

Monthly Labor Review

L.R. 61
9015.
MAY 1967 VOL. 90 NO.

5

Decentralization of Jobs

Full Employment and Education

Discharge of Garnisheed Workers

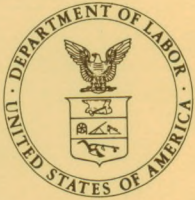
Developments in Productivity

MAY 29 1967

KALAMAZOO LIBRARY SYSTEM

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS



UNITED STATES DEPARTMENT OF LABOR

W. WILLARD WIRTZ, *Secretary*

BUREAU OF LABOR STATISTICS

ARTHUR M. ROSS, *Commissioner of Labor Statistics*

ROBERT J. MYERS, *Deputy Commissioner*

Regional Offices and Directors

NEW ENGLAND REGION

WENDELL D. MACDONALD
1603-A Federal Building
Government Center
Boston, Mass. 02203
Phone: 223-6727 (Area Code 617)
Connecticut New Hampshire
Maine Rhode Island
Massachusetts Vermont

MIDDLE ATLANTIC REGION

HERBERT BIENSTOCK
341 Ninth Avenue
New York, N.Y. 10001
Phone: 971-5401 (Area Code 212)
Delaware New York
Maryland Pennsylvania
New Jersey District of Columbia

SOUTHERN REGION

BRUNSWICK A. BAGDON
1371 Peachtree Street NE.
Atlanta, Ga. 30309
Phone: 526-5416 (Area Code 404)
Alabama North Carolina
Arkansas Oklahoma
Florida South Carolina
Georgia Tennessee
Louisiana Texas
Mississippi Virginia

NORTH CENTRAL REGION

ADOLPH O. BERGER
219 S. Dearborn Street
Chicago, Ill. 60604
Phone: 353-7226 (Area Code 312)
Illinois Missouri
Indiana Nebraska
Iowa North Dakota
Kansas South Dakota
Minnesota Wisconsin

EAST CENTRAL REGION

JOHN W. LEHMAN
1240 East 9th Street
Cleveland, Ohio 44199
Phone: 522-3842 (Area Code 216)
Kentucky Ohio
Michigan West Virginia

WESTERN REGION

MAX D. KOSSORIS
450 Golden Gate Avenue, Box 36017
San Francisco, Calif. 94102
Phone: 556-3178 (Area Code 415)
Alaska Nevada
Arizona New Mexico
California Oregon
Colorado Utah
Hawaii Washington
Idaho Wyoming
Montana

The *Monthly Labor Review* is for sale by the regional offices listed above and by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Subscription price per year—\$7.50 domestic; \$9.00 foreign. Single copy 75 cents. Correspondence regarding subscriptions should be addressed to the Superintendent of Documents.

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

LAWRENCE R. KLEIN, *Editor-in-Chief*

JACK F. STRICKLAND, *Executive Editor*

CONTENTS

Articles

- 1 How Garnisheed Workers Fare Under Arbitration
- 7 The Decentralization of Jobs
- 14 Seasonal Behavior of Components in the CPI
- 21 Full Employment and Workers' Education
- 26 Recent Developments in Productivity and Unit Labor Costs
- 30 Composition of Wages and Supplements: U.S.-Japan Comparisons
- Special Labor Force Reports
- 35 Low Earners and Their Incomes
- 41 Overtime Hours and Premium Pay
- 46 A Primer for a Theory of White-Collar Unionization

Departments

- II This Issue in Brief
- III The Labor Month in Review
- 50 Foreign Labor Briefs
- 52 Communications
- 54 Significant Decisions in Labor Cases
- 57 Chronology of Recent Labor Events
- 58 Major Collective Bargaining Agreements Expiring in May 1967
- 61 Developments in Industrial Relations
- 69 Book Reviews and Notes
- 76 Current Labor Statistics

May 1967 • Vol. 90 • No. 5

This Issue In Brief . . .

