122.7	121.2	119.3	120.3	117.4	118.8	123.5	127.1	124.9	124.5	124.9	130.1	127.4	130.5	
Nonmetallic minerals, except fuels.....	128.1	126.0	121.8	118.4	112.5	110.1	111.6	117.9	122.1	124.4	126.7	128.4	120.8	119.6	
Crushed and broken stone.....	44.4	43.2	43.0	41.3	38.4	37.2	37.7	40.9	42.2	43.0	44.0	44.6	41.6	41.0	
Sand and gravel.....	42.7	42.2	39.1	37.3	34.5	33.5	34.2	37.0	39.7	41.2	41.9	42.5	39.1	40.0	
Contract construction	3,581	3,547	3,407	3,227	3,106	2,922	2,863	2,947	3,146	3,328	3,466	3,540	3,653	3,292	3,186
General building contractors.....	1,095.6	1,057.1	1,005.9	979.1	942.4	931.3	962.9	1,028.0	1,066.6	1,095.7	1,113.8	1,151.9	1,047.3	994.0	
Heavy construction contractors.....	782.4	744.9	677.5	614.9	538.2	518.9	530.9	593.3	696.2	762.8	780.3	803.0	673.9	648.5	
Highway and street construction.....	404.6	380.2	335.6	286.4	224.8	211.7	216.2	262.4	339.4	390.4	404.5	415.4	326.8	324.4	
Heavy construction, nec.....	377.8	364.7	341.9	328.5	313.4	307.2	314.7	330.9	356.8	372.4	375.8	387.6	347.1	324.1	
Special trade contractors.....	1,669.2	1,605.0	1,543.7	1,511.8	1,441.0	1,413.1	1,452.7	1,525.0	1,565.1	1,607.2	1,646.2	1,698.2	1,570.9	1,543.4	
Plumbing, heating, air conditioning.....	383.7	372.0	358.4	358.0	357.7	360.6	366.7	371.3	376.6	379.7	382.1	384.9	373.1	366.2	
Painting, paperhanging, decorating.....	152.4	144.5	136.5	127.3	115.6	109.7	111.6	128.5	138.8	150.8	156.6	164.8	141.0	143.1	
Electrical work.....	273.5	265.3	254.9	252.9	248.5	248.5	251.9	255.9	257.1	257.3	262.2	266.6	250.4	233.7	
Masonry, stonework, and plastering.....	239.9	233.4	227.1	218.5	207.9	196.2	200.0	213.1	221.2	234.6	243.9	261.2	235.0	238.8	
Roofing and sheet metal work.....	122.9	118.0	112.6	110.8	102.9	98.8	106.2	113.5	117.5	118.6	117.9	119.6	112.2	110.2	
Manufacturing	19,480	19,161	19,382	19,133	19,181	19,263	19,297	19,333	19,534	19,625	19,640	19,638	19,499	19,186	18,962
Durable goods.....	11,268	11,219	11,383	11,282	11,298	11,359	11,389	11,413	11,516	11,549	11,538	11,502	11,318	11,256	
Nondurable goods.....	8,212	7,942	7,999	7,851	7,883	7,904	7,908	7,920	8,018	8,076	8,102	8,136	8,181	7,930	
<i>Durable goods</i>															
Ordnance and accessories.....	294.8	289.8	288.7	285.1	285.8	285.3	283.2	279.2	272.7	271.6	267.2	263.6	259.5	256.0	
Ammunition, except for small arms.....	221.4	217.9	215.9	213.1	214.1	213.2	211.5	207.9	201.9	202.5	199.5	197.4	193.9	192.6	
Sighting and fire control equipment.....	56.8	55.8	57.1	56.5	56.4	57.1	57.0	56.6	59.8	58.4	60.8	61.8	63.8	61.6	
Other ordnance and accessories.....	615.0	612.6	613.5	584.8	579.6	577.6	576.8	577.1	584.3	598.4	607.8	619.8	638.8	612.6	
Lumber and wood products.....	93.0	93.0	91.9	78.0	74.0	74.0	76.4	77.0	78.0	83.4	84.8	85.8	88.7	81.3	
Logging camps & logging contractors.....	238.7	237.5	239.1	233.4	231.6	231.4	230.8	230.4	232.1	236.7	240.4	246.6	253.1	244.9	
Sawmills and planing mills.....	169.1	167.7	166.9	160.4	159.7	157.3	154.9	155.2	159.2	162.7	167.3	171.9	179.1	171.3	
Millwork, plywood, & related products.....	35.1	36.3	37.1	36.3	35.8	35.9	35.9	36.1	35.6	35.2	35.3	35.3	36.6	35.5	
Wooden containers.....	79.1	78.1	78.5	76.7	78.5	79.0	78.8	78.4	79.4	80.4	80.0	80.2	81.3	79.6	
Miscellaneous wood products.....	458.4	444.4	451.6	448.3	451.0	458.8	459.4	462.4	471.6	474.2	472.8	471.2	472.4	461.7	
Furniture and fixtures.....	319.0	308.6	313.9	313.2	316.7	319.8	323.3	324.8	332.6	335.4	334.5	333.6	333.7	328.1	
Household furniture.....	35.8	35.8	36.4	36.6	37.2	37.4	37.5	37.4	37.0	37.0	36.4	35.9	34.8	30.2	
Office furniture.....	48.8	48.8	47.3	47.6	47.5	47.4	48.1	48.3	48.4	48.2	48.5	48.5	47.2	43.5	
Partitions and fixtures.....	52.8	51.2	53.1	51.4	50.1	51.3	51.3	52.0	53.3	53.4	53.7	53.2	53.0	51.6	
Other furniture and fixtures.....	646.1	644.5	641.9	628.4	624.5	617.7	612.6	616.5	629.4	642.6	647.9	657.1	664.8	644.6	
Stone, clay, and glass products.....	124.2	122.9	124.5	122.0	122.2	122.1	121.6	122.3	123.4	124.7	124.2	125.8	126.4	122.6	
Flat glass.....	37.0	37.4	37.7	36.7	36.5	35.4	34.9	35.4	36.5	38.1	38.6	39.4	40.0	38.0	
Glass and glassware, pressed or blown.....	67.7	68.1	68.3	66.6	65.4	64.1	63.0	63.1	66.0	67.8	69.1	70.9	72.6	69.7	
Cement, hydraulic.....	41.2	41.7	41.4	42.0	42.3	42.5	42.2	42.7	43.7	43.9	44.1	43.4	43.3	43.4	
Structural clay products.....	187.2	185.4	181.2	175.5	171.8	165.2	162.1	164.1	170.2	176.1	180.0	184.0	187.5	178.9	
Pottery and related products.....	137.4	137.3	136.7	134.1	133.7	134.1	134.0	133.7	134.6	136.0	136.6	137.7	139.8	135.7	
Concrete, gypsum, and plaster products.....	1,278.4	1,299.5	1,319.9	1,310.2	1,314.1	1,330.9	1,338.2	1,348.2	1,347.4	1,348.9	1,352.4	1,361.1	1,371.7	1,345.4	
Other stone & nonmetallic mineral products.....	632.3	637.1	634.6	628.5	630.1	636.0	635.6	639.6	640.1	645.4	651.7	661.8	672.2	651.3	
Primary metal industries.....	216.1	214.2	228.8	227.4	227.8	232.3	237.2	241.4	239.2	239.3	239.0	240.4	238.5	227.0	
Blast furnace and basic steel products.....	66.6	82.2	81.9	80.9	81.1	81.2	80.7	80.6	80.0	79.2	78.4	79.0	78.1	73.9	
Iron and steel foundries.....	203.1	207.2	210.4	211.2	212.1	215.5	217.4	218.6	219.9	218.8	218.9	219.5	216.7	215.0	
Nonferrous metals.....	89.6	87.1	90.5	89.2	89.4	91.5	92.7	93.0	93.3	92.0	91.4	92.8	91.7	90.5	
Nonferrous rolling and drawing.....	70.7	71.7	73.7	73.0	73.6	74.4	74.6	75.0	74.9	74.2	73.0	72.9	71.7	64.8	
Nonferrous foundries.....	1,352.8	1,340.4	1,369.1	1,345.6	1,346.7	1,350.2	1,358.5	1,364.6	1,379.5	1,384.7	1,376.6	1,370.1	1,358.1	1,349.1	
Miscellaneous primary metal products.....	68.5	68.1	68.1	66.5	66.0	64.9	63.7	62.9	63.5	63.7	63.9	66.0	68.0	64.8	
Fabricated metal products.....	153.7	153.4	159.2	156.2	157.1	158.4	162.0	163.4	165.2	165.4	164.4	163.2	158.9	161.3	
Metal cans.....	80.2	77.7	79.1	77.3	76.3	77.3	77.2	78.1	79.4	80.0	80.4	80.6	80.8	80.2	
Cutlery, hand tools, and hardware.....	410.3	406.5	407.7	396.8	395.9	391.3	393.0	394.4	400.2	403.1	404.1	407.5	409.9	397.7	
Plumbing and heating, except electric.....	111.3	111.5	113.3	112.7	113.6	115.2	115.3	115.0	114.6	112.8	110.9	109.4	108.2	107.9	
Fabricated structural metal products.....	225.2	221.7	226.6	234.9	233.4	235.9	239.9	243.2	247.3	248.5	245.6	238.8	228.1	235.9	
Screw machine products, bolts, etc.....	84.9	84.2	85.9	84.1	85.2	86.1	85.5	85.2	86.3	87.4	87.1	86.0	86.2	85.0	
Metal stampings.....	66.2	65.8	66.3	66.0	67.2	68.4	68.6	68.5	68.8	68.7	67.6	66.9	66.9	66.2	
Metal services, nec.....	152.5	151.5	152.9	151.1	152.0	152.7	153.3	153.9	154.2	155.1	152.6	151.7	151.1	150.2	
Misc. fabricated wire products.....	1,972.6	1,972.8	1,988.1	1,977.6	1,988.7	1,994.0	1,988.4	1,985.8	1,948.2	1,948.2	1,943.6	1,941.0	1,936.4	1,911.1	
Misc. fabricated metal products.....	102.3	103.1	104.5	103.1	104.3	105.2	104.6	104.9	98.4	92.5	102.2	103.3	102.7	99.1	
Machinery, except electrical.....	277.9	276.8	278.1	275.8	277.9	278.8	279.3	280.6	282.4	280.9	281.0	282.7	282.4	277.8	
Engines and turbines.....	344.1	346.9	349.5	348.1	350.8	351.6	350.8	349.7	347						

TABLE A-9. Employees in nonagricultural establishments, by industry¹—Continued

Industry	[In thousands]														Annual average	
	1967							1966					1966	1965		
	Aug. ²	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965	
Manufacturing—Continued																
<i>Durable goods—Continued</i>																
Electrical equipment and supplies	1,898.8	1,872.1	1,868.1	1,885.0	1,902.9	1,933.4	1,954.7	1,962.0	1,974.2	1,977.8	1,979.9	1,957.4	1,941.7	1,896.4	1,659.2	
Electric test & distributing equipment	200.9	199.8	200.7	198.0	198.6	197.0	196.6	194.3	196.9	195.4	196.9	196.0	196.2	189.8	170.0	
Electrical industrial apparatus	218.7	218.2	221.0	220.3	221.6	224.6	226.0	226.6	220.6	217.8	221.7	220.2	221.2	214.3	192.3	
Household appliances	176.1	171.2	177.9	174.4	174.8	178.3	181.6	184.5	192.2	189.3	191.9	185.9	182.6	181.3	165.3	
Electric lighting and wiring equipment	191.8	188.2	192.3	191.9	193.4	192.1	194.3	196.7	197.3	196.1	198.0	197.2	195.5	193.1	173.0	
Radio and TV receiving equipment	144.1	139.1	117.9	134.8	138.5	154.1	162.7	170.2	174.9	178.8	176.4	171.3	165.6	159.8	133.4	
Communication equipment	503.2	501.5	499.0	497.0	497.1	494.6	491.7	478.7	476.9	486.0	481.3	478.8	477.1	465.5	416.8	
Electronic components and accessories	347.1	342.0	344.4	354.9	365.3	378.0	385.8	393.2	395.9	395.9	396.3	392.3	392.2	381.3	307.1	
Misc. electrical equipment & supplies	116.9	112.0	114.9	113.7	113.6	114.7	116.0	117.8	119.5	118.5	117.4	115.7	111.3	111.3	101.4	
Transportation equipment	1,858.3	1,867.2	1,952.6	1,938.1	1,927.6	1,941.2	1,947.7	1,951.4	1,995.9	1,994.2	1,980.0	1,958.5	1,782.9	1,911.5	1,740.6	
Motor vehicles and equipment	829.0	824.0	820.3	812.5	812.8	810.1	805.2	810.0	810.0	803.2	789.2	781.5	770.9	750.5	624.2	
Aircraft and parts	164.0	161.0	172.5	174.6	176.4	171.1	175.6	174.6	175.4	170.1	175.5	170.9	175.8	176.4	160.2	
Ship and boat building and repairing	58.2	57.4	57.4	57.1	59.1	59.3	60.7	62.1	63.8	63.7	62.9	63.1	62.2	61.6	56.2	
Railroad equipment	72.0	72.6	67.0	66.0	63.5	60.8	54.8	58.8	63.0	64.7	64.8	66.1	63.8	63.8	57.3	
Other transportation equipment	459.9	454.3	456.0	451.0	453.2	453.8	452.8	451.2	452.3	447.9	446.2	441.2	440.7	433.1	389.0	
Instruments and related products	108.1	108.0	107.6	107.5	108.6	109.4	109.7	110.5	111.5	111.3	111.0	110.8	110.8	108.5	99.4	
Engineering & scientific instruments	86.9	88.1	85.9	85.9	85.7	85.3	85.0	84.2	83.9	83.1	82.1	80.6	80.8	80.1	71.7	
Mechanical measuring & control devices	51.1	49.9	50.5	50.5	50.8	51.0	50.8	50.8	51.0	50.2	49.7	49.3	49.1	45.5		
Optical and ophthalmic goods	31.0	31.6	31.7	31.7	31.9	32.1	32.1	32.0	32.0	32.3	31.8	31.5	31.6	31.0	30.5	
Ophthalmic goods	67.1	65.9	66.0	65.2	65.5	65.2	64.4	64.0	64.3	63.9	63.4	62.8	62.0	61.6	56.4	
Medical instruments and supplies	104.7	104.1	102.9	101.0	101.6	101.6	101.6	101.2	101.9	101.2	100.6	98.9	100.1	96.8	84.1	
Photographic equipment and supplies	39.5	40.9	40.9	41.0	41.3	41.3	41.3	40.5	39.9	37.4	38.9	38.4	37.7	37.0	31.9	
Watches, clocks, and watchcases	432.4	421.0	433.5	428.1	424.2	419.3	417.0	414.5	432.9	460.1	463.3	456.8	450.5	434.5	419.5	
Miscellaneous manufacturing industries	50.3	47.6	51.4	51.0	51.5	51.4	51.0	50.8	51.4	51.6	50.9	49.7	49.4	49.2	45.7	
Jewelry, silverware, and plated ware	115.9	117.5	114.5	109.5	103.4	100.4	98.2	111.6	133.5	136.8	134.2	127.9	117.9	116.7	116.7	
Toys and sporting goods	34.6	35.1	34.9	35.0	34.9	34.8	34.6	35.1	35.3	35.3	35.2	35.3	34.6	33.3		
Pens, pencils, office and art supplies	55.4	58.2	57.7	57.7	57.4	57.5	57.5	59.3	61.1	61.1	60.1	60.1	58.9	56.4		
Costume jewelry and notions	170.9	167.5	171.3	170.0	170.8	172.1	172.6	173.4	175.5	178.6	179.2	177.6	176.9	174.0	167.4	
Other manufacturing industries	25.2	25.4	26.4	25.7	26.8	27.5	27.3	28.0	28.0	28.0	28.0	27.6	27.5	27.2	24.7	
Musical instruments and parts																
<i>Nondurable goods</i>																
Food and kindred products	1,905.4	1,827.6	1,792.9	1,731.8	1,713.8	1,713.0	1,708.3	1,725.4	1,779.2	1,820.0	1,857.0	1,902.2	1,919.5	1,778.9	1,756.7	
Meat products	336.9	334.1	329.3	321.4	318.0	321.4	322.3	325.1	333.4	335.1	334.2	332.0	333.9	323.8	318.4	
Dairy products	279.0	281.3	280.2	273.5	271.4	268.8	267.4	268.0	269.7	270.6	273.2	278.1	287.3	277.5	285.8	
Canned, cured, and frozen foods	132.7	132.6	132.1	128.2	126.5	127.2	126.4	126.7	127.0	125.6	126.5	130.0	131.3	127.8	126.9	
Grain mill products	295.7	296.0	295.0	288.9	286.4	287.7	286.7	285.8	287.4	288.0	285.5	285.2	288.6	284.4	287.4	
Bakery products	80.0	73.9	75.1	74.6	74.3	72.2	78.9	80.0	90.3	89.6	85.6	83.0	80.5	80.7	77.2	
Sugar	244.2	245.0	242.7	232.1	230.3	225.9	223.0	223.9	228.4	230.9	232.3	236.1	241.1	229.3	221.5	
Confectionery and related products	145.1	144.5	143.0	142.3	143.3	142.8	142.8	143.5	146.6	147.1	146.2	144.6	143.7	144.1	143.2	
Beverages	95.2	77.1	76.2	74.9	75.3	77.0	81.5	88.6	92.6	92.0	95.4	95.3	88.5	83.9	86.8	
Misc. foods and kindred products	41.1	41.1	40.1	40.0	39.8	39.6	39.6	39.7	39.7	39.6	39.4	39.7	39.9	39.0	38.6	
Tobacco manufactures	21.1	21.7	21.2	21.2	21.6	21.8	21.8	21.6	21.8	21.9	22.0	21.8	21.6	22.0	24.2	
Cigarettes	956.9	934.9	957.0	941.0	944.1	948.1	945.2	950.8	960.0	966.6	969.4	970.7	977.1	961.5	925.6	
Cigars	236.1	235.1	237.8	235.9	236.4	238.1	237.2	240.0	240.5	240.0	238.9	238.2	238.5	237.2	229.2	
Textile mill products	95.3	93.8	95.0	94.4	94.4	95.2	95.9	96.8	97.5	97.3	97.4	97.8	98.3	97.0	92.4	
Weaving mills, cotton	45.0	44.8	45.9	44.9	44.8	44.6	44.5	44.2	43.5	43.4	43.9	45.1	46.4	45.4	45.5	
Weaving and finishing mills, wool	31.0	30.0	31.9	31.6	31.8	31.9	32.1	32.3	32.6	32.4	32.1	31.8	31.6	31.4	29.4	
Narrow fabric mills	233.9	225.7	232.9	227.5	226.1	224.9	220.9	219.9	226.2	233.8	237.7	238.8	242.0	234.4	229.1	
Knitting mills	81.7	79.7	81.7	77.3	79.9	80.3	80.0	80.3	80.8	80.5	79.7	79.7	80.2	79.6	76.9	
Textile finishing, except wool	43.7	44.3	43.2	43.2	43.4	43.8	44.3	44.9	44.9	45.0	44.6	44.1	43.5	41.4		
Floor covering mills	112.1	111.2	113.9	112.3	112.6	113.5	114.3	115.8	116.4	116.3	116.9	117.3	118.8	115.9	109.2	
Yarn and thread mills	74.2	70.9	73.6	73.9	74.9	76.2	76.5	77.2	77.6	78.0	77.8	77.4	77.2	72.6		
Miscellaneous textile goods	1,403.2	1,340.0	1,395.4	1,382.2	1,375.2	1,396.3	1,407.5	1,392.4	1,405.0	1,421.9	1,422.7	1,417.2	1,424.5	1,398.8	1,354.2	
Apparel and other textile products	124.9	115.6	123.9	123.1	121.1	122.8	122.9	123.3	124.3	122.9	122.3	123.1	123.1	122.9	119.3	
Men's and boys' suits and coats	372.4	358.0	369.8	365.7	366.0	366.9	367.7	369.1	369.9	372.0	373.5	374.8	377.6	370.6	351.9	
Men's and boys' furnishings	430.9	409.3	424.6	423.0	421.0	431.6	436.6	423.7	422.7	427.6	427.5	431.4	423.5	417.1		
Women's and misses' outerwear	123.2	118.1	122.4	123.1	124.1	125.1	126.0	124.9	127.6	130.2	129.7	128.5	127.4	125.2	120.8	
Women's and children's undergarments	24.6	23.8	22.6	22.6	22.7	22.7	29.3	28.9	28.3	27.1	28.1	28.5	29.2	28.0	29.1	
Hats, caps, and millinery	77.8	78.4	81.7	79.9	78.0	77.4	80.5	79.1	78.1	80.1	80.1	80.1	81.9	80.2	78.4	
Children's outerwear	75.5	79.0	76.6	77.0	77.4	77.5	75.8	80.0	83.8	84.8	83.1	83.3	79.5	76.3		
Misc. fabricated textile products	167.6	160.5	170.2	168.2	166.4	167.4	167.0	174.1	178.2	176.7	173.4	170.6	169.0	161.4		
Paper and allied products	698.7	690.0	693.6	674.2	675.6	676.8	674.3	674.3	680.2	681.0	675.9	673.5	680.4	667.5	639.1	
Paper and pulp mills	224.1	223.7	223.9	215.6	216.9	216.2	215.8	216.6	216.6	216.6	215.3	216.1	219.8	215.2	211.9	
Paperboard mills	74.9	73.9	75.1	73.6	73.6	73.9	74.0	74.2	73.6	72.9	72.1	72.2	72.9	71.8	68.1	
Misc. converted paper products	183.9	179.9	180.3	176.0	177.0	176.7	175.3	174.6	176.7	177.1	175.8	174.7	176.5	171.7	159.6	
Paperboard containers and boxes	215.8	212.5	214.3	209.0	208.1	210.0	209.2	210.2	213.3	214.6	212.7	210.5	211.2	208.8	199.6	
Printing and publishing	1,070.0	1,066.4	1,067.3	1,059.3	1,060.8	1,060.4	1,052.9	1,047.3	1,050.6	1,043.6	1,040.0	1,033.7	1,030.7	1,021.8	979.4	
Newspapers	364.6	364.0	365.7	363.4	361.7	361.0	359.1	357.5	360.5	358.8	357.7	356.1	352.5	353.1	345.4	
Periodicals	75.3	74.9	74.4	74.7	74.7	74.1	73.7	73.5	73.3	72.9	72.8	72.2	72.7	71.7		

TABLE A-9. Employees in nonagricultural establishments, by industry¹—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Manufacturing—Continued															
<i>Nonurable goods—Continued</i>															
Chemicals and allied products.....	1,004.0	998.3	993.6	985.3	988.6	980.1	976.3	973.9	972.5	971.4	968.7	971.5	980.8	957.9	907.8
Industrial chemicals.....	311.3	312.0	311.9	307.7	308.5	307.7	307.1	306.5	305.6	305.0	302.4	305.9	308.8	301.5	290.1
Plastics materials and synthetics.....	203.6	203.7	202.3	200.1	201.8	199.4	203.1	205.3	206.6	206.6	206.6	208.9	211.8	205.4	193.7
Drugs.....	138.4	137.5	135.6	134.2	133.3	132.2	131.6	131.7	130.5	129.9	128.8	128.4	130.8	126.9	118.1
Soap, cleaners, and toilet goods.....	117.4	114.5	113.0	110.7	110.7	111.1	109.8	110.2	112.3	113.0	114.3	113.4	113.3	109.7	105.6
Paints and allied products.....	71.4	70.7	70.2	68.4	68.0	67.8	67.4	66.9	67.0	67.3	67.5	68.2	69.9	67.6	66.3
Agricultural chemicals.....	53.0	51.8	55.2	61.2	64.4	61.0	57.1	54.5	52.8	52.3	52.7	50.8	50.8	54.7	53.2
Other chemical products.....	108.9	108.1	105.4	103.0	101.9	100.9	100.2	98.8	97.7	97.3	96.4	95.9	95.4	92.1	80.8
Petroleum and coal products.....	196.1	194.5	192.3	187.4	185.9	182.8	183.0	182.5	184.2	185.8	186.5	189.1	191.7	186.0	182.9
Petroleum refining.....	156.9	155.9	154.0	150.9	150.4	149.0	149.4	149.1	149.7	149.8	149.8	150.9	152.4	149.6	148.1
Other petroleum and coal products.....	39.2	38.6	38.3	36.5	35.5	33.8	33.6	33.4	34.5	36.0	36.7	38.2	39.3	36.4	34.8
Rubber and plastics products, nec.....	525.9	470.4	478.7	469.1	517.0	518.4	521.4	526.8	531.4	529.7	524.6	519.1	516.6	509.8	470.8
Tires and inner tubes.....	111.6	79.6	79.3	77.5	109.2	109.6	109.2	109.4	110.0	109.7	108.7	108.4	108.9	107.2	101.8
Other rubber products.....	174.2	161.2	164.5	162.3	177.6	178.3	181.7	185.2	185.2	183.0	181.3	180.4	178.7	178.7	171.6
Miscellaneous plastics products.....	240.1	229.6	234.9	229.3	130.2	230.5	230.5	232.2	236.2	237.0	234.6	230.3	229.0	223.9	197.5
Leather and leather products.....	356.3	342.3	351.7	345.6	346.1	351.4	357.8	357.5	362.3	363.9	361.7	363.3	371.3	363.5	352.9
Leather tanning and finishing.....	30.9	29.7	30.7	30.1	30.1	30.4	30.7	31.0	31.5	31.1	30.9	31.3	32.0	31.7	31.6
Footwear, except rubber.....	231.5	223.5	228.1	226.1	226.1	229.6	234.7	235.4	239.0	238.4	236.8	239.2	245.6	240.6	234.5
Other leather products.....	93.9	89.1	92.9	89.4	89.9	91.4	92.4	91.1	91.8	94.4	94.0	92.8	93.7	91.2	86.8
Handbags and personal leather goods.....		35.8	37.9	35.9	36.7	37.8	39.1	38.4	38.9	40.7	40.6	39.5	39.8	38.6	36.3
Transportation and public utilities.....	4,346	4,339	4,304	4,250	4,174	4,191	4,175	4,183	4,222	4,229	4,219	4,238	4,171	4,151	4,036
Railroad transportation.....	706.6	706.9	697.2	695.3	693.4	693.4	695.7	699.4	714.9	713.0	716.2	721.1	730.2	718.5	735.3
Class I railroads ³	616.5	616.6	606.7	603.6	602.0	603.6	608.6	619.1	620.6	623.6	627.5	636.5	624.9	640.1	640.1
Local and interurban passenger transit.....	256.1	269.1	277.3	275.4	276.8	276.2	276.6	275.6	272.8	272.2	268.6	249.5	268.7	268.8	268.8
Local and suburban transportation.....	81.6	82.2	82.2	80.7	82.2	82.2	82.2	82.1	81.9	82.8	82.3	80.9	82.0	82.0	82.5
Taxicabs.....	107.3	108.5	110.1	111.0	111.7	111.7	111.7	111.8	110.8	108.6	107.0	105.7	105.3	108.7	109.5
Intercity highway transportation.....	44.9	44.2	43.2	42.5	41.8	41.5	42.1	42.2	41.9	42.5	43.3	44.1	41.8	41.8	41.8
Trucking and warehousing.....	1,063.0	1,041.5	1,022.8	959.6	1,000.1	994.1	998.9	1,030.4	1,045.0	1,044.7	1,044.8	1,029.2	1,007.5	963.5	963.5
Public warehousing.....	88.3	84.3	86.0	80.5	83.9	86.3	87.0	91.3	94.9	92.1	86.1	84.4	84.5	82.0	82.0
Transportation by air.....	297.1	293.3	289.0	285.2	281.1	276.4	272.9	268.1	264.9	263.3	260.5	200.2	246.9	229.0	229.0
Air transportation.....	268.1	264.4	260.6	257.5	253.9	250.0	246.6	241.9	238.9	237.7	235.1	175.2	221.9	205.9	205.9
Pipe line transportation.....	19.3	19.1	18.2	18.1	18.1	18.1	18.2	18.3	18.4	18.5	18.9	19.4	18.8	19.5	19.5
Other transportation and services.....	355.0	356.4	353.6	352.6	335.8	334.2	341.2	341.3	343.1	336.5	347.5	344.9	335.1	315.4	315.4
Communication.....	984.8	973.3	962.5	959.4	958.1	953.9	950.1	947.4	946.5	941.0	942.3	952.4	927.0	880.8	880.8
Telephone communication.....	822.6	812.5	803.4	802.2	800.7	796.9	793.6	790.8	790.5	785.1	786.7	796.5	773.4	735.2	735.2
Telegraph communication.....	34.1	34.1	34.0	33.7	33.5	33.6	33.3	33.6	33.4	33.3	33.3	33.1	33.3	33.0	31.8
Radio and television broadcasting.....	118.5	117.2	115.7	114.2	114.2	114.3	114.2	114.1	113.8	113.9	113.9	113.9	112.2	106.9	106.9
Electric, gas, and sanitary services.....	656.6	644.2	629.4	628.0	627.2	625.9	625.7	625.9	625.0	626.2	634.3	645.6	628.2	623.4	623.4
Electric companies and systems.....	269.4	263.8	257.6	257.8	257.4	257.1	257.1	256.5	256.5	256.7	259.5	263.7	256.7	253.0	253.0
Gas companies and systems.....	157.5	155.4	150.6	150.1	150.1	149.8	149.8	150.7	150.6	150.8	153.1	153.3	152.2	153.6	153.6
Combination companies and systems.....	183.6	179.7	177.4	176.9	176.8	176.5	176.5	176.6	176.4	176.6	179.2	182.3	177.4	176.5	176.5
Water, steam, & sanitary systems.....	46.1	45.3	43.8	43.2	42.9	42.5	42.5	42.2	41.5	42.1	42.5	43.3	41.9	40.4	40.4
Wholesale and retail trade.....	13,635	13,627	13,675	13,503	13,412	13,332	13,218	13,248	14,248	13,603	13,585	13,251	13,219	13,211	12,716
Wholesale trade.....	3,597	3,583	3,562	3,503	3,499	3,486	3,479	3,491	3,534	3,512	3,500	3,476	3,498	3,438	3,312
Motor vehicles, & automotive equipment.....	274.3	271.9	265.2	265.4	264.5	264.9	263.4	264.1	264.1	264.1	261.4	261.7	264.2	261.1	255.3
Drugs, chemicals, and allied products.....	215.4	213.5	211.8	211.7	211.4	209.9	210.4	212.2	212.5	210.7	208.9	210.6	206.9	198.0	198.0
Dry goods and apparel.....	152.0	149.9	147.7	147.9	149.0	147.3	147.0	146.3	147.0	145.7	145.0	144.6	142.8	139.4	139.4
Groceries and related products.....	518.0	520.5	506.0	503.0	501.5	499.7	505.7	522.7	520.2	525.1	511.0	513.0	511.6	510.7	510.7
Electrical goods.....	290.3	288.4	285.1	285.4	283.5	281.8	279.2	280.1	277.9	275.3	275.1	280.1	272.0	256.0	256.0
Hardware, plumbing, & heating equipment.....	157.8	157.5	155.6	155.2	155.2	154.5	154.8	155.7	155.9	156.4	155.4	157.1	154.5	150.1	150.1
Machinery, equipment, and supplies.....	671.9	666.8	657.6	653.6	641.0	639.9	643.7	641.5	637.4	634.4	634.0	639.1	623.8	579.4	579.4
Miscellaneous wholesalers.....	1,213.4	1,208.1	1,188.5	1,188.2	1,188.7	1,183.0	1,182.2	1,196.4	1,189.7	1,184.2	1,179.2	1,185.5	1,165.0	1,122.3	1,122.3
Retail trade.....	10,038	10,044	10,113	10,000	9,913	9,846	9,739	9,843	10,714	10,091	9,885	9,775	9,721	9,773	9,404
Retail general merchandise.....	1,943.1	1,958.2	1,942.0	1,922.1	1,924.1	1,886.9	1,984.2	2,532.1	2,154.4	2,002.6	1,932.2	1,885.6	1,968.8	1,873.4	1,873.4
Department stores.....	1,236.0	1,246.8	1,229.6	1,219.2	1,217.5	1,197.7	1,266.3	1,648.7	1,378.5	1,272.3	1,219.2	1,189.3	1,250.6	1,173.0	1,173.0
Mail order houses.....	113.1	112.5	112.7	113.7	115.3	118.8	130.7	155.8	147.4	131.1	120.9	117.2	124.9	119.5	119.5
Variety stores.....	315.2	320.5	323.0	320.7	323.8	310.2	319.8	407.9	346.0	326.0	317.6	303.4	319.9	312.7	312.7
Food stores.....	1,568.3	1,576.0	1,581.4	1,577.1	1,576.7	1,576.9	1,571.0	1,599.2	1,570.0	1,562.2	1,540.8	1,527.8	1,538.3	1,468.6	1,468.6
Grocery, meat, and vegetable stores.....	1,389.5	1,392.9	1,397.2	1,397.0	1,395.1	1,395.7	1,395.9	1,415.4	1,394.0	1,388.2	1,368.1	1,358.0	1,365.2	1,296.1	1,296.1
Apparel and accessory stores.....	656.7	682.3	675.8	667.7	682.7	650.4	676.8	807.4	694.9	672.0	661.0	669.6	665.5	640.2	640.2
Men's & boys' clothing & furnishings.....	111.5	114.9	111.4	110.8	111.8	110.9	118.1	143.0	114.7	110.3	108.2	106.5	111.2	104.9	104.9
Women's ready-to-wear stores.....	239.1	246.2	247.7	244.8	245.3	235.1	244.1	291.9	256.1	250.4	243.0	240.6	246.6	237.7	237.7
Family clothing stores.....	110.5	114.5	112.1	110.6	112.9	110.8	116.8	144.6	115.9	109.6	108.6	103.7	109.6	104.4	104.4
Shoe stores.....	130.5	135.6	134.1	132.8	140.0	125.9	129.3	148.7	134.1	130.1	131.7	123.7	129.3	1	

TABLE A-9. Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Industry	1967										1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965		
Finance, insurance, and real estate	3,304	3,289	3,253	3,202	3,181	3,157	3,133	3,114	3,125	3,116	3,117	3,127	3,164	3,102	3,023		
Banking.....	877.8	865.6	851.1	848.0	846.3	843.6	838.2	838.3	835.4	833.2	833.7	842.3	823.1	792.0			
Credit agencies other than banks.....	349.5	345.9	341.6	340.4	339.3	337.0	336.0	336.2	334.4	334.3	335.0	338.8	335.0	326.9			
Savings and loan associations.....	101.3	98.9	97.0	96.7	95.8	94.9	95.8	94.6	94.2	94.9	94.5	96.4	96.3	97.1			
Personal credit institutions.....	187.8	187.5	185.6	184.9	185.2	184.2	182.6	183.4	182.3	181.3	182.1	183.1	180.0	171.8			
Security, commodity brokers, & services.....	157.8	153.1	149.2	147.9	146.3	143.8	141.8	142.6	142.2	142.6	142.7	145.0	140.7	129.0			
Insurance carriers.....	961.8	952.6	943.0	939.2	936.1	931.4	923.2	923.2	917.9	915.9	917.2	924.0	909.8	893.4			
Life insurance.....	503.2	500.9	497.5	496.3	494.4	491.8	489.5	490.2	487.6	488.0	489.2	492.4	486.6	481.2			
Accident and health insurance.....	75.6	74.0	72.3	71.8	71.3	69.7	67.1	66.1	65.0	64.0	62.8	63.0	60.1	54.2			
Fire, marine, and casualty insurance.....	343.1	338.7	334.9	333.0	332.4	331.6	328.1	327.9	326.2	324.4	325.1	327.6	322.2	315.8			
Insurance agents, brokers, and service.....	254.7	252.0	247.0	246.2	245.1	244.2	241.1	243.6	242.0	240.4	240.8	243.4	239.2	232.8			
Real estate.....	604.8	601.4	588.5	578.2	562.6	552.8	552.6	559.8	563.1	570.1	576.7	588.5	573.2	568.9			
Operative builders.....	41.9	41.1	38.8	37.3	35.6	33.6	33.4	34.5	35.6	38.0	39.0	42.0	41.0	45.8			
Other finance, insurance, & real estate.....	82.1	82.1	81.6	81.5	81.3	80.2	80.6	80.9	81.0	80.8	81.2	81.8	80.8	79.6			
Services	10,263	10,260	10,196	10,057	9,963	9,817	9,725	9,643	9,693	9,695	9,704	9,667	9,736	9,545	9,087		
Hotels and other lodging places.....	818.7	733.5	687.8	671.9	647.0	635.9	625.3	629.7	641.4	665.9	709.2	808.3	684.6	659.1			
Hotels, tourist courts, and motels.....	684.7	656.2	621.6	611.0	590.8	580.5	570.1	572.5	583.1	604.1	634.2	672.6	610.1	584.2			
Personal services.....	1,031.1	1,030.5	1,022.1	1,020.7	1,016.2	1,010.5	1,010.1	1,016.9	1,022.7	1,024.2	1,017.3	1,023.1	1,012.9	985.4			
Laundries and drycleaning plants.....	564.2	564.0	556.5	556.0	552.8	548.9	550.5	555.7	559.5	562.9	560.0	568.4	559.1	548.4			
Miscellaneous business services.....	1,341.4	1,331.6	1,306.4	1,300.3	1,284.1	1,271.8	1,268.6	1,271.6	1,260.7	1,254.0	1,241.5	1,246.0	1,220.2	1,109.1			
Advertising.....	113.5	113.1	112.9	112.5	112.9	112.1	111.5	111.5	111.8	112.7	113.3	114.9	111.9	112.5			
Credit reporting and collection.....	71.3	70.9	70.1	69.6	69.1	68.5	68.3	69.4	69.4	69.0	68.2	68.7	68.4	65.7			
Motion pictures.....	202.5	196.8	190.5	183.4	173.9	178.2	180.3	187.8	189.7	191.9	195.3	204.5	190.2	185.1			
Motion picture filming & distributing.....	55.3	53.5	49.3	47.3	47.3	47.3	52.8	55.2	59.5	58.7	56.6	53.7	56.8	48.5			
Motion picture theaters and services.....	147.2	143.3	141.2	136.1	126.6	125.4	125.1	128.3	131.0	135.3	141.6	147.7	136.2	136.6			
Medical and other health services.....	2,476.5	2,453.5	2,400.5	2,383.5	2,367.1	2,343.3	2,312.1	2,290.2	2,278.1	2,259.5	2,241.3	2,238.1	2,206.5	2,079.5			
Hospitals.....	1,570.0	1,549.7	1,525.3	1,516.1	1,506.6	1,493.3	1,475.5	1,465.1	1,460.6	1,449.9	1,437.0	1,436.2	1,418.5	1,356.5			
Legal services.....	208.6	203.8	195.1	195.0	194.7	194.2	193.5	196.2	195.1	194.5	194.3	196.7	190.3	181.5			
Educational services.....	927.1	1,000.4	1,068.5	1,066.1	1,065.4	1,057.0	1,046.9	1,048.7	1,049.5	1,029.5	936.0	839.3	968.1	924.6			
Elementary and secondary schools.....	290.1	335.3	346.9	346.4	345.8	345.1	344.5	346.7	346.6	339.5	319.5	276.0	325.9	315.6			
Colleges and universities.....	560.9	588.7	644.9	642.9	643.4	636.1	626.1	625.8	626.5	614.4	545.1	494.3	570.8	544.3			
Miscellaneous services.....	523.0	515.8	498.7	500.6	501.4	500.7	496.2	491.6	490.2	487.8	493.0	501.2	488.5	449.0			
Engineering and architectural services.....	284.2	282.7	272.8	270.5	269.8	268.0	266.5	266.8	265.7	264.5	267.9	273.0	264.9	242.4			
Nonprofit research agencies.....	75.4	74.6	73.4	73.5	73.6	73.7	73.7	73.7	73.5	73.3	73.8	75.2	73.4	68.2			
Government	11,245	11,280	11,664	11,604	11,584	11,554	11,474	11,366	11,497	11,339	11,193	10,922	10,520	10,871	10,091		
Federal Government ⁴	2,804	2,798	2,766	2,690	2,683	2,669	2,652	2,643	2,769	2,641	2,612	2,589	2,631	2,564	2,378		
Executive.....	2,763.4	2,731.8	2,657.2	2,650.3	2,635.7	2,619.7	2,609.3	2,736.4	2,608.2	2,579.3	2,556.3	2,598.1	2,531.9	2,346.7			
Department of Defense.....	1,144.1	1,135.3	1,103.0	1,100.4	1,098.1	1,092.7	1,084.3	1,076.3	1,071.7	1,057.4	1,042.8	1,055.4	1,023.6	938.5			
Post Office Department.....	713.7	714.4	697.8	696.9	693.1	689.4	687.2	687.8	706.3	689.6	682.0	689.4	680.9	614.2			
Other agencies.....	905.6	882.1	856.4	853.0	844.5	837.6	827.8	822.3	830.2	832.3	831.5	853.3	827.3	793.9			
Legislative.....	28.5	28.1	26.9	26.7	26.5	26.4	27.0	26.0	26.4	26.2	26.5	27.1	26.0	25.4			
Judicial.....	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.1	6.2	6.1	6.1	6.0	6.0	5.9			
State and local government ⁵	8,441	8,482	8,898	8,914	8,901	8,885	8,822	8,728	8,728	8,698	8,581	8,333	7,889	8,307	7,714		
State government.....	2,284.1	2,347.5	2,342.0	2,340.8	2,333.4	2,313.4	2,289.8	2,282.0	2,279.8	2,250.6	2,170.6	2,091.4	2,161.9	1,995.9			
State education.....	777.5	877.2	920.0	922.5	918.8	905.8	891.2	891.2	893.0	866.2	759.4	656.2	782.6	679.1			
Other State government.....	1,506.6	1,470.3	1,422.0	1,418.3	1,414.6	1,407.6	1,398.6	1,390.8	1,386.8	1,384.4	1,411.2	1,435.2	1,379.3	1,316.8			
Local government.....	6,197.9	6,550.2	6,572.4	6,560.0	6,551.1	6,508.1	6,433.0	6,445.7	6,418.6	6,330.3	6,162.3	5,797.6	6,145.0	5,717.6			
Local education.....	3,198.5	3,627.0	3,762.2	3,771.4	3,775.1	3,747.8	3,693.7	3,704.5	3,686.9	3,612.8	3,395.6	2,940.2	3,419.1	3,119.9			
Other local government.....	2,999.4	2,923.2	2,810.2	2,788.6	2,776.0	2,760.3	2,739.3	2,741.2	2,731.7	2,717.5	2,766.7	2,857.4	2,726.0	2,597.7			

¹ Beginning with the October 1967 issue, figures differ from those previously published. The industry series have been adjusted to March 1966 benchmarks (comprehensive counts of employment). For comparable back data, see *Employment and Earnings Statistics for the United States, 1909-67* (BLS Bulletin 1312-5). Statistics from April 1966 forward are subject to further revision when new benchmarks become available.