SEASONALLY ADJUSTED indexes for components of the Consumer Price Index were first published by the Bureau in 1966; these factors have now been updated. Variations in seasonal price movements and changes in the seasonal pattern over the past decade are discussed in *Seasonal Behavior of Components in the CPI* (p. 14). Indexes for food, apparel, and transportation are considered in detail.

THE NEED to draw upon less efficient reserve resources, a result of the sustained growth in output, dampened productivity growth in 1966. Productivity increased by 2.8 percent—less than both the postwar trend and the average for the most recent 5-year period. In *Recent Developments in Productivity and Unit Labor Costs* (p. 26), Jerome A. Mark and Martin Ziegler report also that unit labor costs in the private economy increased 3.7 percent in 1966—twice the average annual gain for the entire postwar period.

FIVE AND A HALF MILLION men and women earned less than \$2,500 from year-round full-time work in 1965—12 percent of the persons fully employed during the year. The incidence of low earnings was greater among women, the self-employed, and farm workers. Variations in the distribution of low earnings by residence, region, and color are discussed in *Low Earners and Their Incomes* (p. 35) by Vera Perrella.

THE PROBLEM of matching available jobs with available workers is intensified by the concentration of unemployment and poverty in the central city and the concentration of new jobs in the ring of the metropolitan areas. In *The Decentralization of Jobs* (p. 7), Dorothy K. Newman considers the role of transportation and other factors in the matching process and concludes that the commuter to the suburb experiences a greater burden in terms of both time and money than does the suburbanite who commutes to the city.

THE NUMBER of workers on long workweeks and the number receiving premium pay for extra hours both increased by 2 million between 1963 and 1966—to 17 million and 6½ million. In May 1966, about 27 percent of all nonfarm jobholders worked 41 hours or more, and 39 percent received premium pay for the extra hours. Although 43 percent of the farm workers reported extra hours, only 3 percent received premium pay. Differences in occupation and personal characteristics of the workers on extended workweeks are analyzed in *Overtime Hours and Premium Pay* (p. 41) by James R. Wetzel.

ECONOMIC EXPANSION could reduce unemployment by approximately the same degree at all levels of educational attainment, or it could cause significantly larger reductions at higher or lower levels. In *Full Employment and Workers' Education* (p. 21), Einar Hardin estimates the effect of an expansion in aggregate demand upon various portions of the labor force, grouped by years of educational attainment. He finds that "the disparities in unemployment rates among persons with unequal levels of education diminished as the national rate of unemployment declined."

As the traditional age and length of service differentials in the Japanese wage system diminish, the Japanese wage structure more closely approximates the American one. Many of the significant differences that remain are the result of variations in cultural and economic development. For example, the Japanese worker's wages are determined to a greater extent by his personal attributes and family requirements than by the work he performs. Janet L. Norwood's report on *Composition of Wages and Supplements: U.S.—Japan Comparisons* (p. 30) indicates that supplementary benefits are more varied in Japan than in the United States and that many plant employers provide meals, company stores, dormitory or housing space, and recreational and welfare facilities.

A NEW MONTHLY FEATURE is introduced in this issue. *Major Collective Bargaining Agreements Expiring In May 1967* (p. 58) lists almost all agreements covering 1,000 workers or more that are scheduled to expire during the month.

The Labor Month in Review

Organizing Gains Among Insurance Agents

BARGAINING UNITS were certified as a result of National Labor Relations Board elections for more than 9,000 white-collar employees in 1966, more than in any other year. For the first time, the Insurance Workers International Union was among the leaders in organizing. Only four unions participated in more white-collar elections than the IWIU did, and only one—the Teamsters—won more of them. The IWIU's sudden emergence as an organizing force was a direct result of the NLRB ruling on district office units in the *Metropolitan Insurance Co.* case in February 1966. Although affected by the nature of the insurance industry, the union's subsequent experience parallels that of other groups trying to organize white-collar workers, those employees considered to hold the key to organized labor's future growth.

Membership Growth. The IWIU is the result of a merger between an AFL and a CIO union, one of the first after the two federations united. For the present, the union's practical scope for organizing is 100,000 workers at most. This figure represents debit agents, who founded the union. Debit agents are those who sell industrial life insurance—policies issued in small amounts for which the premiums are collected weekly or monthly by the agent. They are the only workers the companies have agreed to recognize and bargain with except for a few office worker units.