These series are based upon establishment reports which cover all full- and part-time employees in nonagricultural establishments who worked during, or received pay for any part of the pay period which includes the 12th of the month. Therefore, persons who worked in more than 1 establishment during the reporting period are counted more than once. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded.

² Preliminary.

³ Beginning January 1965, data relate to railroads with operating revenues of \$5,000,000 or more.

⁴ Data relate to civilian employees who worked on, or received pay for the last day of the month.

⁵ State and local government data exclude, as nominal employees, elected officials of small local units and paid volunteer firemen.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics for all series except those for the Federal Government, which is prepared by the U.S. Civil Service Commission, and that for Class I railroads, which is prepared by the U.S. Interstate Commerce Commission.

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹

Industry	1967												1966					Annual average	
	Aug. 2	July 2	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965				
Total private.....	45,812	45,488	45,545	44,782	44,440	44,136	43,895	44,079	45,517	45,167	45,157	45,097	45,072	44,234	42,309				
Mining.....	474	490	488	476	472	465	465	471	482	484	487	493	503	485	494				
Metal mining.....	74.2	74.9	74.9	73.1	72.4	72.5	72.2	71.1	71.6	71.6	71.4	73.0	74.1	71.8	69.8				
Iron ores.....	23.7	24.2	23.3	22.6	22.6	22.6	22.6	21.8	22.3	22.5	22.5	23.0	23.0	22.1	22.0				
Copper ores.....	26.7	27.0	26.5	26.6	26.6	26.6	26.5	26.3	26.1	25.6	25.9	26.4	26.7	26.1	24.7				
Coal mining.....	121.5	123.5	121.8	120.6	121.8	123.2	123.5	123.7	123.5	123.3	123.3	123.1	122.9	119.7	123.7				
Bituminous coal and lignite mining.....	115.4	117.3	115.6	114.3	115.4	116.5	116.5	116.9	117.1	116.8	116.7	116.4	116.2	112.7	115.2				
Oil and gas extraction.....	188.6	185.4	180.5	181.8	179.0	180.1	185.7	190.1	188.4	188.8	191.4	199.4	194.1	201.8	201.8				
Crude petroleum and natural gas fields.....	84.6	83.4	80.2	80.5	80.4	80.4	80.6	81.3	81.5	82.0	84.3	86.9	84.5	88.4	88.4				
Oil and gas field services.....	104.0	102.0	100.3	101.3	98.6	99.7	105.1	108.8	106.9	106.8	107.1	112.5	109.6	113.4	113.4				
Nonmetallic minerals, except fuels.....	105.8	104.2	100.3	96.8	91.3	89.0	90.3	90.3	96.6	100.9	103.4	105.5	106.6	99.8	99.1				
Crushed and broken stone.....	37.6	36.6	36.5	34.9	32.0	30.7	31.2	34.3	35.7	37.0	37.7	38.2	35.3	34.9	34.9				
Contract construction.....	3,067	3,033	2,893	2,724	2,603	2,425	2,369	2,451	2,648	2,828	2,964	3,039	3,151	2,799	2,710				
General building contractors.....	945.9	907.3	859.4	832.4	796.2	784.8	817.5	881.4	919.9	948.8	966.5	1,004.7	902.0	852.7	852.7				
Heavy construction contractors.....	687.0	647.3	583.4	522.9	447.3	428.4	440.3	502.4	602.4	666.7	685.9	707.7	581.2	560.1	560.1				
Highway and street construction.....	365.8	340.5	296.9	249.1	188.6	176.3	180.6	226.4	302.5	352.0	367.6	378.0	290.2	289.2	289.2				
Heavy construction, nec.....	321.2	306.8	286.5	273.8	258.7	252.1	259.7	276.0	299.9	314.7	318.3	329.7	291.1	270.9	270.9				
Special trade contractors.....	1,399.7	1,338.8	1,281.0	1,248.1	1,181.2	1,155.5	1,193.0	1,264.2	1,305.3	1,348.1	1,386.7	1,438.1	1,315.2	1,297.2	1,297.2				
Plumbing, heating, air conditioning.....	310.2	298.7	287.1	286.1	285.9	288.6	294.5	299.4	304.4	307.9	311.3	313.5	302.5	298.0	298.0				
Painting, paperhanging, decorating.....	137.4	129.4	121.6	112.3	101.0	95.0	96.5	113.1	123.4	135.4	140.9	148.7	125.5	128.4	128.4				
Electrical work.....	219.3	211.5	202.8	201.0	196.8	197.4	201.2	204.0	206.4	207.3	212.4	216.9	201.2	187.6	187.6				
Masonry, stonework, and plastering.....	216.6	211.1	204.2	196.2	186.1	174.8	178.6	191.3	199.9	213.5	223.0	239.3	213.6	217.6	217.6				
Roofing and sheet metal work.....	100.5	95.9	90.8	89.0	82.0	77.9	84.6	92.4	95.9	97.0	96.3	97.9	90.9	89.6	89.6				
Manufacturing.....	14,288	13,996	14,249	14,059	14,104	14,200	14,252	14,304	14,513	14,619	14,653	14,657	14,490	14,273	13,434				
Durable goods.....	8,177	8,142	8,332	8,261	8,271	8,340	8,380	8,417	8,528	8,572	8,574	8,545	8,349	8,349	7,715				
Nondurable goods.....	6,111	5,854	5,917	5,798	5,833	5,860	5,872	5,887	5,985	6,047	6,079	6,112	6,141	5,925	5,719				
<i>Durable goods</i>																			
Ordnance and accessories.....	151.7	148.3	148.0	145.6	145.6	145.6	144.4	141.2	137.5	134.9	131.3	128.4	124.4	121.8	96.1				
Ammunition, except for small arms.....	104.3	101.6	100.6	98.4	98.5	98.0	96.9	94.1	90.6	89.3	87.0	85.4	82.0	80.9	64.0				
Sighting and fire control equipment.....	40.2	39.9	40.7	40.5	40.5	41.2	41.3	41.1	40.9	39.6	38.4	37.1	36.5	35.3	27.2				
Other ordnance and accessories.....	536.3	533.3	534.2	507.4	502.5	501.5	500.3	501.2	508.3	521.8	530.5	542.2	559.3	535.0	532.4				
Lumber and wood products.....	217.7	216.8	217.7	212.2	209.9	209.9	209.2	209.1	210.9	215.5	218.8	225.0	231.2	223.4	228.0				
Sawmills and planing mills.....	142.3	140.2	140.0	134.2	133.4	131.4	128.8	129.2	132.6	135.8	140.3	144.6	150.8	143.9	138.8				
Millwork, plywood, & related products.....	31.3	32.5	33.3	32.6	32.1	32.3	32.3	32.4	32.1	31.6	31.8	31.7	33.1	31.9	31.0				
Wooden containers.....	66.9	65.7	66.1	64.6	66.9	67.5	67.3	67.0	67.9	68.9	68.4	68.9	69.8	68.2	63.5				
Miscellaneous wood products.....	377.8	363.7	371.3	369.0	370.5	375.4	378.9	381.4	391.1	394.1	392.5	391.2	392.0	382.6	357.4				
Furniture and fixtures.....	269.2	259.2	264.7	264.5	267.4	270.9	274.2	275.5	283.3	286.3	285.5	285.1	285.2	280.3	264.6				
Household furniture.....	27.8	27.7	28.4	28.6	29.0	29.2	29.3	29.3	29.2	28.5	28.1	27.9	27.2	23.6	23.6				
Office furniture.....	36.4	36.7	35.3	35.5	35.5	35.4	36.1	36.4	36.3	36.0	36.1	37.2	35.0	32.4	32.4				
Partitions and fixtures.....	42.0	40.3	42.2	40.8	39.0	40.0	40.1	40.5	42.1	42.3	42.5	41.9	41.7	40.1	36.8				
Other furniture and fixtures.....	514.4	513.8	512.4	499.0	495.3	489.6	483.8	489.1	502.6	515.1	520.1	528.7	536.5	517.5	504.6				
Stone, clay, and glass products.....	108.2	106.7	107.9	105.8	105.8	105.8	105.4	106.1	107.1	108.5	108.2	110.1	110.3	107.0	100.7				
Flat glass.....	28.1	28.7	29.1	28.1	28.0	26.9	25.9	26.7	27.7	29.3	29.8	30.2	31.2	29.2	29.4				
Glass and glassware, pressed or blown.....	56.0	56.8	56.9	55.2	54.2	52.6	51.8	55.0	56.7	58.0	59.9	59.9	61.8	59.0	59.0				
Cement, hydraulic.....	34.5	35.2	34.6	35.1	35.6	35.7	35.5	35.5	36.2	37.1	37.2	37.4	36.9	36.8	36.9				
Structural clay products.....	145.3	143.7	140.1	134.3	130.9	125.2	122.4	124.4	129.9	135.5	139.0	142.8	146.0	137.8	137.2				
Concrete, gypsum, and plaster products.....	102.5	102.7	102.5	99.9	99.5	100.2	99.8	100.1	101.7	102.8	103.4	104.1	106.4	102.5	97.7				
Other stone & nonmetallic mineral products.....	1,015.6	1,038.8	1,061.0	1,054.6	1,058.2	1,073.4	1,084.9	1,093.7	1,093.4	1,095.9	1,099.2	1,111.5	1,116.1	1,095.7	1,062.0				
Primary metal industries.....	503.4	511.2	509.6	505.5	507.1	511.2	514.4	517.4	517.5	523.4	529.3	538.9	547.6	530.4	538.4				
Blast furnace and basic steel products.....	180.5	179.0	193.6	192.4	192.6	197.0	201.8	205.9	204.1	204.0	203.9	204.2	205.0	203.8	194.6				
Iron and steel foundries.....	49.1	63.1	62.8	62.3	62.4	62.6	62.5	61.9	61.1	60.3	60.8	60.6	60.3	57.4	57.4				
Nonferrous metals.....	152.6	156.4	160.6	161.5	162.3	165.7	167.9	169.0	170.4	170.0	169.9	170.4	167.8	166.6	151.1				
Nonferrous rolling and drawing.....	74.0	71.9	75.2	74.2	74.5	76.9	77.8	78.2	78.8	77.4	76.8	78.6	77.6	76.3	68.3				
Nonferrous foundries.....	56.0	57.2	59.2	58.7	59.3	60.0	60.4	60.7	60.7	60.0	59.0	58.6	57.5	58.3	52.2				
Miscellaneous primary metal products.....	1,041.7	1,029.3	1,060.1	1,039.5	1,039.6	1,044.7	1,053.5	1,060.3	1,075.6	1,081.3	1,074.6	1,068.6	1,054.8	1,050.2	982.7				
Fabricated metal products.....	58.5	58.4	58.5	57.0	56.5	55.2	54.1	53.3	53.9	54.0	54.3	56.3	58.0	55.0	51.2				
Metal cans.....	120.4	119.4	125.6	123.0	123.7	124.9	128.4	129.8	131.5	131.4	130.9	129.8	125.5	127.9	122.5				
Cutlery, hand tools, and hardware.....	58.9	57.5	58.7	57.5	56.6	57.5	57.1	58.2	59.6	60.2	60.7	60.7	60.6	60.4	60.0				
Plumbing and heating, except electric.....	296.1	293.3	295.5	285.4	284.7	281.2	282.9	284.6	289.7	292.7	293.9	297.9	299.7	289.4	270.9				
Fabricated structural metal products.....	88.5	88.1	90.0	89.6	90.6	92.3	92.4	92.2	91.9	90.3	88.3	86.9	85.6	85.8	77.4				
Screw machine products, bolts, etc.....	181.1	176.5	191.8	190.8	188.7	191.2	195.4	198.3	203.4	204.4	201.8	195.2	184.2	192.5	180.5				
Metal stampings.....	71.0	70.3	71.9	70.3	71.1	72.1	71.7	71.6	72.9	74.2	74.0	72.7	72.9	71.7	64.8				
Metal services, nec.....	53.1	52.7	53.2	52.9	54.0	55.3	55.5	55.6	55.9	56.1	55.2	54.4	54.3	53.9	50.1				
Misc. fabricated wire products.....	114.1	113.1	114.9	113.0	113.7	115.0	116.0	116.7	116.8	116.0	115.5	114.7	114.0	113.7	105.2				
Misc. fabricated metal products.....	1,364.4	1,363.8	1,386.0	1,381.2	1,391.9	1,399.2	1,397.1	1,398.3	1,391.5	1,367.1	1,366.1	1,364.7	1,357.3	1,344.8	1,214.8				
Machinery, except electrical.....	71.8	7																	

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

Industry	1967								1966				Annual average		
	Aug. 2	July 2	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Electrical equipment and supplies	1,265.4	1,241.9	1,247.2	1,267.4	1,285.2	1,317.2	1,339.4	1,352.3	1,366.9	1,374.9	1,381.9	1,362.9	1,344.5	1,316.8	1,140.5
Electric test & distributing equipment	137.8	137.4	138.6	136.7	137.5	136.3	135.2	134.2	135.7	134.5	136.6	135.7	135.2	130.6	115.6
Electrical industrial apparatus	152.3	153.2	155.9	155.6	156.6	159.6	161.3	162.4	156.7	154.7	158.4	156.7	158.4	152.6	134.9
Household appliances	138.2	133.4	139.6	136.6	136.4	139.6	142.6	145.7	152.7	149.2	152.5	147.1	142.9	142.8	129.7
Electric lighting and wiring equipment	147.6	143.7	147.2	147.0	148.7	147.3	149.6	152.4	153.5	152.9	155.2	154.2	152.3	150.8	134.6
Radio and TV receiving equipment	102.7	99.1	84.6	100.6	103.4	118.0	125.6	134.1	140.1	144.0	141.4	137.0	131.5	127.1	105.7
Communication equipment	249.3	246.9	247.4	248.1	248.3	247.9	246.9	235.7	234.6	245.2	242.6	241.0	237.6	234.5	209.2
Electronic components and accessories	247.3	243.4	245.5	255.3	267.0	280.0	288.3	296.2	300.4	301.9	303.2	301.1	301.5	292.4	232.6
Misc. electrical equipment & supplies	90.2	84.8	88.4	87.5	87.3	88.5	89.9	91.6	93.2	92.5	92.0	90.1	85.1	86.0	78.2
Transportation equipment	1,283.3	1,296.8	1,383.0	1,374.1	1,360.8	1,375.7	1,382.2	1,386.8	1,430.3	1,429.8	1,419.9	1,398.3	1,221.2	1,361.0	1,240.7
Motor vehicles and equipment	566.0	643.5	640.7	625.7	648.1	656.2	665.7	699.5	705.5	698.6	689.0	689.0	515.8	668.4	658.9
Aircraft and parts	495.6	492.9	492.6	490.5	489.5	488.9	484.9	484.5	488.7	483.0	472.6	464.4	455.0	444.7	356.3
Ship and boat building and repairing	133.4	131.6	141.7	143.4	145.4	140.6	144.2	143.9	143.8	139.2	145.9	141.7	146.6	146.8	134.3
Railroad equipment	45.5	44.6	44.3	46.1	46.3	47.6	49.0	50.7	50.6	49.7	49.9	49.9	49.0	46.4	44.1
Other transportation equipment	60.8	60.6	55.2	54.1	51.8	49.3	43.7	47.6	51.5	53.1	53.3	53.3	54.8	52.5	47.1
Instruments and related products	286.7	282.0	286.1	284.4	286.8	288.0	287.2	287.5	287.8	285.6	284.4	282.0	281.7	276.6	248.1
Engineering & scientific instruments	45.0	45.6	45.2	45.1	45.0	44.5	44.5	44.0	43.7	43.3	42.4	42.2	41.7	36.8	
Mechanical measuring & control devices	69.1	68.4	68.8	69.0	70.4	71.0	71.1	72.2	72.7	72.9	72.7	72.7	72.5	71.0	65.1
Optical and ophthalmic goods	36.4	35.1	35.8	35.9	36.2	36.5	36.1	36.2	36.0	36.3	35.6	35.4	34.9	35.0	32.5
Ophthalmic goods	23.3	23.8	24.0	24.2	24.6	24.4	24.3	24.2	24.5	24.3	24.0	24.1	24.2	23.2	
Medical instruments and supplies	45.6	44.6	45.1	44.5	44.8	44.8	44.3	43.9	44.3	44.1	43.9	43.5	43.7	39.0	
Photographic equipment and supplies	57.0	56.8	57.3	56.3	56.7	56.7	57.2	57.3	58.0	57.9	57.0	56.5	57.3	55.9	48.9
Watches, clocks, and watchcases	32.1	33.5	33.5	33.6	34.0	34.0	33.4	32.8	30.7	31.9	31.5	30.9	30.2	25.8	
Miscellaneous manufacturing industries	339.9	330.1	342.8	338.3	334.7	329.6	327.9	325.4	343.0	371.0	373.2	366.7	361.6	346.8	335.5
Jewelry, silverware, and plated ware	38.1	35.9	39.4	39.4	39.8	39.7	39.6	39.4	40.3	40.5	39.5	38.6	38.5	34.6	36.0
Toys and sporting goods	95.8	97.3	94.7	90.1	83.7	80.8	78.8	78.8	90.9	113.4	116.1	113.4	108.0	98.2	97.4
Pens, pencils, office and art supplies	24.8	25.8	25.6	25.7	25.7	25.6	25.4	25.8	25.8	25.9	26.0	26.0	26.0	24.6	24.6
Costume jewelry and notions	45.3	47.6	47.3	47.0	46.8	47.6	46.9	48.8	50.7	50.8	49.5	49.5	50.6	46.6	46.5
Other manufacturing industries	131.5	128.3	132.7	131.3	132.1	133.7	134.3	137.2	140.6	140.9	139.2	138.5	138.5	136.2	131.1
Musical instruments and parts	19.9	20.2	21.2	20.5	21.8	22.4	22.3	23.2	23.0	23.1	22.8	22.7	22.5	20.5	
<i>Nondurable goods</i>															
Food and kindred products	1,291.0	1,214.2	1,183.8	1,132.4	1,114.8	1,116.3	1,113.2	1,131.8	1,181.1	1,222.4	1,259.4	1,300.9	1,310.0	1,180.9	1,159.1
Meat products	269.8	268.1	263.4	256.3	252.4	256.4	256.7	260.2	268.0	269.7	269.5	266.7	267.7	258.7	252.9
Dairy products	130.1	132.5	132.0	126.5	124.6	122.3	120.8	121.2	122.5	122.2	124.0	127.7	133.8	127.3	131.2
Canned, cured, and frozen foods	245.4	245.4	219.8	197.9	192.8	189.7	186.1	191.0	210.2	240.4	279.4	336.1	338.0	233.3	219.7
Grain mill products	94.8	94.1	93.6	90.1	88.7	89.2	88.4	89.2	89.3	87.8	90.4	91.8	93.5	89.6	89.1
Bakery products	173.0	173.6	172.6	167.6	165.1	166.1	165.3	164.7	166.1	168.2	166.1	166.7	169.4	165.0	166.5
Sugar	21.1	23.3	22.6	20.5	22.1	25.4	31.9	36.9	42.7	40.3	25.8	22.9	28.7	29.3	
Confectionery and related products	65.1	59.4	60.4	59.9	60.0	62.8	64.7	66.0	73.8	74.3	71.2	68.8	66.3	66.1	62.5
Beverages	126.7	126.8	126.6	119.3	117.8	114.8	112.4	113.5	117.7	120.2	122.4	123.0	125.5	118.4	113.8
Misc. foods and kindred products	93.7	93.2	92.1	92.2	92.9	92.9	93.4	94.1	96.7	96.9	96.1	94.3	92.9	93.8	94.1
Tobacco manufactures	81.9	65.0	64.1	62.9	63.3	65.0	69.5	76.2	80.0	79.4	82.6	82.6	75.8	71.5	74.8
Cigarettes	33.9	33.8	32.9	32.8	32.6	32.6	32.6	32.7	32.6	32.6	32.3	32.6	32.7	32.0	32.1
Cigars	19.5	20.2	19.7	20.1	20.4	20.4	20.1	20.5	20.4	20.5	20.3	20.3	20.1	20.4	22.5
Textile mill products	848.4	827.7	849.2	835.0	837.5	841.7	839.7	844.7	854.3	860.9	863.5	865.0	871.7	857.1	826.7
Weaving mills, cotton	216.3	215.4	218.2	216.6	217.0	218.7	218.2	220.4	221.3	220.8	219.5	218.6	219.3	218.0	210.5
Weaving mills, synthetics	85.6	84.6	85.5	84.8	84.8	85.6	86.4	87.2	87.9	87.9	87.9	88.3	88.8	87.5	83.4
Weaving and finishing mills, wool	39.0	38.7	39.8	38.9	38.9	38.6	38.5	38.3	37.7	37.6	38.1	39.3	40.4	39.6	39.9
Narrow fabric mills	27.6	26.5	28.4	28.3	28.3	28.5	28.5	28.8	28.9	28.9	28.6	28.3	28.2	27.9	26.2
Knitting mills	208.3	201.0	207.5	202.6	201.0	199.9	195.9	195.2	201.3	208.8	212.7	213.9	217.2	209.8	205.8
Textile finishing, except wool	68.8	67.0	68.7	64.8	67.1	67.5	67.6	67.7	68.5	67.8	67.1	67.2	67.6	67.3	65.4
Floor covering mills	34.9	35.7	34.8	34.9	35.2	35.7	36.1	36.8	36.8	36.8	36.8	36.5	35.9	35.6	34.0
Yarn and thread mills	103.4	102.5	105.3	103.6	103.9	104.8	105.8	107.2	107.8	107.9	108.5	108.9	110.4	107.7	101.2
Miscellaneous textile goods	61.0	57.1	60.1	60.6	61.6	62.9	63.1	63.8	64.1	64.4	64.3	64.0	63.9	63.8	60.2
Apparel and other textile products	1,243.0	1,184.2	1,235.0	1,223.6	1,218.8	1,239.5	1,250.7	1,235.2	1,247.7	1,262.8	1,265.7	1,259.8	1,266.9	1,243.0	1,205.6
Men's and boys' suits and coats	110.9	102.3	109.8	108.9	107.5	108.8	109.3	109.9	110.5	109.7	109.2	109.9	109.8	109.7	107.0
Men's and boys' furnishings	335.0	321.8	333.1	329.5	329.4	331.1	332.0	333.1	334.0	335.7	337.3	338.7	341.1	334.9	319.3
Women's and misses' outerwear	383.3	363.4	376.8	376.3	374.8	385.7	390.2	378.0	377.1	381.8	382.6	380.9	386.3	378.7	373.6
Women's and children's undergarments	108.2	103.6	107.6	108.1	109.4	110.5	111.1	109.9	112.6	115.0	114.8	113.6	113.2	110.6	106.6
Hats, caps, and millinery	21.8	21.0	20.1	20.0	20.4	20.8	26.4	26.0	25.4	24.2	25.1	25.4	26.0	24.9	25.9
Children's outerwear	69.6	70.0	73.0	71.6	69.9	69.3	72.6	70.9	70.0	71.2	71.5	71.3	73.4	71.8	70.2
Fur goods and miscellaneous apparel	65.7	65.7	69.1	66.8	66.8	67.2	67.3	65.4	69.5	72.9	73.8	72.3	72.5	68.9	66.1
Miscellaneous fabricated textile products	142.3	135.6	144.8	142.3	141.0	142.1	141.8	142.0	148.6	152.3	151.4	147.7	144.6	143.5	136.9
Paper and allied products	543.2	535.2	539.5	521.6	522.5	524.1	522.2	522.7	528.5	530.1	525.2	523.5	529.3	519.0	497.7
Paper and pulp mills	176.2	176.0	176.7	169.0	170.1	169.8	169.7	169.2	170.6	170.5	169.1	170.4	173.6	170.0	168.2
Paperboard mills	59.4	57.6	58.7	57.5	57.5	57.7	57.6	57.7	57.5	57.4	56.6	56.9	57.3	56.4	54.1
Miscellaneous converted paper products	135.9	132.2	133.0	129.1	129.9	129.7	128.7	128.2	129.4	130.0	129.2	127.9	129.2	125.8	116.8
Paperboard containers and boxes	171.7	169.4	171.1	166.0	165.0	166.9	166.2	167.6	171.0	172.2	170.3	168.3	169.2	166.8	158.6
Printing and publishing	673.9	671.0	673.1	670.1	671.7	672.4	667.3	663.0							

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

Industry	1967								1966					Annual average	
	Aug. 2	July 2	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Chemicals and allied products.....	591.5	587.6	586.9	584.8	589.6	581.2	580.0	578.4	578.4	578.9	577.0	579.2	585.1	572.3	546.1
Industrial chemicals.....	171.3	172.6	174.0	172.5	173.9	173.0	173.1	172.9	172.0	172.0	169.7	172.5	173.7	170.5	166.7
Plastics materials and synthetics.....	132.1	132.1	130.9	129.9	131.0	128.5	132.7	134.6	136.5	136.8	136.7	137.8	139.9	136.4	130.8
Drugs.....	71.3	71.1	70.8	70.1	69.6	68.7	68.5	68.6	68.2	67.7	67.1	67.3	69.0	66.7	61.6
Soap, cleaners, and toilet goods.....	72.0	69.0	68.3	66.3	66.6	67.0	66.0	66.5	68.4	69.5	70.9	70.2	69.8	67.0	64.8
Paints and allied products.....	39.6	39.3	38.8	37.5	37.0	37.1	36.9	36.8	37.0	37.3	37.3	37.9	39.5	37.7	37.1
Agricultural chemicals.....	33.3	32.0	35.3	41.7	45.2	42.0	38.1	35.6	33.9	33.3	33.8	31.9	31.7	35.5	34.7
Other chemical products.....	71.9	71.5	68.8	66.8	66.3	64.9	64.7	63.4	62.4	62.3	61.5	61.6	61.5	58.7	50.5
Petroleum and coal products.....	123.2	121.9	120.8	117.2	116.2	113.6	113.9	113.4	115.3	116.6	117.0	118.5	120.3	115.8	112.9
Petroleum refining.....	94.6	93.9	93.2	91.4	91.3	90.2	90.8	90.6	91.2	91.0	90.5	91.0	91.9	90.1	88.7
Other petroleum and coal products.....	28.6	28.0	27.6	25.8	24.9	23.4	23.1	22.8	24.1	25.6	26.5	27.5	28.4	25.7	24.3
Rubber and plastics products, nec.....	406.3	352.4	360.5	351.5	399.5	401.3	405.2	410.9	415.5	414.6	410.7	405.4	402.3	397.2	365.9
Tires and inner tubes.....	78.9	47.7	47.5	45.5	77.2	77.6	77.5	77.8	78.2	78.0	77.1	76.8	77.1	76.0	72.7
Other rubber products.....	135.9	122.9	125.6	124.3	139.3	140.2	143.7	147.3	147.3	145.2	144.1	143.2	141.1	141.7	135.7
Miscellaneous plastics products.....	191.5	181.8	187.4	181.7	183.0	183.5	184.0	185.8	190.0	191.4	189.5	185.4	184.1	179.6	157.5
Leather and leather products.....	308.4	295.1	304.0	298.5	299.1	304.6	310.0	310.4	316.0	317.8	316.1	318.0	325.7	318.4	310.0
Leather tanning and finishing.....	26.8	25.6	26.7	26.1	26.2	26.4	26.7	27.0	27.6	27.2	27.0	27.3	27.9	27.6	27.5
Footwear, except rubber.....	203.6	195.6	200.1	198.4	198.3	201.9	206.4	207.3	211.1	210.5	209.3	211.9	218.1	213.4	208.8
Other leather products.....	78.0	73.9	77.2	74.0	74.6	76.3	76.9	76.1	77.3	80.1	79.8	78.8	79.7	77.3	73.8
Handbags and personal leather goods.....		30.4	32.5	30.4	31.3	32.5	33.9	33.2	33.8	35.8	35.6	34.6	35.0	33.6	31.4
Transportation and public utilities:															
Local and interurban passenger transit:															
Local and suburban transportation.....		77.3	78.0	77.9	76.4	77.9	77.8	78.0	77.7	77.6	78.1	77.8	76.4	77.5	78.1
Intercity highway transportation.....		41.3	40.6	39.5	38.8	38.2	37.8	38.7	38.7	38.6	38.9	39.8	40.7	38.3	38.5
Trucking and warehousing.....		966.0	946.0	924.7	862.4	905.4	900.5	905.6	937.7	953.4	954.4	954.8	940.6	918.5	878.4
Public warehousing.....		77.4	73.8	75.0	69.6	72.9	75.2	76.2	80.3	84.0	81.4	75.5	74.2	74.1	72.0
Pipe line transportation.....		16.2	16.0	15.1	15.1	15.1	15.1	15.2	15.2	15.3	15.4	15.9	16.3	15.8	16.3
Communication.....		779.3	769.2	758.1	756.3	755.9	752.1	748.9	748.0	747.5	742.8	744.7	756.3	732.5	698.1
Telephone communication.....		656.5	647.7	638.7	638.0	637.2	634.3	631.3	630.1	629.7	624.9	627.1	638.3	616.5	587.2
Telegraph communications ²		23.2	23.2	23.1	23.0	22.9	22.9	22.8	23.0	23.0	23.1	23.0	23.1	22.8	22.2
Radio and television broadcasting.....		96.3	95.1	93.2	92.1	92.7	91.8	91.7	91.9	91.8	91.9	91.7	92.1	90.5	86.7
Electric, gas, and sanitary services.....		568.7	556.9	543.1	541.7	540.9	539.8	540.1	540.8	539.8	541.4	550.5	561.1	544.9	542.4
Electric companies and systems.....		230.2	224.9	219.0	219.2	219.0	218.5	218.6	218.3	218.3	218.5	221.3	225.4	218.4	214.6
Gas companies and systems.....		135.8	133.9	129.4	129.0	128.9	128.9	129.1	129.6	129.5	129.8	132.4	135.3	131.7	134.5
Combination companies and systems.....		162.0	158.1	156.2	155.7	155.5	155.5	155.5	155.6	155.8	156.4	159.5	162.4	158.2	158.1
Water, steam, & sanitary systems.....		40.7	40.0	38.5	37.8	37.4	36.9	36.9	36.8	36.2	36.7	37.3	38.0	36.6	35.2
Wholesale and retail trade:															
Wholesale trade.....															
Wholesale trade.....	12,140	12,133	12,184	12,019	11,937	11,858	11,750	11,874	12,780	12,147	11,941	11,806	11,787	11,786	11,358
Motor vehicles & automotive equipment.....	3,038	3,024	3,004	2,947	2,948	2,940	2,935	2,947	2,992	2,974	2,963	2,941	2,964	2,911	2,814
Drugs, chemicals, and allied products.....		229.1	227.3	221.6	221.7	221.2	221.6	220.7	221.5	221.2	218.3	218.9	221.5	218.8	214.3
Dry goods and apparel.....		178.4	176.7	175.4	175.6	175.2	173.5	173.8	175.9	176.4	174.5	172.6	174.1	171.1	164.0
Groceries and related products.....		123.6	121.5	119.3	120.4	121.6	120.1	119.7	118.8	119.5	118.3	118.0	117.6	116.0	112.9
Electrical goods.....		452.3	454.7	441.0	437.7	437.0	435.7	441.7	458.8	457.3	461.2	448.4	450.7	441.0	450.2
Hardware, plumbing & heating equipment.....		237.9	235.6	232.2	232.7	232.5	231.6	229.7	229.6	228.5	225.7	224.2	229.9	224.0	213.1
Machinery, equipment, and supplies.....		134.1	133.9	131.8	131.6	131.7	131.1	131.4	132.2	132.5	133.1	132.2	133.8	131.2	127.8
Miscellaneous wholesalers.....		570.7	566.6	556.2	554.5	543.2	542.6	545.8	545.0	541.0	537.9	538.6	544.3	529.1	490.8
Retail trade.....		1,023.1	1,017.7	999.5	1,000.7	1,001.4	996.4	994.9	1,011.6	1,005.8	1,002.3	997.5	1,004.2	986.6	954.0
Retail general merchandise.....	9,102	9,109	9,180	9,072	8,989	8,918	8,815	8,927	9,788	9,173	8,978	8,865	8,823	8,876	8,544
Department stores.....		1,786.0	1,800.9	1,782.8	1,763.1	1,765.0	1,778.4	1,825.8	2,365.1	1,992.4	1,842.8	1,773.4	1,728.6	1,810.7	1,719.6
Mail order houses.....		1,134.8	1,145.6	1,127.7	1,117.6	1,115.8	1,095.6	1,164.4	1,540.0	1,275.3	1,169.1	1,116.9	1,088.1	1,149.6	1,077.6
Variety stores.....		105.2	104.8	105.0	105.9	107.5	111.4	123.0	148.2	139.2	123.3	113.2	109.7	117.3	112.3
Food stores.....		295.5	300.6	302.9	300.3	303.3	289.9	299.3	306.8	325.7	305.8	297.1	283.1	299.3	292.1
Grocery, meat, and vegetable stores.....		1,451.4	1,459.2	1,466.7	1,463.6	1,462.0	1,462.8	1,458.1	1,487.2	1,458.4	1,452.9	1,430.8	1,418.5	1,428.9	1,364.3
Apparel and accessory stores.....		1,284.6	1,288.2	1,294.2	1,295.4	1,291.7	1,293.2	1,294.4	1,314.9	1,293.8	1,290.0	1,269.6	1,260.1	1,267.1	1,201.7
Men's & boys' clothing & furnishings.....		588.1	613.0	606.9	598.1	613.4	582.1	607.6	738.3	626.5	604.5	592.5	573.2	598.9	577.1
Women's ready-to-wear stores.....		99.9	103.2	99.9	99.2	99.6	99.4	106.8	132.1	104.3	100.0	97.7	96.3	100.7	94.6
Family clothing stores.....		215.2	222.2	223.6	220.4	221.5	211.6	220.6	268.2	232.4	227.1	219.2	217.5	223.5	215.6
Shoe stores.....		102.3	106.3	104.0	102.2	104.9	102.2	108.0	136.3	107.7	101.6	100.1	95.9	101.6	97.2
Furniture and home furnishings stores.....		113.8	118.6	117.4	116.3	123.7	109.5	112.5	131.5	117.0	113.2	114.5	106.5	112.6	108.2
Furniture and home furnishings.....		376.7	377.2	375.0	375.3	375.5	376.1	376.1	390.7	374.7	374.7	370.7	370.5	371.0	362.3
Eating and drinking places.....		241.6	241.5	238.2	238.6	239.7	239.4	240.5	250.9	245.3	240.7	238.9	238.1	239.0	234.2
Other retail trade.....		2,062.9	2,083.2	2,039.1	2,006.6	1,958.1	1,926.3	1,907.7	1,944.0	1,949.2	1,966.5	1,970.1	1,982.5	1,926.6	1,852.9
Building materials and farm equipment.....		2,843.9	2,846.9	2,803.1	2,782.4	2,743.8	2,739.3	2,751.9	2,862.9	2,765.3	2,736.5	2,727.1	2,749.2	2,739.2	2,668.0
Motor vehicle dealers.....		478.1	472.4	453.2	448.5	437.6	431.9	435.5	452.9	454.7	460.9	466.3	479.4	464.5	464.9
Other automotive & accessory dealers.....		636.5	633.9	627.5	628.7	627.3	631.6	631.6	632.9	632.9	628.8	626.6	630.8	631.1	623.5
Drug stores and proprietary stores.....		183.1	179.8	176.2	172.9	167.4	165.0	168.0	179.6	174.5	170.9	170.6	173.5	167.6	155.8
Fuel and ice dealers.....		391.9	401.3	398.6	398.9	398.7	402.8	405.7	426.4	393.6	388.0	381.2	377.9	382.7	366.3
		88.4	90.5	90.1	93.2	99.0	101.6	102.2	101.4	97.9	94.2	89.2	88.0	94.8	95.6

See footnotes at end of table.

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Finance, insurance, and real estate⁴	2,637	2,623	2,589	2,544	2,527	2,507	2,487	2,472	2,490	2,485	2,486	2,497	2,534	2,478	2,426
Banking		732.4	720.1	706.8	704.1	702.7	700.5	696.6	699.0	696.9	694.4	695.6	704.8	686.4	663.5
Credit agencies other than banks		277.8	274.1	271.3	269.9	268.8	266.8	266.2	267.0	265.5	265.4	266.3	270.5	267.1	263.4
Savings and loan associations		81.2	79.1	77.4	77.1	76.3	75.5	76.6	75.7	75.4	76.1	75.9	77.9	77.8	79.7
Security, commodity brokers & services		138.8	134.0	130.2	129.0	127.7	125.5	123.4	125.1	125.0	125.7	125.4	127.4	123.8	113.9
Insurance carriers		676.0	668.1	660.9	659.5	656.9	654.5	647.8	649.9	645.1	643.2	645.8	652.1	640.7	634.0
Life insurance		290.3	288.0	286.1	286.8	285.0	283.7	282.8	284.2	282.5	282.3	284.1	286.9	282.9	282.9
Accident and health insurance		66.1	64.7	63.3	62.8	62.2	60.9	58.3	57.8	56.6	55.7	54.6	54.8	51.9	46.3
Fire, marine, and casualty insurance		286.7	283.3	279.9	278.6	278.5	278.4	274.9	275.5	273.7	272.4	273.7	276.2	271.7	269.2
Services:															
Hotels and other lodging places:															
Hotels, tourist courts, and motels		638.8	613.3	580.5	570.0	549.7	540.9	531.9	534.7	546.1	565.7	593.7	631.0	571.1	546.8
Personal services:															
Laundries and drycleaning plants		512.5	511.7	504.8	503.7	499.9	496.8	498.0	503.1	506.3	509.5	506.4	514.9	505.2	492.0
Motion pictures:															
Motion picture filming & distributing		34.2	33.8	31.3	29.8	31.0	31.6	34.0	37.2	36.5	35.4	34.4	36.6	33.5	30.4

¹ For comparability of data with those published in issues prior to October 1967, and coverage of these series, see footnote 1, table A-9.

For mining and manufacturing, data refer to production and related workers; for contract construction, to construction workers; and for all other industries, to nonsupervisory workers. Transportation and public utilities, and services are included in total private but are not shown separately in this table.

Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, and watchmen services, product development, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations.

Construction workers include working foremen, journeymen, mechanics, apprentices, laborers, etc., engaged in new work, alterations, demolition, repair, and maintenance, etc., at the site of construction or working in shop or yards at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.

Nonsupervisory workers include employees (not above the working supervisory level) such as office and clerical workers, repairmen, salespersons, operators, drivers, attendants, service employees, linemen, laborers, janitors, watchmen, and similar occupational levels, and other employees whose services are closely associated with those of the employees listed.

² Preliminary.

³ Data relate to nonsupervisory employees except messengers.

⁴ Nonoffice salesmen excluded from nonsupervisory count for all series in this division.

CAUTION

The series on employment, hours, earnings, and labor turnover in nonagricultural establishments have been adjusted to March 1966 benchmarks and are not comparable with those published in the Monthly Labor Review prior to the October 1967 issue, nor with those for periods after April 1965 appearing in the *Handbook of Labor Statistics, 1967*. (See footnote 1, table A-9, and "BLS Establishment Employment Estimates Revised to March 1966 Benchmark Levels" appearing in the September 1967 issue of *Employment and Earnings and Monthly Report on the Labor Force*.) Moreover, when the figures are again adjusted to new benchmarks, the data presented in this issue should not be compared with those in later issues which reflect the adjustments. Comparable historical data appear in *Employment and Earnings Statistics for the United States, 1909-67* (BLS Bulletin 1312-5).

Beginning with the October 1967 issue of the Monthly Labor Review, industry titles have been changed, as necessary, to conform to the Bureau of the Budget's Standard list of short SIC titles—definitions are unchanged.

TABLE A-11. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted ¹

[In thousands]

Industry division and group	1967								1966				
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
Total employees.....	66,250	65,947	65,903	65,639	65,653	65,749	65,692	65,564	65,251	65,014	64,694	64,394	64,345
Mining.....	605	623	619	617	620	624	624	625	623	621	623	625	630
Contract construction.....	3,212	3,230	3,187	3,192	3,276	3,313	3,352	3,311	3,291	3,241	3,239	3,260	3,273
Manufacturing.....	19,358	19,172	19,285	19,238	19,331	19,445	19,507	19,558	19,526	19,498	19,422	19,337	19,371
Durable goods.....	11,352	11,224	11,285	11,283	11,322	11,434	11,482	11,507	11,496	11,485	11,457	11,401	11,395
Ordnance and accessories.....	296	291	290	286	288	286	283	277	272	270	267	263	261
Lumber and wood products.....	588	588	590	584	592	602	603	607	596	598	599	602	611
Furniture and fixtures.....	453	448	452	453	455	459	465	466	469	469	466	465	467
Stone, clay, and glass products.....	625	626	626	624	628	638	640	642	640	640	640	639	643
Primary metal industries.....	1,270	1,283	1,295	1,299	1,305	1,332	1,348	1,362	1,364	1,369	1,370	1,361	1,364
Fabricated metal products.....	1,353	1,349	1,357	1,348	1,354	1,364	1,372	1,374	1,374	1,372	1,364	1,358	1,358
Machinery, except electrical.....	1,979	1,969	1,972	1,972	1,979	1,984	1,984	1,988	1,978	1,968	1,959	1,947	1,942
Electrical equipment and supplies.....	1,907	1,889	1,872	1,904	1,916	1,947	1,959	1,958	1,955	1,956	1,956	1,942	1,950
Transportation equipment.....	2,004	1,897	1,947	1,927	1,916	1,932	1,938	1,938	1,959	1,959	1,955	1,949	1,923
Instruments and related products.....	458	454	454	454	456	456	454	453	451	446	445	439	439
Miscellaneous manufacturing industries.....	419	430	430	432	433	434	436	442	438	438	436	436	437
Nondurable goods.....	8,006	7,948	8,000	7,955	8,009	8,011	8,025	8,051	8,030	8,013	7,965	7,936	7,976
Food and kindred products.....	1,774	1,787	1,806	1,797	1,800	1,803	1,798	1,795	1,795	1,793	1,769	1,763	1,787
Tobacco manufactures.....	89	89	87	86	86	84	85	89	86	84	79	80	83
Textile mill products.....	948	941	948	941	945	952	954	963	962	962	963	964	968
Apparel and other textile products.....	1,378	1,377	1,396	1,395	1,390	1,384	1,401	1,414	1,411	1,408	1,404	1,396	1,399
Paper and allied products.....	691	690	688	679	680	684	681	680	679	678	673	667	673
Printing and publishing.....	1,069	1,066	1,066	1,064	1,063	1,065	1,056	1,053	1,044	1,041	1,037	1,032	1,030
Chemicals and allied products.....	992	988	990	982	984	981	984	983	978	976	973	969	969
Petroleum and coal products.....	191	191	189	187	187	186	187	187	187	187	186	186	187
Rubber and plastics products, nec.....	525	477	479	472	520	521	523	527	527	523	519	517	516
Leather and leather products.....	349	342	351	352	354	351	356	360	361	361	362	362	364
Transportation and public utilities.....	4,299	4,296	4,266	4,267	4,212	4,246	4,247	4,242	4,218	4,212	4,190	4,184	4,126
Wholesale and retail trade.....	13,677	13,645	13,648	13,609	13,572	13,557	13,541	13,515	13,416	13,406	13,354	13,279	13,259
Wholesale trade.....	3,558	3,551	3,555	3,549	3,545	3,535	3,521	3,512	3,496	3,484	3,469	3,455	3,460
Retail trade.....	10,119	10,094	10,093	10,060	10,027	10,022	10,020	10,003	9,920	9,922	9,885	9,824	9,799
Finance, insurance, and real estate.....	3,252	3,234	3,227	3,205	3,194	3,179	3,165	3,152	3,144	3,132	3,120	3,118	3,114
Services.....	10,131	10,069	10,035	9,987	9,973	9,946	9,883	9,840	9,781	9,744	9,675	9,619	9,611
Government.....	11,716	11,678	11,636	11,524	11,475	11,439	11,373	11,321	11,252	11,160	11,071	10,972	10,961
Federal.....	2,765	2,759	2,747	2,698	2,688	2,685	2,673	2,667	2,653	2,616	2,617	2,597	2,595
State and local.....	8,951	8,919	8,889	8,826	8,787	8,754	8,700	8,654	8,599	8,544	8,454	8,375	8,366

¹ For coverage of the series, see footnote 1, table A-9.² Preliminary.NOTE: The seasonal adjustment method used is described in appendix A, *BLS Handbook of Methods for Surveys and Studies* (BLS Bulletin 1458, 1966).

TABLE A-12. Production workers in manufacturing industries, by major industry group, seasonally adjusted ¹

Revised series; see box, p. 86.

[In thousands]

Major industry group	1967						1966						
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
Manufacturing.....	14,215	14,055	14,170	14,147	14,233	14,358	14,436	14,506	14,495	14,490	14,434	14,363	14,409
Durable goods.....	8,283	8,170	8,240	8,254	8,286	8,407	8,459	8,502	8,501	8,505	8,488	8,448	8,447
Ordnance and accessories.....	154	150	149	147	147	146	143	140	136	133	130	128	126
Lumber and wood products.....	511	510	512	507	514	525	524	530	519	521	522	524	534
Furniture and fixtures.....	372	368	371	375	374	379	384	385	389	389	386	385	386
Stone, clay, and glass products.....	494	498	498	495	499	509	509	512	513	512	512	511	516
Primary metal industries.....	1,012	1,026	1,037	1,042	1,049	1,073	1,091	1,106	1,109	1,116	1,117	1,108	1,112
Fabricated metal products.....	1,044	1,040	1,048	1,041	1,046	1,059	1,065	1,068	1,069	1,069	1,062	1,057	1,057
Machinery, except electrical.....	1,375	1,367	1,372	1,373	1,380	1,388	1,392	1,398	1,390	1,384	1,380	1,372	1,368
Electrical equipment and supplies.....	1,271	1,260	1,251	1,284	1,298	1,332	1,345	1,348	1,347	1,352	1,356	1,349	1,351
Transportation equipment.....	1,437	1,329	1,377	1,361	1,347	1,363	1,371	1,373	1,394	1,396	1,393	1,390	1,368
Instruments and related products.....	286	284	285	287	289	289	288	289	286	284	283	279	281
Miscellaneous manufacturing industries.....	327	338	340	342	343	344	347	353	349	349	347	345	348
Nondurable goods.....	5,932	5,885	5,930	5,893	5,947	5,951	5,977	6,004	5,994	5,985	5,946	5,915	5,962
Food and kindred products.....	1,170	1,182	1,201	1,196	1,195	1,200	1,197	1,196	1,195	1,195	1,174	1,166	1,188
Tobacco manufactures.....	76	76	75	74	73	72	73	77	74	72	67	68	70
Textile mill products.....	840	835	841	835	838	845	848	856	856	856	858	858	863
Apparel and other textile products.....	1,221	1,221	1,239	1,235	1,232	1,226	1,243	1,254	1,252	1,252	1,248	1,240	1,245
Paper and allied products.....	537	537	535	525	526	531	529	527	527	526	522	516	524
Printing and publishing.....	675	674	673	672	673	674	670	668	663	660	658	655	655
Chemicals and allied products.....	587	586	583	580	583	580	585	585	584	584	581	578	580
Petroleum and coal products.....	119	119	119	117	118	116	117	117	118	117	116	116	117
Rubber and plastics products, nec.....	406	360	362	354	402	403	406	411	411	408	406	402	402
Leather and leather products.....	301	295	302	305	307	304	309	313	314	315	316	316	318

¹ For definition of production workers, see footnote 1, table A-10.² Preliminary.NOTE: The seasonal adjustment method used is described in appendix A, *BLS Handbook of Methods for Surveys and Studies* (BLS Bulletin 1458, 1966).

TABLE A-13. Unemployment insurance and employment service program operations ¹

[All items except average benefit amounts are in thousands]

Item	1967							1966					
	Aug.	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	June
Employment service: ²													
New applications for work.....	967	1,335	974	859	887	853	966	721	794	819	801	869	1,314
Nonfarm placements.....	487	537	507	476	460	407	440	420	513	592	619	619	622
State unemployment insurance programs:													
Initial claims ^{3,4}	1,218	803	848	1,005	1,061	1,087	1,346	1,280	915	709	626	826	690
Insured unemployment ⁵ (average weekly volume) ⁶	1,184	1,019	1,142	1,360	1,532	1,582	1,558	1,254	903	753	755	928	793
Rate of insured unemployment ⁷	2.4	2.1	2.4	2.9	3.3	3.4	3.3	2.7	1.9	1.6	1.6	2.0	1.8
Weeks of unemployment compensated.....	3,807	4,071	4,663	4,977	6,323	5,398	5,615	3,971	2,960	2,476	2,817	3,639	3,087
Average weekly benefit amount for total unemployment.....	\$40.10	\$39.99	\$40.99	\$41.81	\$42.07	\$41.97	\$41.73	\$41.39	\$40.57	\$39.84	\$39.68	\$40.65	\$38.72
Total benefits paid.....	\$147,307	\$156,083	\$183,645	\$200,588	\$257,488	\$219,480	\$224,787	\$157,566	\$114,814	\$93,697	\$106,548	\$143,058	\$114,358
Unemployment compensation for ex-service-men: ^{8,9}													
Initial claims ^{3,6}	22	17	14	14	16	15	19	17	15	13	12	16	14
Insured unemployment ⁶ (average weekly volume).....	24	19	19	21	24	25	25	21	16	14	15	19	17
Weeks of unemployment compensated.....	75	82	81	85	101	93	96	72	59	51	63	81	72
Total benefits paid.....	\$3,125	\$3,471	\$3,404	\$3,576	\$4,199	\$3,878	\$3,963	\$2,973	\$2,450	\$2,117	\$2,561	\$3,204	\$2,872
Unemployment compensation for Federal civilian employees: ^{9,10}													
Initial claims ³	12	9	9	8	8	9	15	10	9	9	7	8	9
Insured unemployment ⁶ (average weekly volume).....	20	18	18	19	22	24	23	20	17	16	16	18	18
Weeks of unemployment compensated.....	67	81	78	81	103	91	87	75	67	60	67	79	79
Total benefits paid.....	\$2,754	\$3,370	\$3,237	\$3,354	\$4,192	\$3,728	\$3,581	\$3,045	\$2,752	\$2,466	\$2,731	\$3,239	\$3,255
Railroad unemployment insurance:													
Applications ¹¹	21	15	3	4	5	6	11	7	6	6	7	8	25
Insured unemployment (average weekly volume).....	17	14	17	20	23	24	25	19	18	16	16	15	15
Number of payments ¹²	32	36	42	44	57	53	48	40	38	34	36	35	54
Average amount of benefit payment ¹³	\$73.45	\$73.44	\$71.29	\$74.10	\$77.16	\$75.54	\$72.95	\$76.70	\$73.80	\$71.99	\$72.07	\$74.96	\$60.07
Total benefits paid ¹⁴	\$2,069	\$2,478	\$2,812	\$3,013	\$4,233	\$3,784	\$3,499	\$2,858	\$2,550	\$2,126	\$2,422	\$2,499	\$2,913
All programs: ¹⁵													
Insured unemployment ⁶	1,246	1,070	1,196	1,422	1,602	1,654	1,631	1,313	955	799	802	980	841

¹ Includes data for Puerto Rico beginning January 1961 when the Commonwealth's program became part of the Federal-State UI system.

² Includes Guam and the Virgin Islands.

³ Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitions claims under State programs.

⁴ Includes interstate claims for the Virgin Islands.

⁵ Number of workers reporting the completion of at least 1 week of unemployment.

⁶ Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.

⁷ The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.

⁸ Excludes data on claims and payments made jointly with other programs.

⁹ Includes the Virgin Islands.

¹⁰ Excludes data on claims and payments made jointly with State programs.

¹¹ An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year.

¹² Payments are for unemployment in 14-day registration periods. The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.

¹³ Adjusted for recovery of overpayments and settlement of underpayments.

¹⁴ Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs and the Railroad Unemployment Insurance Act.

SOURCE: U.S. Department of Labor, Bureau of Employment Security for all items except railroad unemployment insurance which is prepared by the U.S. Railroad Retirement Board.

B.—Labor Turnover

TABLE B-1. Labor turnover rates, by major industry group ¹

[Per 100 employees]

Major industry group	1967							1966					Annual average	
	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Accessions: Total														
Manufacturing.....	4.5	5.9	4.6	3.9	3.9	3.6	4.3	2.9	3.9	5.1	6.0	6.4	5.0	4.3
<i>Seasonally adjusted</i>	4.1	4.6	4.6	4.2	4.1	4.3	4.6	4.6	4.8	5.1	4.9	5.1	-----	-----
Durable goods.....	4.0	5.5	4.3	3.7	3.7	3.4	4.1	2.7	3.8	4.8	5.9	6.2	4.8	4.1
Ordnance and accessories.....	3.8	5.0	3.1	2.8	2.7	2.9	3.8	2.2	3.7	4.7	4.4	4.3	3.8	2.9
Lumber and wood products.....	5.7	9.2	8.3	7.0	6.5	5.4	6.4	3.6	4.5	5.9	6.8	6.9	6.7	6.0
Furniture and fixtures.....	6.6	6.4	5.3	4.5	4.9	4.5	5.3	3.4	5.6	7.4	8.5	8.9	6.6	5.5
Stone, clay, and glass products.....	4.7	6.9	5.4	5.0	4.7	3.7	3.7	2.3	3.1	3.9	4.5	5.0	4.5	4.0
Primary metal industries.....	2.8	4.6	3.2	2.6	2.7	2.6	3.2	2.3	2.8	3.3	3.8	4.4	3.7	2.9
Fabricated metal products.....	4.8	6.1	5.1	4.5	4.4	4.0	4.7	3.2	4.4	5.4	6.2	7.1	5.3	4.6
Machinery, except electrical.....	2.9	4.3	3.0	2.7	2.9	3.0	3.6	2.6	3.2	3.9	4.2	4.4	3.9	3.3
Electrical equipment and supplies.....	3.7	4.7	3.3	2.9	3.0	3.1	3.8	2.6	3.7	5.1	5.5	5.9	4.7	3.9
Transportation equipment.....	3.9	5.5	4.9	3.7	3.9	3.3	4.0	2.5	3.8	5.1	8.4	8.9	5.3	4.7
Instruments and related products.....	3.5	4.9	2.9	2.9	3.0	2.9	3.5	2.3	3.0	3.9	4.1	4.3	3.8	3.2
Miscellaneous manufacturing industries.....	6.3	7.2	6.3	6.0	5.8	5.1	6.2	3.0	5.5	8.2	9.2	8.3	6.9	6.3
Nondurable goods.....	5.3	6.5	5.1	4.3	4.2	3.8	4.5	3.1	4.2	5.4	6.3	6.8	5.2	4.6
Food and kindred products.....	7.6	9.5	7.0	5.6	5.1	4.3	5.0	4.1	5.3	7.6	9.2	10.4	6.9	6.1
Tobacco manufactures.....	9.1	5.9	5.4	2.9	2.8	3.2	3.7	7.0	5.9	6.2	7.2	16.4	6.4	6.1
Textile mill products.....	5.1	5.7	5.4	4.8	4.7	4.1	4.7	2.9	4.2	5.2	5.9	6.3	5.1	4.3
Apparel and other textile products.....	6.6	6.2	5.9	5.1	5.0	5.0	6.3	3.4	4.9	5.8	6.7	7.5	6.1	5.8
Paper and allied products.....	3.5	6.1	3.9	3.3	3.3	2.9	3.4	2.5	3.4	4.4	4.8	4.4	4.0	3.2
Printing and publishing.....	3.4	5.1	3.6	3.1	3.5	3.3	3.7	2.7	3.3	4.1	4.8	4.4	3.8	3.2
Chemicals and allied products.....	2.6	4.5	2.8	2.5	2.7	2.4	2.4	1.8	2.2	2.7	3.0	2.8	2.9	2.4
Petroleum and coal products.....	2.4	4.6	2.7	2.6	2.0	1.6	1.5	1.1	1.4	1.9	2.0	2.0	2.1	1.8
Rubber and plastics products, nec.....	5.6	7.1	5.3	4.3	4.3	4.1	4.6	3.2	4.9	6.0	6.9	7.1	5.5	4.4
Leather and leather products.....	7.4	6.4	5.7	5.0	4.8	4.7	7.0	4.1	5.3	6.2	6.6	7.2	6.3	5.4
Nonmanufacturing:														
Metal mining.....	2.7	6.5	4.0	4.7	3.4	3.0	4.6	3.0	2.8	3.0	3.0	3.6	3.5	3.2
Coal mining.....	2.2	1.7	1.6	1.8	1.4	1.5	2.3	1.4	1.7	2.0	1.8	2.3	1.7	1.7
Accessions: New hires														
Manufacturing.....	3.2	4.5	3.3	2.8	2.8	2.7	3.0	2.1	3.1	4.1	4.7	4.8	3.8	3.1
<i>Seasonally adjusted</i>	2.9	3.2	3.2	3.1	3.2	3.4	3.6	3.6	3.7	3.9	3.7	3.8	-----	-----
Durable goods.....	2.8	4.1	3.0	2.6	2.7	2.5	2.9	2.1	3.1	4.1	4.5	4.5	3.8	3.0
Ordnance and accessories.....	3.2	4.3	2.6	2.3	2.2	2.5	3.1	1.8	3.1	4.1	3.8	3.5	3.2	1.8
Lumber and wood products.....	5.0	7.8	6.5	5.5	4.8	3.9	4.2	2.9	3.8	5.2	6.1	6.3	5.7	4.7
Furniture and fixtures.....	4.9	5.3	4.3	3.8	4.2	3.8	4.5	3.0	5.1	6.8	7.6	7.9	5.9	4.6
Stone, clay, and glass products.....	3.5	5.4	4.0	3.3	2.9	2.2	2.3	1.6	2.5	3.3	3.8	4.1	3.5	2.7
Primary metal industries.....	1.7	3.1	1.9	1.5	1.7	1.7	2.0	1.5	2.1	2.7	3.2	3.1	2.7	2.0
Fabricated metal products.....	3.3	4.9	3.8	3.3	3.4	3.1	3.5	2.5	3.7	4.6	5.4	5.4	4.3	3.5
Machinery, except electrical.....	2.2	3.4	2.4	2.2	2.4	2.6	3.0	2.1	2.7	3.3	3.7	3.5	3.3	2.6
Electrical equipment and supplies.....	2.4	3.3	2.1	2.0	2.2	2.3	2.8	2.0	3.1	4.3	4.7	4.6	3.8	2.9
Transportation equipment.....	2.4	3.7	2.7	2.3	2.3	2.1	2.1	1.7	2.8	3.9	4.1	4.1	3.4	2.8
Instruments and related products.....	3.0	4.2	2.4	2.4	2.6	2.6	3.0	2.0	2.7	3.5	3.7	3.8	3.4	2.6
Miscellaneous manufacturing industries.....	4.3	5.6	4.7	4.1	4.0	3.8	3.9	2.5	4.9	7.5	8.2	7.2	5.5	4.5
Nondurable goods.....	3.8	5.1	3.7	3.2	3.1	2.8	3.2	2.3	3.3	4.2	5.0	5.3	4.0	3.2
Food and kindred products.....	5.7	7.4	5.1	4.0	3.4	2.9	3.4	2.8	3.9	5.5	7.1	7.9	5.0	4.1
Tobacco manufactures.....	4.7	3.8	2.8	1.9	1.7	2.3	2.6	3.4	4.6	4.4	4.9	10.2	3.7	3.3
Textile mill products.....	3.7	4.6	4.2	3.7	3.5	3.1	3.5	2.2	3.3	4.1	4.9	5.2	4.1	3.3
Apparel and other textile products.....	3.9	4.2	3.6	3.3	3.5	3.4	4.0	2.1	3.5	4.3	5.0	5.4	4.2	3.7
Paper and allied products.....	2.9	5.1	3.3	2.8	2.8	2.4	2.8	2.1	3.0	4.0	4.4	3.9	3.5	2.5
Printing and publishing.....	2.8	4.2	2.9	2.7	2.8	2.7	3.0	2.2	2.8	3.5	4.1	3.7	3.2	2.6
Chemicals and allied products.....	2.0	3.7	2.2	2.1	2.1	1.9	1.9	1.4	1.8	2.3	2.6	2.4	2.4	1.9
Petroleum and coal products.....	2.2	3.9	2.4	2.0	1.5	1.3	1.1	.9	1.2	1.7	1.8	1.7	1.7	1.4
Rubber and plastics products, nec.....	3.9	6.0	4.0	3.3	3.3	3.2	3.5	2.6	4.1	5.3	6.1	5.7	4.6	3.4
Leather and leather products.....	4.6	4.9	3.9	3.1	3.2	3.3	4.8	3.1	4.1	4.8	5.3	5.6	4.8	3.9
Nonmanufacturing:														
Metal mining.....	2.1	5.1	2.7	2.4	2.3	2.1	2.7	2.0	2.0	2.3	2.5	2.7	2.5	2.2
Coal mining.....	1.1	1.2	1.1	1.1	.9	1.0	1.2	1.0	1.1	1.3	1.2	1.4	1.1	.9

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group ¹—Continued

[Per 100 employees]

Major industry group	1967							1966					Annual average	
	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Separations: Total														
Manufacturing.....	4.8	4.3	4.2	4.3	4.6	4.0	4.5	4.2	4.3	4.8	6.6	5.8	4.6	4.1
<i>Seasonally adjusted</i>	4.4	4.8	4.6	4.7	5.2	4.9	4.6	4.4	4.6	4.6	5.0	4.7		
Durable goods.....	4.8	4.1	3.9	4.1	4.4	3.9	4.4	3.9	3.9	4.5	6.1	5.5	4.4	3.8
Ordnance and accessories.....	2.5	2.9	2.8	3.3	3.0	2.4	2.6	1.7	2.1	2.8	4.1	3.2	2.6	2.5
Lumber and wood products.....	5.5	5.9	6.5	6.4	6.8	5.3	6.3	6.4	7.3	7.4	9.4	8.5	7.1	6.0
Furniture and fixtures.....	5.8	5.6	5.8	5.8	6.4	5.2	6.2	4.9	5.7	6.8	8.3	8.4	6.3	5.1
Stone, clay, and glass products.....	4.3	4.6	4.2	4.2	4.5	4.2	5.2	4.8	4.5	4.7	6.8	5.9	4.6	3.9
Primary metal industries.....	3.0	3.2	3.1	3.3	3.6	3.0	3.6	2.9	3.1	3.6	5.6	4.3	3.2	3.0
Fabricated metal products.....	4.7	5.3	4.5	4.8	5.0	4.9	4.9	4.3	4.7	5.3	7.1	6.3	5.1	4.2
Machinery, except electrical.....	3.4	3.5	3.1	3.3	3.5	2.8	3.1	2.5	2.6	3.3	5.2	4.5	3.4	2.8
Electrical equipment and supplies.....	3.4	3.4	3.7	4.3	4.8	4.0	4.2	3.2	3.4	4.0	5.8	4.5	3.8	3.1
Transportation equipment.....	9.2	4.3	3.8	4.1	4.3	4.5	5.1	3.8	3.7	4.4	5.3	6.5	4.9	4.3
Instruments and related products.....	2.9	3.0	2.9	2.9	3.0	2.7	2.9	2.4	2.4	3.5	4.9	3.6	3.1	2.7
Miscellaneous manufacturing industries.....	6.0	5.3	5.4	5.1	5.4	5.0	5.7	12.2	8.6	6.8	8.6	7.2	6.9	5.9
Nondurable goods.....	4.8	4.5	4.5	4.6	4.7	4.1	4.8	4.6	4.7	5.4	7.3	6.2	5.0	4.4
Food and kindred products.....	5.5	5.4	5.6	5.6	5.5	5.0	6.0	7.1	7.2	8.4	10.9	7.9	6.8	6.1
Tobacco manufactures.....	3.5	3.6	4.2	4.8	7.7	7.2	8.1	6.0	6.5	4.9	5.6	8.5	6.0	6.4
Textile mill products.....	5.2	4.8	4.8	5.0	5.2	4.6	5.2	4.2	4.8	5.3	6.7	6.5	5.1	4.1
Apparel and other textile products.....	7.4	5.9	5.8	6.2	6.4	5.0	5.7	5.5	5.4	5.8	7.2	7.2	6.1	5.8
Paper and allied products.....	3.3	3.5	3.5	3.6	3.5	3.0	3.5	3.0	3.5	4.1	6.6	5.0	3.8	3.1
Printing and publishing.....	3.1	3.6	3.3	3.1	3.3	3.0	3.5	3.0	3.0	3.5	5.1	4.6	3.4	3.1
Chemicals and allied products.....	2.1	2.7	2.5	2.3	2.4	2.1	2.4	2.1	2.0	2.5	4.6	3.0	2.5	2.2
Petroleum and coal products.....	1.7	1.8	1.9	1.8	1.7	1.5	2.0	1.8	1.9	2.1	3.9	2.6	2.1	1.9
Rubber and plastics products, nec.....	5.3	5.0	5.0	4.9	5.1	5.1	5.3	4.2	4.5	5.5	7.2	6.2	5.0	4.2
Leather and leather products.....	7.6	5.0	5.7	6.1	6.2	5.6	6.2	6.4	5.2	5.9	8.4	7.8	6.4	5.3
Nonmanufacturing:														
Metal mining.....	3.1	3.1	3.5	4.0	3.5	2.9	3.8	3.3	3.4	4.0	6.0	3.8	3.5	3.1
Coal mining.....	2.5	1.6	1.9	2.2	2.1	1.6	2.3	1.4	1.6	1.8	1.9	1.6	1.8	1.9
Separations: Quits														
Manufacturing.....	2.1	2.3	2.2	2.2	2.1	1.9	2.1	1.7	2.1	2.8	4.5	3.6	2.6	1.9
<i>Seasonally adjusted</i>	2.1	2.4	2.2	2.3	2.4	2.5	2.5	2.7	2.6	2.6	2.6	2.6		
Durable goods.....	1.8	2.1	2.0	2.0	2.0	1.7	1.9	1.5	1.9	2.6	4.2	3.4	2.4	1.7
Ordnance and accessories.....	1.5	1.6	1.4	1.6	1.5	1.3	1.2	.9	1.1	1.6	2.7	1.9	1.5	1.1
Lumber and wood products.....	3.6	4.1	4.5	4.1	3.7	2.9	3.1	2.6	3.4	4.6	6.8	6.0	4.5	3.4
Furniture and fixtures.....	3.4	3.3	3.5	3.7	3.8	3.1	3.5	2.7	3.6	4.8	6.5	6.2	4.3	3.1
Stone, clay, and glass products.....	2.2	2.4	2.2	2.0	1.9	1.6	1.8	1.4	1.9	2.6	4.5	3.6	2.4	1.7
Primary metal industries.....	1.1	1.4	1.3	1.3	1.3	1.1	1.4	1.1	1.3	1.8	3.8	2.7	1.7	1.2
Fabricated metal products.....	2.2	2.4	2.4	2.4	2.4	2.1	2.3	1.8	2.4	3.0	4.8	4.0	2.8	1.9
Machinery, except electrical.....	1.5	1.7	1.7	1.7	1.7	1.5	1.7	1.3	1.5	1.9	3.5	2.7	1.9	1.4
Electrical equipment and supplies.....	1.7	1.8	1.8	1.9	1.9	1.8	2.0	1.6	1.9	2.5	4.2	3.1	2.3	1.6
Transportation equipment.....	1.5	1.7	1.6	1.5	1.6	1.4	1.5	1.1	1.5	2.0	3.1	2.6	1.9	1.3
Instruments and related products.....	1.7	1.8	1.6	1.6	1.7	1.6	1.7	1.3	1.5	2.4	3.7	2.5	2.0	1.4
Miscellaneous manufacturing industries.....	2.7	3.0	3.0	2.9	2.8	2.5	2.7	2.6	3.9	4.6	6.5	4.9	3.6	2.6
Nondurable goods.....	2.4	2.6	2.5	2.4	2.4	2.1	2.4	1.9	2.4	3.1	5.0	4.0	2.8	2.1
Food and kindred products.....	2.8	2.9	2.8	2.5	2.5	2.2	2.5	2.2	2.9	3.9	6.7	4.8	3.2	2.4
Tobacco manufactures.....	1.5	1.7	1.7	1.6	1.7	1.7	1.9	1.6	1.8	2.3	3.4	2.8	1.9	1.5
Textile mill products.....	3.2	3.3	3.4	3.4	3.3	2.8	3.1	2.3	2.9	3.6	5.1	4.9	3.5	2.5
Apparel and other textile products.....	3.0	2.8	3.0	2.8	2.8	2.5	2.9	2.1	2.8	3.4	4.7	4.6	3.3	2.6
Paper and allied products.....	1.8	2.2	2.1	2.1	2.1	1.7	2.0	1.6	2.1	2.7	5.1	3.5	2.4	1.7
Printing and publishing.....	1.9	2.2	2.0	1.9	2.0	1.8	2.0	1.6	1.8	2.2	3.7	3.1	2.2	1.7
Chemicals and allied products.....	1.0	1.3	1.3	1.2	1.2	1.0	1.1	.9	1.0	1.4	3.3	2.1	1.4	1.0
Petroleum and coal products.....	.8	.9	.9	.7	.7	.7	.7	.6	.6	.9	2.3	1.4	.9	.7
Rubber and plastics products, nec.....	2.6	3.1	2.9	2.7	2.7	2.4	2.5	2.0	2.7	3.5	5.3	4.3	3.1	2.1
Leather and leather products.....	3.6	3.3	3.4	3.3	3.2	3.0	3.6	2.9	3.4	4.3	6.3	5.9	4.1	3.0
Nonmanufacturing:														
Metal mining.....	1.6	2.0	2.0	1.9	1.9	1.4	1.7	1.1	1.3	1.7	4.8	2.7	2.0	1.7
Coal mining.....	.8	.5	.6	.6	.7	.7	.6	.6	.6	.8	1.1	.9	.7	.6

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group ¹—Continued

(Per 100 employees)

Major industry group	1967							1966					Annual average	
	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
	Separations: Layoffs													
Manufacturing.....	1.9	1.1	1.1	1.3	1.5	1.3	1.5	1.8	1.3	1.1	1.0	1.1	1.2	1.4
<i>Seasonally adjusted</i>	<i>1.6</i>	<i>1.4</i>	<i>1.4</i>	<i>1.5</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>1.3</i>	<i>1.2</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.4</i>
Durable goods.....	2.1	1.1	1.0	1.2	1.5	1.4	1.5	1.5	1.1	.8	.8	1.1	1.1	1.2
Ordnance and accessories.....	.4	.4	.6	.9	.8	.5	.5	.2	.4	.5	.4	.4	.4	.8
Lumber and wood products.....	1.0	.8	.9	1.4	2.1	1.6	2.3	3.1	3.0	1.7	1.4	1.4	1.6	1.7
Furniture and fixtures.....	1.5	1.2	1.1	1.1	1.4	1.1	1.5	1.2	1.0	.7	.5	.7	.8	1.0
Stone, clay, and glass products.....	1.2	1.2	1.2	1.3	1.7	1.7	2.6	2.7	1.8	1.1	1.1	1.0	1.3	1.5
Primary metal industries.....	1.0	.9	.9	1.2	1.3	1.0	1.0	1.0	.8	.7	.6	.5	.6	1.0
Fabricated metal products.....	1.7	1.8	1.0	1.4	1.6	1.9	1.6	1.5	1.3	1.1	1.0	1.0	1.2	1.4
Machinery, except electrical.....	1.1	.9	.6	.7	.8	.5	.5	.4	.4	.4	.6	.8	.5	.6
Electrical equipment and supplies.....	1.0	.7	1.1	1.4	1.9	1.2	1.2	.7	.5	.4	.4	.3	.5	.8
Transportation equipment.....	6.9	1.7	1.4	1.8	1.9	2.4	2.7	1.9	1.3	1.3	1.2	2.8	2.1	2.2
Instruments and related products.....	.6	.4	.6	.7	.5	.5	.5	.4	.3	.4	.4	.3	.4	.6
Miscellaneous manufacturing industries.....	2.3	1.3	1.3	1.3	1.5	1.6	2.0	8.6	3.5	.8	.8	1.1	2.1	2.3
Nondurable goods.....	1.7	1.2	1.3	1.4	1.5	1.3	1.6	2.1	1.6	1.5	1.4	1.3	1.4	1.6
Food and kindred products.....	2.0	1.7	2.0	2.3	2.3	2.1	2.7	4.2	3.5	3.5	3.2	2.3	2.8	2.9
Tobacco manufactures.....	1.5	1.1	2.0	2.5	5.2	4.9	5.6	3.6	4.0	1.8	1.5	5.0	3.5	4.4
Textile mill products.....	1.3	.6	.6	.7	.9	.9	1.2	1.2	1.1	.8	.6	.6	.7	.8
Apparel and other textile products.....	3.4	2.3	2.1	2.6	2.8	1.7	1.9	2.8	1.8	1.5	1.6	1.8	2.1	2.4
Paper and allied products.....	.6	.4	.5	.7	.6	.5	.7	.7	.6	.4	.5	.5	.5	.8
Printing and publishing.....	.7	.7	.7	.6	.6	.6	.8	.9	.6	.6	.7	.8	.7	.9
Chemicals and allied products.....	.6	.8	.7	.5	.6	.5	.6	.7	.5	.5	.6	.3	.6	.7
Petroleum and coal products.....	.3	.3	.3	.5	.4	.4	.7	.8	.7	.6	.9	.6	.6	.6
Rubber and plastics products, nec.....	1.7	.8	1.0	1.1	1.3	1.7	1.5	1.3	.7	.7	.6	.6	.9	1.2
Leather and leather products.....	3.1	.7	1.5	1.9	2.0	1.7	1.7	2.7	1.0	.8	1.1	.9	1.4	1.5
Nonmanufacturing:														
Metal mining.....	.8	.5	.7	1.0	.6	.7	1.1	1.0	1.5	1.3	.2	.2	.7	.7
Coal mining.....	1.1	.7	.8	1.2	.9	.5	.8	.5	.5	.4	.2	.2	.6	.9

¹ For comparability of data with those published in issues prior to October 1967, see footnote 1, table A-9.

Month-to-month changes in total employment in manufacturing and nonmanufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series for the following reasons: (1) the labor turnover series measures changes

during the calendar month, while the employment series measures changes from midmonth to midmonth and (2) the turnover series excludes personnel changes caused by strikes, but the employment series reflects the influence of such stoppages.

² Preliminary.

C.—Earnings and Hours

TABLE C-1. Gross hours and earnings of production workers,¹ by industry

Industry	1967							1966							Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965	
	Average weekly earnings															
Total private	\$103.06	\$102.53	\$101.88	\$100.06	\$99.41	\$99.56	\$99.30	\$99.70	\$99.97	\$99.84	\$100.62	\$100.88	\$99.71	\$98.69	\$95.06	
Mining	140.51	140.18	136.53	134.09	134.51	132.09	131.14	134.09	133.45	131.66	135.10	133.73	132.32	130.66	123.52	
Metal mining		137.90	137.48	135.98	137.05	137.60	136.00	136.00	136.53	135.24	134.82	136.21	134.62	133.77	127.30	
Iron ores		140.34	134.40	134.37	137.67	139.40	136.31	138.65	136.86	136.29	136.29	142.23	138.32	138.09	129.24	
Copper ores		142.33	145.08	142.35	142.35	143.55	142.46	142.79	144.21	143.11	142.46	140.62	140.51	140.07	136.71	
Coal mining		157.25	154.01	148.37	148.45	145.39	146.10	153.38	155.91	146.20	156.98	151.37	149.33	145.95	137.51	
Bituminous coal and lignite mining		158.53	156.38	151.07	150.78	147.68	148.40	155.77	158.30	148.13	159.80	154.09	152.44	148.44	140.26	
Oil and gas extraction		133.98	127.56	127.75	129.63	127.75	126.42	127.50	124.91	124.95	124.10	123.68	121.84	122.69	116.18	
Crude petroleum and natural gas fields		139.03	133.25	132.51	135.71	131.78	133.42	135.62	129.65	129.34	129.74	129.34	125.96	128.11	123.62	
Oil and gas field services		129.60	122.82	124.24	125.27	123.52	121.26	120.96	121.39	121.33	119.30	119.30	118.90	118.63	110.31	
Nonmetallic minerals, except fuels		133.34	131.96	128.03	124.65	119.03	116.72	119.30	120.94	124.48	129.91	129.91	129.33	123.39	117.45	
Crushed and broken stone		133.16	131.04	127.84	122.89	115.84	110.16	115.14	120.19	125.76	130.95	131.49	131.14	123.45	116.58	
Contract construction	158.69	157.51	153.56	149.54	147.23	146.83	143.60	149.14	148.83	144.14	152.46	152.05	149.77	145.89	138.38	
General building contractors		145.43	142.03	141.12	139.32	139.26	135.84	141.21	141.21	136.96	142.07	140.93	138.37	136.49	128.16	
Heavy construction contractors		162.11	154.14	144.32	139.48	138.90	139.26	142.56	142.04	138.55	155.55	156.09	152.94	145.14	137.90	
Highway and street construction		163.39	151.87	139.88	131.60	126.86	127.40	130.28	129.75	131.14	154.34	156.52	152.60	142.80	136.36	
Heavy construction, nec.		160.63	156.62	148.52	146.28	147.75	147.45	150.88	151.62	145.91	157.73	155.86	152.25	147.97	140.00	
Special trade contractors		163.62	160.39	157.81	155.86	154.64	150.73	157.14	156.09	151.56	158.34	157.88	156.49	153.22	145.39	
Plumbing, heating, air conditioning		170.38	167.52	165.46	164.74	164.35	162.26	166.53	165.36	159.14	166.63	166.60	164.30	161.44	152.47	
Painting, paperhanging, and decorating		149.69	146.65	145.40	140.54	140.54	138.80	140.70	141.60	141.20	143.60	144.44	141.99	139.59	134.61	
Electrical work		191.35	188.46	187.50	184.89	184.78	181.45	185.81	186.44	179.65	186.05	184.24	181.24	179.79	170.28	
Masonry, stonework, and plastering		147.91	147.74	144.01	141.45	138.58	127.00	138.43	140.22	134.39	143.72	142.27	142.26	138.75	133.21	
Roofing and sheet metal work		136.82	132.75	127.53	122.88	118.72	116.29	125.25	125.21	120.85	131.74	128.12	127.45	123.50	117.30	
	Average weekly hours															
Total private	38.6	38.4	38.3	37.9	37.8	38.0	37.9	38.2	38.6	38.4	38.7	38.8	39.1	38.7	38.8	
Mining	43.5	43.4	42.8	42.3	42.3	41.8	41.5	42.3	42.5	42.2	43.3	43.0	43.1	42.7	42.3	
Metal mining		42.3	42.3	42.1	42.3	42.6	42.5	42.5	42.4	42.0	42.0	42.7	42.2	42.2	41.6	
Iron ores		42.4	41.1	41.6	42.1	42.5	42.2	42.4	41.6	41.3	41.3	43.1	42.3	42.1	40.9	
Copper ores		43.0	43.7	43.4	43.4	43.9	43.7	43.8	44.1	43.9	43.7	43.4	43.1	43.5	43.4	
Coal mining			41.4	40.1	39.8	39.4	39.7	40.9	41.8	39.3	42.2	40.8	40.8	40.3	39.9	
Bituminous coal and lignite mining			41.7	40.5	40.1	39.7	40.0	41.1	42.1	39.5	42.5	41.2	41.2	40.6	40.2	
Oil and gas extraction		43.5	42.1	42.3	42.5	42.3	42.0	42.5	42.2	42.5	42.5	42.5	42.6	42.6	42.4	
Crude petroleum and natural gas fields		41.5	40.5	40.4	41.0	40.3	40.8	41.6	40.9	40.8	40.8	40.8	40.5	40.8	40.8	
Oil and gas field services		45.0	43.4	43.9	43.8	43.8	43.0	43.2	43.2	43.8	43.7	43.7	44.2	44.1	43.6	
Nonmetallic minerals, except fuels		46.3	46.3	45.4	45.0	43.6	42.6	43.7	44.3	45.1	46.9	46.9	47.2	45.7	45.7	
Crushed and broken stone		47.9	48.0	47.0	46.2	44.9	43.2	44.8	45.7	47.1	48.5	48.7	49.3	47.3	47.2	
Contract construction	38.8	38.7	38.2	37.2	36.9	36.8	35.9	37.1	37.3	36.4	38.5	38.3	38.5	37.6	37.4	
General building contractors		37.1	36.7	36.0	36.0	35.8	35.1	36.3	36.3	35.3	36.9	36.7	36.8	36.3	36.1	
Heavy construction contractors		43.0	42.0	40.2	39.4	39.8	38.9	39.6	39.9	38.7	42.5	42.3	42.2	41.0	40.8	
Highway and street construction		44.4	42.9	40.9	40.0	40.4	39.2	39.6	39.8	38.8	43.6	43.6	43.6	42.0	41.7	
Heavy construction, nec.		41.4	41.0	39.5	38.8	39.4	38.7	39.6	39.9	38.6	41.4	40.8	40.6	40.1	40.0	
Special trade contractors		37.7	37.3	36.7	36.5	36.3	35.3	36.8	36.9	36.0	37.7	37.5	37.8	37.1	36.9	
Plumbing, heating, air conditioning		38.9	38.6	38.3	38.4	38.4	38.0	39.0	39.0	37.8	39.3	39.2	39.4	38.9	38.6	
Painting, paperhanging, and decorating		36.6	36.3	35.9	35.4	35.4	34.7	35.0	35.4	35.3	35.9	36.2	36.5	35.7	35.8	
Electrical work		39.7	39.1	38.9	38.6	38.9	38.2	39.2	39.5	37.9	39.5	39.2	39.4	39.0	38.7	
Masonry, stonework, and plastering		35.3	35.6	34.7	34.5	33.8	30.9	33.6	34.2	33.1	35.4	34.7	35.3	34.6	34.6	
Roofing and sheet metal work		36.1	35.4	34.1	33.3	32.0	31.6	33.4	33.3	33.2	35.8	35.1	35.6	34.4	34.5	
	Average hourly earnings															
Total private	\$2.67	\$2.67	\$2.66	\$2.64	\$2.63	\$2.62	\$2.62	\$2.61	\$2.59	\$2.60	\$2.60	\$2.55	\$2.55	\$2.57	\$2.45	
Mining	3.23	3.23	3.19	3.17	3.18	3.16	3.16	3.17	3.14	3.12	3.12	3.11	3.07	3.06	2.92	
Metal mining		3.26	3.25	3.23	3.24	3.23	3.20	3.20	3.22	3.22	3.21	3.19	3.19	3.17	3.06	
Iron ores		3.31	3.27	3.23	3.27	3.28	3.23	3.27	3.29	3.30	3.30	3.30	3.27	3.28	3.16	
Copper ores		3.31	3.32	3.28	3.28	3.27	3.26	3.26	3.27	3.26	3.26	3.24	3.26	3.22	3.15	
Coal mining			3.72	3.70	3.73	3.69	3.68	3.75	3.73	3.72	3.72	3.71	3.66	3.62	3.46	
Bituminous coal and lignite mining			3.75	3.73	3.76	3.72	3.71	3.79	3.76	3.75	3.76	3.74	3.70	3.65	3.49	
Oil and gas extraction		3.08	3.03	3.02	3.05	3.02	3.01	3.00	2.96	2.94	2.92	2.91	2.86	2.88	2.74	
Crude petroleum and natural gas fields		3.35	3.29	3.28	3.31	3.27	3.27	3.26	3.17	3.17	3.18	3.17	3.11	3.14	3.03	
Oil and gas field services		2.88	2.83	2.83	2.86	2.82	2.82	2.80	2.81	2.77	2.73	2.73	2.69	2.69	2.53	
Nonmetallic minerals, except fuels		2.88	2.85	2.82	2.77	2.73	2.74	2.73	2.73	2.76	2.77	2.77	2.74	2.70	2.57	
Crushed and broken stone		2.78	2.73	2.72	2.66	2.58	2.55	2.57	2.63	2.67	2.70	2.70	2.66	2.61	2.47	
Contract construction	4.09	4.07	4.02	4.02	3.99	3.99	4.00	4.02	3.99	3.96	3.96	3.97	3.89	3.88	3.70	
General building contractors		3.92	3.87	3.92	3.87	3.89	3.87	3.89	3.89	3.88	3.85	3.84	3.76	3.76	3.55	
Heavy construction contractors		3.77	3.67	3.59	3.54	3.49	3.58	3.60	3.56	3.58	3.66	3.69	3.61	3.54	3.38	
Highway and street construction		3.68	3.54	3.42	3.29	3.14	3.25	3.29	3.26	3.38	3.54	3.59	3.50	3.40	3.27	
Heavy construction, nec.		3.88	3.82	3.76	3.77	3.75	3.81	3.81	3.80	3.78	3.81	3.82	3.75	3.69	3.50	
Special trade contractors		4.34	4.30	4.30	4.27	4.26	4.27	4.27	4.23	4.21	4.20	4.21	4.14	4.13	3.94	
Plumbing, heating, air conditioning		4.38	4.34	4.32	4.29	4.28	4.27	4.27	4.24	4.21	4.24	4.25	4.17	4.15	3.95	
Painting, paperhanging, and decorating		4.09	4.04	4.05	3.97	3.97	4.00	4.02	4.00	4.00	4.00	3.99	3.89	3.91	3.76	
Electrical work		4.82	4.82	4.82	4.79	4.75	4.75	4.74	4.72	4.74	4.71	4.70	4.60	4.61	4.40	
Masonry, stonework, and plastering		4.19	4.15	4.15	4.10	4.10	4.11	4.12	4.10	4.06	4.06	4.10	4.03	4.01	3.85	
Roofing and sheet metal work		3.79	3.75	3												