Until the *Metropolitan* decision, the union's membership since the merger had remained steady at about 21,000. Membership gains were only enough to offset losses caused by employee turnover, which occurs mostly because agents, paid a

salary while they are being trained, often find they cannot sell enough insurance to match it when they are paid by commission later. In a recent interview, Charles G. Heisel, the union's secretary-treasurer, estimated that agent turnover costs the IWIU between 400 and 500 members each month. But in the year since the decision, net membership has grown about 10 percent to more than 23,000 by March.

Almost all of the membership increase was derived from an organizing drive begun as soon as Metropolitan agreed to recognize the district office unit for debit agents. Between April 1, 1966, and March 1, 1967, the union participated in 48 representation elections, more than had been held in the preceding 4 years. The union won all but four (two of these were ties). Almost all of the elections were at Metropolitan, where the union added 2,000 members in 1966—nearly doubling its 1965 membership and accounting for practically all the union's net growth. In fact, three-fourths of the companies that had IWIU members at the beginning of the year had fewer members at the end of 1966, according to a report prepared by the union for its officers.

The union's membership is overwhelmingly concentrated in the three largest firms: Prudential, Metropolitan, and John Hancock. At John Hancock, the contract includes a union shop, and of the 6,500 agents in the unit, all but 600 in right-to-work States are members. At the other two companies, where the contracts have no union security provisions, the union represents approximately twice as many agents as it has members. Despite membership growth, the union has ground to gain in these companies; for example, it represents only 8,000 of the 20,000 Metropolitan debit agents.

The Unit Issue. Even before the unit question arose, insurance agents had representation problems. As Harvey J. Clemont shows in his recent *Organizing the Insurance Workers: A History of Labor Unions of Insurance Employees*, the union has good reason for its claim to "the world's championship in labor litigation." There have been a number of cases, for instance, in which a company has claimed that its agents are independent contractors and insurance agents have had to convince the courts and labor agencies that they qualify as

employees under the relevant labor legislation. This issue has not yet been resolved.

Geographical dispersion has also impeded agent representation. Since 1944, the NLRB had required units to be State- or companywide. In *Quaker City* in 1961, the Board found that its 1944 decision had arrested "the organization of insurance agents to an extent" never contemplated, and ruled that district offices could be appropriate units.

Metropolitan received a similar ruling a year later after more legal steps, the company and the union agreed to bargain by region, although the union may represent more than one district. The company recognized the union in units where it won a majority, but only for debit agents. This made moot the case the company took to the Supreme Court. The union is still litigating the status of "insurance counselors," agents who sell insurance other than industrial policies.

According to its secretary-treasurer, the union sees little point in organizing a company until it is clear that the company will recognize the district office unit. In the absence of a Supreme Court decision, it appears that some companies are unwilling to accept the *Metropolitan* and *Quaker City* rulings as final, as witnessed by four Board rulings in February and by several cases still undecided.

Obstacles to Organizing. Establishing the district office unit frees attention for other obstacles. For one, debit agents are becoming fewer as more consumers become able to afford ordinary insurance. Some companies, including Metropolitan, have ceased writing the kind of insurance handled by debit agents.

The IWIU has few members among ordinary agents and office workers. Ordinary agents have different problems in their job, work more independently than debit agents do, and consider themselves in a different category—all of which makes organizing them difficult. The office workers have been hard to organize too, partly because about three-fourths are women. (Women office workers traditionally have been less receptive to unions than men.)

Turnover is high for all types of insurance employees, which means that the union must continually organize just to stand still. The union must thus spend an unusually high proportion of its re-

sources in constant reorganizing rather than in developing new territory.

Striking is generally ineffective for insurance agents, since policyholders continue to pay premiums to maintain their policies. The only way the union has found to bring economic pressure on the insurance companies is to continue to service existing policies (which also continues agents' income), but to refuse to write new ones. (This approach also required a court decision before the union could proceed.)

The IWIU is tailoring its program to overcome these three major obstacles. Its larger membership furnishes the union with more money for organizing. The IWIU is now concentrating on one company at a time (currently Metropolitan). Membership records are being analyzed to determine the incidence and location of turnover; characteristics of unorganized agents are also being studied to provide information for a more effective campaign. At Prudential, the union found that the majority of unorganized agents are not in outlying offices or States, as had been thought, but rather in the seven industrial States where membership is already concentrated.

Aside from their own efforts, the union's leaders see developments in insurance employment working in their favor. They attribute the increase in debit agent members to alterations the companies have made in working conditions, such as changing reporting procedures or inserting another level of supervision, and anticipate that similar changes—many of which may result from the trend toward amalgamation of insurance firms—will interest other agents in unionization.

Automation and its consequent dislocations, which have already increased the proportion of men in office work, may make workers more receptive. (This change in attitude has not taken place yet; the union tried to organize the 20,000 workers at Metropolitan's home office last spring, without success.)

Common Problems. Many elements of the insurance agents' situation apply to other unions organizing white-collar workers. Such factors as wariness about unions and the lack of interest among women have long been recognized as hindering white-collar unionization, and automation and the development of multicompany corporations are already being examined to see if they encourage it.

How Garnisheed Workers Fare Under Arbitration

ROBERT W. FISHER*

FIGHTING, DRUNKENNESS, OR THEFT while on company property, insubordination, absenteeism, or unsatisfactory work—all these affect the employment relationship sufficiently to be grounds for discharge. The ancient¹ practice of garnishment is sometimes grouped with them as another ground for discharge. There is, however, a question whether this classification is proper; discharging a worker for repeated garnishments against his wages is essentially punishment on the job for behavior off the job.

*Of the Division of Publications, Bureau of Labor Statistics.

¹The roots of the practice can be traced to Hebraic and Roman law in which the debtor's person and family as well as his property were forfeit.

²A study of garnishment, financed by the Office of Economic Opportunity, is being planned under the direction of Professors David Caplovitz and Barbara Rubin of Columbia University. The study is intended to provide a basis for reform of the system of consumer credit. It will deal with the incidence of lawsuits, problems of debtors and creditors, and costs to industry.

Except for treatment of garnishment problems in law journals, there is a dearth of scholarly studies of the problem. This is probably the result of diffuse statistics.

³This discussion is based upon an analysis of arbitration decisions reported in the Bureau of National Affairs' *Labor Arbitration Reports* from 1950 to 1966, and in the Commerce Clearing House's *Labor Arbitration Awards* from the first publication of this series in 1961 to 1966. Forty-eight cases decided primarily on the issue of garnishment were studied.

⁴*Black's Law Dictionary* (St. Paul, Minn., West Publishing Co., 1957, 4th ed.) defines these terms as follows:

Garnishment involves a writ warning a third party (garnishee) not to deliver money or property to the defendant but to appear and answer the plaintiff's suit. *Attachment* is the process of actually bringing the valuables under direct control of the legal authority until the suit is settled. Sometimes *garnishment* and *attachment* are used interchangeably. *Assignment* is the voluntary apportionment of pay to satisfy a claim. It is occasionally agreed to at the time of receiving credit as assurance that the credit will be repaid. *Execution* is generally considered the entire legal process from *garnishment* (warning) through *attachment* (seizure of the assets) to final settlement of the judgment. Often, only that portion of the process following judgment of the suit is referred to as *execution*.

Undoubtedly, garnishment actions affect the employment relationship to an extent. The employer may be harassed by creditors or served with a writ against wages. Unions do not accept discharge of workers for garnishments with equanimity primarily because such discharges smack of employer control of the employee's private life—the philosophical root of the questioning of discharges for garnishment.