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967							1966					Annual average		
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Average weekly earnings															
Manufacturing.....	\$114.49	\$113.93	\$114.49	\$113.52	\$112.56	\$112.44	\$111.88	\$113.42	\$114.40	\$113.99	\$113.85	\$114.13	\$111.78	\$112.34	\$107.53
Durable goods.....	123.30	122.40	123.19	122.89	121.18	121.36	120.77	122.84	124.62	123.77	124.07	123.94	120.96	122.09	117.18
Nondurable goods.....	102.80	102.03	101.63	100.73	100.22	100.08	99.18	99.65	100.25	100.10	99.94	99.54	99.23	98.49	94.44
Ordnance and accessories.....	136.08	135.11	132.25	134.08	132.48	133.54	133.22	136.63	138.02	136.75	136.21	135.78	134.08	134.94	131.15
Ammunition, except for small arms.....	137.34	136.03	131.46	133.72	131.46	134.55	134.23	135.71	135.38	134.88	134.72	134.64	134.72	134.55	135.66
Sighting and fire control equipment.....	137.05	134.96	135.98	140.51	137.60	137.70	137.70	139.43	135.46	133.35	121.60	128.96	125.66	130.83	127.08
Other ordnance and accessories.....	133.35	131.99	133.56	133.73	133.22	130.20	129.58	138.03	143.28	141.48	141.48	139.02	133.72	135.25	121.93
Lumber and wood products.....	97.61	96.88	97.27	95.18	94.77	93.09	91.08	90.80	90.80	91.43	94.02	94.02	93.89	91.80	88.75
Sawmills and planing mills.....	92.52	90.97	91.98	89.02	88.84	88.22	86.24	85.75	84.53	85.17	87.08	87.89	88.34	86.07	82.42
Millwork, plywood, & related products.....	104.96	103.02	103.63	102.41	103.41	101.09	99.70	99.38	99.47	98.00	100.12	100.61	100.12	99.70	96.93
Wooden containers.....	80.20	81.00	81.60	80.36	79.56	77.76	76.00	75.44	76.36	76.04	75.44	76.96	76.49	75.53	72.92
Miscellaneous wood products.....	90.94	91.58	91.88	90.20	89.35	88.56	86.83	86.88	88.37	88.78	88.58	88.38	87.77	87.34	84.67
Furniture and fixtures.....	94.89	92.40	93.09	91.25	90.46	90.74	90.12	90.63	93.79	93.15	94.28	93.63	93.68	91.72	88.19
Household furniture.....	88.70	85.89	86.76	84.41	84.24	84.71	83.89	83.95	87.76	87.13	88.40	87.14	87.36	85.49	83.21
Office furniture.....	114.74	118.28	116.69	113.65	113.12	113.55	113.55	114.01	115.61	114.38	115.01	114.75	115.02	112.32	104.06
Partitions and fixtures.....	114.74	118.28	116.69	113.65	113.12	113.55	113.55	114.01	115.61	114.38	115.01	114.75	115.02	112.32	104.06
Other furniture and fixtures.....	99.46	99.22	101.09	100.45	99.14	97.68	97.10	95.75	101.10	99.36	101.15	102.15	100.02	97.90	92.18
Average weekly hours															
Manufacturing.....	40.6	40.4	40.6	40.4	40.2	40.3	40.1	40.8	41.3	41.3	41.4	41.5	41.4	41.3	41.2
Durable goods.....	41.1	40.8	41.2	41.1	40.8	41.0	40.8	41.5	42.1	42.1	42.2	42.3	42.0	42.1	42.0
Nondurable goods.....	40.0	39.7	39.7	39.5	39.3	39.4	39.2	39.7	40.1	40.2	40.3	40.3	40.5	40.2	40.1
Ordnance and accessories.....	42.0	41.7	41.2	41.9	41.4	41.6	41.5	42.3	42.6	42.6	42.3	42.3	41.9	42.3	41.0
Ammunition, except for small arms.....	42.0	41.6	40.7	41.4	40.7	41.4	41.3	41.5	41.4	41.5	41.2	41.3	41.2	41.4	42.0
Sighting and fire control equipment.....	42.2	42.3	41.4	42.1	43.1	42.6	42.5	42.9	42.2	42.2	39.1	41.6	40.8	41.8	40.6
Other ordnance and accessories.....	42.2	41.9	42.4	43.0	42.7	42.0	41.8	44.1	45.2	45.2	45.2	44.7	43.7	44.2	41.9
Lumber and wood products.....	40.5	40.2	40.7	40.5	40.5	40.3	39.6	40.0	40.0	40.1	40.7	40.7	41.0	40.8	40.9
Sawmills and planing mills.....	40.4	39.9	40.7	40.1	40.2	40.1	39.2	39.7	39.5	39.8	40.5	40.5	40.9	40.6	40.6
Millwork, plywood, & related products.....	41.0	40.4	40.8	40.8	41.2	40.6	40.2	40.4	40.6	40.0	40.7	40.9	41.2	41.2	41.6
Wooden containers.....	39.9	40.5	40.8	41.0	40.8	40.5	40.0	41.0	41.5	41.1	41.0	41.6	41.8	41.5	41.2
Miscellaneous wood products.....	40.6	40.7	41.2	41.0	40.8	41.0	40.2	40.6	41.1	41.1	41.2	41.3	41.4	41.2	41.3
Furniture and fixtures.....	40.9	40.0	40.3	39.5	39.5	39.8	39.7	40.1	41.5	41.4	41.9	41.8	42.2	41.5	41.6
Household furniture.....	40.5	39.4	39.8	38.9	39.0	39.4	39.2	39.6	41.2	41.1	41.7	41.3	41.8	41.1	41.4
Office furniture.....	43.9	43.9	41.9	41.4	41.6	41.6	41.7	42.7	43.3	43.0	43.4	43.3	43.9	43.2	42.3
Partitions and fixtures.....	40.4	40.4	41.5	40.8	40.3	40.4	40.7	41.2	41.8	41.3	42.2	42.9	43.5	42.0	41.8
Other furniture and fixtures.....	41.1	41.0	41.6	41.0	40.8	40.7	40.8	40.4	42.3	42.1	42.5	43.1	43.3	42.2	41.9
Average hourly earnings															
Manufacturing.....	\$2.82	\$2.82	\$2.82	\$2.81	\$2.80	\$2.79	\$2.79	\$2.78	\$2.77	\$2.76	\$2.75	\$2.75	\$2.70	\$2.72	\$2.61
Durable goods.....	3.00	3.00	2.99	2.99	2.97	2.96	2.96	2.96	2.96	2.94	2.94	2.93	2.88	2.90	2.79
Nondurable goods.....	2.57	2.57	2.56	2.55	2.55	2.54	2.53	2.51	2.50	2.49	2.48	2.47	2.45	2.45	2.36
Ordnance and accessories.....	3.24	3.24	3.21	3.20	3.20	3.21	3.21	3.23	3.24	3.21	3.22	3.21	3.20	3.19	3.13
Ammunition, except for small arms.....	3.27	3.27	3.23	3.23	3.23	3.25	3.25	3.27	3.27	3.25	3.27	3.26	3.27	3.25	3.23
Sighting and fire control equipment.....	3.24	3.24	3.26	3.23	3.26	3.23	3.24	3.25	3.21	3.16	3.11	3.10	3.08	3.13	3.13
Other ordnance and accessories.....	3.16	3.15	3.15	3.11	3.12	3.10	3.10	3.13	3.17	3.13	3.13	3.11	3.06	3.06	2.91
Lumber and wood products.....	2.41	2.41	2.39	2.35	2.34	2.31	2.30	2.27	2.27	2.28	2.31	2.31	2.29	2.25	2.17
Sawmills and planing mills.....	2.29	2.28	2.26	2.22	2.21	2.20	2.20	2.16	2.14	2.14	2.15	2.17	2.16	2.12	2.03
Millwork, plywood, & related products.....	2.56	2.55	2.54	2.52	2.51	2.49	2.48	2.46	2.45	2.45	2.46	2.46	2.43	2.42	2.33
Wooden containers.....	2.01	2.00	2.00	1.96	1.95	1.92	1.90	1.84	1.84	1.85	1.84	1.85	1.83	1.82	1.77
Miscellaneous wood products.....	2.24	2.25	2.23	2.20	2.19	2.16	2.16	2.14	2.15	2.16	2.15	2.14	2.12	2.12	2.05
Furniture and fixtures.....	2.32	2.31	2.31	2.31	2.29	2.28	2.27	2.26	2.26	2.25	2.25	2.24	2.22	2.21	2.12
Household furniture.....	2.19	2.18	2.18	2.17	2.16	2.15	2.14	2.12	2.13	2.12	2.12	2.11	2.09	2.08	2.01
Office furniture.....	2.61	2.61	2.60	2.66	2.65	2.64	2.65	2.67	2.66	2.66	2.65	2.65	2.62	2.60	2.46
Partitions and fixtures.....	2.84	2.84	2.85	2.86	2.82	2.80	2.79	2.79	2.80	2.78	2.79	2.77	2.75	2.76	2.70
Other furniture and fixtures.....	2.42	2.42	2.43	2.45	2.43	2.40	2.38	2.37	2.39	2.36	2.38	2.37	2.31	2.32	2.20

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Stone, clay, and glass products.....	\$119.70	\$118.01	\$117.46	\$116.62	\$115.23	\$113.70	\$112.19	\$113.71	\$115.23	\$116.20	\$116.89	\$116.05	\$115.48	\$114.24	\$110.04
Flat glass.....	148.10	152.46	149.56	150.33	149.24	150.28	152.64	155.06	160.60	159.87	153.99	152.44	153.36	149.60	
Glass and glassware, pressed or blown.....	115.02	113.93	113.93	113.24	115.34	112.59	114.26	114.68	114.12	111.38	111.38	110.30	111.93	106.25	
Cement, hydraulic.....	132.07	130.70	130.41	132.70	129.02	128.70	130.79	131.65	138.22	132.39	133.76	132.61	132.61	124.42	
Structural clay products.....	99.80	99.80	100.45	99.72	99.55	97.77	96.07	95.92	96.48	97.44	98.16	97.99	98.12	94.02	
Pottery and related products.....	99.32	102.57	102.31	103.22	101.26	100.22	101.12	101.75	102.36	100.15	100.44	98.50	98.85	95.12	
Concrete, gypsum, and plaster products.....	131.45	128.25	124.60	121.05	116.57	113.40	111.38	112.44	114.90	116.42	121.83	121.76	122.94	117.65	
Other stone & nonmetallic mineral products.....	116.40	117.99	117.71	116.60	114.93	113.65	115.36	116.76	116.20	118.86	117.32	115.79	115.64	110.62	
Primary metal industries.....	137.02	136.61	136.12	134.64	133.57	135.38	134.97	138.69	137.61	139.02	139.02	141.10	138.09	138.09	
Blast furnace and basic steel products.....	143.92	144.23	141.55	141.20	139.35	142.31	140.80	144.02	140.45	142.97	144.43	148.16	145.85	144.73	
Iron and steel foundries.....	126.16	125.55	128.74	125.86	123.11	124.73	125.44	129.20	131.63	130.42	130.90	130.16	126.69	128.57	
Nonferrous metals.....	134.37	134.40	134.20	131.88	132.51	131.15	130.21	132.60	131.86	132.60	132.91	132.71	130.20	129.98	
Nonferrous rolling and drawing.....	132.62	132.93	132.71	130.09	130.40	131.24	133.65	136.66	138.03	139.42	136.47	138.22	136.27	136.27	
Nonferrous foundries.....	120.88	117.71	119.95	120.95	117.68	117.27	119.25	121.30	123.77	122.93	122.38	124.41	119.00	120.56	
Miscellaneous primary metal products.....	146.02	143.15	143.85	144.14	142.27	147.70	148.12	150.66	152.14	155.14	153.56	154.34	147.32	150.25	
Average weekly hours															
Stone, clay, and glass products.....	42.0	41.7	41.8	41.5	41.3	40.9	40.5	41.2	41.6	41.8	42.2	42.2	42.3	42.0	
Flat glass.....	40.8	42.0	41.2	41.3	41.0	41.4	42.4	42.6	44.0	43.8	43.5	42.7	42.6	42.5	
Glass and glassware, pressed or blown.....	40.5	40.4	40.4	40.3	40.9	40.5	41.4	41.4	41.2	40.8	40.8	40.7	41.0	40.4	
Cement, hydraulic.....	41.4	41.1	41.4	41.6	40.7	40.6	41.0	41.4	42.4	41.5	41.8	41.7	41.7	41.2	
Structural clay products.....	40.9	40.9	41.0	40.7	40.8	40.4	39.7	39.8	40.2	40.6	40.9	41.0	41.4	41.6	
Pottery and related products.....	38.2	39.3	39.5	39.7	39.4	39.3	39.5	39.9	40.3	39.9	39.7	39.4	39.7	39.8	
Concrete, gypsum, and plaster products.....	45.8	45.0	44.5	43.7	42.7	42.0	41.1	41.8	42.4	42.8	44.3	44.6	45.2	43.9	
Other stone & nonmetallic mineral products.....	40.7	41.4	41.3	41.2	40.9	40.3	41.2	41.7	41.5	42.3	41.9	41.8	41.9	41.9	
Primary metal industries.....	40.9	40.9	41.0	40.8	40.6	40.9	40.9	41.9	41.7	42.0	42.0	42.5	42.1	42.1	
Blast furnace and basic steel products.....	40.2	40.4	40.1	40.0	39.7	40.2	40.0	40.8	39.9	40.5	40.8	41.5	41.2	41.0	
Iron and steel foundries.....	41.5	41.3	41.8	41.4	40.9	41.3	41.4	42.5	43.3	42.9	43.2	43.1	42.8	43.0	
Nonferrous metals.....	41.6	42.0	42.2	42.0	42.2	41.9	41.6	42.5	42.4	42.5	42.6	42.4	42.0	42.2	
Nonferrous rolling and drawing.....	42.1	42.2	42.4	42.1	42.2	42.2	42.7	43.8	44.1	44.4	43.6	44.3	44.1	44.1	
Nonferrous foundries.....	40.7	39.9	40.8	41.0	40.3	40.3	40.7	41.4	42.1	42.1	42.2	42.9	42.2	42.3	
Miscellaneous primary metal products.....	41.6	40.9	41.1	41.3	41.0	42.2	42.2	42.8	43.1	43.7	43.5	43.6	42.7	43.3	
Average hourly earnings															
Stone, clay, and glass products.....	\$2.85	\$2.83	\$2.81	\$2.81	\$2.79	\$2.78	\$2.77	\$2.76	\$2.77	\$2.78	\$2.77	\$2.75	\$2.73	\$2.72	
Flat glass.....	3.63	3.63	3.63	3.64	3.64	3.63	3.60	3.64	3.65	3.65	3.65	3.54	3.57	3.60	
Glass and glassware, pressed or blown.....	2.84	2.82	2.82	2.81	2.82	2.78	2.76	2.77	2.77	2.73	2.73	2.71	2.73	2.63	
Cement, hydraulic.....	3.19	3.18	3.15	3.19	3.17	3.17	3.19	3.18	3.26	3.19	3.20	3.18	3.18	3.02	
Structural clay products.....	2.44	2.44	2.45	2.44	2.42	2.42	2.41	2.40	2.40	2.39	2.39	2.37	2.36	2.26	
Pottery and related products.....	2.60	2.61	2.59	2.60	2.57	2.55	2.56	2.55	2.54	2.51	2.53	2.50	2.49	2.39	
Concrete, gypsum, and plaster products.....	2.87	2.85	2.80	2.77	2.73	2.70	2.71	2.69	2.71	2.72	2.75	2.73	2.72	2.68	
Other stone & nonmetallic mineral products.....	2.86	2.85	2.85	2.83	2.81	2.82	2.80	2.80	2.80	2.81	2.80	2.77	2.76	2.64	
Primary metal industries.....	3.35	3.34	3.32	3.30	3.29	3.31	3.30	3.31	3.30	3.31	3.31	3.32	3.28	3.28	
Blast furnace and basic steel products.....	3.58	3.57	3.53	3.53	3.51	3.54	3.52	3.53	3.52	3.53	3.54	3.57	3.54	3.53	
Iron and steel foundries.....	3.04	3.04	3.08	3.04	3.01	3.02	3.03	3.04	3.04	3.04	3.03	3.02	2.96	2.99	
Nonferrous metals.....	3.23	3.20	3.18	3.14	3.13	3.13	3.13	3.12	3.11	3.12	3.12	3.13	3.10	3.08	
Nonferrous rolling and drawing.....	3.15	3.15	3.13	3.09	3.09	3.11	3.13	3.12	3.13	3.14	3.13	3.12	3.09	3.09	
Nonferrous foundries.....	2.97	2.95	2.94	2.95	2.92	2.91	2.93	2.93	2.94	2.92	2.90	2.90	2.82	2.85	
Miscellaneous primary metal products.....	3.51	3.50	3.50	3.49	3.47	3.50	3.51	3.52	3.53	3.55	3.53	3.54	3.45	3.47	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967										1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965		
Average weekly earnings																	
Manufacturing—Continued																	
Durable goods—Continued																	
Fabricated metal products.....	\$123.85	\$122.36	\$122.84	\$123.26	\$121.54	\$120.72	\$120.83	\$122.89	\$124.53	\$123.81	\$124.26	\$125.27	\$121.98	\$121.69	\$116.20		
Metal cans.....	149.41	150.41	147.84	147.94	143.38	142.86	137.12	137.85	139.40	136.92	136.73	143.66	148.40	140.40	137.49		
Cutlery, hand tools, and hardware.....	114.17	112.92	114.62	116.16	115.30	115.46	114.74	116.60	117.03	116.62	116.90	116.76	113.98	114.54	111.64		
Plumbing and heating, except electric.....	113.08	112.12	113.81	111.56	110.88	109.14	108.31	109.02	111.35	110.95	113.30	114.40	111.65	110.16	105.06		
Fabricated structural metal products.....	124.15	121.84	122.43	122.13	121.25	122.13	121.42	123.31	125.83	123.09	123.97	124.26	121.11	120.83	114.26		
Screw machine products, bolts, etc.....	127.89	123.35	125.83	125.24	125.27	128.33	129.95	131.26	133.18	131.98	130.79	130.92	125.24	128.13	120.73		
Metal stampings.....	135.78	135.66	134.72	136.31	131.02	125.02	127.08	131.25	133.76	135.65	138.21	139.28	132.56	133.61	129.03		
Metal services, nec.....	108.14	107.07	109.06	108.26	107.98	108.39	106.92	108.21	109.20	107.90	108.78	110.85	108.54	107.26	100.43		
Misc. fabricated wire products.....	110.84	108.81	111.25	110.03	108.54	109.75	108.27	111.10	112.71	112.98	112.59	113.10	110.88	110.88	104.92		
Misc. fabricated metal products.....	121.64	117.74	118.20	119.77	119.07	120.35	118.78	121.51	121.09	119.83	120.98	121.55	119.00	111.43	113.84		
Machinery, except electrical.....	133.88	132.51	134.09	134.30	134.82	136.20	135.88	137.03	138.60	136.78	136.34	136.53	133.55	134.90	127.58		
Engines and turbines.....	.....	136.06	140.15	141.93	142.27	146.20	143.72	143.48	154.51	144.66	138.69	143.81	143.29	142.95	133.44	
Farm machinery.....	.....	123.80	126.32	128.30	130.38	135.14	136.21	136.40	132.29	127.89	130.29	131.57	127.31	129.89	121.72	
Construction and related machinery.....	132.19	128.52	129.78	130.73	130.52	131.57	130.83	131.35	134.08	135.45	135.14	135.33	132.99	133.92	126.39		
Metal working machinery.....	149.64	151.70	153.53	154.35	156.07	156.29	156.52	157.42	157.17	155.69	153.77	153.05	148.79	153.72	144.37		
Special industry machinery.....	125.28	124.80	126.90	126.78	128.14	128.01	127.41	129.65	132.61	130.10	128.92	130.09	126.58	127.16	120.22		
General industrial machinery.....	133.98	132.40	132.93	133.88	132.29	133.65	131.66	136.47	138.92	137.09	137.90	138.40	135.39	135.21	126.56		
Office and computing machines.....	132.19	130.41	129.78	128.34	130.20	130.51	129.58	131.75	133.85	132.18	132.49	131.44	128.21	131.33	127.20		
Service industry machines.....	118.08	119.19	117.96	118.24	115.83	117.83	116.52	115.26	119.81	119.68	118.85	116.05	115.51	117.18	112.19		
Misc. machinery, except electrical.....	128.78	128.65	130.90	129.60	129.17	129.47	130.80	133.20	132.46	132.76	132.02	130.83	127.01	128.91	121.21		
Average weekly hours																	
Fabricated metal products.....	41.7	41.2	41.5	41.5	41.2	41.2	41.1	41.8	42.5	42.4	42.7	42.9	42.5	42.4	42.1		
Metal cans.....	44.6	44.5	44.0	43.9	42.8	42.9	41.3	41.9	42.5	42.0	42.2	43.8	44.7	43.2	43.1		
Cutlery, hand tools, and hardware.....	40.2	39.9	40.5	40.9	40.6	40.8	40.4	41.2	41.5	41.5	41.6	41.7	41.6	41.5	41.5		
Plumbing and heating, except electric.....	40.1	39.9	40.5	39.7	39.6	39.4	39.1	39.5	40.2	40.2	41.2	41.3	41.2	40.5	40.1		
Fabricated structural metal products.....	41.8	41.3	41.5	41.4	41.1	41.4	41.3	41.8	42.8	42.3	42.6	42.7	42.2	42.1	41.7		
Screw machine products, bolts, etc.....	43.5	42.1	42.8	42.6	42.9	43.8	44.2	44.8	45.3	45.2	45.1	45.3	44.1	44.8	43.9		
Metal stampings.....	42.3	42.0	42.1	42.2	41.2	40.2	40.6	41.8	42.6	43.2	43.6	43.8	42.9	43.1	43.3		
Metal services, nec.....	40.2	40.1	41.0	40.7	40.9	40.9	40.5	41.3	42.0	41.5	42.0	42.8	42.4	41.9	41.5		
Misc. fabricated wire products.....	40.6	40.3	40.9	40.6	40.5	40.8	40.4	41.3	41.9	42.0	41.7	42.2	42.0	42.0	41.8		
Misc. fabricated metal products.....	41.8	40.6	40.9	41.3	41.2	41.5	41.1	41.9	41.9	41.9	42.3	42.5	42.2	42.2	41.7		
Machinery, except electrical.....	42.1	41.8	42.3	42.5	42.8	43.1	43.0	43.5	44.0	43.7	43.7	43.9	43.5	43.8	43.1		
Engines and turbines.....	.....	39.9	41.1	41.5	41.6	42.5	41.9	42.2	44.4	42.8	41.4	42.8	42.9	42.8	41.7	
Farm machinery.....	.....	39.3	40.1	40.6	41.0	42.1	42.3	42.1	41.6	40.6	41.1	41.9	41.2	41.9	41.4	
Construction and related machinery.....	41.7	40.8	41.2	41.5	41.7	41.9	41.8	42.1	42.7	43.0	42.9	43.1	42.9	43.2	42.7		
Metal working machinery.....	43.5	44.1	44.5	45.0	45.5	45.7	45.9	46.3	46.5	46.2	45.9	46.1	45.5	46.3	45.4		
Special industry machinery.....	41.9	41.6	42.3	42.4	43.0	43.1	42.9	43.8	44.8	44.1	44.0	44.4	43.8	44.0	43.4		
General industrial machinery.....	42.4	41.9	42.2	42.5	42.4	42.7	42.2	43.6	44.1	43.8	44.2	44.5	44.1	43.9	42.9		
Office and computing machines.....	42.1	41.4	41.2	41.4	42.0	42.1	41.8	42.5	42.9	42.5	42.6	42.4	41.9	42.5	42.4		
Service industry machines.....	41.0	41.1	41.1	41.2	40.5	41.2	40.6	40.3	41.6	41.7	41.7	41.3	41.4	41.7	41.4		
Misc. machinery, except electrical.....	42.5	42.6	43.2	43.2	43.2	43.3	43.6	44.4	44.6	44.7	44.6	44.5	44.1	44.3	43.6		
Average hourly earnings																	
Fabricated metal products.....	\$2.97	\$2.97	\$2.96	\$2.97	\$2.95	\$2.93	\$2.94	\$2.94	\$2.93	\$2.92	\$2.91	\$2.92	\$2.87	\$2.87	\$2.76		
Metal cans.....	3.35	3.38	3.36	3.37	3.35	3.33	3.32	3.29	3.28	3.26	3.24	3.28	3.32	3.25	3.19		
Cutlery, hand tools, and hardware.....	2.84	2.83	2.83	2.84	2.84	2.83	2.84	2.83	2.82	2.81	2.81	2.80	2.74	2.76	2.69		
Plumbing and heating, except electric.....	2.82	2.81	2.81	2.81	2.80	2.77	2.77	2.76	2.77	2.76	2.75	2.77	2.71	2.72	2.62		
Fabricated structural metal products.....	2.97	2.95	2.95	2.95	2.95	2.95	2.94	2.95	2.94	2.91	2.91	2.91	2.87	2.87	2.74		
Screw machine products, bolts, etc.....	2.94	2.93	2.94	2.94	2.92	2.93	2.94	2.93	2.94	2.92	2.90	2.89	2.84	2.86	2.75		
Metal stampings.....	3.21	3.23	3.20	3.23	3.18	3.11	3.13	3.14	3.14	3.14	3.17	3.18	3.09	3.10	2.98		
Metal services, nec.....	2.69	2.67	2.66	2.66	2.64	2.65	2.64	2.62	2.60	2.60	2.59	2.59	2.56	2.56	2.42		
Misc. fabricated wire products.....	2.73	2.70	2.72	2.71	2.68	2.69	2.68	2.69	2.69	2.69	2.70	2.68	2.64	2.64	2.51		
Misc. fabricated metal products.....	2.91	2.90	2.89	2.90	2.89	2.90	2.89	2.90	2.89	2.86	2.86	2.86	2.82	2.83	2.73		
Machinery, except electrical.....	3.18	3.17	3.17	3.16	3.15	3.16	3.16	3.15	3.15	3.13	3.12	3.11	3.07	3.08	2.96		
Engines and turbines.....	.....	3.41	3.41	3.42	3.42	3.44	3.43	3.43	3.48	3.38	3.35	3.36	3.34	3.34	3.20	
Farm machinery.....	.....	3.15	3.15	3.16	3.18	3.21	3.22	3.24	3.18	3.15	3.17	3.14	3.09	3.10	2.94	
Construction and related machinery.....	3.17	3.15	3.15	3.15	3.13	3.14	3.13	3.12	3.14	3.15	3.15	3.14	3.10	3.10	2.96		
Metal working machinery.....	3.44	3.44	3.45	3.43	3.43	3.42	3.41	3.40	3.38	3.37	3.35	3.32	3.27	3.32	3.18		
Special industry machinery.....	2.99	3.00	3.00	2.99	2.98	2.97	2.97	2.96	2.96	2.95	2.93	2.93	2.89	2.89	2.77		
General industrial machinery.....	3.16	3.16	3.15	3.15	3.12	3.13	3.12	3.13	3.15	3.13	3.12	3.11	3.07	3.08	2.95		
Office and computing machines.....	3.14	3.15	3.15	3.10	3.10	3.10	3.10	3.12	3.11	3.11	3.10	3.10	3.06	3.09	3.00		
Service industry machines.....	2.88	2.90	2.87	2.87	2.86	2.86	2.87	2.86	2.88	2.87	2.85	2.81	2.79	2.81	2.71		
Misc. machinery, except electrical.....	3.03	3.02	3.03	3.00	2.99	2.99	3.00	3.00	2.97	2.97	2.96	2.94	2.88	2.91	2.78		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967									1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965	
Average weekly earnings																
Manufacturing—Continue																
<i>Durable goods—Continued</i>																
Electrical equipment and supplies	\$111.60	\$111.60	\$111.88	\$110.12	\$108.35	\$108.93	\$107.98	\$109.35	\$111.24	\$110.56	\$109.74	\$110.54	\$107.83	\$109.18	\$105.78	
Electric test & distributing equipment	116.87	118.55	119.48	119.19	119.36	120.10	118.82	118.43	123.69	120.69	118.02	119.99	116.34	117.46	113.02	
Electrical industrial apparatus	117.74	119.02	116.76	116.93	117.62	117.26	116.85	118.85	119.71	118.02	118.44	120.70	118.58	118.72	113.70	
Household appliances	122.10	121.80	119.39	118.70	111.93	115.15	114.76	115.63	116.80	121.01	119.65	122.51	119.55	118.82	114.54	
Electric lighting and wiring equipment	103.88	101.79	104.26	104.00	100.74	102.56	100.10	103.97	104.70	104.45	104.14	103.82	102.34	102.41	99.55	
Radio and TV receiving equipment	93.17	92.20	91.37	86.76	89.21	90.82	92.97	94.80	96.88	96.72	96.32	94.30	94.33	91.54		
Communication equipment	124.24	125.05	126.48	124.03	123.62	124.12	123.82	124.56	125.63	123.02	122.18	122.64	118.78	120.93	116.47	
Electronic components and accessories	94.23	94.47	93.60	92.19	91.48	91.42	90.56	91.41	92.86	92.00	92.40	92.06	91.43	92.11	89.28	
Misc. electrical equipment & supplies	119.60	119.90	118.80	117.91	116.13	116.82	115.94	121.18	125.40	127.32	123.90	122.43	115.02	119.89	115.36	
Transportation equipment	139.60	139.94	141.17	141.78	137.30	136.49	136.21	141.02	144.93	145.18	146.29	144.41	139.35	141.86	137.71	
Motor vehicles and equipment	143.47	145.14	144.96	135.76	133.86	135.63	143.50	150.80	151.71	154.86	151.87	142.27	147.23	147.63		
Aircraft and parts	146.20	144.67	144.24	145.09	145.18	145.09	143.06	144.24	144.14	145.92	144.05	143.52	144.09	143.32	131.88	
Ship and boat building and repairing	126.94	130.90	133.09	132.93	132.60	127.59	133.63	136.21	130.60	134.18	129.51	128.93	130.41	121.50		
Railroad equipment	136.46	135.32	138.23	139.09	136.00	139.19	141.66	141.92	141.80	140.70	135.81	135.74	137.09	129.44		
Other transportation equipment	100.84	106.50	102.97	98.60	98.89	94.75	93.07	94.92	95.01	97.60	99.55	97.68	95.52	93.09		
Average weekly hours																
Electrical equipment and supplies	40.0	40.0	40.1	39.9	39.4	39.9	39.7	40.5	41.2	41.1	41.1	41.4	41.0	41.2	41.0	
Electric test & distributing equipment	40.3	40.6	41.2	41.1	41.3	41.7	41.4	41.7	42.8	42.2	42.0	42.7	42.0	42.1	41.4	
Electrical industrial apparatus	40.6	40.9	40.4	40.6	40.7	41.0	41.0	41.7	42.3	42.0	42.0	42.5	42.2	42.4	41.8	
Household appliances	40.7	40.6	40.2	40.1	38.2	39.3	39.3	39.6	40.0	41.3	41.4	42.1	41.8	41.4	41.2	
Electric lighting and wiring equipment	39.8	39.3	40.1	40.0	39.2	39.6	38.8	40.3	40.9	40.8	41.0	41.2	41.1	40.8	40.8	
Radio and TV receiving equipment	38.5	38.1	37.6	36.0	37.8	38.0	38.9	39.5	40.2	40.3	40.3	40.3	39.8	39.8		
Communication equipment	40.6	40.6	41.2	40.8	40.8	41.1	41.0	41.8	42.3	41.7	41.7	42.0	41.1	41.7	41.3	
Electronic components and accessories	39.1	39.2	39.0	38.9	38.6	38.9	38.7	39.4	40.2	40.0	40.0	40.2	40.1	40.4	40.4	
Misc. electrical equipment & supplies	40.0	40.1	40.0	39.7	39.5	39.6	39.3	40.8	41.8	42.3	42.0	41.5	40.5	41.2	41.2	
Transportation equipment	40.7	40.8	41.4	41.7	40.5	40.5	40.3	41.6	42.5	42.7	42.9	42.6	42.1	42.6	42.9	
Motor vehicles and equipment	40.3	41.0	41.3	38.9	38.8	39.2	41.0	42.6	43.1	43.5	42.9	41.6	42.8	44.2		
Aircraft and parts	42.5	42.3	42.3	42.8	42.7	42.8	42.2	42.8	42.9	43.3	43.0	43.1	43.4	43.3	42.0	
Ship and boat building and repairing	38.7	40.4	40.7	40.9	40.8	39.5	41.5	42.3	41.2	41.8	40.6	40.8	41.4	40.5		
Railroad equipment	39.9	39.8	40.3	40.2	40.0	40.7	41.3	40.9	41.1	40.9	40.3	40.4	40.8	40.2		
Other transportation equipment	39.7	41.6	40.7	39.6	39.4	37.9	38.3	38.9	39.1	40.0	40.8	40.7	39.8	40.3		
Average hourly earnings																
Electrical equipment and supplies	\$2.79	\$2.79	\$2.79	\$2.76	\$2.75	\$2.73	\$2.72	\$2.70	\$2.70	\$2.69	\$2.67	\$2.67	\$2.63	\$2.65	\$2.58	
Electric test & distributing equipment	2.90	2.92	2.90	2.90	2.89	2.88	2.87	2.84	2.89	2.86	2.81	2.81	2.77	2.79	2.73	
Electrical industrial apparatus	2.90	2.91	2.89	2.88	2.89	2.86	2.85	2.85	2.83	2.81	2.82	2.84	2.81	2.80	2.72	
Household appliances	3.00	3.00	2.97	2.96	2.93	2.93	2.92	2.92	2.92	2.93	2.89	2.91	2.86	2.87	2.78	
Electric lighting and wiring equipment	2.61	2.59	2.60	2.60	2.57	2.59	2.58	2.58	2.56	2.56	2.54	2.52	2.49	2.51	2.44	
Radio and TV receiving equipment	2.42	2.42	2.43	2.41	2.36	2.39	2.39	2.40	2.41	2.40	2.39	2.34	2.37	2.30		
Communication equipment	3.06	3.08	3.07	3.04	3.03	3.02	3.02	2.98	2.97	2.95	2.93	2.92	2.89	2.90	2.82	
Electronic components and accessories	2.41	2.41	2.40	2.37	2.37	2.35	2.34	2.32	2.31	2.30	2.31	2.29	2.28	2.28	2.21	
Misc. electrical equipment & supplies	2.99	2.99	2.97	2.97	2.94	2.95	2.95	2.97	3.00	3.01	2.95	2.95	2.84	2.91	2.80	
Transportation equipment	3.43	3.43	3.41	3.40	3.39	3.37	3.38	3.39	3.41	3.40	3.41	3.39	3.31	3.33	3.21	
Motor vehicles and equipment	3.56	3.54	3.51	3.49	3.45	3.46	3.50	3.54	3.52	3.56	3.54	3.42	3.44	3.34		
Aircraft and parts	3.44	3.42	3.41	3.39	3.40	3.39	3.37	3.36	3.37	3.35	3.33	3.32	3.31	3.14		
Ship and boat building and repairing	3.28	3.24	3.27	3.25	3.25	3.23	3.22	3.22	3.17	3.21	3.19	3.16	3.15	3.00		
Railroad equipment	3.42	3.40	3.43	3.46	3.40	3.42	3.43	3.47	3.45	3.44	3.37	3.36	3.36	3.22		
Other transportation equipment	2.54	2.56	2.53	2.49	2.51	2.50	2.43	2.44	2.43	2.44	2.44	2.40	2.40	2.40		