An examination of the arbitration of garnishment discharges yields information on the extent to which garnishment has acquired equal footing with on-duty infractions as grounds for discharge. Such a study also permits an oblique look at garnishment—a phenomenon which is almost hidden because participants in the process do not talk about it and there is an absence of aggregate statistics and general studies.² This article seeks to reveal how just cause has been interpreted in published cases of discharge for garnishment.³

Basis of Discharge

Garnishment, attachment, assignment, execution—terms dealing with the seizure of assets to settle a claim—connote trouble for the employee and his employer.⁴ Paradoxically, garnishments may also recoil upon the creditor, because his legal action to recover a debt may cost the debtor the principal means of repayment—his job. In the published cases, arbitrators split about equally over the issue of discharge, half ordering reinstatement and half affirming discharges.

In these cases, arbitrators held in principle that an employer has just cause for discharging a worker who has repeated garnishments issued against him. They accepted the employers' position that retention of garnisheed workers was burdensome, subjecting them to hectoring and harassment by creditors, the necessity for special bookkeeping, and appearance in court; as well as the idea that a worker besieged by creditors may lose efficiency and become a hazard to fellow workers.

This viewpoint was clearly expressed in a 1960 case, in which the arbitrator sustained the grievance:

... among the reasons for any employer's rules against excessive attachments are his natural wish to avoid the time, inconvenience and expense of extra bookkeeping, extra accounting procedures, the neces-

sity to file written returns to the attaching officer, as well as the additional trust liability for the funds that he is required to hold and his statutory liability for any failure to hold and to pay according to the instructions of the attaching officer. . . . In addition to the foregoing employers may also entertain a desire to discourage employees from incurring irresponsible debts, on the theory that those who are free from worry of heavy debts may be more efficient and productive than those laboring under such concern. The reasons for a rule against excessive attachments thus are easily and generally accepted in the industrial community. . . .⁵

The determination that employers had the right to impose garnishment rules was not necessarily dependent on an explicit management's rights clause in the contract. In *Metropolis Metal Spinning and Stamping Company*, the arbitrator upheld the employer's right to impose the rule despite the absence of a residual rights clause, and union rejection of the rule in proposal form. The arbitrator found for the employer because the rule was reasonable in the face of excessive garnishments of workers, the union had not objected to similar work rules, and it was proper to warn employees of penalties prior to disciplinary action.⁶

Explicit opposition to the principle of establishing garnishment as grounds for discharge occurred in *United States Pipe and Foundry Co.*⁷ The union charged that the garnishment rule was "harsh, unfair, and medieval," a "debtor's prison rule." Another explicit statement of opposition occurred in *Brinks, Inc.*:⁸

The basic contention of the Union is that garnishment proceedings or the personal financial problems of an employee are not proper grounds for discipline or discharge. The Union maintains that the personal financial problems or arrangements of employees are essentially not relevant to the employment relationship.

But the arbitrator affirmed the employer's right to impose the rule:

Garnishments are not uncommonly a basis for disciplinary action by employers who have unwillingly been made a party to the personal financial obligations of employees. Some employers object to garnishments as incidents of petty expense and annoyance, necessitating special bookkeeping and the appearance of company representatives in court.

Although the arbitrator reduced discharge to suspension in this case, his affirmation of the right of management to impose reasonable garnishment rules was the important finding.

The arbitrators all found that management had the right to discipline garnisheed workers, but not all of them appeared satisfied with the situation. In *D. M. Watkins Co.*, the arbitrator stated that "discharge should be used only when employee behavior affected the employer-employee relationship" and that "pay attachments were definitely in the twilight zone." He wrote that:

It is incongruous to have a civil law which allows creditors (many of whom lure purchasers by promises of roseate liberality) to pursue the debtor directly to his pay envelope and . . . to have a unilateral industrial law which can wipe out the pay envelope when it is pursued. . . . This is a highly unconstructive and inhuman procedure and ignores completely the circumstances which gave rise to the debt or the circumstances which made payments impossible.⁹

Since the employer's right to impose a garnishment rule was not successfully challenged in any of the cases, discharges for garnishment were treated much like discharges for on-duty offenses. Indeed, the measuring stick in the published garnishment cases was derived from the general principles which arbitrators have evolved to determine just cause in any discharge case.¹⁰ In the garnishment cases, the issues revolved around the rule, the discharge, and the worker's conduct. The rule—was it reasonable and well-known to the workers? The discharge—was it nondiscriminatory? The worker—were there any extenuating circumstances?