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Instruments and related products.....	\$119.23	\$116.00	\$117.01	\$115.90	\$115.77	\$115.51	\$114.11	\$115.65	\$116.89	\$116.20	\$116.05	\$116.05	\$113.70	\$114.93	\$108.47
Engineering & scientific instruments.....	.....	136.75	137.90	137.14	138.85	137.85	133.65	133.30	136.97	134.23	134.23	133.80	130.05	133.18	125.33
Mechanical measuring & control devices.....	112.44	109.69	110.92	113.24	111.20	112.72	110.92	116.06	117.88	117.18	117.04	116.34	113.98	115.78	109.03
Optical and ophthalmic goods.....	108.36	107.57	107.94	105.82	105.67	104.86	103.68	105.22	106.59	105.41	103.75	105.59	102.75	103.66	99.30
Ophthalmic goods.....	.....	95.44	94.80	94.09	94.09	93.06	92.59	93.20	94.42	94.60	93.20	94.71	92.62	92.84	89.40
Medical instruments and supplies.....	101.09	98.21	98.40	98.74	98.33	97.44	97.69	96.64	97.68	97.51	97.17	96.76	94.54	95.24	90.63
Photographic equipment and supplies.....	.....	141.10	141.67	137.48	135.98	137.49	136.53	136.21	136.28	134.59	137.66	136.47	132.99	134.54	128.14
Watches, clocks, and watchcases.....	.....	92.58	93.06	90.87	91.77	91.43	90.23	92.06	92.11	91.69	91.65	92.48	92.70	91.39	87.85
Miscellaneous manufacturing industries.....	92.36	90.56	92.20	91.57	91.57	92.20	90.17	91.87	91.20	90.45	90.09	89.20	88.22	88.80	85.39
Jewelry, silverware, and plated ware.....	104.28	102.70	104.26	105.30	105.18	104.52	100.47	103.38	108.03	109.23	108.20	105.42	102.51	102.26	95.53
Toys and sporting goods.....	.....	81.75	83.10	82.11	82.71	83.10	81.79	82.53	79.17	79.60	79.60	78.41	79.00	78.80	76.44
Pens, pencils, office and art supplies.....	.....	90.23	90.68	90.06	89.33	89.04	87.58	88.31	90.17	90.45	89.38	88.07	86.43	86.65	82.82
Costume jewelry and notions.....	.....	81.53	85.36	84.07	84.46	83.42	81.32	82.47	82.35	80.13	81.37	81.58	80.40	81.39	77.62
Other manufacturing industries.....	98.60	96.47	97.86	96.97	96.58	97.71	96.08	97.66	97.84	97.84	97.28	96.16	95.04	95.68	92.46
Musical instruments and parts.....	.....	100.08	98.39	96.75	99.15	99.43	98.89	100.85	103.91	104.75	103.42	99.55	99.39	100.53	97.75
Average weekly hours															
Instruments and related products.....	41.4	40.7	41.2	41.1	41.2	41.4	40.9	41.6	42.2	42.1	42.2	42.2	41.8	42.1	41.4
Engineering & scientific instruments.....	.....	42.6	43.5	43.4	43.8	43.9	42.7	43.0	43.9	43.3	43.3	43.3	42.5	43.1	41.5
Mechanical measuring & control devices.....	40.3	39.6	39.9	40.3	40.0	40.4	39.9	41.6	42.1	42.0	42.1	42.0	41.6	42.1	41.3
Optical and ophthalmic goods.....	41.2	40.9	41.2	40.7	40.8	40.8	40.5	41.1	41.8	41.5	41.5	41.9	41.6	41.8	41.9
Ophthalmic goods.....	.....	40.1	40.0	39.7	39.7	39.6	39.4	40.0	40.7	40.6	40.7	41.0	40.8	40.9	41.2
Medical instruments and supplies.....	40.6	39.6	40.0	40.3	40.3	40.1	40.2	40.1	40.7	40.8	41.0	41.0	40.4	40.7	40.1
Photographic equipment and supplies.....	.....	42.5	42.8	42.3	42.1	42.7	42.4	42.7	43.4	43.0	43.7	43.6	42.9	43.4	43.0
Watches, clocks, and watchcases.....	.....	38.9	39.6	39.0	39.9	40.1	39.4	40.2	40.4	41.3	41.1	41.1	41.2	40.8	40.3
Miscellaneous manufacturing industries.....	39.3	38.7	39.4	39.3	39.3	39.4	38.7	39.6	40.0	40.2	40.4	40.0	40.1	40.0	39.9
Jewelry, silverware, and plated ware.....	39.8	39.5	40.1	40.5	40.3	40.2	39.4	40.7	42.2	42.5	42.6	42.0	41.5	41.4	41.0
Toys and sporting goods.....	.....	38.2	39.2	39.1	39.2	39.2	38.4	39.3	39.0	40.0	40.0	39.4	39.7	39.4	39.2
Pens, pencils, office and art supplies.....	.....	39.4	39.6	39.5	39.7	39.4	39.1	39.6	40.8	41.3	41.0	40.4	40.2	40.3	40.4
Costume jewelry and notions.....	.....	38.1	39.7	39.1	39.1	38.8	38.0	38.9	39.4	38.9	39.5	39.6	39.8	39.7	39.6
Other manufacturing industries.....	39.6	38.9	39.3	39.1	39.1	39.4	38.9	39.7	40.1	40.1	40.2	39.9	40.1	40.2	40.2
Musical instruments and parts.....	.....	39.4	39.2	38.7	39.5	39.3	39.4	40.5	41.9	41.9	41.7	40.8	40.9	41.2	40.9
Average hourly earnings															
Instruments and related products.....	\$2.88	\$2.85	\$2.84	\$2.82	\$2.81	\$2.79	\$2.79	\$2.78	\$2.77	\$2.76	\$2.75	\$2.75	\$2.72	\$2.73	\$2.62
Engineering & scientific instruments.....	.....	3.21	3.17	3.16	3.17	3.14	3.13	3.10	3.12	3.10	3.10	3.09	3.06	3.09	3.02
Mechanical measuring & control devices.....	2.79	2.77	2.78	2.81	2.78	2.79	2.78	2.79	2.80	2.79	2.78	2.77	2.74	2.75	2.64
Optical and ophthalmic goods.....	2.63	2.63	2.62	2.60	2.59	2.57	2.56	2.56	2.55	2.54	2.50	2.52	2.47	2.48	2.37
Ophthalmic goods.....	.....	2.38	2.37	2.37	2.37	2.35	2.35	2.33	2.32	2.33	2.29	2.31	2.27	2.27	2.17
Medical instruments and supplies.....	2.49	2.48	2.46	2.45	2.44	2.43	2.43	2.41	2.40	2.39	2.37	2.36	2.34	2.34	2.26
Photographic equipment and supplies.....	.....	3.32	3.31	3.25	3.23	3.22	3.22	3.19	3.14	3.13	3.15	3.13	3.10	3.10	2.98
Watches, clocks, and watchcases.....	.....	2.38	2.35	2.33	2.30	2.28	2.29	2.29	2.28	2.22	2.23	2.25	2.25	2.24	2.18
Miscellaneous manufacturing industries.....	2.35	2.34	2.34	2.33	2.33	2.34	2.33	2.32	2.28	2.25	2.23	2.23	2.20	2.22	2.14
Jewelry, silverware, and plated ware.....	2.62	2.60	2.60	2.60	2.61	2.60	2.55	2.54	2.56	2.57	2.54	2.51	2.47	2.47	2.33
Toys and sporting goods.....	.....	2.14	2.12	2.10	2.11	2.12	2.13	2.10	2.03	1.99	1.99	1.99	1.99	2.00	1.95
Pens, pencils, office and art supplies.....	.....	2.29	2.29	2.28	2.25	2.26	2.24	2.23	2.21	2.19	2.18	2.18	2.15	2.15	2.05
Costume jewelry and notions.....	.....	2.14	2.15	2.15	2.16	2.15	2.14	2.12	2.09	2.06	2.06	2.06	2.02	2.05	1.96
Other manufacturing industries.....	2.49	2.48	2.49	2.48	2.47	2.48	2.47	2.46	2.44	2.44	2.42	2.41	2.37	2.38	2.30
Musical instruments and parts.....	.....	2.54	2.51	2.50	2.51	2.53	2.51	2.49	2.48	2.50	2.48	2.44	2.43	2.44	2.39

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967									1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965	
Average weekly earnings																
Manufacturing—Continued																
<i>Nondurable goods</i>																
Food and kindred products.....	\$107.38	\$108.62	\$108.50	\$107.18	\$105.86	\$106.52	\$105.18	\$106.08	\$106.14	\$104.90	\$104.08	\$104.92	\$103.34	\$103.82	\$99.87	
Meat products.....	114.96	116.20	115.09	113.83	113.96	112.16	110.76	115.64	116.05	114.51	112.44	113.94	107.98	109.74	107.27	
Dairy products.....	113.58	116.31	114.38	111.57	110.62	110.62	110.88	110.46	110.56	110.30	109.88	110.50	108.80	109.13	105.08	
Canned, cured, and frozen foods.....	83.66	83.76	84.52	82.06	84.26	83.11	82.60	81.87	80.32	82.58	87.34	87.33	83.35	78.99		
Grain mill products.....	125.49	125.85	120.50	120.39	118.53	120.01	119.14	122.30	123.12	122.94	124.01	124.08	117.97	118.61	113.40	
Bakery products.....	108.68	109.75	108.68	107.07	104.28	104.67	104.67	103.49	104.01	104.54	105.99	106.11	106.08	104.38	101.40	
Sugar.....	117.35	122.06	124.64	126.59	127.30	115.53	110.68	111.28	110.11	101.39	119.48	122.09	117.97	110.33		
Confectionery and related products.....	95.68	92.34	92.86	91.94	87.85	91.66	90.45	88.80	87.85	88.22	89.06	89.06	89.69	87.34	83.53	
Beverages.....	126.24	128.17	127.26	123.42	123.93	122.91	119.20	117.89	122.36	121.99	120.07	119.14	119.68	119.60	114.09	
Misc. foods and kindred products.....	107.52	107.59	107.78	106.50	105.16	105.59	104.17	103.91	105.11	105.35	104.25	104.55	102.41	102.12	98.79	
Tobacco manufactures.....	86.14	90.82	94.41	90.30	91.33	87.52	82.08	83.16	88.10	81.24	82.14	83.62	82.68	84.97	79.21	
Cigarettes.....	111.04	113.98	107.48	110.25	110.25	105.71	98.19	103.95	112.47	100.77	105.72	106.23	106.11	105.45	97.27	
Cigars.....	64.44	68.81	68.08	66.97	64.80	64.78	64.98	68.02	68.24	66.41	64.61	64.25	65.84	63.95		
Textile mill products.....	83.64	81.41	82.82	82.22	81.20	81.20	80.60	81.61	82.40	83.42	83.40	83.38	83.36	82.12	78.17	
Weaving mills, cotton.....	83.43	81.40	83.42	84.03	84.23	84.64	85.04	86.28	87.29	87.29	86.46	87.06	86.23	85.54	80.28	
Weaving mills, synthetics.....	85.28	84.46	83.43	84.25	83.43	82.62	82.62	83.84	84.84	87.11	86.70	87.31	89.35	87.03	83.90	
Weaving and finishing mills, wool.....	92.02	91.81	91.16	90.10	87.99	86.73	86.11	87.57	87.78	85.68	86.53	87.78	88.60	87.54	83.69	
Narrow fabric mills.....	82.42	80.80	81.81	81.40	79.40	78.21	77.82	80.15	81.34	81.16	82.15	81.90	81.25	80.26	75.99	
Knitting mills.....	76.83	74.11	74.88	73.72	72.75	72.66	71.80	70.68	70.88	72.58	73.51	72.93	72.84	71.60	68.29	
Textile finishing, except wool.....	90.69	88.10	94.81	94.38	93.94	92.43	90.91	90.27	93.31	92.66	92.66	91.59	90.74	91.58	85.85	
Floor covering mills.....	88.39	88.19	87.15	83.43	82.42	82.42	79.39	82.01	83.82	86.88	86.88	86.68	85.43	83.36	81.51	
Yarn and thread mills.....	77.68	75.01	75.39	74.24	72.93	72.91	72.73	74.37	75.48	77.42	78.35	79.24	79.00	77.59	73.70	
Miscellaneous textile goods.....	94.85	93.52	94.62	92.43	92.89	91.88	90.98	93.44	93.66	96.53	96.54	96.56	94.38	93.95	88.83	
Average weekly hours																
Food and kindred products.....	41.3	41.3	41.1	40.6	40.1	40.5	40.3	40.8	41.3	41.3	41.3	41.8	41.5	41.2	41.1	
Meat products.....	41.5	41.8	41.4	40.8	40.7	40.2	39.7	41.3	42.2	42.1	41.8	42.2	40.9	41.1	41.1	
Dairy products.....	42.7	43.4	43.0	42.1	41.9	41.9	42.0	42.0	42.2	42.1	42.1	42.5	42.5	42.3	42.2	
Canned, cured, and frozen foods.....	38.2	37.9	37.9	37.9	36.8	38.3	38.3	38.6	38.8	38.8	39.7	41.2	41.0	39.5	39.3	
Grain mill products.....	45.8	46.1	44.3	44.1	43.1	43.8	43.8	44.8	45.1	45.2	46.1	46.3	45.2	45.1	45.0	
Bakery products.....	40.4	40.8	40.4	40.1	39.5	39.8	39.8	39.5	39.7	39.9	40.3	40.5	40.8	40.3	40.4	
Sugar.....	38.1	39.5	41.0	41.1	41.6	39.7	40.1	42.8	44.4	39.3	41.2	42.1	42.2	42.6	42.6	
Confectionery and related products.....	41.6	39.8	40.2	39.8	38.7	40.2	40.2	40.0	40.3	40.1	40.3	40.3	40.4	39.7	39.4	
Beverages.....	41.8	42.3	42.0	40.6	40.9	40.7	40.0	40.1	41.2	40.8	40.7	40.8	41.7	41.1	40.6	
Misc. foods and kindred products.....	42.0	41.7	42.1	41.6	41.4	41.9	41.5	41.9	42.9	43.0	42.9	42.5	41.8	42.2	42.4	
Tobacco manufactures.....	38.8	38.0	39.5	38.1	38.7	37.4	36.0	37.8	40.6	38.5	39.3	40.2	38.1	38.8	37.9	
Cigarettes.....	39.8	41.0	38.8	39.8	38.3	36.1	38.5	41.5	37.6	39.3	39.2	39.3	39.2	37.7	37.7	
Cigars.....	35.6	37.6	37.2	37.0	35.8	35.4	35.9	38.0	37.7	37.1	36.5	36.3	37.2	37.4		
Textile mill products.....	41.0	40.3	40.8	40.5	40.2	40.2	40.1	40.6	41.2	41.5	41.7	41.9	42.1	41.9	41.8	
Weaving mills, cotton.....	41.3	40.7	41.5	41.6	41.7	41.9	42.1	42.5	43.0	43.0	42.8	43.1	42.9	43.2	42.7	
Weaving mills, synthetics.....	41.6	41.4	41.1	41.3	41.1	40.7	40.7	41.3	42.0	42.7	42.5	42.8	43.8	43.3	43.7	
Weaving and finishing mills, wool.....	43.0	42.9	42.8	42.5	41.9	41.3	41.2	41.7	42.0	40.8	41.4	42.0	42.8	42.7	42.7	
Narrow fabric mills.....	40.6	40.4	40.7	40.7	40.1	39.5	39.5	41.1	41.5	41.2	41.7	42.0	42.1	41.8	41.3	
Knitting mills.....	39.0	38.2	38.6	38.0	37.5	37.4	37.2	37.2	37.7	38.4	39.1	39.0	39.7	38.7	38.8	
Textile finishing, except wool.....	41.6	40.6	42.9	42.9	42.7	42.4	41.7	41.6	43.0	42.7	42.9	42.8	42.6	43.2	42.5	
Floor covering mills.....	42.7	42.4	41.9	40.5	40.4	49.3	40.4	41.7	42.8	42.8	42.8	42.7	42.5	42.1	42.9	
Yarn and thread mills.....	41.1	39.9	40.1	39.7	39.0	39.2	39.1	40.2	40.8	41.4	41.9	42.6	42.7	42.4	42.6	
Miscellaneous textile goods.....	41.6	41.2	41.5	40.9	41.1	41.2	40.8	41.9	42.0	42.9	43.1	43.3	42.9	42.9	42.3	
Average hourly earnings																
Food and kindred products.....	\$2.60	\$2.63	\$2.64	\$2.64	\$2.64	\$2.63	\$2.61	\$2.60	\$2.57	\$2.54	\$2.52	\$2.51	\$2.49	\$2.52	\$2.43	
Meat products.....	2.77	2.78	2.78	2.79	2.80	2.79	2.79	2.80	2.75	2.72	2.69	2.70	2.64	2.67	2.61	
Dairy products.....	2.66	2.68	2.66	2.65	2.64	2.64	2.64	2.63	2.62	2.62	2.61	2.60	2.56	2.58	2.49	
Canned, cured, and frozen foods.....	2.19	2.21	2.23	2.23	2.20	2.17	2.14	2.11	2.07	2.08	2.12	2.13	2.11	2.01		
Grain mill products.....	2.74	2.73	2.72	2.73	2.75	2.74	2.72	2.73	2.73	2.72	2.69	2.68	2.61	2.63	2.52	
Bakery products.....	2.69	2.69	2.69	2.67	2.64	2.63	2.63	2.62	2.62	2.62	2.63	2.62	2.60	2.59	2.51	
Sugar.....	3.08	3.09	3.04	3.08	3.06	2.91	2.76	2.60	2.48	2.58	2.90	2.90	2.72	2.59		
Confectionery and related products.....	2.30	2.32	2.31	2.31	2.27	2.28	2.25	2.22	2.18	2.20	2.21	2.21	2.22	2.20	2.12	
Beverages.....	3.02	3.03	3.03	3.04	3.03	3.02	2.98	2.94	2.97	2.99	2.95	2.92	2.87	2.91	2.81	
Misc. foods and kindred products.....	2.56	2.58	2.56	2.56	2.54	2.52	2.51	2.48	2.45	2.45	2.43	2.46	2.45	2.42	2.33	
Tobacco manufactures.....	2.22	2.39	2.39	2.37	2.36	2.34	2.28	2.20	2.17	2.11	2.09	2.08	2.17	2.19	2.09	
Cigarettes.....	2.79	2.78	2.77	2.77	2.76	2.76	2.72	2.70	2.71	2.68	2.69	2.71	2.70	2.69	2.58	
Cigars.....	1.81	1.83	1.83	1.81	1.81	1.81	1.83	1.81	1.79	1.81	1.79	1.77	1.77	1.77	1.71	
Textile mill products.....	2.04	2.02	2.03	2.03	2.02	2.02	2.01	2.01	2.00	2.01	2.00	1.99	1.98	1.96	1.87	
Weaving mills, cotton.....	2.02	2.00	2.01	2.02	2.02	2.02	2.02	2.03	2.03	2.03	2.02	2.02	2.01	1.98	1.88	
Weaving mills, synthetics.....	2.05	2.04	2.03	2.04	2.03	2.03	2.03	2.03	2.02	2.04	2.04	2.04	2.04	2.01	1.92	
Weaving and finishing mills, wool.....	2.14	2.14	2.13	2.12	2.10	2.10	2.09	2.10	2.09	2.10	2.09	2.09	2.07	2.05	1.96	
Narrow fabric mills.....	2.03	2.00	2.01	2.00	1.98	1.98	1.97	1.95	1.96	1.97	1.97	1.95	1.93	1.92	1.83	
Knitting mills.....	1.97	1.94	1.94	1.94	1.94	1.94	1.93	1.90	1.88	1.89	1.88	1.87	1.86	1.85	1.76	
Textile finishing, except wool.....	2.18	2.17	2.21	2.20	2.20	2.18	2.18	2.17	2.17	2.17	2.16	2.14	2.13	2.12	2.02	
Floor covering mills.....	2.07	2.08	2.08	2.06	2.04	2.02	2.03	2.01	2.03	2.03	2.03	2.03	2.01	1.98	1.90	
Yarn and thread mills.....	1.89	1.88	1.88	1.87	1.87	1.86	1.86	1.85	1.85	1.87	1.87	1.86	1.85	1.83	1.73	
Miscellaneous textile goods.....	2.28	2.27	2.28	2.26	2.26	2.23	2.23	2.23	2.23	2.25	2.24	2.23	2.20	2.19	2.10	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and other textile products.....	\$73.49	\$72.32	\$72.52	\$71.80	\$72.16	\$71.80	\$71.04	\$70.40	\$69.87	\$70.25	\$70.64	\$67.83	\$70.30	\$68.80	\$66.61
Men's and boys' suits and coats.....	89.52	85.31	88.67	88.22	87.75	87.00	85.70	88.09	87.78	86.94	87.17	84.83	87.19	85.79	81.86
Men's and boys' furnishings.....	63.32	63.66	62.78	62.97	62.80	63.15	61.42	61.34	60.64	59.68	59.36	60.10	59.15	57.90	57.90
Women's and misses' outerwear.....	76.81	74.58	74.43	75.99	75.77	74.21	72.08	71.02	71.32	72.42	68.55	73.43	71.94	68.68	68.68
Women's and children's undergarments.....	67.51	66.25	65.88	65.70	65.51	65.70	64.98	63.89	63.70	65.98	66.12	64.18	64.09	63.10	60.19
Hats, caps, and millinery.....	75.76	72.62	68.75	69.58	71.75	75.90	74.16	72.27	70.62	72.69	67.86	75.86	71.18	70.08	70.08
Children's outerwear.....	66.72	66.91	67.49	66.01	65.08	64.40	65.14	64.62	62.66	62.48	59.86	63.86	62.99	60.79	60.79
Fur goods and miscellaneous apparel.....	78.18	77.83	78.12	76.96	75.75	75.18	74.57	76.34	77.91	78.58	72.92	74.97	74.70	71.18	71.18
Misc. fabricated textile products.....	77.93	74.91	78.00	78.83	76.84	77.25	75.85	77.29	79.15	79.54	81.56	77.55	76.81	76.02	74.11
Paper and allied products.....	124.56	123.69	122.41	120.28	119.00	119.71	119.14	119.84	120.81	121.80	121.37	121.92	120.77	119.35	114.22
Paper and pulp mills.....	141.64	141.96	139.67	137.64	136.40	136.89	136.75	137.20	138.12	139.05	138.43	138.29	137.39	135.30	128.16
Paperboard mills.....	107.07	107.64	106.30	104.86	103.38	105.22	104.55	106.08	105.84	105.84	104.75	106.17	104.66	104.16	99.42
Misc. converted paper products.....	112.94	109.71	110.88	108.47	107.01	107.38	105.41	107.07	109.65	110.33	111.11	111.89	109.82	108.63	104.23
Paperboard containers and boxes.....	125.90	125.24	124.86	124.86	124.03	125.06	123.33	123.97	125.90	124.87	125.51	125.51	123.24	122.61	118.12
Printing and publishing.....	129.60	128.52	129.95	129.60	127.44	126.71	125.65	124.95	131.33	129.55	128.47	127.75	137.39	135.30	128.16
Newspapers.....	138.17	133.12	130.42	130.02	130.87	129.81	129.63	132.20	133.72	133.78	139.78	133.66	130.65	130.65	126.23
Periodicals.....	112.40	112.16	115.65	114.26	115.51	113.71	115.09	114.54	115.08	115.93	117.04	115.78	114.53	110.68	110.68
Books.....	130.35	129.30	128.58	127.59	127.47	129.17	126.75	127.26	128.08	128.16	129.52	129.44	127.20	126.56	120.96
Commercial printing.....	96.11	94.75	96.64	98.16	97.78	96.75	93.99	96.36	96.72	96.33	96.92	95.31	94.23	95.16	91.57
Blankbooks and bookbinding.....	127.44	125.68	125.68	126.34	125.18	127.71	128.43	128.64	127.14	125.32	126.10	127.20	124.94	124.94	120.90
Other publishing & printing ind.....	Average weekly hours														
Apparel and other textile products.....	36.2	35.8	35.9	35.9	35.9	35.9	35.7	36.1	36.2	36.4	36.6	35.7	37.0	36.4	36.4
Men's and boys' suits and coats.....	37.3	36.3	37.1	37.7	37.5	37.5	37.1	38.3	38.5	38.3	38.4	37.7	39.1	38.3	37.9
Men's and boys' furnishings.....	36.6	36.6	36.8	36.5	36.4	36.3	36.5	37.0	37.4	37.2	37.3	37.1	37.8	37.2	37.6
Women's and misses' outerwear.....	34.6	33.9	34.3	34.7	34.6	34.2	34.0	33.5	33.8	34.0	32.8	34.8	34.3	34.0	34.0
Women's and children's undergarments.....	37.3	36.4	36.2	35.9	35.8	36.1	35.9	36.3	36.4	37.7	38.0	37.1	37.7	36.9	36.7
Hats, caps, and millinery.....	35.3	36.6	35.6	34.9	35.5	35.0	35.8	36.0	36.5	36.4	36.9	34.8	37.5	36.5	36.5
Children's outerwear.....	35.4	35.9	35.3	34.8	35.0	35.4	36.1	35.4	35.7	35.7	34.4	36.7	36.2	36.4	36.4
Fur goods and miscellaneous apparel.....	35.7	35.7	36.0	36.3	35.9	35.8	36.2	36.7	37.1	37.6	36.1	37.3	36.8	36.5	36.5
Misc. fabricated textile products.....	38.2	36.9	37.5	37.9	37.3	37.5	37.0	38.8	38.8	39.4	38.2	38.6	38.2	38.4	38.4
Paper and allied products.....	43.1	42.8	42.8	42.5	42.2	42.6	42.4	42.8	43.3	43.5	43.5	43.7	43.6	43.4	43.1
Paper and pulp mills.....	44.4	44.5	44.2	44.4	44.0	44.3	44.4	44.7	45.0	44.8	44.9	44.9	44.8	44.8	44.5
Paperboard mills.....	44.9	44.9	44.9	43.8	44.0	44.8	44.2	44.4	44.7	45.3	45.0	45.1	44.7	45.3	45.1
Misc. converted paper products.....	41.5	41.4	41.2	40.8	40.7	41.1	41.0	41.6	42.0	42.0	41.9	42.3	42.2	42.0	41.6
Paperboard containers and boxes.....	42.3	41.4	42.0	41.4	41.0	41.3	40.7	41.5	42.5	42.6	42.9	43.2	42.9	42.6	42.2
Printing and publishing.....	38.5	38.3	38.3	38.3	38.4	38.6	38.3	38.5	39.1	38.9	39.1	39.1	39.0	38.8	38.6
Newspapers.....	36.1	36.0	36.3	36.2	36.0	36.1	35.9	35.7	37.1	36.7	36.6	36.5	36.6	36.3	36.1
Periodicals.....	40.4	40.4	39.5	38.7	39.4	39.3	39.1	39.4	39.7	40.4	41.2	41.6	41.0	40.2	40.2
Books.....	40.0	40.2	41.6	41.4	41.7	41.2	41.4	41.2	41.1	41.7	41.8	42.1	41.8	41.8	41.3
Commercial printing.....	39.5	39.3	39.2	38.9	39.1	39.5	39.0	39.4	39.9	39.8	40.1	40.2	40.0	39.8	39.4
Blankbooks and bookbinding.....	38.6	37.9	38.5	38.8	38.8	38.7	37.9	38.7	39.0	39.0	39.4	38.9	39.1	39.0	38.8
Other publishing & printing ind.....	38.5	38.2	38.2	38.4	38.4	38.7	38.8	39.1	39.0	38.8	38.8	38.9	38.8	38.8	39.0
Average hourly earnings															
Apparel and other textile products.....	\$2.03	\$2.02	\$2.02	\$2.00	\$2.01	\$2.00	\$1.99	\$1.95	\$1.93	\$1.93	\$1.93	\$1.90	\$1.90	\$1.89	\$1.83
Men's and boys' suits and coats.....	2.40	2.35	2.39	2.34	2.34	2.32	2.31	2.30	2.28	2.27	2.27	2.25	2.23	2.24	2.16
Men's and boys' furnishings.....	1.73	1.73	1.72	1.73	1.73	1.73	1.73	1.66	1.64	1.63	1.60	1.60	1.59	1.59	1.54
Women's and misses' outerwear.....	2.22	2.20	2.17	2.19	2.19	2.17	2.12	2.12	2.12	2.11	2.13	2.09	2.11	2.08	2.02
Women's and children's undergarments.....	1.81	1.82	1.82	1.83	1.83	1.82	1.81	1.76	1.75	1.75	1.74	1.73	1.70	1.71	1.64
Hats, caps, and millinery.....	2.07	2.04	1.97	1.96	2.05	2.12	2.06	1.98	1.94	1.97	1.95	2.01	1.95	1.92	1.92
Children's outerwear.....	1.89	1.89	1.88	1.87	1.87	1.84	1.84	1.79	1.77	1.75	1.75	1.74	1.74	1.74	1.67
Fur goods and miscellaneous apparel.....	2.19	2.18	2.17	2.12	2.11	2.10	2.06	2.08	2.10	2.09	2.02	2.02	2.01	2.03	1.95
Misc. fabricated textile products.....	2.04	2.03	2.08	2.08	2.06	2.06	2.05	2.05	2.04	2.05	2.07	2.03	1.99	1.99	1.93
Paper and allied products.....	2.89	2.89	2.86	2.83	2.82	2.81	2.80	2.79	2.80	2.80	2.79	2.79	2.77	2.75	2.65
Paper and pulp mills.....	3.19	3.19	3.16	3.10	3.10	3.09	3.08	3.09	3.09	3.09	3.09	3.08	3.06	3.02	2.88
Paperboard mills.....	3.20	3.20	3.16	3.11	3.12	3.12	3.11	3.10	3.10	3.09	3.08	3.08	3.06	3.02	2.93
Misc. converted paper products.....	2.58	2.60	2.58	2.57	2.54	2.56	2.55	2.52	2.52	2.52	2.50	2.51	2.48	2.48	2.30
Paperboard containers and boxes.....	2.67	2.65	2.64	2.62	2.61	2.60	2.59	2.58	2.58	2.59	2.59	2.59	2.56	2.55	2.47
Printing and publishing.....	3.27	3.27	3.26	3.26	3.23	3.24	3.22	3.22	3.22	3.21	3.21	3.21	3.16	3.16	3.06
Newspapers.....	3.59	3.57	3.58	3.58	3.54	3.51	3.50	3.50	3.54	3.53	3.51	3.50	3.44	3.45	3.32
Periodicals.....	3.42	3.37	3.37	3.30	3.33	3.32	3.29	3.33	3.31	3.32	3.32	3.36	3.26	3.25	3.14
Books.....	2.81	2.79	2.78	2.76	2.77	2.76	2.75	2.78	2.78	2.80	2.78	2.80	2.75	2.74	2.68
Commercial printing.....	3.30	3.29	3.28	3.28	3.26	3.27	3.25	3.23	3.21	3.22	3.23	3.22	3.18	3.18	3.07
Blankbooks and bookbinding.....	2.49	2.50	2.51	2.53	2.52	2.50	2.48	2.49	2.48	2.47	2.46	2.45	2.41	2.44	2.36
Other publishing & printing ind.....	3.31	3.29	3.29	3.29	3.26	3.30	3.31	3.29	3.26	3.23	3.25	3.27	3.22	3.22	3.10

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ³	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Chemicals and allied products.....	\$129.58	\$129.90	\$128.65	\$127.10	\$127.49	\$126.88	\$125.25	\$126.16	\$127.68	\$127.98	\$127.56	\$127.14	\$125.70	\$125.16	\$121.09
Industrial chemicals.....	144.97	143.72	142.12	142.80	142.04	142.04	140.19	141.20	143.68	145.09	143.65	142.04	140.19	140.86	136.08
Plastics materials and synthetics.....	129.16	129.89	128.63	126.46	125.33	125.33	123.19	123.07	126.78	126.48	125.88	125.33	125.63	125.08	120.70
Drugs.....	115.66	114.57	114.97	115.26	118.08	118.24	117.96	117.55	117.01	116.18	115.49	113.96	110.95	113.02	107.04
Soap, cleaners, and toilet goods.....	125.87	126.07	124.34	125.05	123.32	122.61	122.10	122.29	120.83	122.06	122.35	122.35	122.93	119.94	113.15
Paints and allied products.....	121.72	121.60	122.47	120.60	117.91	117.50	115.66	116.81	118.24	118.40	118.24	119.83	118.58	118.01	113.15
Agricultural chemicals.....	108.09	110.40	107.19	105.40	112.70	109.31	105.40	107.75	106.32	104.90	106.70	105.58	103.81	105.27	100.69
Other chemical products.....	123.49	123.00	123.37	121.13	122.43	121.84	119.95	120.30	123.77	122.47	122.22	123.97	121.09	119.97	116.48
Petroleum and coal products.....	151.30	156.24	152.72	153.58	153.15	150.94	147.97	144.90	145.67	146.70	145.01	146.80	142.72	144.58	138.42
Petroleum refining.....	163.07	159.47	161.41	161.36	159.38	156.19	151.94	152.82	154.34	150.12	152.04	148.57	151.56	145.05	145.05
Other petroleum and coal products.....	134.54	134.23	131.24	126.58	123.41	117.04	114.90	116.05	118.02	119.85	127.84	130.42	123.48	120.22	115.90
Rubber and plastics products, nec.....	113.16	105.06	109.03	107.57	110.30	110.16	109.35	112.19	113.13	113.67	113.94	114.21	111.72	112.14	109.62
Tires and inner tubes.....	142.60	164.94	162.50	154.45	154.76	154.03	161.62	165.10	165.17	166.66	165.99	163.02	163.39	158.06	158.06
Other rubber products.....	104.54	107.30	105.18	106.66	106.52	105.73	108.09	110.09	110.62	110.62	110.72	107.33	107.74	103.82	103.82
Miscellaneous plastics products.....	95.18	95.51	96.29	94.94	94.71	94.54	93.43	94.37	94.30	94.35	95.45	95.68	93.52	94.39	92.77
Leather and leather products.....	81.12	79.95	79.28	77.04	75.19	75.65	76.13	77.20	76.63	76.03	74.68	74.09	75.85	74.88	71.82
Leather tanning and finishing.....	104.94	102.96	107.45	107.57	104.66	103.20	101.65	102.66	104.19	104.23	103.53	101.85	100.19	101.75	97.99
Footwear, except rubber.....	78.98	77.81	76.20	74.00	71.64	72.44	73.68	75.08	73.92	72.39	70.58	71.25	73.32	71.81	68.80
Other leather products.....	78.54	77.14	76.73	74.57	73.77	75.35	73.80	74.86	74.87	76.05	75.08	71.62	73.71	73.15	70.49
Handbags and personal leather goods.....	73.70	73.70	72.89	70.79	70.40	70.36	70.59	71.05	69.19	72.20	71.82	66.22	70.49	69.38	67.86
Average weekly hours															
Chemicals and allied products.....	41.4	41.5	41.5	41.4	41.8	41.6	41.2	41.5	42.0	42.1	42.1	42.1	41.9	42.0	41.9
Industrial chemicals.....	41.9	41.9	41.9	41.8	42.0	41.9	41.6	41.9	42.5	42.8	42.5	42.4	42.1	42.3	42.0
Plastics materials and synthetics.....	41.8	41.9	41.9	41.6	41.5	41.5	41.2	41.3	42.4	42.3	42.1	42.2	42.3	42.4	42.5
Drugs.....	40.3	40.2	40.2	40.3	41.0	41.2	41.1	41.1	41.2	41.2	41.1	40.7	40.2	40.8	40.7
Soap, cleaners, and toilet goods.....	41.0	40.8	40.9	41.0	40.7	40.6	40.7	40.9	41.1	41.8	41.9	41.9	42.1	41.5	40.7
Paints and allied products.....	41.4	41.5	41.8	41.3	40.8	40.8	40.3	40.7	41.2	41.4	41.2	41.9	41.9	41.7	41.6
Agricultural chemicals.....	41.1	42.3	42.2	42.5	46.0	44.8	42.5	43.1	42.7	42.3	43.2	42.4	42.2	43.5	43.4
Other chemical products.....	41.3	41.0	41.4	41.2	41.5	41.3	40.8	41.2	42.1	41.8	42.0	42.6	41.9	41.8	41.9
Petroleum and coal products.....	42.5	43.4	42.9	42.9	42.9	42.4	41.8	41.4	42.1	42.4	42.4	42.8	42.1	42.4	42.2
Petroleum refining.....	42.8	42.8	42.3	42.7	42.8	42.5	42.1	41.4	42.1	42.4	41.7	42.0	41.5	42.1	41.8
Other petroleum and coal products.....	45.3	45.5	45.1	43.8	43.3	41.8	40.6	41.3	42.0	42.5	44.7	45.6	44.1	43.4	43.9
Rubber and plastics products, nec.....	41.3	40.1	41.3	40.9	40.7	40.8	40.5	41.4	41.9	42.1	42.2	42.3	42.0	42.0	42.0
Tires and inner tubes.....	39.5	44.7	44.4	42.2	42.4	42.2	43.8	44.5	44.4	44.8	44.5	44.3	44.4	44.4	44.4
Other rubber products.....	39.9	40.8	40.3	40.4	40.5	40.2	41.1	41.7	41.9	41.9	42.1	41.6	41.6	41.2	41.2
Miscellaneous plastics products.....	40.5	40.3	40.8	40.4	40.3	40.4	40.1	40.5	41.0	41.2	41.5	41.6	41.2	41.4	41.6
Leather and leather products.....	39.0	39.0	38.3	37.4	36.5	36.9	37.5	38.6	38.7	38.4	38.1	37.8	39.1	38.6	38.2
Leather tanning and finishing.....	39.9	39.6	40.7	40.9	40.1	40.0	39.4	40.1	40.7	40.4	40.6	40.1	40.4	40.7	41.0
Footwear, except rubber.....	39.1	39.3	38.1	37.0	36.0	36.4	37.4	38.7	38.7	37.9	37.5	37.7	39.0	38.4	37.8
Other leather products.....	38.5	38.0	37.8	37.1	36.7	37.3	36.9	38.0	38.2	39.0	38.7	37.3	39.0	38.3	38.1
Handbags and personal leather goods.....	37.6	37.0	36.3	36.1	35.9	36.2	37.2	37.0	37.0	38.0	37.8	35.6	38.1	37.5	37.7
Average hourly earnings															
Chemicals and allied products.....	\$3.13	\$3.13	\$3.10	\$3.07	\$3.05	\$3.05	\$3.04	\$3.04	\$3.04	\$3.04	\$3.03	\$3.02	\$3.00	\$2.98	\$2.89
Industrial chemicals.....	3.46	3.43	3.40	3.40	3.40	3.39	3.37	3.37	3.38	3.39	3.38	3.35	3.33	3.33	3.24
Plastics materials and synthetics.....	3.09	3.10	3.07	3.04	3.02	3.02	2.99	2.98	2.99	2.99	2.99	2.97	2.97	2.95	2.84
Drugs.....	2.87	2.85	2.86	2.86	2.88	2.87	2.87	2.86	2.84	2.82	2.81	2.80	2.76	2.77	2.63
Soap, cleaners, and toilet goods.....	3.07	3.09	3.04	3.05	3.03	3.02	3.00	2.99	2.94	2.92	2.92	2.92	2.92	2.89	2.78
Paints and allied products.....	2.94	2.93	2.93	2.92	2.89	2.88	2.87	2.87	2.87	2.86	2.87	2.86	2.83	2.83	2.72
Agricultural chemicals.....	2.63	2.61	2.54	2.48	2.45	2.44	2.48	2.50	2.49	2.48	2.47	2.49	2.46	2.42	2.32
Other chemical products.....	2.99	3.00	2.98	2.94	2.95	2.95	2.94	2.92	2.94	2.93	2.91	2.91	2.89	2.87	2.78
Petroleum and coal products.....	3.56	3.60	3.56	3.58	3.57	3.56	3.54	3.50	3.46	3.46	3.42	3.43	3.39	3.41	3.28
Petroleum refining.....	3.81	3.77	3.78	3.74	3.74	3.75	3.71	3.67	3.63	3.64	3.60	3.62	3.58	3.60	3.47
Other petroleum and coal products.....	2.97	2.95	2.91	2.89	2.85	2.80	2.83	2.81	2.81	2.82	2.86	2.86	2.80	2.77	2.64
Rubber and plastics products, nec.....	2.74	2.62	2.64	2.63	2.71	2.70	2.70	2.71	2.70	2.70	2.70	2.70	2.66	2.67	2.61
Tires and inner tubes.....	3.61	3.69	3.66	3.66	3.66	3.65	3.65	3.69	3.71	3.72	3.72	3.73	3.68	3.68	3.56
Other rubber products.....	2.62	2.63	2.61	2.64	2.63	2.63	2.63	2.64	2.64	2.64	2.64	2.63	2.58	2.59	2.52
Miscellaneous plastics products.....	2.35	2.37	2.36	2.35	2.35	2.34	2.33	2.33	2.30	2.29	2.30	2.30	2.27	2.28	2.23
Leather and leather products.....	2.08	2.05	2.07	2.06	2.06	2.05	2.03	2.00	1.98	1.98	1.96	1.96	1.94	1.94	1.88
Leather tanning and finishing.....	2.63	2.60	2.64	2.63	2.61	2.58	2.58	2.56	2.56	2.58	2.55	2.54	2.48	2.50	2.39
Footwear, except rubber.....	2.02	1.98	2.00	2.00	1.99	1.99	1.97	1.94	1.91	1.91	1.89	1.89	1.88	1.87	1.82
Other leather products.....	2.04	2.03	2.03	2.01	2.01	2.02	2.00	1.97	1.96	1.95	1.94	1.92	1.89	1.91	1.85
Handbags and personal leather goods.....	1.96	1.97	1.95	1.95	1.95	1.96	1.95	1.91	1.87	1.90	1.90	1.86	1.85	1.85	1.80

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Average weekly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³						\$138.53	\$143.77	\$137.49	\$137.22	\$137.90	\$132.99	\$135.96	\$136.34	\$135.65	\$130.80
Local and suburban transportation	\$119.28	\$117.32	\$117.73	\$114.11	\$113.70	\$112.88	\$112.74	\$112.71	\$114.33	\$115.13	\$112.41	\$113.48	\$112.36	\$108.20	
Intercity highway transportation	153.72	150.34	146.03	144.57	136.12	142.43	145.29	143.22	145.53	142.46	151.01	160.32	144.95	133.72	
Trucking and warehousing	141.19	141.34	136.27	121.86	135.11	134.60	132.80	137.82	136.85	138.14	138.78	136.63	135.15	130.48	
Public warehousing	101.85	101.66	99.15	101.81	97.71	98.40	97.61	99.12	98.18	96.82	98.33	98.71	96.80	93.50	
Pipeline transportation	159.83	155.77	159.08	166.53	155.80	157.38	161.66	154.34	152.31	152.25	152.77	148.37	151.29	145.85	
Communication:	120.50	119.59	117.69	117.90	117.00	120.10	118.01	120.40	122.54	119.54	119.43	117.62	118.55	114.62	
Telephone communication	114.34	113.87	112.03	112.22	111.36	114.62	112.97	115.31	117.03	114.24	114.11	112.33	113.27	109.08	
Telegraph communication ⁴	136.71	135.14	133.90	128.23	128.35	131.07	128.35	128.53	127.62	130.16	131.94	131.37	128.01	122.55	
Radio and television broadcasting	157.19	154.81	154.45	154.01	153.65	154.42	152.05	154.41	158.36	154.77	152.82	149.27	151.24	147.63	
Electric, gas, and sanitary services:	142.76	142.00	140.49	140.83	139.59	141.86	139.18	140.11	140.53	141.20	137.86	136.95	136.95	131.24	
Electric companies and systems	146.72	145.95	144.07	143.59	143.24	143.87	141.52	142.20	142.96	142.54	139.93	140.03	139.70	133.31	
Gas companies and systems	130.65	128.88	129.43	129.20	128.02	128.52	129.78	128.33	129.90	131.36	128.03	124.64	125.77	120.83	
Combination companies and systems	153.35	153.77	151.89	152.94	151.37	156.14	150.75	154.28	152.52	154.40	149.82	148.93	149.70	143.79	
Water, steam, & sanitary systems	114.49	113.52	113.12	113.27	111.91	113.42	112.06	111.79	112.89	111.52	111.24	109.74	110.42	105.16	
Average weekly hours															
Transportation and public utilities:															
Railroad transportation:						43.7	44.1	43.1	43.7	44.2	42.9	44.0	44.7	43.9	43.6
Class I railroads ³						41.8	41.5	41.6	41.9	42.5	42.8	42.1	42.5	42.4	42.1
Local and suburban transportation	42.6	42.2	42.5	41.8	41.0	42.9	43.5	43.4	44.1	43.3	45.9	48.0	44.6	43.7	
Intercity highway transportation	43.3	43.2	42.7	42.9	41.0	42.9	43.5	43.4	44.1	43.3	45.9	48.0	44.6	43.7	
Trucking and warehousing	42.4	42.7	41.8	38.2	41.7	41.8	41.5	42.8	42.5	42.9	43.1	43.1	42.5	42.5	
Public warehousing	40.1	40.5	39.5	40.4	39.4	40.0	40.5	41.3	41.6	41.2	40.8	41.3	40.5	40.3	
Pipeline transportation	41.3	41.1	41.0	42.7	41.0	41.2	42.1	41.6	41.5	40.6	41.4	41.1	41.0	41.2	
Communication:	39.9	39.6	39.1	39.3	39.0	39.9	39.6	40.0	41.4	40.8	40.9	40.7	40.6	40.5	
Telephone communication	39.7	39.6	38.9	39.1	38.8	39.8	39.5	39.9	41.5	40.8	40.9	40.7	40.6	40.4	
Telegraph communication ⁴	43.4	42.9	43.9	42.6	42.5	43.4	42.5	42.7	42.4	43.1	43.4	43.5	43.1	43.0	
Radio and television broadcasting	40.1	39.9	39.5	39.9	39.6	39.8	39.7	39.9	40.5	40.2	39.9	39.7	39.8	39.9	
Electric, gas, and sanitary services:	41.5	41.4	41.2	41.3	41.3	41.6	41.3	41.7	41.7	41.9	41.4	41.5	41.5	41.4	
Electric companies and systems	41.8	41.7	41.4	41.5	41.4	41.7	41.5	41.7	41.8	41.8	41.4	41.8	41.7	41.4	
Gas companies and systems	40.7	40.4	40.7	40.5	40.9	40.8	41.2	41.0	41.5	41.7	41.3	41.0	41.1	41.1	
Combination companies and systems	41.9	41.9	41.5	41.9	41.7	42.2	41.3	42.5	41.9	42.3	41.5	41.6	41.7	41.8	
Water, steam, & sanitary systems	40.6	40.4	40.4	40.6	40.4	40.8	40.6	40.8	41.2	41.0	41.2	41.1	41.2	41.4	
Average hourly earnings															
Transportation and public utilities:															
Railroad transportation:						\$3.17	\$3.26	\$3.19	\$3.14	\$3.12	\$3.10	\$3.09	\$3.05	\$3.09	\$3.00
Class I railroads ³						2.72	2.72	2.71	2.69	2.69	2.67	2.67	2.67	2.65	2.57
Local and suburban transportation	\$2.80	\$2.78	\$2.77	\$2.73	\$2.72	\$3.32	\$3.32	\$3.34	\$3.30	\$3.29	\$3.29	\$3.34	\$3.25	\$3.06	
Intercity highway transportation	3.55	3.48	3.42	3.37	3.32	3.32	3.34	3.30	3.30	3.29	3.29	3.34	3.25	3.06	
Trucking and warehousing	3.33	3.31	3.26	3.19	3.24	3.22	3.20	3.22	3.22	3.22	3.22	3.17	3.18	3.07	
Public warehousing	2.54	2.51	2.51	2.52	2.48	2.46	2.41	2.40	2.36	2.35	2.41	2.39	2.39	2.32	
Pipeline transportation	3.87	3.79	3.88	3.90	3.80	3.82	3.84	3.71	3.67	3.75	3.69	3.61	3.69	3.54	
Communication:	3.02	3.02	3.01	3.00	3.00	3.01	2.98	3.01	2.96	2.93	2.92	2.89	2.92	2.83	
Telephone communication	2.88	2.89	2.88	2.87	2.87	2.88	2.86	2.89	2.82	2.80	2.79	2.76	2.79	2.70	
Telegraph communication ⁴	3.15	3.15	3.05	3.01	3.02	3.02	3.02	3.01	3.01	3.02	3.04	3.02	2.97	2.85	
Radio and television broadcasting	3.92	3.88	3.91	3.86	3.88	3.88	3.83	3.87	3.91	3.85	3.83	3.76	3.80	3.70	
Electric, gas, and sanitary services:	3.44	3.43	3.41	3.41	3.38	3.41	3.37	3.36	3.37	3.37	3.33	3.30	3.30	3.17	
Electric companies and systems	3.51	3.50	3.48	3.46	3.46	3.45	3.41	3.41	3.42	3.41	3.38	3.35	3.35	3.22	
Gas companies and systems	3.21	3.19	3.18	3.19	3.13	3.15	3.15	3.13	3.13	3.15	3.10	3.04	3.06	2.94	
Combination companies and systems	3.66	3.67	3.66	3.65	3.63	3.70	3.65	3.63	3.64	3.65	3.61	3.58	3.59	3.44	
Water, steam, & sanitary systems	2.82	2.81	2.80	2.79	2.77	2.78	2.76	2.74	2.74	2.72	2.70	2.67	2.68	2.54	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. 2	July 2	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
	Average weekly earnings														
Wholesale and retail trade.....	\$84.00	\$84.15	\$82.80	\$81.09	\$80.73	\$80.59	\$80.22	\$80.30	\$79.92	\$79.57	\$79.86	\$79.55	\$80.73	\$79.02	\$76.53
Wholesale trade.....	116.64	117.33	116.64	115.66	115.26	114.74	114.05	114.09	114.52	113.27	112.74	112.33	111.38	111.38	106.49
Motor vehicles & automotive equipment.....	107.23	107.38	106.97	107.23	105.32	104.65	105.41	106.17	105.66	105.41	106.26	103.42	104.08	100.14	100.14
Drugs, chemicals, and allied products.....	120.90	117.90	117.51	118.59	117.51	118.50	117.89	117.27	115.60	115.49	115.66	113.08	114.17	109.08	109.08
Dry goods and apparel.....	114.00	112.48	112.05	112.48	111.81	110.58	109.53	109.16	109.15	110.78	108.95	109.16	107.26	103.19	103.19
Groceries and related products.....	111.76	108.79	106.92	106.25	105.73	105.59	105.26	104.39	104.04	103.48	104.55	103.91	102.09	97.00	97.00
Electrical goods.....	129.25	129.63	129.20	129.20	132.98	130.85	132.98	136.95	126.65	128.87	127.97	123.65	126.98	122.84	122.84
Hardware, plumbing & heating equipment.....	111.78	111.10	110.02	109.34	108.27	108.14	108.68	108.81	108.00	108.95	108.12	106.90	107.30	101.91	101.91
Machinery, equipment, and supplies.....	129.83	129.51	128.30	127.80	126.27	125.05	124.24	125.97	125.46	124.53	122.59	123.49	121.66	115.23	115.23
Miscellaneous wholesalers.....	115.20	114.80	113.43	113.83	113.60	112.92	113.08	114.05	112.40	111.60	111.35	110.83	110.95	107.20	107.20
Retail trade.....	73.00	73.16	71.56	69.80	69.30	69.10	69.15	69.65	68.64	68.87	69.09	70.11	68.57	66.61	66.61
Retail general merchandise.....	66.05	64.35	62.99	62.34	61.88	61.18	61.05	62.24	60.26	61.01	61.38	62.59	60.94	59.15	59.15
Department stores.....	70.10	68.31	66.65	65.81	65.04	64.52	64.92	64.70	63.36	65.27	65.87	66.50	64.55	62.98	62.98
Mail order houses.....	76.82	76.38	75.26	74.48	73.39	72.24	69.42	83.83	73.08	70.04	71.25	71.66	71.51	71.00	71.00
Variety stores.....	51.51	49.57	48.00	48.16	48.34	47.70	46.35	48.77	46.97	46.66	46.66	47.85	46.19	44.10	44.10
Food stores.....	77.70	75.70	73.14	72.37	72.49	72.27	72.27	72.14	72.59	71.81	73.10	75.19	72.21	70.66	70.66
Grocery, meat, and vegetable stores.....	78.98	76.83	73.80	73.25	73.47	73.47	73.15	72.81	73.81	72.81	74.34	76.25	73.22	71.69	71.69
Apparel and accessory stores.....	63.65	62.59	60.80	60.86	60.03	60.03	60.35	61.15	58.24	58.97	59.01	59.66	58.89	57.46	57.46
Men's & boys' clothing & furnishings.....	76.60	76.47	73.01	73.22	71.99	72.91	75.15	74.13	72.12	72.03	71.48	73.64	71.96	69.84	69.84
Women's ready-to-wear stores.....	58.10	56.72	56.00	55.53	55.21	55.01	55.38	55.78	52.95	53.13	52.98	52.63	52.97	51.46	51.46
Family clothing stores.....	61.52	60.78	60.35	60.40	59.52	58.06	57.22	59.43	57.14	58.50	57.64	59.81	58.21	56.28	56.28
Shoe stores.....	64.68	62.51	59.69	58.98	57.83	58.53	59.03	60.03	56.36	58.02	60.41	60.52	58.40	56.64	56.64
Average weekly hours															
Wholesale and retail trade.....	37.5	37.4	36.8	36.2	36.2	36.3	36.3	36.5	37.0	36.5	36.8	37.0	37.9	37.1	37.7
Wholesale trade.....	40.5	40.6	40.5	40.3	40.3	40.4	40.3	40.6	40.9	40.6	40.7	40.7	40.8	40.8	40.8
Motor vehicles & automotive equipment.....	41.4	41.3	41.3	41.4	41.3	41.2	41.5	41.8	41.6	41.5	42.0	41.7	41.8	41.9	41.9
Drugs, chemicals, and allied products.....	39.9	39.3	39.3	39.4	39.7	39.9	40.1	40.3	40.0	40.1	40.3	40.1	40.2	40.4	40.4
Dry goods and apparel.....	38.0	38.0	37.6	38.0	37.9	38.0	37.9	38.3	37.9	38.2	37.7	38.3	37.9	37.8	37.8
Groceries and related products.....	41.7	40.9	40.5	40.4	40.2	40.3	40.8	41.1	40.8	40.9	41.0	41.4	41.0	41.1	41.1
Electrical goods.....	42.1	42.5	42.5	42.5	43.6	42.9	43.6	44.9	42.5	43.1	42.8	42.2	42.9	42.8	42.8
Hardware, plumbing & heating equipment.....	40.5	40.4	40.3	40.2	40.1	40.2	40.4	40.6	40.6	40.5	40.8	40.8	40.8	40.6	40.6
Machinery, equipment, and supplies.....	40.7	40.6	40.6	40.7	40.6	40.6	40.6	40.9	41.0	41.1	41.0	41.3	41.1	41.3	41.3
Miscellaneous wholesalers.....	40.0	40.0	39.8	39.8	40.0	39.9	40.1	40.3	40.0	40.0	40.2	40.3	40.2	40.3	40.3
Retail trade.....	36.5	36.4	35.6	34.9	34.9	35.0	34.9	35.1	35.9	35.2	35.5	35.8	36.9	35.9	36.6
Retail general merchandise.....	33.7	33.0	32.3	32.3	32.4	32.2	32.3	32.4	32.4	32.4	32.8	33.0	34.2	33.3	33.8
Department stores.....	33.7	33.0	32.2	32.1	32.2	32.1	32.3	33.7	32.0	32.8	33.1	34.1	33.1	33.5	33.5
Mail order houses.....	35.4	35.2	35.5	35.3	35.9	34.4	33.7	41.5	36.0	34.5	35.1	35.3	35.4	36.6	36.6
Variety stores.....	31.6	30.6	30.0	30.1	30.4	30.0	30.1	32.3	30.9	30.7	30.7	31.9	31.0	31.5	31.5
Food stores.....	35.0	34.1	32.8	32.6	32.8	32.7	33.0	33.4	33.3	33.4	34.0	35.3	33.9	34.3	34.3
Grocery, meat, and vegetable stores.....	35.1	34.3	32.8	32.7	32.8	32.8	33.1	33.4	33.4	33.4	34.1	35.3	33.9	34.3	34.3
Apparel and accessory stores.....	33.5	32.6	32.0	32.2	32.1	32.1	32.1	33.6	32.0	32.4	32.6	33.9	32.9	33.6	33.6
Men's & boys' clothing & furnishings.....	35.3	34.6	33.8	33.9	33.8	33.6	33.7	35.3	33.7	34.3	34.7	36.1	35.1	36.0	36.0
Women's ready-to-wear stores.....	33.2	32.6	32.0	32.1	32.1	31.8	32.2	33.6	31.9	32.2	32.5	33.1	32.7	33.2	33.2
Family clothing stores.....	32.9	32.5	32.1	32.3	32.0	31.9	31.1	33.2	32.1	32.5	32.2	33.6	32.7	33.3	33.3
Shoe stores.....	33.0	31.1	30.3	30.4	30.6	31.3	31.4	32.1	30.3	30.7	31.3	34.0	31.4	32.0	32.0
Average hourly earnings															
Wholesale and retail trade.....	\$2.24	\$2.25	\$2.25	\$2.24	\$2.23	\$2.22	\$2.21	\$2.20	\$2.16	\$2.18	\$2.17	\$2.15	\$2.13	\$2.13	\$2.03
Wholesale trade.....	2.88	2.89	2.88	2.87	2.86	2.84	2.83	2.81	2.80	2.79	2.77	2.76	2.73	2.73	2.61
Motor vehicles & automotive equipment.....	2.59	2.60	2.59	2.59	2.55	2.54	2.54	2.54	2.54	2.54	2.54	2.53	2.48	2.49	2.39
Drugs, chemicals, and allied products.....	3.03	3.00	2.99	3.01	2.96	2.97	2.94	2.91	2.89	2.88	2.87	2.82	2.82	2.84	2.70
Dry goods and apparel.....	3.00	2.96	2.98	2.96	2.95	2.91	2.89	2.85	2.88	2.90	2.89	2.85	2.83	2.73	2.73
Groceries and related products.....	2.68	2.66	2.64	2.63	2.63	2.62	2.58	2.54	2.55	2.53	2.55	2.51	2.49	2.36	2.36
Electrical goods.....	3.07	3.05	3.04	3.04	3.05	3.05	3.05	3.05	2.98	2.99	2.99	2.93	2.96	2.87	2.87
Hardware, plumbing & heating equipment.....	2.76	2.75	2.73	2.72	2.70	2.69	2.69	2.68	2.66	2.69	2.65	2.62	2.63	2.51	2.51
Machinery, equipment, and supplies.....	3.19	3.19	3.16	3.14	3.11	3.08	3.06	3.08	3.06	3.03	2.99	2.99	2.96	2.79	2.79
Miscellaneous wholesalers.....	2.88	2.87	2.85	2.86	2.84	2.83	2.82	2.83	2.81	2.79	2.77	2.75	2.76	2.66	2.66
Retail trade.....	2.00	2.01	2.00	2.00	1.98	1.98	1.97	1.94	1.95	1.94	1.93	1.90	1.91	1.82	1.82
Retail general merchandise.....	1.96	1.95	1.95	1.93	1.91	1.90	1.89	1.82	1.86	1.86	1.86	1.83	1.83	1.75	1.75
Department stores.....	2.08	2.07	2.07	2.05	2.02	2.01	2.01	1.92	1.98	1.99	1.99	1.95	1.95	1.88	1.88
Mail order houses.....	2.17	2.17	2.12	2.11	2.10	2.10	2.06	2.02	2.03	2.03	2.03	2.03	2.02	1.94	1.94
Variety stores.....	1.63	1.62	1.60	1.60	1.59	1.59	1.54	1.51	1.52	1.52	1.52	1.50	1.49	1.40	1.40
Food stores.....	2.22	2.22	2.23	2.22	2.21	2.21	2.19	2.16	2.18	2.15	2.15	2.13	2.13	2.06	2.06
Grocery, meat, and vegetable stores.....	2.25	2.24	2.25	2.24	2.24	2.24	2.21	2.13	2.21	2.21	2.18	2.16	2.16	2.09	2.09
Apparel and accessory stores.....	1.90	1.92	1.90	1.89	1.87	1.87	1.88	1.82	1.82	1.82	1.81	1.76	1.79	1.71	1.71
Men's & boys' clothing & furnishings.....	2.17	2.21	2.16	2.16	2.13	2.17	2.23	2.10	2.14	2.10	2.06	2.04	2.05	1.94	1.94
Women's ready-to-wear stores.....	1.75	1.74	1.75	1.73	1.72	1.73	1.72	1.66	1.66	1.65	1.63	1.59	1.62	1.55	1.55
Family clothing stores.....	1.87	1.87	1.88	1.87	1.86	1.82	1.84	1.79	1.78	1.80	1.79	1.78	1.78	1.69	1.69
Shoe stores.....	1.96	2.01	1.97	1.94	1.89	1.87	1.88	1.87	1.86	1.89	1.93	1.78	1.86	1.77	1.77

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
	Average weekly earnings														
Services:															
Hotels and other lodging places:															
Hotels, tourist courts, and motels ⁵		\$57.07	\$56.36	\$56.42	\$55.85	\$56.15	\$56.00	\$55.05	\$55.72	\$54.83	\$55.06	\$53.73	\$53.96	\$53.34	\$51.54
Personal services:															
Laundries and drycleaning plants.....		65.42	65.77	64.53	64.13	63.24	62.02	62.79	62.87	61.99	62.65	61.88	60.74	61.12	58.98
Motion pictures:															
Motion picture filming & distributing.....		164.37	162.38	155.16	154.77	150.91	160.24	162.89	166.96	159.83	164.55	159.71	162.93	157.77	148.08
	Average weekly hours														
Services:															
Hotels and other lodging places:															
Hotels, tourist courts, and motels ⁵		37.3	36.6	36.4	36.5	36.7	36.6	36.7	36.9	36.8	37.2	36.8	38.0	37.3	37.9
Personal services:															
Laundries and drycleaning plants.....		37.6	37.8	37.3	37.5	37.2	36.7	37.6	38.1	37.8	38.2	38.2	38.2	38.2	38.8
Motion pictures:															
Motion picture filming & distributing.....		41.3	40.8	40.3	40.2	39.3	41.3	42.2	42.7	41.3	42.3	41.7	42.1	41.3	39.7
	Average hourly earnings														
Services:															
Hotels and other lodging places:															
Hotels, tourist courts, and motels ⁵		1.53	1.54	1.55	1.53	1.53	1.53	1.50	1.51	1.49	1.48	1.46	1.42	1.43	1.36
Personal services:															
Laundries and drycleaning plants.....		1.74	1.74	1.73	1.71	1.70	1.69	1.67	1.65	1.64	1.64	1.62	1.59	1.60	1.52
Motion pictures:															
Motion picture filming & distributing.....		3.98	3.98	3.85	3.85	3.84	3.88	3.86	3.91	3.87	3.89	3.83	3.87	3.82	3.73

¹ For comparability of data with those published in issues prior to October 1967 see footnote 1, table A-9. For employees covered, see footnote 1, table A-10.

² Preliminary.

³ Based upon monthly data summarized in the M-300 report by the Interstate Commerce Commission, which relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICC Group I). Beginning January 1965, data relate to railroads with operating revenues of \$5,000,000 or more.

⁴ Data relate to nonsupervisory employees except messengers.

⁵ Money payments only, tips not included.

⁶ Data for nonoffice salesmen excluded from all series in this division.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics for all series except that for Class I railroads. (See footnote 3.)

TABLE C-2. Gross and spendable average weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls in current and 1957-59 dollars¹

Item	1967							1966							Annual average	
	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1966	1965	
<i>Total private</i>																
Gross average weekly earnings:																
Current dollars	\$102.53	\$101.88	\$100.06	\$99.41	\$99.56	\$99.30	\$99.70	\$99.97	\$99.84	\$100.62	\$100.88	\$99.71	\$99.84	\$98.69	\$95.06	
1957-59 dollars	88.01	87.83	86.56	86.22	86.57	86.50	86.92	87.16	87.12	87.88	88.41	87.62	88.12	87.26	86.50	
Spendable average weekly earnings:																
Worker with no dependents:																
Current dollars	83.91	83.42	82.04	81.54	81.66	81.46	81.76	82.17	82.07	82.66	82.86	81.97	82.07	81.19	78.99	
1957-59 dollars	72.03	71.91	70.97	70.72	71.01	70.96	71.28	71.64	71.61	72.19	72.62	72.03	72.44	71.79	71.87	
Worker with 3 dependents:																
Current dollars	91.41	90.90	89.45	88.93	89.05	88.84	89.16	89.58	89.47	90.09	90.30	89.37	89.47	88.55	86.30	
1957-59 dollars	78.46	78.36	77.38	77.13	77.43	77.39	77.73	78.10	78.07	78.68	79.14	78.53	78.97	78.29	78.53	
<i>Manufacturing</i>																
Gross average weekly earnings:																
Current dollars	113.93	114.49	113.52	112.56	112.44	111.88	113.42	114.40	113.99	113.85	114.13	111.78	111.38	112.34	107.53	
1957-59 dollars	97.79	98.70	98.20	97.62	97.77	97.46	98.88	99.74	99.47	99.43	100.03	98.22	98.31	99.33	97.84	
Spendable average weekly earnings:																
Worker with no dependents:																
Current dollars	92.55	92.97	92.24	91.51	91.42	91.00	92.16	93.13	92.82	92.72	92.93	91.14	90.84	91.57	89.08	
1957-59 dollars	79.44	80.15	79.79	79.37	79.50	79.27	80.35	81.19	80.99	80.98	81.45	80.09	80.18	80.96	81.06	
Worker with 3 dependents:																
Current dollars	100.49	100.93	100.16	99.40	99.30	98.86	100.08	101.09	100.76	100.65	100.88	99.00	98.68	99.45	96.78	
1957-59 dollars	86.26	87.01	86.64	86.21	86.35	86.11	87.25	88.13	87.92	87.90	88.41	86.99	87.10	87.93	88.06	

¹ For comparability of data with those published in issues prior to October 1967, see footnote 1, table A-9. For employees covered, see footnote 1, table A-10.

Spendable average weekly earnings are based on gross average weekly earnings as published in table C-1 less the estimated amount of the workers' Federal social security and income tax liability. Since the amount of tax liability depends on the number of dependents supported by the worker as well as on the level of his gross income, spendable earnings have been com-

puted for 2 types of income receivers: (1) a worker with no dependents and (2) a married worker with 3 dependents.

The earnings expressed in 1957-59 dollars have been adjusted for changes in purchasing power as measured by the Bureau's Consumer Price Index.

² Preliminary.

NOTE: These series are described in "The Calculation and Uses of Spendable Earnings Series," *Monthly Labor Review*, April 1966, pp. 406-410.

TABLE C-3. Average weekly hours, seasonally adjusted, of production workers in selected industries¹

Industry division and group	1967							1966						
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	
Mining	43.1	43.3	42.2	42.0	42.7	42.4	42.2	42.6	42.5	42.7	42.7	42.8	42.7	
Contract construction	37.5	37.5	37.4	36.4	37.4	37.4	37.6	38.2	38.1	37.4	37.5	37.7	37.2	
Manufacturing	40.6	40.5	40.3	40.3	40.5	40.4	40.3	41.0	41.0	41.3	41.3	41.4	41.4	
Durable goods	41.3	41.0	40.9	41.0	41.0	41.1	41.0	41.7	41.7	42.1	42.1	42.3	42.2	
Ordnance and accessories	42.2	42.0	41.2	42.0	41.6	41.9	41.7	42.0	42.0	42.4	42.1	42.3	42.1	
Lumber and wood products	40.0	40.0	40.1	40.1	40.6	40.7	40.3	40.4	40.3	40.5	40.4	40.5	40.5	
Furniture and fixtures	40.3	40.2	40.3	40.1	40.3	40.2	40.2	40.7	40.6	41.0	41.2	41.3	41.5	
Stone, clay, and glass products	41.5	41.3	41.3	41.1	41.3	41.5	41.5	41.9	41.7	41.7	41.9	42.0	41.8	
Primary metal industries	41.1	41.0	40.6	40.6	40.2	40.8	40.9	41.8	41.7	42.3	42.5	42.5	42.3	
Fabricated metal products	41.6	41.4	41.2	41.3	41.5	41.5	41.4	42.2	42.1	42.3	42.4	42.7	42.4	
Machinery, except electrical	42.4	42.0	42.0	42.3	42.8	42.9	43.0	43.5	43.6	43.8	43.8	44.2	43.9	
Electrical equipment and supplies	40.2	40.4	40.0	39.9	39.6	40.0	40.7	40.7	40.6	40.9	41.0	41.2	41.2	
Transportation equipment	41.6	41.3	41.2	41.7	40.9	40.7	40.7	41.6	41.6	41.9	42.2	42.8	43.0	
Instruments and related products	41.5	40.9	41.0	41.1	41.5	41.5	40.9	41.8	41.9	41.9	42.0	42.1	41.9	
Miscellaneous manufacturing industries	39.2	39.1	39.4	39.5	39.7	39.2	38.7	40.0	39.7	39.9	40.0	39.9	40.0	
Nondurable goods	39.7	39.6	39.5	39.5	39.8	39.5	39.5	40.0	39.9	40.2	40.1	40.1	40.2	
Food and kindred products	40.9	40.6	41.0	40.6	40.8	41.1	41.0	41.1	41.0	41.1	41.1	41.1	41.1	
Tobacco manufactures	38.7	38.3	39.0	38.3	39.4	38.2	38.2	38.7	39.0	38.5	38.0	38.6	38.0	
Textile mill products	40.9	40.6	40.4	40.5	40.8	40.2	40.2	40.9	40.9	41.2	41.4	42.0	42.0	
Apparel and other textile products	35.7	35.8	35.7	35.9	36.2	35.5	35.6	36.6	36.4	36.5	36.6	35.9	36.5	
Paper and allied products	42.8	42.7	42.6	42.5	42.5	42.8	42.8	43.2	43.1	43.3	43.2	43.4	43.3	
Printing and publishing	38.3	38.4	38.3	38.3	38.6	38.5	38.6	38.8	38.6	39.0	39.0	38.9	38.8	
Chemicals and allied products	41.5	41.5	41.3	41.2	41.5	41.6	41.4	41.8	41.9	42.1	42.1	42.1	42.0	
Petroleum and coal products	42.4	42.8	42.6	42.6	42.6	43.0	42.6	42.0	42.4	42.5	42.4	42.0	42.0	
Rubber and plastics products, nec.	41.1	40.5	41.2	40.9	41.1	41.0	40.9	41.5	41.4	41.9	42.0	41.9	41.8	
Leather and leather products	38.6	38.5	37.9	37.7	37.7	37.0	37.1	38.3	38.0	38.6	38.5	38.3	38.7	
Wholesale and retail trade	36.8	36.7	36.7	36.3	36.4	36.6	36.6	36.8	36.7	36.9	36.9	37.1	37.2	
Wholesale trade	40.5	40.4	40.5	40.3	40.4	40.5	40.5	40.7	40.6	40.6	40.7	40.7	40.8	
Retail trade	35.7	35.5	35.4	35.2	35.1	35.3	35.3	35.5	35.6	35.6	35.7	35.9	36.1	

¹ For employees covered, see footnote 1, table A-10.

² Preliminary.

NOTE: The seasonal adjustment method used is described in appendix A. *BLS Handbook of Methods for Surveys and Studies* (BLS Bulletin 1458, 1966).

TABLE C-4. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group¹

Major industry group	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Manufacturing.....	\$2.71	\$2.71	\$2.71	\$2.70	\$2.70	\$2.69	\$2.68	\$2.67	\$2.65	\$2.64	\$2.62	\$2.61	\$2.58	\$2.59	\$2.51
Durable goods.....	2.88	2.88	2.88	2.87	2.86	2.85	2.84	2.84	2.82	2.80	2.79	2.78	2.74	2.76	2.67
Ordnance and accessories.....	3.10	3.09	3.07	3.08	3.08	3.08	3.08	3.08	3.08	3.06	3.07	3.06	3.05	3.05	3.03
Lumber and wood products.....	2.30	2.29	2.25	2.24	2.21	2.21	2.21	2.18	2.18	2.19	2.20	2.20	2.18	2.15	2.07
Furniture and fixtures.....	2.24	2.23	2.24	2.22	2.21	2.19	2.19	2.18	2.16	2.15	2.14	2.13	2.11	2.11	2.03
Stone, clay, and glass products.....	2.69	2.68	2.68	2.67	2.66	2.66	2.65	2.65	2.64	2.64	2.62	2.61	2.59	2.59	2.49
Primary metal industries.....	3.22	3.20	3.19	3.18	3.18	3.16	3.16	3.15	3.15	3.16	3.15	3.15	3.13	3.13	3.04
Fabricated metal products.....	2.84	2.83	2.84	2.83	2.81	2.81	2.80	2.79	2.77	2.76	2.76	2.76	2.72	2.73	2.64
Machinery, except electrical.....	3.03	3.02	3.01	3.00	2.99	2.98	2.98	2.96	2.95	2.94	2.92	2.92	2.89	2.90	2.81
Electrical equipment and supplies.....	2.71	2.71	2.69	2.67	2.65	2.64	2.61	2.60	2.58	2.57	2.56	2.56	2.53	2.54	2.49
Transportation equipment.....	3.27	3.27	3.27	3.26	3.26	3.25	3.26	3.25	3.22	3.22	3.22	3.21	3.13	3.15	3.04
Instruments and related products.....	2.76	2.74	2.73	2.71	2.69	2.69	2.67	2.66	2.64	2.62	2.62	2.62	2.61	2.61	2.53
Miscellaneous manufacturing industries.....	2.28	2.27	2.26	2.26	2.27	2.26	2.26	2.25	2.21	2.17	2.14	2.14	2.12	2.14	2.07
Nondurable goods.....	2.47	2.47	2.46	2.46	2.46	2.45	2.44	2.42	2.40	2.39	2.37	2.37	2.34	2.35	2.27
Food and kindred products.....	2.50	2.51	2.52	2.53	2.51	2.50	2.48	2.45	2.42	2.40	2.39	2.39	2.37	2.40	2.33
Tobacco manufactures.....	2.34	2.32	2.32	2.31	2.30	2.25	2.17	2.12	2.08	2.05	2.04	2.04	2.12	2.15	2.06
Textile mill products.....	1.94	1.94	1.94	1.94	1.94	1.93	1.93	1.91	1.91	1.91	1.91	1.89	1.88	1.87	1.78
Apparel and other textile products.....	1.98	1.98	1.97	1.97	1.97	1.96	1.91	1.90	1.89	1.88	1.86	1.86	1.85	1.85	1.80
Paper and allied products.....	2.72	2.70	2.68	2.67	2.66	2.66	2.65	2.64	2.63	2.62	2.62	2.62	2.60	2.59	2.50
Printing and publishing.....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Chemicals and allied products.....	3.02	2.99	2.97	2.94	2.94	2.94	2.94	2.94	2.93	2.92	2.91	2.90	2.89	2.87	2.79
Petroleum and coal products.....	3.44	3.42	3.44	3.43	3.43	3.41	3.38	3.34	3.33	3.30	3.29	3.29	3.27	3.29	3.18
Rubber and plastics products, nec.....	2.52	2.52	2.52	2.61	2.60	2.59	2.59	2.57	2.56	2.56	2.56	2.56	2.53	2.54	2.49
Leather and leather products.....	2.00	2.02	2.02	2.02	2.02	2.01	1.98	1.95	1.93	1.93	1.91	1.91	1.88	1.89	1.84

¹ For comparability of data with those published in issues prior to October 1967, see footnote 1, table A-9. For employees covered, see footnote 1, table A-10. Average hourly earnings excluding overtime are derived by assuming that overtime hours are paid for at the rate of time and one-half.

² Preliminary.

³ Not available because average overtime rates are significantly above time and one-half. Inclusion of data for the group in the nondurable goods total has little effect.

TABLE C-5. Average weekly overtime hours of production workers in manufacturing, by industry¹

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Manufacturing.....	3.3	3.3	3.3	3.2	3.1	3.2	3.2	3.4	3.7	3.9	4.1	4.2	4.0	3.9	3.6
Durable goods.....	3.5	3.4	3.4	3.3	3.2	3.4	3.4	3.7	4.1	4.3	4.5	4.6	4.3	4.3	3.9
Nondurable goods.....	3.1	3.1	3.1	3.0	2.9	3.0	2.9	3.0	3.3	3.4	3.6	3.7	3.5	3.4	3.2
<i>Durable goods</i>															
Ordnance and accessories.....		3.8	3.2	3.4	3.2	3.4	3.6	4.0	4.3	4.2	4.1	4.2	4.1	3.9	3.0
Ammunition, except for small arms.....		3.7	2.9	3.1	2.7	3.2	3.4	3.3	3.4	3.4	3.3	3.5	3.5	3.2	3.1
Sighting and fire control equipment.....		4.1	3.5	3.9	4.9	4.3	4.6	4.5	3.0	3.9	2.2	3.4	3.0	3.4	1.6
Other ordnance and accessories.....		3.8	3.8	4.2	4.1	3.7	3.7	5.4	6.3	6.3	6.2	6.0	5.6	5.4	2.9
Lumber and wood products.....		3.7	3.6	3.5	3.6	3.3	3.2	3.3	3.4	3.4	3.9	4.0	4.1	4.0	3.8
Sawmills and planing mills.....		3.7	3.7	3.6	3.6	3.4	3.2	3.3	3.3	3.3	3.9	3.9	4.1	4.0	3.7
Millwork, plywood, & related products.....		3.6	3.4	3.3	3.4	3.2	3.1	3.0	3.2	3.3	3.7	3.8	3.9	3.9	4.0
Wooden containers.....		3.3	3.5	3.5	3.4	3.1	3.1	3.7	3.9	3.8	3.7	4.1	4.7	4.1	3.6
Miscellaneous wood products.....		3.6	3.6	3.8	3.5	3.4	3.3	3.5	3.5	3.8	4.0	4.2	4.1	3.9	3.6
Furniture and fixtures.....		2.6	2.9	2.4	2.5	2.6	2.7	2.8	3.8	3.9	4.3	4.3	4.2	3.8	3.6
Household furniture.....		2.2	2.5	2.1	2.2	2.4	2.4	2.6	3.6	3.7	4.1	4.0	3.9	3.6	3.6
Office furniture.....		4.6	3.2	3.1	3.4	3.3	4.2	4.4	5.1	4.9	4.9	4.9	5.2	4.7	3.6
Partitions and fixtures.....		3.3	4.0	3.3	2.9	2.9	3.2	2.7	3.6	3.5	4.7	5.5	5.4	4.2	3.7
Other furniture and fixtures.....		3.5	3.7	3.4	3.2	3.3	3.3	3.3	4.3	4.3	4.6	5.2	5.0	4.2	3.7
Stone, clay, and glass products.....		4.5	4.3	4.1	3.9	3.7	3.5	3.5	3.9	4.3	4.7	4.7	4.8	4.5	4.2
Flat glass.....		3.1	3.1	2.8	3.2	3.2	3.1	3.8	3.7	5.9	4.8	3.8	4.0	4.3	4.1
Glass and glassware, pressed or blown.....		4.5	4.3	4.4	3.7	4.0	3.7	3.6	4.1	4.2	4.1	4.1	4.2	4.2	4.0
Cement, hydraulic.....		2.6	2.4	2.2	2.5	2.2	2.0	2.3	2.3	3.0	2.8	3.0	3.0	2.8	2.2
Structural clay products.....		3.5	3.6	3.3	3.3	3.0	2.6	2.6	2.8	3.4	3.7	3.7	3.8	3.6	3.6
Pottery and related products.....		2.0	2.0	2.1	2.3	2.2	2.2	2.3	2.6	3.1	2.8	3.0	2.7	2.5	2.2
Concrete, gypsum, and plaster products.....		7.1	6.8	6.2	5.7	5.1	4.9	4.6	4.9	5.3	6.6	7.0	7.3	6.3	6.2
Other stone & nonmetallic mineral products.....		3.4	3.4	3.3	3.3	3.2	3.0	3.1	3.7	3.9	4.3	4.2	4.2	4.1	3.5
Primary metal industries.....		3.0	3.1	2.8	2.8	3.3	3.4	3.7	3.8	4.0	4.2	4.5	4.2	4.0	3.8
Blast furnace and basic steel products.....		2.1	1.9	1.8	1.8	2.3	2.2	2.4	2.1	2.4	2.8	3.3	3.0	2.7	2.8
Iron and steel foundries.....		3.8	4.6	3.7	3.8	4.0	4.4	4.9	5.4	5.4	5.4	5.3	5.1	5.3	5.5
Nonferrous metals.....		3.9	4.1	4.0	3.9	3.9	3.8	4.1	4.0	4.2	4.4	4.3	4.2	3.9	3.5
Nonferrous rolling and drawing.....		4.0	4.2	3.8	4.1	4.7	5.2	5.3	5.8	6.1	6.3	6.3	6.0	6.0	5.1
Nonferrous foundries.....		3.0	3.4	3.5	3.0	3.2	3.6	4.3	4.7	4.9	4.9	5.3	4.5	4.7	3.9
Miscellaneous primary metal products.....		4.1	4.5	3.8	4.2	5.2	5.3	5.4	5.6	6.5	6.5	6.5	6.5	5.9	5.2
Fabricated metal products.....		3.6	3.8	3.7	3.5	3.7	3.7	3.9	4.3	4.5	4.8	5.0	4.7	4.5	4.0
Metal cans.....		5.3	4.7	5.0	4.9	4.1	3.5	3.2	3.1	3.7	3.6	5.1	5.6	4.4	4.5
Cutlery, handtools, and hardware.....		2.5	2.7	2.8	2.8	3.1	3.1	3.2	3.4	3.5	3.6	3.8	3.5	3.5	3.4
Plumbing and heating, except electric.....		2.2	2.7	2.1	2.0	2.2	2.0	2.1	2.6	2.6	3.3	3.3	3.0	2.7	2.3
Fabricated structural metal products.....		3.5	3.7	3.6	3.4	3.5	3.6	3.8	4.5	4.4	4.5	4.7	4.4	4.1	3.6
Screw machine products, bolts, etc.....		4.6	5.0	4.9	5.0	5.9	6.5	6.7	7.1	7.2	7.1	7.3	6.6	6.9	5.4
Metal stampings.....		4.6	4.5	4.5	3.8	3.4	3.5	3.9	4.3	5.3	5.8	6.1	5.4	5.3	5.3
Metal services, nec.....		3.5	3.9	3.8	3.8	4.2	4.0	4.4	4.9	4.7	5.1	5.7	5.1	4.9	4.3
Miscellaneous fabricated wire products.....		3.1	3.4	3.2	3.2	3.6	3.6	3.9	4.0	4.5	4.5	4.5	4.4	4.3	3.8
Miscellaneous fabricated metal products.....		2.8	3.2	3.3	3.1	3.6	3.6	3.7	3.9	4.1	4.2	4.4	4.3	4.2	3.5
Machinery, except electrical.....		4.0	4.2	4.3	4.5	4.8	5.0	5.2	5.6	5.4	5.6	5.7	5.4	5.5	4.6
Engines and turbines.....		3.2	3.7	4.1	4.0	5.1	4.7	4.5	6.7	4.9	4.9	5.7	5.9	5.4	4.1
Farm machinery.....		2.2	2.6	3.1	3.4	4.1	4.5	4.2	3.6	3.1	3.7	4.0	3.4	3.8	2.9
Construction and related machinery.....		3.3	3.1	3.2	3.2	3.4	3.6	3.6	4.2	4.7	4.9	4.9	4.9	4.9	4.2
Metal working machinery.....		6.0	6.4	6.5	7.0	7.3	7.6	7.7	7.9	7.6	7.6	7.7	7.2	7.8	6.7
Special industry machinery.....		3.6	4.2	4.3	4.8	5.0	5.2	5.4	6.0	5.8	5.7	6.1	5.4	5.6	4.8
General industrial machinery.....		3.8	4.1	4.2	4.2	4.5	4.6	5.1	5.6	5.5	5.8	6.1	5.7	5.5	4.4
Office and computing machines.....		2.4	2.3	2.3	2.8	3.2	3.2	3.6	3.9	3.8	4.0	3.9	3.4	4.0	3.4
Service industry machines.....		3.2	3.1	3.1	2.5	3.0	2.9	2.5	3.4	3.6	3.5	3.3	3.8	3.4	2.9
Miscellaneous machinery, except electrical.....		5.2	5.5	5.3	5.3	5.5	6.0	6.4	6.4	6.5	6.6	6.6	6.3	6.3	5.4
Electrical equipment and supplies.....		2.4	2.4	2.2	2.1	2.4	2.5	2.8	3.3	3.3	3.5	3.7	3.3	3.3	2.8
Electrical test & distributing equipment.....			2.9	2.9	2.9	3.1	3.6	3.4	3.5	4.2	3.9	3.8	4.4	3.7	3.0
Electrical industrial apparatus.....			2.7	2.7	2.8	3.1	3.3	3.5	3.7	4.0	4.0	4.2	4.8	4.4	3.5
Household appliances.....			3.0	2.5	2.2	1.7	1.8	1.8	1.9	2.5	3.3	3.6	4.0	3.7	3.0
Electric lighting and wiring equipment.....			1.9	2.1	2.1	2.1	2.2	2.3	2.7	2.9	3.1	3.4	3.3	3.2	2.7
Radio and TV receiving equipment.....			1.7	1.6	1.0	.5	1.3	1.2	1.7	2.7	3.1	3.4	3.4	3.0	2.4
Communication equipment.....			2.7	2.7	2.6	2.5	2.9	3.1	3.2	3.7	3.3	3.4	3.6	2.9	2.7
Electronic components and accessories.....			1.9	1.9	1.7	1.7	1.9	2.3	2.6	2.9	2.7	2.9	2.7	3.0	2.4
Misc. electrical equipment & supplies.....			2.4	2.3	1.9	1.8	2.2	2.0	3.0	3.8	4.1	3.8	3.5	3.1	3.2
Transportation equipment.....			3.9	3.5	3.6	3.1	2.9	3.1	3.5	4.1	4.8	5.2	4.9	4.8	4.7
Motor vehicles and equipment.....			3.7	3.4	3.2	2.2	1.7	2.2	2.9	4.1	5.0	5.9	5.2	5.0	4.9
Aircraft and parts.....			4.5	3.8	4.2	4.2	4.4	4.4	4.5	5.1	4.9	5.1	5.2	5.0	3.3
Ship and boat building and repairing.....			3.4	3.4	3.5	3.6	3.6	3.2	3.9	4.2	3.9	4.5	3.7	3.8	4.0
Railroad equipment.....			2.0	2.2	2.3	2.1	2.3	3.6	3.7	3.7	3.4	3.2	2.9	3.4	2.6
Other transportation equipment.....			3.3	3.7	3.2	2.8	2.3	1.8	1.6	1.9	2.1	2.8	3.4	3.1	2.7
Instruments and related products.....			2.8	3.0	3.0	3.0	3.2	3.1	3.3	3.8	3.8	4.0	4.0	3.5	3.7
Engineering & scientific instruments.....			4.3	4.7	4.5	4.9	4.9	4.3	4.1	4.7	4.3	4.7	4.6	4.0	3.4
Mechanical measuring & control devices.....			2.3	2.4	2.7	2.3	2.9	2.6	3.4	4.1	4.1	4.4	4.4	3.8	4.1
Optical and ophthalmic goods.....			2.6	2.9	2.6	2.8	2.9	3.0	3.0	3.1	3.1	3.4	3.6	3.2	2.8
Ophthalmic goods.....			2.0	2.1	1.9	2.1	2.1	2.3	2.2	2.4	2.7	2.8	3.0	2.6	2.4
Medical instruments and supplies.....			2.4	2.4	2.4	2.3	2.2	2.3	2.2	2.6	2.8	2.8	2.9	2.7	2.1
Photographic equipment and supplies.....			3.6	3.5	3.4	3.7	4.0	4.1	4.0	4.4	4.5	5.1	5.1	4.1	4.6
Watches, clocks, and watchcases.....			1.7	1.8	1.6	1.6	2.3	2.2	2.5	2.8	2.8	2.9	2.8	2.6	2.7
Miscellaneous manufacturing industries.....			1.9	2.4	2.4	2.4	2.6	2.5	2.5	2.9	3.1	3.4	3.3	3.1	3.0
Jewelry, silverware, and plated ware.....			2.6	3.2	3.6	3.6	3.7	3.1	3.4	4.8	4.9	5.3	4.9	4.6	4.3
Toys and sporting goods.....			2.1	2.5	2.3	2.4	2.5	2.4	2.3	2.4	2.8	3.2	3.3	3.1	2.7
Pens, pencils, office and art supplies.....			1.5	1.7	2.0	1.9	2.3	2.2	2.2	3.1	3.2	2.8	2.7	2.4	2.5
Costume jewelry and notions.....			1.6	2.6	2.4	2.4	2.1	2.5	2.5	2.7					

TABLE C-5. Average weekly overtime hours of production workers in manufacturing, by industry¹—Continued

Industry	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
<i>Nondurable goods</i>															
Food and kindred products.....	4.4	4.2	3.1	3.6	3.6	3.6	3.6	3.8	4.0	4.0	4.2	4.4	4.0	4.0	3.8
Meat products.....	4.7	4.4	4.2	4.0	3.7	3.7	3.7	4.8	5.1	5.1	4.8	5.1	4.2	4.3	4.2
Dairy products.....	4.6	4.7	4.0	3.9	3.7	3.8	3.4	3.7	3.7	3.5	3.6	4.0	3.9	3.7	3.6
Canned, cured, and frozen foods.....	3.3	3.2	3.0	2.3	2.7	2.8	2.9	2.9	2.9	2.9	3.2	3.5	3.4	3.1	2.9
Grain mill products.....	7.5	6.1	6.0	5.7	6.0	5.8	7.0	6.7	6.6	7.8	8.5	7.1	6.8	6.6	6.6
Bakery products.....	3.9	3.8	3.8	3.0	3.1	3.2	2.9	3.1	3.3	3.6	3.8	3.8	3.8	3.5	3.3
Sugar.....	4.0	3.6	3.5	3.6	3.7	3.0	3.0	3.1	3.7	3.8	4.4	4.0	3.9	4.0	4.0
Confectionery and related products.....	2.9	2.8	2.7	2.2	2.8	3.1	2.6	3.2	3.2	3.1	3.1	3.1	2.9	2.7	2.4
Beverages.....	4.5	4.9	3.7	3.8	3.6	3.1	3.0	3.5	3.6	3.8	4.0	4.1	3.8	3.3	3.3
Misc. foods and kindred products.....	4.5	4.8	4.5	4.1	4.4	4.3	4.2	4.7	4.9	4.8	5.0	4.2	4.4	4.3	4.3
Tobacco manufacturers.....	1.5	2.2	1.7	1.8	1.3	.9	1.1	1.9	1.2	1.4	1.5	1.7	1.4	1.1	1.1
Cigarettes.....	2.3	3.3	2.2	2.5	1.8	1.0	1.1	2.2	1.2	1.7	1.8	2.2	1.7	.8	.8
Cigars.....	.4	1.1	1.1	.9	.9	.7	.6	1.0	1.2	1.1	.9	1.2	1.1	1.3	1.3
Textile mill products.....	3.2	3.5	3.5	3.4	3.3	3.3	3.5	3.8	4.2	4.2	4.2	4.4	4.5	4.4	4.2
Weaving mills, cotton.....	3.4	3.9	4.1	4.4	4.4	4.6	4.6	5.0	5.3	5.0	5.2	5.1	5.3	4.8	4.8
Weaving mills, synthetics.....	3.6	3.2	3.6	3.4	3.2	3.2	3.5	3.9	4.5	4.3	4.7	5.2	5.0	5.3	5.3
Weaving and finishing mills, wool.....	4.9	4.5	4.4	3.9	3.5	3.6	4.0	3.9	3.9	3.9	4.3	4.3	4.7	4.4	4.4
Narrow fabric mills.....	2.7	3.0	3.1	2.8	2.8	2.9	3.5	3.9	4.1	4.1	4.3	3.9	4.1	3.6	3.6
Knitting mills.....	2.3	2.3	2.1	1.9	1.9	1.8	1.8	1.9	2.3	2.5	2.7	3.1	2.5	2.5	2.5
Textile finishing, except wool.....	3.8	5.5	5.2	5.0	4.7	4.6	4.4	5.1	5.2	5.1	4.9	4.8	5.3	4.6	4.6
Floor covering mills.....	4.8	4.9	4.3	3.3	3.3	2.9	3.5	4.3	5.1	5.3	5.4	4.9	4.5	5.1	5.1
Yarn and thread mills.....	3.0	3.4	3.3	3.0	2.8	2.8	3.3	3.5	4.0	4.4	5.0	4.9	4.8	4.7	4.7
Miscellaneous textile goods.....	3.3	3.7	3.6	3.6	3.5	3.6	4.2	4.2	5.0	5.2	5.2	4.7	4.9	4.3	4.3
Apparel and other textile products.....	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.4	1.5	1.7	1.5	1.7	1.5	1.4	1.4
Men's and boys' suits and coats.....	.7	1.3	1.6	1.4	1.5	1.5	1.6	1.5	1.7	2.0	1.7	1.8	1.6	1.5	1.5
Men's and boys' furnishings.....	.9	1.0	.9	.9	.9	1.0	1.1	1.1	1.3	1.4	1.3	1.5	1.3	1.2	1.2
Women's and misses' outerwear.....	1.3	1.2	1.2	1.3	1.4	1.3	1.3	1.2	1.3	1.2	1.4	1.4	1.4	1.3	1.3
Women's and children's undergarments.....	1.3	1.1	1.0	1.1	1.2	1.1	1.2	1.1	1.3	1.9	2.2	1.9	1.9	1.6	1.4
Hats, caps, and millinery.....	1.5	1.0	.8	1.0	1.3	1.4	1.5	1.2	1.3	1.4	1.5	1.8	1.7	1.4	1.4
Children's outerwear.....	1.3	1.3	1.1	1.1	1.2	1.1	1.0	1.0	1.2	1.8	2.1	1.5	1.7	1.5	1.4
Fur goods and miscellaneous apparel.....	.9	1.1	1.1	1.1	1.1	1.1	1.5	1.5	2.2	2.5	3.1	2.4	2.5	2.1	2.1
Misc. fabricated textile products.....	1.6	1.7	1.8	1.5	1.7	1.5	1.5	2.0	2.5	3.1	2.4	2.5	2.1	2.1	2.1
Paper and allied products.....	5.2	4.9	4.6	4.6	4.8	4.8	5.0	5.2	5.5	5.7	5.9	5.6	5.5	5.1	5.1
Paper and pulp mills.....	6.6	5.9	5.8	5.8	6.0	6.1	6.0	6.1	6.3	6.6	6.5	6.4	6.3	6.0	6.0
Paperboard mills.....	7.2	7.1	6.1	6.6	6.9	6.8	7.0	7.0	7.5	7.2	7.4	7.4	7.1	7.0	7.0
Misc. converted paper products.....	3.7	3.5	3.3	3.2	3.6	3.7	3.9	3.9	4.3	4.3	4.5	4.3	4.1	3.5	3.5
Paperboard containers and boxes.....	4.3	4.2	3.8	3.7	3.8	3.8	4.0	4.6	5.0	5.5	5.7	5.1	4.9	4.5	4.5
Printing and publishing.....	3.0	3.0	3.1	3.2	3.4	3.0	3.1	3.7	3.6	3.9	4.0	3.7	3.5	3.1	3.1
Newspapers.....	2.4	2.9	3.0	2.6	2.6	2.1	2.0	3.4	3.2	3.2	3.1	2.7	2.8	2.4	2.4
Periodicals.....	4.4	3.3	3.0	3.5	3.8	3.4	3.7	3.4	4.5	5.8	5.9	4.6	4.2	3.8	3.8
Books.....	3.2	3.0	4.4	4.6	4.9	4.3	4.5	4.4	4.1	4.8	5.2	5.4	4.9	4.2	4.2
Commercial printing.....	3.4	3.2	3.1	3.4	3.8	3.4	3.5	4.0	3.9	4.3	4.4	4.1	3.9	3.4	3.4
Blankbooks and bookbinding.....	1.8	2.1	2.7	2.5	2.5	2.3	2.8	2.7	2.7	3.2	3.3	3.2	2.9	2.5	2.5
Other publishing & printing ind.....	3.0	2.8	2.7	2.9	3.1	3.3	3.3	3.5	3.5	3.6	3.9	3.5	3.3	3.1	3.1
Chemicals and allied products.....	2.9	2.9	2.9	3.1	3.1	2.9	2.9	3.1	3.3	3.5	3.5	3.4	3.3	3.0	3.0
Industrial chemicals.....	3.2	3.0	2.9	3.0	3.1	2.9	3.2	3.3	3.7	3.7	3.5	3.4	3.4	3.0	3.0
Plastics materials and synthetics.....	2.7	2.8	2.6	2.3	2.4	2.3	2.3	2.9	2.9	3.2	3.2	3.5	3.2	2.9	2.9
Drugs.....	2.0	2.1	2.4	2.6	2.6	2.9	3.2	3.1	2.8	2.9	3.1	2.6	2.8	2.6	2.6
Soap, cleaners, and toilet goods.....	3.1	2.7	2.7	2.5	2.9	2.9	2.7	2.8	3.6	3.9	3.9	3.8	3.3	2.5	2.5
Paints and allied products.....	2.9	3.2	3.1	2.4	2.5	2.1	2.1	2.4	2.7	2.9	3.4	3.3	3.0	2.7	2.7
Agricultural chemicals.....	3.7	3.6	4.8	8.2	6.6	4.8	4.6	4.2	3.9	4.6	4.2	3.7	5.2	4.9	4.9
Other chemicals products.....	2.9	3.4	2.8	3.2	3.0	3.0	2.8	3.3	3.4	3.7	3.9	3.3	3.3	3.0	3.0
Petroleum and coal products.....	4.1	3.7	3.5	3.5	3.1	3.0	2.7	3.0	3.3	3.3	3.7	3.0	3.2	2.8	2.8
Petroleum refining.....	3.2	2.8	2.9	3.0	2.8	2.8	2.5	2.6	2.9	2.3	2.6	2.2	2.5	2.1	2.1
Other petroleum and coal products.....	7.3	6.8	5.4	5.5	4.2	3.6	3.7	4.4	4.8	6.6	7.4	5.7	5.4	5.5	5.5
Rubber and plastics products, nec.....	3.2	3.9	3.5	3.2	3.4	3.4	3.9	4.2	4.5	4.7	4.8	4.3	4.4	4.1	4.1
Tires and inner tubes.....	4.2	6.7	6.6	4.3	4.2	4.2	6.1	6.6	6.4	6.4	6.1	5.7	6.2	6.1	6.1
Other rubber products.....	2.8	3.3	2.6	2.8	3.0	3.0	3.3	3.6	4.1	4.2	4.4	4.0	3.8	3.3	3.3
Miscellaneous plastics products.....	3.1	3.7	3.3	3.0	3.4	3.3	3.3	3.6	4.0	4.4	4.5	4.0	4.1	4.0	4.0
Leather and leather products.....	1.8	1.8	1.6	1.4	1.7	1.8	2.0	2.1	2.1	2.1	2.0	2.2	2.1	1.8	1.8
Leather tanning and finishing.....	2.9	3.8	3.8	3.5	3.1	3.2	3.0	3.7	3.5	3.6	3.4	3.3	3.5	3.3	3.3
Footwear, except rubber.....	1.6	1.5	1.3	1.2	1.5	1.7	2.0	1.9	1.6	1.6	1.7	2.0	1.9	1.6	1.6
Other leather products.....	1.9	1.9	1.5	1.4	1.7	1.6	1.7	2.1	2.8	2.8	2.5	2.5	2.3	2.0	2.0
Handbags and personal leather goods.....	1.8	1.6	1.4	1.3	1.7	1.7	1.6	1.7	2.9	2.8	2.2	2.7	2.2	2.2	2.2

¹ For comparability of data with those published in issues prior to October 1967, see footnote 1, table A-9. For employees covered, see footnote 1, table A-10.

These series cover premium overtime hours of production and related workers during the pay period which includes the 12th of the month. Overtime hours are those paid for at premium rates because (1) they exceeded

either the straight-time workday or workweek or (2) they occurred on week ends or holidays or outside regularly scheduled hours. Hours for which only shift differential, hazard, incentive, or other similar types of premiums were paid are excluded.

² Preliminary.

TABLE C-6. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities ¹

[1957-59=100]

Activity	1967								1966					Annual average	
	Aug. ²	July ²	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
Man-hours															
Total.....	116.4	113.8	114.8	111.7	110.5	110.2	109.4	112.3	116.2	117.6	120.1	120.7	120.2	115.9	109.3
Mining.....	81.9	84.5	83.0	80.0	79.2	77.1	76.7	79.1	81.4	81.1	83.6	84.2	86.0	82.2	83.0
Contract construction.....	129.4	127.8	120.2	110.4	104.7	97.1	92.5	99.1	107.4	111.9	124.3	126.8	131.9	114.7	110.5
Manufacturing.....	115.8	112.8	115.4	113.5	113.2	114.3	114.1	116.4	119.6	120.5	121.2	121.4	119.7	117.8	110.4
Durable goods.....	118.5	117.4	121.0	119.9	119.1	120.6	120.5	123.4	126.6	127.3	127.8	127.7	128.9	124.2	114.3
Ordnance and accessories.....	179.4	173.9	171.5	171.6	169.5	170.4	168.6	168.1	164.8	161.9	156.1	152.8	146.8	144.9	113.3
Lumber and wood products.....	97.0	95.7	97.1	91.6	90.8	90.1	88.4	89.4	90.7	93.3	96.3	98.5	102.3	97.4	97.0
Furniture and fixtures.....	124.4	117.0	120.5	117.3	117.7	120.1	121.1	123.1	130.6	131.3	132.4	131.6	133.2	127.7	119.5
Stone, clay, and glass products.....	110.5	109.5	109.6	106.0	104.5	102.5	100.1	103.0	106.9	110.1	112.2	114.1	116.1	111.2	108.3
Primary metal industries.....	105.2	107.7	110.2	109.1	108.7	111.3	112.5	116.0	115.4	116.5	117.0	119.6	119.1	116.9	113.3
Fabricated metal products.....	123.2	120.2	124.8	122.3	121.3	122.0	122.5	125.6	129.4	129.7	129.9	129.9	126.9	126.1	117.2
Machinery, except electrical.....	135.5	134.6	138.2	138.5	140.4	142.2	141.6	143.5	144.6	141.1	140.7	141.3	139.2	139.0	123.6
Electrical equipment and supplies.....	136.2	133.6	134.6	136.1	136.4	141.4	143.2	147.3	151.3	152.1	152.9	151.9	148.4	145.8	125.7
Transportation equipment.....	105.2	106.6	115.0	115.3	111.0	112.1	112.1	116.0	122.3	123.0	122.6	119.8	103.4	116.7	107.1
Instruments and related products.....	130.1	125.9	129.1	128.0	129.4	130.6	128.7	131.0	133.1	131.7	131.7	130.5	128.9	127.7	112.7
Misc. manufacturing industries.....	109.0	104.4	110.4	108.6	107.5	106.0	103.7	105.2	112.1	121.9	123.0	119.8	118.4	113.4	109.4
Nondurable goods.....	112.3	106.8	108.0	105.2	105.4	106.1	105.7	107.3	110.4	111.7	112.6	113.2	114.3	109.5	105.3
Food and kindred products.....	105.7	99.4	96.2	91.0	88.6	89.5	88.8	91.4	96.6	99.9	102.9	107.7	107.7	96.2	94.4
Tobacco manufactures.....	96.8	75.2	77.1	73.0	74.6	74.2	76.2	87.8	98.9	93.3	98.9	101.2	88.1	84.6	86.4
Textile mill products.....	102.7	98.4	102.2	100.0	99.5	99.9	99.4	101.3	103.9	105.4	106.3	107.0	108.4	106.0	102.0
Apparel and other textile products.....	117.9	111.3	116.2	115.3	114.7	116.6	117.1	116.9	118.6	120.5	121.6	118.1	122.8	118.7	115.1
Paper and allied products.....	119.5	116.9	118.0	113.1	112.7	114.0	112.9	114.1	116.9	117.8	116.6	116.9	117.7	115.0	109.6
Printing and publishing.....	119.3	118.0	118.6	118.0	118.5	119.3	117.4	117.2	119.9	118.6	118.7	118.3	117.4	115.8	110.0
Chemicals and allied products.....	118.0	117.4	117.4	116.7	118.7	116.6	115.2	115.5	117.1	117.5	117.0	117.4	118.1	115.9	110.2
Petroleum and coal products.....	86.6	87.4	85.7	83.1	82.3	79.5	78.6	77.5	80.1	81.7	81.9	83.8	83.7	81.0	78.7
Rubber and plastics products, nec.....	147.5	124.2	130.9	126.3	143.1	144.1	144.5	149.4	153.2	153.4	152.6	150.9	148.4	146.8	135.2
Leather and leather products.....	98.5	94.2	95.2	91.3	89.4	92.0	95.0	98.2	100.2	99.8	98.5	98.4	104.2	100.6	96.9
Payrolls															
Mining.....	106.3	109.4	106.2	101.8	101.0	97.7	97.1	100.4	102.6	101.6	104.7	105.0	105.8	100.8	97.1
Contract construction.....	187.5	184.5	171.1	157.3	147.9	137.2	131.3	141.0	151.7	157.0	174.3	178.3	181.9	157.6	144.6
Manufacturing.....	154.3	150.6	153.8	150.9	149.9	151.1	150.4	153.1	166.9	157.4	157.9	157.7	152.9	151.4	136.6

¹ For comparability of data with those published in issues prior to October 1967, see footnote 1, table A-9.

For mining and manufacturing, data refer to production and related

workers and for contract construction, to construction workers, as defined in footnote 1, table A-10.

² Preliminary.

D.—Consumer and Wholesale Prices

TABLE D-1. Consumer Price Index¹—U.S. city average for urban wage earners and clerical workers, all items, groups, subgroups, and special groups of items

[1957-59=100 unless otherwise specified]

Group	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
All items	116.9	116.5	116.0	115.6	115.3	115.0	114.8	114.7	114.7	114.6	114.5	114.1	113.8	113.1	109.9
All items (1947-49=100)	143.4	142.9	142.3	141.8	141.5	141.1	140.9	140.7	140.7	140.6	140.5	140.0	139.6	138.8	134.8
Food	116.6	116.0	115.1	113.9	113.7	114.2	114.2	114.7	114.8	114.8	115.6	115.6	115.8	114.2	108.8
Food at home	113.9	113.3	112.3	110.9	110.8	111.5	111.7	112.3	112.6	112.8	113.8	114.0	114.4	112.6	107.2
Cereals and bakery products	118.4	118.2	118.3	118.8	118.5	118.6	118.5	118.8	118.8	118.6	118.3	118.4	117.3	115.8	111.2
Meats, poultry, and fish	113.1	112.3	111.6	108.5	109.0	110.0	110.7	110.3	110.9	111.8	113.8	114.8	114.5	114.1	105.1
Dairy products	116.6	116.4	116.3	115.9	115.7	115.7	116.1	116.4	116.5	116.7	117.1	116.0	114.8	111.8	105.0
Fruits and vegetables	122.7	124.4	119.9	116.4	114.2	115.2	114.2	115.3	114.3	114.9	115.3	116.6	122.3	117.6	115.2
Other foods at home ²	102.6	100.2	100.0	100.7	101.4	102.3	102.5	104.9	105.7	104.8	106.0	105.3	104.9	103.9	101.8
Food away from home	130.3	129.7	129.1	128.7	128.3	127.7	127.4	127.0	126.3	125.7	125.2	124.6	124.0	123.2	117.8
Housing	114.7	³ 114.3	114.1	113.9	113.6	113.3	113.3	113.1	113.0	112.6	112.2	111.8	111.5	111.1	108.5
Shelter ⁴	118.4	³ 117.9	117.7	117.5	116.9	116.6	116.6	116.4	115.8	115.5	115.0	114.6	114.1	110.6	110.6
Rent	112.6	112.4	112.2	112.1	111.9	111.8	111.7	111.4	111.3	111.2	111.0	110.7	110.6	110.4	108.9
Homeownership ⁵	120.8	³ 120.2	119.9	119.7	119.0	118.6	118.9	118.7	118.6	117.8	117.4	116.8	116.4	115.7	111.4
Fuel and utilities ⁶	109.1	108.9	108.6	108.7	108.8	108.7	108.7	108.6	108.4	108.3	108.1	108.0	107.9	107.7	107.2
Fuel oil and coal ⁷	111.7	111.4	110.5	110.8	111.0	111.1	111.1	110.5	110.2	108.9	108.3	107.4	107.0	108.3	105.6
Gas and electricity	108.5	108.3	108.2	108.3	108.4	108.3	108.3	108.3	107.9	108.1	108.0	108.1	108.1	108.1	107.8
Household furnishings and operation ⁸	108.3	108.2	108.1	107.9	107.7	107.3	107.0	106.7	106.7	106.5	106.1	105.7	105.2	105.0	103.1
Apparel and upkeep ⁹	113.8	113.7	113.9	113.8	113.0	112.6	111.9	111.3	112.3	112.0	111.5	110.7	109.2	109.6	106.8
Men's and boys'	114.5	113.9	114.1	114.0	113.5	112.7	111.8	111.6	112.6	112.4	111.5	111.2	109.9	110.3	107.4
Women's and girls'	108.8	109.2	109.7	109.6	108.8	108.2	107.3	106.4	108.1	107.8	107.5	106.3	103.8	105.1	103.1
Footwear	126.0	125.4	125.4	125.2	124.9	124.2	123.4	122.9	122.9	122.8	122.2	121.3	120.4	119.6	112.9
Transportation	116.4	116.2	115.7	115.5	115.1	114.2	113.8	113.4	113.8	114.5	114.3	113.3	113.5	112.7	111.1
Private	114.4	114.1	113.7	113.6	113.2	112.2	111.8	111.4	111.7	112.6	112.3	111.3	111.6	111.0	109.7
Public	132.8	132.7	132.2	130.9	130.6	130.5	130.0	129.8	129.8	129.6	129.6	129.5	129.2	125.8	121.4
Health and recreation	124.2	123.6	123.2	122.8	122.6	122.2	121.8	121.4	121.0	120.8	120.4	119.9	119.5	119.0	115.6
Medical care	137.5	136.9	136.3	135.7	135.1	134.6	133.6	132.9	131.9	131.3	130.4	129.4	128.4	127.7	122.3
Personal care	116.1	115.5	115.3	115.0	114.9	114.4	114.1	113.8	113.7	113.4	113.3	113.0	112.7	112.2	109.9
Reading and recreation	120.0	119.8	119.7	119.6	119.4	118.9	118.6	118.5	118.4	118.3	118.0	117.5	117.4	117.1	115.2
Other goods and services ¹⁰	118.8	117.8	116.9	116.7	116.6	116.4	116.3	116.2	115.9	116.0	115.9	115.7	115.5	114.9	111.4
Special groups:															
All items less shelter	116.5	116.1	115.6	115.1	114.8	114.6	114.3	114.2	114.3	114.4	114.3	113.9	113.6	112.9	109.6
All items less food	117.1	116.8	116.5	116.3	115.9	115.4	115.2	114.8	114.9	114.8	114.4	113.8	113.4	113.0	110.4
All items less medical care	115.6	115.2	114.8	114.4	114.1	113.8	113.7	113.6	113.7	113.6	113.6	113.1	112.9	112.3	109.1
Commodities ¹¹	111.9	111.5	111.0	110.5	110.2	110.0	109.9	109.9	110.1	110.2	110.3	110.0	109.8	109.2	106.4
Nondurables ¹²	114.8	114.3	113.8	113.2	113.0	112.9	112.7	112.7	113.0	112.9	113.1	112.9	112.5	111.8	107.9
Durables ^{11 13}	104.7	104.4	104.1	103.9	103.4	102.9	102.8	102.7	103.1	103.5	102.7	102.7	102.0	102.7	102.6
Services ^{11 14 15}	128.2	³ 127.7	127.4	127.0	126.6	126.3	125.9	125.5	125.2	124.7	124.1	123.5	123.0	122.3	117.8
Commodities less food ¹¹	109.4	109.1	108.9	108.7	108.4	107.8	107.6	107.3	107.7	107.8	107.6	107.0	106.6	106.5	105.1
Nondurables less food	113.2	112.8	112.7	112.7	112.4	111.8	111.5	111.0	111.4	111.3	110.9	110.5	109.6	109.7	107.2
Apparel commodities	112.7	112.6	112.8	112.7	111.9	111.5	110.7	110.1	111.2	110.9	110.4	109.7	107.9	108.5	105.8
Apparel commodities less footwear	110.0	110.0	110.3	110.2	109.4	109.0	108.2	107.6	108.8	108.6	108.1	107.4	105.5	106.3	104.4
Nondurables less food and apparel	113.4	113.0	112.7	112.6	112.7	112.0	111.9	111.6	111.6	111.5	111.2	111.0	110.5	110.3	108.0
New cars	96.9	97.0	96.8	96.9	97.0	97.2	97.3	97.6	98.6	99.3	98.4	94.4	95.8	97.2	99.0
Used cars	125.2	124.8	122.4	121.4	118.8	115.9	114.0	113.0	114.2	119.3	120.8	120.1	122.1	117.8	120.8
Household durables ¹⁶	98.2	98.1	98.0	98.1	98.0	97.8	97.7	97.6	97.7	97.6	97.4	97.3	97.0	96.8	96.9
Housefurnishings	100.8	100.8	100.7	100.6	100.6	100.3	100.0	99.7	100.0	99.9	99.5	99.3	98.9	98.8	97.9
Services less rent ^{11 14}	131.7	³ 131.2	130.8	130.4	130.0	129.5	129.2	128.8	128.3	127.7	127.1	126.5	125.9	125.0	120.0
Household services less rent ¹¹	127.5	³ 127.0	126.7	126.5	126.0	125.6	125.5	125.1	124.9	124.2	123.5	123.0	122.4	121.5	117.0
Transportation services	128.8	128.3	128.1	127.7	127.6	127.4	127.2	126.9	126.5	126.1	125.9	125.5	125.3	124.3	119.3
Medical care services	146.7	146.0	145.2	144.4	143.6	142.9	141.6	140.6	139.4	138.6	137.4	136.2	134.7	133.9	127.1
Other services ^{11 17}	131.9	131.6	131.3	130.8	130.3	129.7	129.4	129.1	128.9	128.5	128.2	127.5	127.1	126.5	121.8

¹ The CPI measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Beginning January 1964, the index structure was revised to reflect buying patterns of wage earners and clerical workers in the 1960's. The indexes shown here are based on expenditures of all urban wage-earner and clerical-worker consumers, including single workers living alone, as well as families of two or more persons.

² Includes eggs, fats and oils, sugar and sweets, nonalcoholic beverages, and prepared and partially prepared foods.

³ Corrected index.

⁴ Also includes hotel and motel room rates not shown separately.

⁵ Includes home purchase, mortgage interest, taxes, insurance, and maintenance and repairs.

⁶ Also includes telephone, water, and sewerage service not shown separately.

⁷ Called "Solid and petroleum fuels" prior to 1964.

⁸ Includes housefurnishings and housekeeping supplies and services.

⁹ Includes dry cleaning and laundry of apparel, infants' wear, sewing materials, jewelry, and miscellaneous apparel, not shown separately.

¹⁰ Includes tobacco, alcoholic beverages, and funeral, legal, and bank service charges.

¹¹ Recalculated group—indexes prior to January 1964 have been recomputed.

¹² Includes foods, paint, furnace filters, shrubbery, fuel oil, coal, household textiles, housekeeping supplies, apparel, gasoline and motor oil, drugs and

pharmaceuticals, toilet goods, nondurable recreational goods, newspapers, magazines, books, tobacco, and alcoholic beverages.

¹³ Includes home purchase, which was classified under services prior to 1964, building materials, furniture and bedding, floor coverings, household appliances, dinnerware, tableware, cleaning equipment, power tools, lamps, venetian blinds, hardware, automobiles, tires, radios, television sets, tape recorders, durable toys, and sports equipment.

¹⁴ Excludes home purchase costs which were classified under this heading prior to 1964.

¹⁵ Includes rent, mortgage interest, taxes and insurance on real property, home maintenance and repair services, gas, electricity, telephone, water, sewerage service, household help, postage, laundry and dry cleaning, furniture and apparel repair and upkeep, moving, auto repairs, auto insurance, registration and license fees, parking and garage rent, local transit, taxicab, airplane, train, and bus fares, professional medical services, hospital services, health insurance, barber and beauty shop services, movies, fees for sports, television repairs, and funeral, bank, and legal services.

¹⁶ Called "Durables less cars" prior to 1964. Does not include auto parts, durable toys, and sports equipment.

¹⁷ Includes the services components of apparel, personal care, reading and recreation, and other goods and services. Not comparable with series published prior to 1964.

TABLE D-2. Consumer Price Index¹—U.S. city average for urban wage earners and clerical workers, selected groups, subgroups, and special groups of items, seasonally adjusted²

[1957-59=100 unless otherwise specified]

Group	1967								1966				
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.
Food.....	115.8	115.0	115.3	114.5	113.9	114.3	114.0	114.9	115.3	115.3	115.8	115.3	115.5
Food at home.....	112.9	112.0	112.6	111.5	110.9	111.6	111.4	112.5	113.1	113.4	114.0	113.7	113.9
Meats, poultry, and fish.....	112.1	112.2	113.1	110.3	110.0	110.4	110.4	110.4	111.3	111.5	112.8	112.4	112.9
Dairy products.....	116.6	117.0	117.4	116.6	116.3	115.6	115.9	115.8	115.9	116.1	116.5	115.8	114.9
Fruits and vegetables.....	120.6	116.0	115.1	113.5	112.1	114.7	114.4	118.5	117.6	119.6	120.9	121.0	121.4
Other foods at home.....	102.5	101.1	101.6	101.7	101.9	102.8	102.3	104.4	104.9	104.1	104.5	103.8	105.1
Fuel and utilities ³	109.5	109.3	108.8	108.8	108.7	108.4	108.7	108.2	108.0	108.1	108.0	108.2	108.4
Fuel oil and coal ⁴	113.9	113.7	112.4	112.4	110.3	109.4	108.9	108.3	108.3	108.3	108.5	108.8	109.2
Apparel and upkeep ⁵	114.3	114.2	113.9	113.7	113.1	112.9	112.3	111.9	111.7	111.3	110.8	110.5	109.6
Men's and boys'.....	115.0	114.4	114.2	114.0	113.6	113.2	112.2	111.9	111.9	111.7	111.1	111.0	110.2
Women's and girls'.....	109.6	109.7	109.8	109.6	108.7	108.6	107.9	107.5	107.1	107.5	106.3	105.8	104.5
Footwear.....	126.3	125.8	125.3	125.2	124.8	124.3	123.5	123.0	122.5	122.3	122.0	121.3	120.6
Transportation.....	116.3	116.0	115.9	115.6	115.3	114.5	114.3	113.2	113.3	114.0	114.1	113.5	113.5
Private.....	114.3	113.9	113.8	113.7	113.4	112.7	112.2	111.8	111.4	112.0	112.0	111.5	111.6
Special groups:													
Commodities ⁶	111.8	111.3	111.1	110.6	110.3	110.1	110.0	110.1	110.1	110.1	110.2	109.9	109.8
Nondurables.....	114.6	113.7	113.9	113.4	113.1	113.0	112.7	112.9	113.1	112.9	113.0	112.8	112.4
Durables ⁷	104.9	104.4	104.1	103.9	103.4	103.0	103.0	102.7	102.9	103.1	103.3	102.9	103.2
Commodities less food ⁶	109.6	109.2	108.9	108.8	108.4	108.0	107.9	107.4	107.4	107.4	107.3	107.0	106.9
Nondurables less food.....	113.4	113.0	112.8	112.8	112.5	112.0	111.8	111.1	111.1	111.0	110.6	110.3	109.8
Apparel commodities.....	113.2	113.2	112.9	112.6	112.1	111.9	111.3	110.8	110.5	110.0	109.5	109.5	108.4
Apparel commodities less footwear.....	110.6	110.6	110.4	110.2	109.6	109.4	108.9	108.4	108.0	107.6	107.2	107.1	106.0
New cars.....	98.2	98.0	97.2	97.1	96.8	97.1	96.9	96.9	97.5	97.7	97.9	96.2	97.1
Used cars.....	123.3	123.1	120.9	121.9	119.4	117.9	117.2	115.1	114.0	118.0	119.6	118.7	120.8
Housefurnishings.....	101.1	100.9	100.6	100.5	100.4	100.2	100.2	100.0	100.0	99.8	99.5	99.3	99.2

¹ See footnote 1, table D-1.² Beginning January 1966, seasonally adjusted national indexes were computed for selected groups, subgroups, and special groups where there is a significant seasonal pattern of price change. Previously published indexes for the year 1965 have been adjusted. No seasonally adjusted indexes will be shown for any of the individual metropolitan areas for which separate indexes are published. Previously, the Bureau of Labor Statistics has made available only seasonal factors, rather than seasonally adjusted indexes (e.g., Department of Labor Bulletin 1366, *Seasonal Factors, Consumer Price Index: Selected Series*). The factors currently used were derived by the BLSSeasonal Factor Method using data for 1956-66. These factors will be updated at the end of each calendar year. A detailed description of the BLS Seasonal Factor Method is provided in appendix A, *BLS Handbook of Methods for Surveys and Studies* (BLS Bulletin 1458, 1966).³ See footnote 5, table D-1.⁴ See footnote 6, table D-1.⁵ See footnote 8, table D-1.⁶ See footnote 10, table D-1.⁷ See footnote 12, table D-1.

TABLE D-3. Consumer Price Index—U.S. and selected areas for urban wage earners and clerical workers ¹

[1957-59=100 unless otherwise specified]

Area ²	1967								1966					Annual average		1947-49=100 ⁵
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965	Aug. 1967
All items																
U.S. city average ³	116.9	116.5	116.0	115.6	115.3	115.0	114.8	114.7	114.7	114.6	114.5	114.1	113.8	113.1	109.9	143.4
Atlanta, Ga.	(4)	(4)	114.8	(4)	(4)	114.0	(4)	(4)	113.3	(4)	(4)	112.8	(4)	111.5	108.1	(4)
Baltimore, Md.	(4)	(4)	115.7	(4)	(4)	114.8	(4)	(4)	114.5	(4)	(4)	114.3	(4)	113.4	109.6	(4)
Boston, Mass.	(4)	119.9	(4)	(4)	118.8	(4)	(4)	118.6	(4)	(4)	118.5	(4)	(4)	117.0	113.2	(4)
Buffalo, N.Y. (Nov. 1963=100)	110.4	(4)	(4)	109.5	(4)	(4)	108.5	(4)	108.0	(4)	(4)	107.7	(4)	107.0	103.5	-----
Chicago, Ill.—Northwestern Ind.	114.5	113.7	112.9	112.6	112.2	112.3	112.2	111.8	112.2	111.9	112.0	111.9	111.4	110.7	107.6	144.4
Cincinnati, Ohio-Kentucky	(4)	(4)	113.1	(4)	(4)	111.6	(4)	(4)	111.2	(4)	(4)	111.7	(4)	110.3	107.2	(4)
Cleveland, Ohio	113.2	(4)	(4)	111.8	(4)	(4)	111.5	(4)	110.9	(4)	(4)	110.2	(4)	109.7	106.9	140.6
Dallas, Tex. (Nov. 1963=100)	108.9	(4)	(4)	107.5	(4)	(4)	107.0	(4)	106.5	(4)	(4)	105.6	(4)	105.0	101.4	-----
Detroit, Mich.	115.3	115.0	114.7	114.5	114.6	114.3	113.5	113.3	112.7	112.6	112.1	111.9	111.1	111.1	106.4	142.2
Honolulu, Hawaii (Dec. 1963=100)	(4)	(4)	107.9	(4)	(4)	106.7	(4)	(4)	106.6	(4)	(4)	105.6	(4)	105.1	102.1	-----
Houston, Tex.	(4)	114.3	(4)	(4)	113.6	(4)	(4)	113.0	(4)	(4)	112.4	(4)	(4)	111.5	108.5	(4)
Kansas City, Mo.—Kansas	(4)	(4)	117.4	(4)	(4)	117.9	(4)	(4)	117.3	(4)	(4)	117.1	(4)	116.3	113.3	(4)
Los Angeles-Long Beach, Calif.	118.3	117.5	117.3	116.9	116.3	115.4	115.7	115.8	116.3	116.3	115.9	115.7	114.6	114.7	112.5	147.5
Milwaukee, Wis.	113.6	(4)	(4)	112.2	(4)	(4)	111.4	(4)	(4)	111.6	(4)	(4)	111.5	110.6	108.2	143.2
Minneapolis-St. Paul, Minn.	(4)	115.6	(4)	(4)	114.2	(4)	(4)	113.4	(4)	(4)	113.4	(4)	(4)	112.2	109.5	(4)
New York, N.Y.—Northeastern N.J.	119.4	119.1	118.7	118.4	118.2	118.2	118.0	117.5	117.6	117.7	117.8	117.3	116.7	116.0	112.2	143.9
Philadelphia, Pa.—N.J.	117.4	116.7	116.6	116.0	115.8	115.5	115.3	115.0	115.3	115.0	115.0	114.7	114.5	113.7	110.6	144.2
Pittsburgh, Pa.	(4)	115.0	(4)	(4)	114.2	(4)	(4)	114.0	(4)	(4)	114.1	(4)	(4)	113.0	110.2	(4)
Portland, Oreg.—Wash.	(4)	118.2	(4)	(4)	117.4	(4)	(4)	117.1	(4)	(4)	116.6	(4)	(4)	115.3	111.8	(4)
St. Louis, Mo.—Ill.	(4)	(4)	116.5	(4)	(4)	115.5	(4)	(4)	114.9	(4)	(4)	114.7	(4)	113.5	109.9	(4)
San Diego, Calif. (Feb. 1965=100)	105.9	(4)	(4)	104.1	(4)	(4)	103.7	(4)	(4)	103.5	(4)	(4)	102.0	102.1	100.1	-----
San Francisco-Oakland, Calif.	(4)	(4)	118.4	(4)	(4)	117.1	(4)	(4)	117.2	(4)	(4)	116.4	(4)	115.6	112.7	(4)
Scranton, Pa.	118.7	(4)	(4)	117.1	(4)	(4)	116.3	(4)	(4)	116.2	(4)	(4)	115.5	114.9	111.0	141.6
Seattle, Wash.	118.2	(4)	(4)	116.8	(4)	(4)	115.9	(4)	(4)	115.6	(4)	(4)	114.5	114.1	111.0	148.6
Washington, D.C.—Md.—Va.	117.3	(4)	(4)	115.7	(4)	(4)	115.1	(4)	(4)	114.6	(4)	(4)	114.0	113.3	109.6	141.2
Food																
U.S. city average ³	116.6	116.0	115.1	113.9	113.7	114.2	114.2	114.7	114.8	114.8	115.6	115.6	115.8	114.2	108.8	-----
Atlanta, Ga.	115.4	114.4	114.3	113.6	112.9	113.6	113.5	114.1	113.8	114.0	114.7	114.2	114.0	112.9	107.4	-----
Baltimore, Md.	118.3	117.6	115.5	114.9	114.8	114.9	115.2	115.3	116.0	115.9	116.7	117.9	117.4	115.9	109.3	-----
Boston, Mass.	121.1	120.1	119.0	118.3	117.7	118.4	118.2	119.0	118.8	118.5	119.3	119.3	118.9	117.0	112.5	-----
Buffalo, N.Y. (Nov. 1963=100)	111.3	111.1	110.6	108.9	108.9	109.4	109.3	109.7	109.3	109.7	109.9	109.9	110.5	108.8	104.1	-----
Chicago, Ill.—Northwestern Ind.	117.7	116.4	114.5	113.9	113.1	114.1	114.7	114.1	114.7	114.7	115.4	116.3	116.8	114.6	108.8	-----
Cincinnati, Ohio-Kentucky	114.4	115.2	113.7	111.9	111.3	111.4	111.2	111.5	111.7	112.4	113.6	113.4	113.9	111.8	106.2	-----
Cleveland, Ohio	113.0	112.2	111.5	109.9	109.6	110.3	110.0	110.9	111.5	111.8	112.1	112.4	113.1	110.9	104.8	-----
Dallas, Tex. (Nov. 1963=100)	110.8	110.2	109.4	108.4	107.9	108.9	109.8	110.5	110.9	111.0	111.0	111.1	111.6	110.0	103.9	-----
Detroit, Mich.	116.3	115.1	113.5	113.0	112.6	113.2	112.7	113.0	113.1	113.1	113.5	113.7	114.4	112.2	105.0	-----
Honolulu, Hawaii (Dec. 1963=100)	110.1	109.9	109.5	108.4	108.0	108.3	107.7	108.1	108.0	108.7	108.4	107.3	106.6	107.0	103.5	-----
Houston, Tex.	116.1	115.9	115.0	114.2	115.5	115.7	116.0	116.6	116.9	116.6	117.0	117.0	117.0	115.4	109.2	-----
Kansas City, Mo.—Kansas	119.1	118.4	117.8	116.1	116.0	116.6	117.2	118.0	117.8	117.5	118.7	119.0	118.1	117.2	111.3	-----
Los Angeles-Long Beach, Calif.	114.6	114.3	113.6	112.4	112.4	112.5	112.8	113.7	114.0	113.7	114.2	113.7	113.8	113.3	110.7	-----
Milwaukee, Wis.	116.5	(4)	(4)	113.5	(4)	(4)	112.8	(4)	(4)	114.3	(4)	(4)	116.2	114.0	107.7	-----
Minneapolis-St. Paul, Minn.	114.3	113.1	112.3	111.8	112.2	112.5	112.5	113.0	112.9	112.6	114.2	113.4	113.3	112.4	107.1	-----
New York, N.Y.—Northeastern N.J.	117.2	116.5	115.5	114.3	114.4	114.9	115.0	115.5	115.3	115.7	116.5	116.3	116.4	115.1	109.8	-----
Philadelphia, Pa.—N.J.	115.9	114.7	114.5	113.3	113.0	113.1	113.6	113.7	114.0	113.5	114.5	114.5	114.9	113.1	107.2	-----
Pittsburgh, Pa.	113.1	112.9	111.6	109.1	109.5	109.7	110.2	111.3	111.2	111.4	112.8	112.8	112.8	111.8	107.5	-----
Portland, Oreg.—Wash.	(4)	115.9	(4)	(4)	114.1	(4)	116.0	115.7	115.6	116.0	115.6	116.1	115.6	114.7	108.5	-----
St. Louis, Mo.—Ill.	120.0	119.9	118.8	117.4	117.2	118.1	118.5	119.3	119.2	118.6	119.7	119.4	119.8	117.8	111.5	-----
San Diego, Calif. (Feb. 1965=100)	109.1	(4)	(4)	106.2	(4)	(4)	105.9	(4)	(4)	106.6	(4)	(4)	106.8	106.5	102.7	-----
San Francisco-Oakland, Calif.	116.4	116.1	114.4	112.8	113.0	113.2	113.3	114.4	114.4	115.1	115.0	114.7	114.2	114.2	110.2	-----
Scranton, Pa.	116.0	(4)	(4)	112.0	(4)	(4)	112.1	112.6	113.1	113.2	113.8	113.7	113.7	112.8	107.7	-----
Seattle, Wash.	115.2	115.4	114.4	113.6	113.1	113.3	113.5	114.0	114.3	114.7	115.1	115.2	114.9	114.1	110.3	-----
Washington, D.C.—Md.—Va.	118.0	116.3	115.7	114.4	114.8	115.3	114.7	114.7	114.7	113.5	115.1	115.6	115.8	114.0	108.4	-----

¹ See footnote 1, table D-1. Indexes measure time-to-time changes in prices. They do not indicate whether it costs more to live in one area than in another.

² The areas listed include not only the central city but the entire urban portion of the Standard Metropolitan Statistical Area, as defined for the 1960 Census of Population; except that the Standard Consolidated Area is used for New York and Chicago.

³ A average of 56 "cities" (metropolitan areas and nonmetropolitan urban places) beginning January 1966.

⁴ All items indexes are computed monthly for 5 areas and once every months on a rotating cycle for other areas.

⁵ Corrected index.

⁶ Corrected index, All items, July (1947-49=100): Chicago, 143.4; Detroit, 141.8; Los Angeles, 146.5; Boston, 148.6; Minneapolis, 143.0; Portland, Oreg., 146.4.

TABLE D-4. Indexes of wholesale prices,¹ by group and subgroup of commodities[1957-59=100, unless otherwise specified]²

Commodity group	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
All commodities	106.1	106.5	106.3	105.8	105.3	105.7	106.0	106.2	105.9	105.9	106.2	106.8	106.8	105.9	102.5
Farm products and processed foods and feeds	105.2	107.3	106.8	105.0	103.4	104.6	105.7	107.0	106.7	107.1	108.8	111.5	111.3	108.9	102.1
Farm products	99.2	102.8	102.4	100.7	97.6	99.6	101.0	102.6	101.8	102.5	104.4	108.7	108.1	105.6	98.4
Fresh and dried fruits and vegetables	96.6	107.9	114.3	104.4	99.6	98.4	104.5	101.8	101.3	104.2	97.9	110.4	97.7	102.5	101.8
Grains	86.1	92.6	96.1	98.0	98.3	99.9	95.8	100.7	101.5	98.0	98.9	104.6	105.6	97.3	89.6
Livestock	106.3	107.4	104.9	102.6	94.0	97.4	99.5	101.4	97.9	98.4	106.5	109.2	112.0	110.0	100.5
Live poultry	77.3	91.9	85.7	85.6	89.0	90.8	97.1	88.1	77.2	85.1	83.1	87.5	89.8	91.4	87.2
Plant and animal fibers	71.4	70.9	70.9	69.9	69.9	70.3	70.2	70.8	71.0	70.9	71.4	71.7	72.3	82.3	91.1
Fluid milk	120.9	121.3	121.3	120.9	119.1	119.0	122.9	123.4	124.0	124.4	125.8	125.4	124.1	117.6	103.5
Eggs	82.1	86.0	76.0	74.5	77.0	90.8	84.0	100.0	109.0	121.8	114.7	128.0	108.6	107.9	93.5
Hay, hayseeds, and oilseeds	111.6	117.1	116.6	117.8	118.4	120.5	120.3	123.5	124.5	122.9	121.5	126.3	139.2	122.9	112.9
Other farm products	99.3	99.7	100.2	99.9	99.2	99.5	100.5	99.6	100.5	98.7	100.8	102.3	103.2	101.5	97.6
Processed foods and feeds	112.1	113.1	112.6	110.7	110.0	110.6	111.7	112.8	112.8	112.6	113.9	115.5	115.7	113.0	106.7
Cereal and bakery products	116.8	116.9	117.2	117.4	117.2	117.5	117.3	117.6	118.0	118.7	118.7	118.9	118.9	118.5	109.0
Meats, poultry, and fish	107.4	109.9	108.3	103.8	100.6	101.7	104.7	105.4	104.4	104.2	108.1	112.2	111.1	110.2	101.0
Dairy products	122.1	122.0	122.2	120.8	120.1	120.7	121.2	121.8	122.3	122.6	124.5	124.2	124.0	118.5	108.5
Processed fruits and vegetables	107.1	107.0	106.5	105.1	104.3	104.2	104.3	105.9	105.8	105.9	105.7	103.7	102.3	104.8	102.1
Sugar and confectionery	113.8	113.7	112.7	112.0	111.3	112.5	112.6	113.0	112.6	112.1	111.6	111.4	110.9	110.5	109.0
Beverages and beverage materials	106.6	106.4	106.3	106.0	105.9	105.6	105.9	105.8	105.8	105.6	105.6	105.6	106.4	105.8	105.7
Animal fats and oils	83.0	77.4	82.4	89.8	91.5	89.6	92.0	94.9	97.5	105.6	108.9	115.9	120.9	113.1	113.4
Crude vegetable oils	89.8	86.8	91.7	93.9	93.8	94.2	94.1	94.1	98.1	99.2	100.1	112.4	127.5	107.2	100.9
Refined vegetable oils	91.9	88.3	93.5	96.6	96.8	96.9	96.7	93.0	101.2	102.2	102.7	107.6	118.4	108.7	97.0
Vegetable oil end products	101.0	101.3	101.6	101.6	101.6	101.8	103.5	106.3	106.3	106.8	108.2	110.4	108.7	104.6	101.2
Miscellaneous processed foods	112.1	113.1	112.6	112.4	112.9	112.0	111.5	112.6	113.7	114.6	115.1	114.2	114.1	114.0	113.6
Manufactured animal feeds	119.6	123.2	122.4	118.7	122.9	124.8	125.9	132.1	132.0	128.4	128.1	132.3	133.6	126.6	116.3
All commodities except farm products	106.8	106.8	106.7	106.4	106.2	106.3	106.5	106.5	106.3	106.3	106.4	106.6	106.6	105.8	102.9
Industrial commodities	106.3	106.0	106.0	106.0	106.0	106.0	106.0	105.8	105.5	105.5	105.3	105.2	105.2	104.7	102.5
Textile products and apparel	101.7	101.5	101.6	101.6	101.8	101.8	102.0	102.0	101.8	102.1	102.2	102.2	102.2	102.4	101.8
Cotton products	98.8	98.9	99.7	100.3	100.8	101.3	101.8	102.5	102.7	103.0	103.3	103.1	103.3	103.2	100.2
Wool products	102.9	103.3	103.2	103.1	102.9	104.0	104.7	104.7	104.8	105.1	105.6	106.1	106.6	106.0	104.3
Manmade fiber textile products	85.9	85.5	85.8	86.3	86.8	86.9	87.1	87.1	86.9	87.7	88.1	88.6	89.6	89.5	95.0
Silk yarns	172.6	168.4	167.0	167.0	164.5	164.1	164.1	166.1	163.2	161.1	161.1	158.6	156.7	153.6	134.3
Apparel	107.3	107.1	106.7	106.3	106.2	106.0	105.9	105.7	105.4	105.5	105.3	105.1	105.2	105.0	103.7
Textile housefurnishings	105.3	105.3	105.3	105.5	105.5	105.1	105.3	105.3	105.3	105.3	105.3	105.1	104.3	104.4	103.1
Miscellaneous textile products	116.0	117.1	118.0	118.5	119.4	120.8	121.0	120.5	119.7	119.1	118.8	120.3	121.2	122.6	123.0
Hides, skins, leather, and related products	114.4	115.2	115.6	115.2	115.7	116.9	118.0	117.9	117.3	117.5	118.7	119.9	121.2	119.7	109.2
Hides and skins	86.8	93.4	95.8	87.2	88.3	98.9	107.8	110.1	109.2	114.3	120.8	134.2	141.2	140.8	111.2
Leather	109.2	109.5	110.2	110.9	112.9	114.6	116.3	116.9	116.2	114.1	117.5	121.8	124.9	121.1	108.1
Footwear	121.2	121.4	121.5	121.4	121.5	121.7	121.6	120.9	120.3	120.1	120.1	119.1	119.1	118.2	110.7
Other leather and related products	112.5	112.9	113.3	114.3	114.5	114.4	114.6	114.5	114.2	115.1	115.6	115.1	116.0	114.4	106.1
Fuels and related products, and power	104.7	103.9	104.0	104.4	103.3	103.7	103.4	102.6	102.4	102.7	102.6	102.2	102.0	101.3	98.9
Coal	103.0	103.0	102.4	102.6	102.7	102.2	102.3	102.3	102.4	101.9	100.6	99.6	98.5	98.6	96.5
Coke	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	109.8	107.3
Gas fuels (Jan. 1958=100)	132.0	131.8	134.3	135.0	134.8	134.6	134.5	134.6	132.0	130.6	130.7	129.2	128.9	129.3	124.1
Electric power (Jan. 1958=100)	100.5	100.6	100.5	100.6	100.6	100.6	100.6	100.6	100.8	100.3	100.2	100.3	100.3	100.3	100.8
Crude petroleum	99.0	98.4	98.3	98.3	98.3	98.3	98.2	98.2	98.1	98.1	98.1	97.7	97.7	97.5	96.8
Petroleum products, refined	104.6	103.3	103.1	103.7	101.7	102.4	101.9	100.3	100.2	101.3	101.3	101.0	100.7	99.5	95.9
Chemicals and allied products	98.0	98.3	98.5	98.8	98.8	98.5	98.5	98.4	98.2	98.0	97.9	98.0	97.9	97.8	97.4
Industrial chemicals	97.1	97.2	97.2	97.5	97.6	97.0	96.9	96.6	96.4	96.0	95.9	95.8	95.8	95.7	95.0
Prepared paint	108.8	108.8	108.8	108.8	108.8	108.8	108.7	108.7	108.5	107.8	107.3	106.8	106.8	106.8	105.4
Paint materials	90.7	90.9	91.0	91.0	91.2	90.8	90.8	90.6	90.6	90.4	90.2	90.3	90.5	90.1	89.8
Drugs and pharmaceuticals	93.6	94.1	94.1	94.1	94.0	94.4	94.2	94.7	94.7	95.0	95.0	94.8	94.7	94.5	94.4
Fats and oils, inedible	77.2	77.1	79.5	82.9	85.3	81.5	89.1	92.3	95.1	91.6	94.5	103.8	105.5	102.8	112.7
Agricultural chemicals and chemical products	101.8	103.5	105.1	105.2	105.2	105.9	105.4	104.2	103.1	103.3	102.8	102.2	101.9	102.8	101.8
Plastic resins and materials	89.5	90.0	90.3	90.7	90.4	90.3	90.5	90.3	90.2	90.2	89.9	89.1	89.1	88.4	
Other chemicals and allied products	108.7	108.7	108.5	108.7	108.6	107.8	107.6	107.4	107.0	106.9	106.9	106.8	106.8	106.6	105.3
Rubber and rubber products	97.8	95.8	95.8	95.8	95.9	95.9	95.8	95.6	95.0	95.0	94.6	94.7	95.1	94.8	92.9
Crude rubber	84.8	85.7	86.2	85.9	86.5	86.5	87.1	87.6	87.6	87.9	87.4	87.9	88.8	89.2	90.0
Tires and tubes	98.7	94.0	94.0	94.0	94.0	94.9	94.9	94.9	93.9	93.9	93.4	93.4	93.9	93.3	90.0
Miscellaneous rubber products	102.3	101.6	101.5	101.5	101.5	100.9	100.4	99.7	99.3	99.2	98.9	99.0	99.0	98.8	97.1
Lumber and wood products	106.0	105.3	104.7	104.2	104.1	103.6	103.6	102.6	102.5	103.0	104.8	105.9	106.2	105.6	101.1
Lumber	109.0	108.3	108.0	107.0	106.6	106.0	105.4	104.5	104.5	105.6	108.0	109.5	110.2	108.5	101.9
Millwork	112.6	112.1	111.7	111.7	111.6	111.2	111.1	110.3	110.3	110.3	110.8	110.9	110.9	110.0	107.7
Plywood	90.9	89.4	87.6	87.5	87.9	87.7	89.2	87.3	87.4	86.9	88.1	89.2	91.0	92.8	92.3
Other wood products (Dec. 1966=100)	101.6	102.0	102.0	102.0	102.0	102.0	102.0	102.0	100.0						

See footnotes at end of table.

TABLE D-4. Indexes of wholesale prices,¹ by group and subgroup of commodities—Continued[1957-59=100, unless otherwise specified]²

Commodity group	1967									1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965	
Industrial Commodities—Continued																
Pulp, paper, and allied products.....	104.0	104.1	103.9	103.9	103.9	103.6	103.3	103.1	103.0	103.0	103.1	103.1	103.2	102.6	99.9	
Pulp, paper, and products, excluding building paper and board.....	104.5	104.6	104.3	104.3	104.3	104.0	103.7	103.5	103.4	103.4	103.5	103.6	103.6	103.0	100.2	
Woodpulp.....	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.1	
Wastepaper.....	74.6	76.2	76.7	77.5	79.1	79.7	83.2	83.9	90.5	92.7	98.8	102.9	106.7	105.0	99.4	
Paper.....	110.9	110.9	109.6	109.5	109.3	108.5	108.5	108.5	108.5	108.5	108.4	108.4	108.4	107.3	104.1	
Paperboard.....	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.2	97.2	97.2	97.2	97.2	97.1	96.4	
Converted paper and paperboard products.....	104.6	104.7	104.9	104.9	104.9	104.7	104.0	103.7	103.2	103.1	103.0	103.0	102.8	102.3	99.3	
Building paper and board.....	91.3	91.5	91.5	91.7	92.2	92.3	92.4	92.4	92.7	93.1	93.0	92.7	92.8	92.6	92.7	
Metals and metal products.....	109.2	109.0	108.9	108.9	109.1	109.4	109.6	109.4	109.0	109.0	109.0	108.6	108.4	108.5	105.7	
Iron and steel.....	103.5	103.4	103.3	103.2	103.2	103.3	103.2	103.0	102.9	102.8	102.5	102.5	102.7	102.3	101.4	
Steel mill products.....	105.7	105.7	105.7	105.7	105.6	105.6	105.6	105.4	105.3	105.2	105.1	105.1	105.0	104.7	103.3	
Nonferrous metals.....	118.9	118.6	118.7	118.9	120.0	121.1	122.3	121.8	120.5	121.0	120.3	119.9	120.4	120.9	115.2	
Metal containers.....	111.7	111.7	111.7	111.7	111.5	111.5	111.5	111.5	111.5	110.2	110.2	110.1	110.1	110.1	107.6	
Hardware.....	115.2	113.8	113.0	112.9	112.8	112.4	112.0	111.9	111.9	111.5	110.9	110.3	110.1	109.6	106.0	
Plumbing fixtures and brass fittings.....	110.1	110.0	110.8	110.7	110.5	110.5	110.5	110.5	110.5	110.5	110.6	110.6	110.0	108.4	103.1	
Heating equipment.....	92.5	92.6	92.5	92.0	92.0	92.2	92.3	92.6	93.4	93.4	93.3	92.9	92.5	92.5	91.7	
Fabricated structural metal products.....	105.5	105.1	104.9	105.1	104.9	104.8	104.8	104.8	104.9	104.8	104.6	104.4	104.2	103.9	101.2	
Miscellaneous metal products.....	114.2	113.8	113.7	113.7	113.6	113.7	113.6	113.6	113.2	113.1	112.7	112.4	112.3	111.6	109.4	
Machinery and equipment.....	111.8	111.6	111.6	111.6	111.6	111.5	111.2	111.1	110.7	110.2	109.4	108.9	108.5	108.2	105.0	
Agricultural machinery and equipment.....	122.0	121.9	121.8	121.8	121.8	121.9	121.7	121.5	120.8	120.4	118.5	118.2	118.3	118.5	115.1	
Construction machinery and equipment.....	122.4	122.1	121.9	121.9	121.8	121.5	121.4	121.3	121.0	120.6	119.8	119.4	118.9	118.9	115.3	
Metalworking machinery and equipment.....	124.4	123.9	123.6	123.6	122.9	122.6	122.2	121.9	121.8	121.5	121.1	120.5	119.5	118.8	113.6	
General purpose machinery and equipment.....	113.6	113.2	113.1	113.2	113.0	113.0	113.0	112.8	112.4	112.2	111.8	111.1	110.6	109.7	105.1	
Special industry machinery and equipment (Jan. 1961=100).....	116.7	116.3	116.1	116.1	115.8	115.4	115.1	114.8	114.3	114.1	113.9	113.2	112.9	111.8	108.0	
Electrical machinery and equipment.....	101.6	101.7	101.8	101.9	102.3	102.2	101.8	101.9	101.5	100.7	99.5	99.2	99.1	99.0	96.8	
Miscellaneous machinery.....	109.4	109.1	109.1	108.9	108.8	108.8	108.7	108.5	108.1	107.8	107.4	106.8	106.6	106.5	105.2	
Furniture and household durables.....	101.0	100.9	100.8	100.8	100.6	100.6	100.4	100.4	100.4	100.3	99.9	99.2	99.1	99.1	98.0	
Household furniture.....	112.8	112.6	112.4	112.4	112.4	112.4	112.0	111.9	111.8	111.5	110.3	109.8	109.4	109.1	106.2	
Commercial furniture.....	111.9	111.9	111.9	111.9	109.3	109.3	109.3	108.7	108.7	108.0	107.3	106.0	105.8	105.7	103.7	
Floor coverings.....	92.6	92.9	93.1	93.1	93.1	93.8	93.9	94.1	96.2	96.6	96.6	96.6	96.6	97.0	97.7	
Household appliances.....	90.1	90.1	90.0	89.7	89.8	89.8	89.7	89.6	89.2	88.9	88.9	88.7	88.8	89.1	89.2	
Home electronic equipment.....	81.8	81.8	82.0	82.9	83.3	83.3	83.5	83.6	83.8	83.8	83.8	83.3	83.1	83.6	85.2	
Other household durable goods.....	117.9	116.6	115.9	115.8	115.7	115.2	114.8	114.8	114.0	113.8	113.6	112.6	112.1	111.6	108.9	
Nonmetallic mineral products.....	104.5	104.2	103.9	103.8	103.9	103.8	103.7	103.6	103.3	103.3	103.2	103.0	102.7	102.6	101.7	
Flat glass.....	106.9	104.5	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	102.1	100.6	99.7	100.7	100.9	
Concrete ingredients.....	106.0	106.0	105.9	105.9	106.0	105.8	105.6	105.8	104.3	104.2	104.3	103.9	103.8	103.9	103.2	
Concrete products.....	105.8	105.8	105.7	105.2	104.6	104.5	104.4	103.9	103.9	103.5	103.5	103.6	103.3	103.0	101.5	
Structural clay products excluding refractories.....	110.4	109.9	109.7	109.7	109.4	109.3	109.3	109.3	109.1	109.3	108.8	108.7	108.7	108.4	106.6	
Refractories.....	104.9	104.9	104.9	104.9	104.9	104.8	104.8	104.8	104.2	104.2	104.2	103.9	103.9	103.7	103.0	
Asphalt roofing.....	91.8	91.6	88.3	88.3	94.8	94.8	94.8	95.7	95.7	97.6	97.6	97.6	97.6	96.0	92.8	
Gypsum products.....	100.7	100.7	100.9	102.3	102.3	102.3	103.5	103.5	103.5	103.5	102.7	102.7	102.7	102.4	104.0	
Glass containers.....	101.1	101.1	101.0	101.0	101.0	101.0	101.0	101.0	101.1	101.1	101.1	99.2	99.2	99.9	98.1	
Other nonmetallic minerals.....	101.8	102.2	102.2	102.1	102.0	101.8	101.1	101.1	101.3	101.3	102.0	101.8	101.8	101.7	101.3	
Transportation equipment ³	101.3	101.3	101.4	101.6	101.6	101.6	101.6	101.6	101.7	101.7	101.7	100.1	100.5	100.8	100.7	
Motor vehicles and equipment.....	102.9	102.9	102.9	102.9	102.7	102.7	102.7	102.7	102.7	101.0	101.0	101.0	101.0	101.2	100.9	
Railroad equipment (Jan. 1961=100).....	110.0	109.7	109.6	108.0	108.0	107.7	108.0	107.9	107.5	107.4	107.2	107.1	107.1	106.8	104.8	
Miscellaneous products.....	105.8	105.6	105.3	105.3	105.2	104.0	105.3	105.2	104.8	104.8	105.0	104.8	104.9	104.1	102.7	
Toys, sporting goods, small arms, ammunition.....	114.8	114.8	114.8	110.3	110.3	110.3	110.3	110.3	110.3	110.2	110.3	110.3	110.3	109.6	106.2	
Tobacco products.....	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.5	99.1	
Notions.....	111.3	110.1	110.1	110.1	110.2	110.1	110.3	110.1	109.9	109.8	108.4	108.4	108.6	108.9	109.2	
Photographic equipment and supplies.....	108.5	108.3	108.0	107.4	107.4	107.3	107.2	107.2	106.1	106.0	105.6	105.5	105.5	105.3	103.8	
Other miscellaneous products.....																

¹ As of January 1967, the indexes incorporated a revised weighting structure reflecting 1963 values of shipments. Changes also were made in the classification structure, and titles and composition of some indexes were changed. Titles and indexes in this table conform with the revised classification structure, and may differ from data previously published. See *Wholesale Prices and Price Indexes*, January 1967 (final) and February 1967 (final) for a description of the changes.

² As of January 1962, the indexes were converted from the former base of 1947-49=100 to the new base of 1957-59=100. Technical details and earlier data on the 1957-59 base furnished upon request to the Bureau.

³ Not available.

NOTE: For a description of the general method of computing the monthly Wholesale Price Index, see *BLS Handbook of Methods for Surveys and Studies* (BLS Bulletin 1458, October 1966), Chapter 11.

TABLE D-5. Indexes of wholesale prices for special commodity groupings¹[1957-59=100, unless otherwise specified]²

Commodity group	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
All commodities—less farm products.....	106.8	106.8	106.7	106.4	106.2	106.3	106.5	106.5	106.3	106.3	106.4	106.6	106.6	105.8	102.9
All foods.....	108.8	110.7	110.3	107.8	106.4	107.3	108.5	109.5	109.8	110.6	111.3	114.0	112.4	110.7	104.5
Processed foods.....	111.1	112.0	111.4	109.6	108.2	108.8	109.9	110.6	110.6	110.7	112.4	113.8	113.8	111.5	105.1
Textile products, excluding hard and bast fiber products.....	95.6	95.5	95.9	96.3	96.7	97.0	97.3	97.5	97.5	98.0	98.4	98.6	99.0	98.5	99.1
Hosiery.....	91.6	91.3	91.3	91.7	91.6	91.6	91.6	91.4	91.4	91.4	91.4	91.2	91.2	92.0	93.5
Underwear and nightwear.....	109.7	109.7	109.7	108.7	108.4	107.7	107.5	107.5	107.1	107.1	106.8	106.8	106.8	106.8	104.6
Refined petroleum products.....	104.6	103.3	103.1	103.7	101.7	102.4	101.9	100.3	100.2	101.3	101.3	101.0	100.7	99.5	95.9
East Coast, refined.....	104.3	104.3	101.6	101.6	101.6	101.6	101.6	99.9	99.9	98.1	98.1	98.1	96.4	97.5	95.3
Mid-Continent, refined.....	103.0	103.0	103.0	103.0	103.0	103.0	100.9	98.7	97.9	99.5	98.6	100.2	100.2	98.6	97.6
Gulf Coast, refined.....	108.6	107.0	107.0	107.2	102.5	104.1	104.1	102.5	102.5	105.1	105.1	104.9	104.5	102.2	95.1
Pacific Coast, refined.....	92.2	92.2	92.1	95.6	95.6	95.6	95.6	94.8	94.8	94.4	96.4	90.4	90.4	90.7	90.6
Midwest, refined (Jan. 1961=100).....	98.8	95.2	95.2	95.2	94.0	94.7	93.4	92.7	92.7	92.7	92.0	93.3	93.3	92.7	91.7
Pharmaceutical preparations.....	95.6	96.1	96.1	96.2	95.9	96.4	96.3	96.9	97.1	97.5	97.3	97.2	97.0	96.8	96.5
Lumber and wood products excluding millwork and other wood products ³	105.1	104.1	103.4	102.6	102.5	101.9	102.0	100.7	100.8	101.6	103.7	105.1	105.8	105.1	99.8
Special metals and metal products ⁴	107.5	107.4	107.3	107.5	107.6	107.7	107.9	107.8	107.5	107.5	107.2	106.6	106.8	106.7	104.7
Machinery and motive products.....	108.5	108.4	108.4	108.5	108.5	108.4	108.3	108.2	108.0	107.7	107.1	106.3	106.2	106.0	103.7
Machinery and equipment, except electrical.....	118.2	117.8	117.6	117.6	117.3	117.2	117.0	116.8	116.4	116.1	115.5	114.9	114.5	114.0	110.1
Agricultural machinery, including tractors.....	123.9	123.9	123.8	123.7	123.7	123.8	123.7	123.4	122.7	122.4	120.2	119.9	120.0	120.3	116.6
Metalworking machinery.....	131.5	130.6	130.4	130.5	129.5	129.2	128.4	128.1	128.2	127.8	127.2	126.4	125.2	124.1	117.4
Total tractors.....	123.7	123.4	123.3	123.3	123.0	123.1	123.1	123.0	122.7	122.3	120.7	120.3	120.0	120.2	116.8
Industrial valves.....	121.9	121.8	121.5	122.7	122.7	122.7	122.7	122.4	122.1	121.9	121.0	118.8	118.4	116.3	105.7
Industrial fittings.....	101.5	102.6	102.6	102.6	101.7	101.7	101.7	101.7	99.1	99.1	100.5	100.5	99.1	95.9	90.8
Abrasive grinding wheels.....	94.6	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	93.9	94.2
Construction materials.....	105.3	104.9	104.6	104.4	104.7	104.5	104.4	104.1	104.0	104.0	104.3	104.3	104.5	103.9	100.8

¹ See footnote 1, table D-4.² See footnote 2, table D-4.³ Formerly titled "Lumber and wood products, excluding millwork."⁴ Metals and metal products, agricultural machinery and equipment, and motor vehicles and equipment.

TABLE D-6. Indexes of wholesale prices,¹ by stage of processing and durability of product[1957-59=100]²

Commodity group	1967								1966					Annual average	
	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	1966	1965
All commodities.....	106.1	106.5	106.3	105.8	105.3	105.7	106.0	106.2	105.9	105.9	106.2	106.8	106.8	105.9	102.5
<i>Stage of processing</i>															
Crude materials for further processing.....	99.5	101.7	101.4	100.6	98.0	99.7	100.8	101.9	100.8	101.1	103.6	106.1	107.4	105.3	98.9
Crude foodstuffs and feedstuffs.....	101.4	104.7	104.2	103.1	99.2	101.3	102.7	104.2	102.3	102.5	106.2	109.9	111.2	107.2	98.3
Crude nonfood materials except fuel.....	94.5	94.6	95.1	94.7	94.6	95.7	96.5	97.0	97.4	97.6	98.2	98.9	100.2	101.9	99.8
Crude nonfood materials, except fuel, for manufacturing.....	93.5	93.7	94.2	93.7	93.6	94.9	95.8	96.3	96.8	97.0	97.7	98.5	100.0	101.8	99.5
Crude nonfood materials, except fuel, for construction.....	106.0	105.9	105.7	105.7	105.6	105.0	104.7	104.7	104.3	104.3	104.3	103.9	103.8	103.9	103.2
Crude fuel.....	110.3	110.2	109.8	110.3	110.2	109.4	109.3	109.4	109.7	108.9	108.1	107.0	106.2	106.4	103.3
Crude fuel for manufacturing.....	110.0	109.9	109.5	110.1	109.9	109.3	109.2	109.3	109.6	108.9	108.1	107.0	106.2	106.3	103.2
Crude fuel for nonmanufacturing.....	110.8	110.7	110.3	110.7	110.6	109.6	109.6	109.7	109.9	109.1	108.3	107.2	106.4	106.6	103.5
Intermediate materials, supplies, and components.....	105.4	105.4	105.4	105.3	105.5	105.5	105.5	105.6	105.4	105.3	105.3	105.6	105.8	104.8	102.2
Intermediate materials and components for manufacturing.....	104.5	104.4	104.4	104.4	104.6	104.6	104.8	104.7	104.5	104.4	104.3	104.6	104.8	104.0	102.0
Intermediate materials for food manufacturing.....	109.9	110.2	110.2	109.1	108.1	108.7	109.0	110.1	110.9	111.2	111.6	113.6	114.8	111.3	106.6
Intermediate materials for nondurable manufacturing.....	98.4	98.4	98.6	98.9	99.1	99.1	99.3	99.3	99.2	99.2	99.5	99.8	100.1	99.5	98.7
Intermediate materials for durable manufacturing.....	107.7	107.5	107.4	107.4	107.7	107.7	107.9	107.6	107.1	107.0	106.8	106.8	106.9	106.6	104.6
Components for manufacturing.....	107.9	107.5	107.5	107.6	107.9	107.9	107.6	107.5	107.1	106.6	105.9	105.5	105.4	104.9	101.3
Materials and components for construction.....	105.5	105.2	104.9	104.8	104.9	104.8	104.7	104.4	104.3	104.3	104.5	104.6	104.6	104.1	101.4
Processed fuels and lubricants.....	102.4	102.1	102.7	103.2	102.5	102.7	102.5	102.3	101.9	102.5	102.6	102.2	102.1	101.4	99.5
Processed fuels and lubricants for manufacturing.....	102.8	102.9	103.5	103.7	103.6	103.7	103.7	103.6	103.2	103.4	103.5	103.1	103.1	102.5	101.0
Processed fuels and lubricants for nonmanufacturing.....	101.5	100.8	101.5	102.3	100.6	101.1	100.6	100.3	99.8	100.8	100.9	100.5	100.4	99.4	97.1
Containers.....	106.4	106.4	106.5	106.6	106.6	106.4	106.0	105.9	105.3	105.2	105.1	104.9	104.9	104.9	102.1
Supplies.....	110.8	111.5	111.3	110.4	111.4	111.8	111.6	112.9	112.6	111.6	111.5	112.8	113.3	110.7	106.0
Supplies for manufacturing.....	110.7	110.6	110.6	110.4	110.4	110.1	109.7	109.5	109.2	109.5	109.5	109.7	109.5	108.9	106.1
Supplies for nonmanufacturing.....	110.0	111.1	110.9	109.7	111.1	111.7	111.7	113.6	113.3	111.8	111.6	113.4	114.1	110.7	105.4
Manufactured animal feeds.....	112.2	115.9	115.2	111.6	115.9	117.8	118.8	124.9	124.8	121.2	120.9	125.0	126.3	119.5	109.7
Other supplies.....	105.4	105.3	105.3	105.2	105.2	105.3	104.8	104.5	104.2	104.0	103.9	104.3	104.6	103.4	100.9
Finished goods (goods to users, including raw foods and fuels).....	108.3	108.7	108.4	107.6	107.0	107.2	107.6	107.7	107.6	107.8	107.8	108.1	107.5	106.9	103.6
Consumer finished goods.....	107.2	107.7	107.4	106.4	105.7	106.0	106.5	106.6	106.6	107.0	107.2	107.8	107.1	106.4	102.8
Consumer foods.....	109.6	111.5	110.9	108.5	106.9	107.9	109.3	110.3	110.5	111.3	112.2	114.5	112.8	111.2	104.5
Consumer crude foods.....	98.3	104.6	104.4	99.9	97.8	100.5	103.1	106.0	108.0	112.7	108.1	116.6	105.3	106.5	100.2
Consumer processed foods.....	111.7	112.7	112.1	110.0	108.6	109.2	110.4	111.0	110.9	111.0	112.8	114.2	114.0	112.0	105.2
Consumer other nondurable goods.....	108.0	107.4	107.2	106.9	106.4	106.4	106.3	105.8	105.5	105.7	105.5	105.4	105.2	104.8	102.8
Consumer durable goods.....	101.2	101.1	101.0	101.3	101.3	101.3	101.3	101.3	101.3	101.2	100.9	100.0	100.1	100.2	99.6
Producer finished goods.....	111.4	111.2	111.2	111.1	110.8	110.7	110.6	110.5	110.2	109.8	109.1	108.4	108.3	108.0	105.4
Producer finished goods for manufacturing.....	115.8	115.4	115.3	115.2	114.7	114.5	114.3	114.0	113.7	113.4	112.7	112.0	111.7	111.3	108.0
Producer finished goods for nonmanufacturing.....	107.2	107.2	107.1	107.2	107.0	107.0	106.9	106.8	106.6	106.1	105.4	104.8	104.7	104.6	102.9
<i>Durability of product</i>															
Total durable goods.....	107.9	107.6	107.5	107.5	107.6	107.6	107.6	107.4	107.1	106.9	106.6	106.2	106.2	106.0	103.7
Total nondurable goods.....	104.8	105.6	105.4	104.6	103.7	104.2	104.7	105.2	104.9	105.1	105.8	107.1	107.0	105.6	101.5
Total manufactures.....	106.8	106.8	106.6	106.3	106.2	106.3	106.4	106.4	106.2	106.2	106.3	106.4	106.4	105.7	102.8
Durable manufactures.....	108.1	107.9	107.7	107.7	107.8	107.7	107.7	107.5	107.2	107.0	106.7	106.3	106.3	106.0	103.7
Nondurable manufactures.....	105.6	105.8	105.6	105.0	104.6	104.8	105.1	105.3	105.2	105.3	105.8	106.5	106.5	105.3	101.9
Total raw or slightly processed goods.....	102.3	104.5	104.4	103.1	101.0	102.5	103.6	104.7	104.0	104.7	106.0	108.4	108.2	106.5	100.7
Durable raw or slightly processed goods.....	100.3	99.4	99.6	99.9	99.2	102.0	103.4	104.1	103.9	106.3	105.6	104.4	105.0	109.0	104.7
Nondurable raw or slightly processed goods.....	102.4	104.8	104.7	103.3	101.1	102.4	103.6	104.7	104.1	104.6	106.0	108.7	108.4	106.4	100.5

¹ See footnote 1, table D-4.² See footnote 2, table D-4.NOTE: For description of the series by stage of processing, see *Wholesale Prices and Price Indexes, January 1967 (final) and February 1967 (final)*; and by durability of product and data beginning with 1947, see *Wholesale Prices and Price Indexes, 1967* (BLS Bulletin 1235, 1968).

E.—Work Stoppages

TABLE E-1. Work stoppages resulting from labor-management disputes ¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1945.....	4,750	-----	3,470,000	-----	38,000,000	0.47
1946.....	4,985	-----	4,600,000	-----	116,000,000	1.43
1947.....	3,693	-----	2,170,000	-----	34,600,000	.41
1948.....	3,419	-----	1,960,000	-----	34,100,000	.37
1949.....	3,606	-----	3,030,000	-----	50,500,000	.59
1950.....	4,843	-----	2,410,000	-----	38,800,000	.44
1951.....	4,737	-----	2,220,000	-----	22,900,000	.23
1952.....	5,117	-----	3,540,000	-----	59,100,000	.57
1953.....	5,091	-----	2,400,000	-----	28,300,000	.26
1954.....	3,468	-----	1,530,000	-----	22,600,000	.21
1955.....	4,320	-----	2,650,000	-----	28,200,000	.26
1956.....	3,825	-----	1,900,000	-----	33,100,000	.29
1957.....	3,673	-----	1,390,000	-----	18,500,000	.14
1958.....	3,694	-----	2,060,000	-----	23,900,000	.22
1959.....	3,708	-----	1,880,000	-----	69,000,000	.61
1960.....	3,333	-----	1,320,000	-----	19,100,000	.17
1961.....	3,367	-----	1,450,000	-----	16,300,000	.14
1962.....	3,614	-----	1,230,000	-----	18,600,000	.16
1963.....	3,362	-----	941,000	-----	16,100,000	.13
1964.....	3,655	-----	1,640,000	-----	22,900,000	.18
1965.....	3,963	-----	1,550,000	-----	23,300,000	.18
1966.....	4,405	-----	1,960,000	-----	25,400,000	.19
1965: January.....	244	404	98,800	183,000	1,740,000	.18
February.....	208	393	45,100	149,000	1,440,000	.15
March.....	329	511	150,000	274,000	1,770,000	.16
April.....	390	603	141,000	194,000	1,840,000	.17
May.....	450	669	127,000	201,000	1,850,000	.19
June.....	425	677	268,000	354,000	2,590,000	.23
July.....	416	702	156,000	334,000	3,670,000	.34
August.....	388	685	109,000	229,000	2,230,000	.20
September.....	345	631	155,000	250,000	2,110,000	.20
October.....	321	570	101,000	209,000	1,770,000	.16
November.....	289	505	140,000	192,000	1,380,000	.13
December.....	158	371	24,300	75,800	907,000	.08
1966: January.....	238	389	113,000	140,000	1,090,000	.10
February.....	252	421	101,000	138,000	928,000	.09
March.....	336	536	217,000	265,000	1,410,000	.12
April.....	403	614	227,000	392,000	2,600,000	.24
May.....	494	720	240,000	340,000	2,870,000	.26
June.....	499	759	161,000	265,000	2,220,000	.19
July.....	448	704	286,000	347,000	3,100,000	.29
August.....	442	718	117,000	310,000	3,370,000	.27
September.....	422	676	132,000	226,000	1,780,000	.16
October.....	410	651	191,000	255,000	2,190,000	.19
November.....	288	533	126,000	234,000	2,150,000	.19
December.....	173	389	49,000	158,000	1,670,000	.15
1967: January ²	275	440	98,000	190,000	1,270,000	.11
February ²	325	465	106,000	151,000	1,280,000	.12
March ²	430	575	141,000	202,000	1,490,000	.12
April ²	440	600	409,000	443,000	2,170,000	.20
May ²	535	695	255,000	402,000	3,900,000	.33
June ²	430	670	177,000	350,000	4,360,000	.36
July ²	375	630	804,000	1,010,000	4,710,000	.43

¹ The data include all known strikes or lockouts involving 6 workers or more and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made idle for as long as 1 shift in establishments directly involved in a stoppage. They do not measure the indirect

or secondary effect on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary.

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