⁵ *American Brass Co.* 35 LA 139, 1960 (BNA).

⁶ 28 LA 328, 1956 (BNA). This case is not counted among the 48 studied because it concerned a garnishment rule rather than a garnishment discharge.

⁷ 46 LA 822, 1966 (BNA).

⁸ 21 LA 4, 1953 (BNA).

⁹ 14 LA 787, 1950 (BNA).

¹⁰ For a compact discussion of arbitrators' approach to industrial discipline, see Arthur M. Ross, *The Arbitration of Discharge Cases: What Happens After Reinstatement* (Berkeley, University of California, 1957) [Reprinted from *Critical Issues in Labor Arbitration* (Washington, D.C., BNA, 1957)] pp. 24-27. See also "Arbitration of Discharges and the Reinstated Worker," *Monthly Labor Review*, June 1957, pp. 677-688. For recent discussions of the problem, see "Discharge in the 'Law' of Arbitration," *Vanderbilt Law Review*, December 1966, pp. 83 ff., and *Electric Hose and Rubber Co.*, 47 LA 1104, 1967 (BNA).

Since the requirements that arbitrators have developed for determining just cause in garnishment discharge cases will probably influence future cases, the balance of this article will attempt to establish what those specific positions are as revealed in the published case.¹¹

Reasonable Rules

Arbitrators weighed the reasonableness of garnishment work rules which had been imposed unilaterally by management, not the garnishment clauses embedded in contracts or arrived at by employer-union consultation. In the handful of cases where the union had agreed to a contractual clause, consideration of the reasonableness of the rule was foreclosed. The arbitrator's scope was limited to procedural matters (dissemination of rule, equal treatment), and personal circumstances.

Uniformly, arbitrators translated "reasonable" to mean rules which permitted more than one garnishment before discharge. Such rules were deemed reasonable because they permitted warning the employee that future garnishment would lead to more stringent discipline, including discharge.

Firing workers for a first infraction was not generally supported in reported arbitration cases. Workers were often given a second or even third chance to amend their behavior before "industrial capital punishment" was invoked. For this reason, one-garnishment rules (no garnishments permitted) were not looked on with favor.¹² Only one arbitrator actually struck down this type of rule in the published cases however; he found it "unjust, unreasonable" and therefore "invalid."¹³

¹¹ For a discussion of the controversial issue of precedential value of awards, see Frank Elkouri, *How Arbitration Works* (Washington, BNA, 1952), pp. 186-201.

¹² The usual nomenclature of garnishment work rules may be misleading. A "three-garnishment" rule means discharge upon the third garnishment, and a "one-garnishment" rule means discharge upon the first garnishment. In other words, the worker is permitted two garnishments under a "three-garnishment" rule and no garnishments under a "one-garnishment" rule.

¹³ All States Trailer Co., 44 LA 104, 1965 (BNA).

¹⁴ Carpenter Steel Co., 44 LA 1185, 1965 (BNA).

¹⁵ 44 LA 87, 1965 (BNA).

¹⁶ 14 LA 787, 1950 (BNA).

¹⁷ 46 LA 822, 1966 (BNA).

While other arbitrators did not formally find such rules invalid, all but one of them reinstated the worker, ostensibly on other grounds. In the exceptional case, the arbitrator denied the grievance because the worker was progressing toward discharge for insubordination, absenteeism, and inattentiveness to work.¹⁴

There was a consensus in these published cases that rules which permit at least 2 garnishments within a stipulated period before the worker was discharged ("three-garnishment" rules) were best, although those permitting only one garnishment before discharge ("two-garnishment" rules) were accepted as reasonable. The prevalence of "three-garnishment" rules in the published cases indicated that in the matter of reasonable rules, a majority of the employers involved in these cases were on the side of the angels. The arbitrator in *Caterpillar Tractor Co.* accurately described the state of affairs:

. . . many companies have established the practice of terminating employees after their third wage or salary deduction. This may seem harsh to those who are perpetually in financial difficulties; but at least the employees are put on notice; they are counseled and . . . warned that future financial involvement of this kind will result in discharge.¹⁵

Knowledge of the Rule

Since it is considered unfair to expect employees to conform to a work rule that they are unaware of, arbitrators invariably insisted that employees be amply warned of a garnishment rule if discharges were to be considered just. The arbitrator in *Watkins Co.* sustained the grievance because the company had not posted and otherwise disseminated its two-garnishment rule.¹⁶ Similarly, in *Brinks, Inc.*, the arbitrator sustained the grievance because "the record [did] not disclose any clear-cut statement of policy or preliminary warning to [the grievant] prior to the 'final warning.' . . . [The] 'final warning' constituted his first formal notice . . . in view of the failure of the company to have made its position on garnishments generally known to all employees. . . ." ¹⁷ So great was the emphasis placed upon this issue that in *Lester Engineering Co.*, the arbitrator reversed the

discharge because the new contract, which permitted discharge for "two garnishments" rather than "two unnecessary garnishments," had not been printed. He found that the grievant could hardly know of the change in the garnishment rule in the absence of a printed contract.¹⁸ The discharge was not upheld in any of the cases in which it was proved that the employee was unaware of the rule.

Discriminatory Discharge

Equal application of discipline touches a key note in the American industrial ethos. If a worker errs, he shall receive the same treatment as his erring peers. In industrial relations, this commandment is called equal or fair treatment, consistency or predictability of discipline, and procedural regularity. The yield for workers lies in the confidence that discipline should follow predictable, progressively stringent lines leading to discharge, a corrective rather than punitive course.

Proof of discrimination meant proof that another employee who had committed the same offense had been treated differently. In one such instance, *Trailmobile, Inc.*, the arbitrator ruled that the company had not applied its garnishment policy uniformly:

The company contended that in the application of the rule the system of penalties . . . had been automatic, uniform, and rigorous. . . . The evidence shows no such undeviating uniformity in the matter of discharges . . . six employees . . . had been involved in third garnishments. . . . Only three had been discharged. . . . In view of the fact that the [company's] application of the rule has not been uniform . . . and [the grievant] had not had the two warnings prior to discharge which practice required, I feel that this discharge must be set aside. . . .¹⁹

However, even when the employer admittedly treated employees differently, the "discrimination" did not always lead arbitrators to sustain the grievant. One arbitrator denied the grievance because the "discriminatory" cases all occurred prior to promulgation of the current work rule. The latter signaled a metamorphosis from flexibility to rigidity.²⁰ In *Union Carbide Corp.*, the grievant made, but the arbitrator dismissed, a complaint that the employer fired the grievant because of off-duty activity. Since the discharge was justifiable in terms of the stated facts, the worker's off-duty activity was held irrelevant.²¹

Several cases present a hair-splitting variant of the discriminatory treatment allegation. In this type of grievance, the employer was charged with failing to supply a copy of the disciplinary letter to the union, or the letter to the worker did not spell out that it was a "second" or "final" notice. In the published cases grievances were not sustained solely on this basis. To make the allegation of discriminatory treatment stick, stronger glue was required.

Discriminatory discharge sometimes arose in odd ways. In one case, the employer's mechanical following of procedure was deemed good faith but bad judgment. The arbitrator ruled that receipt of the third garnishment, for which a warning was to be given, and the fourth garnishment, for which discharge was the penalty, on the same day, and warning and discharging the employee simultaneously was discriminatory procedure. Because the two writs arrived together, he felt the worker was deprived of his right to a meaningful "final warning" before discharge. A mitigating circumstance in this case was the fact that the debts had been incurred before dissemination of the rule. Since the employee was already in a hole when the rule was promulgated, rigid application in his situation would be more deeply tinged with unequal treatment.²²

Equal treatment is the grand old man among the principles of enlightened industrial discipline. However, its declamatory use is clearer than its practical application. In the garnishment cases, arbitrators held that the garnishment discharge, like any other discharge measured against equal treatment, must show regularity, predictability and corrective escalation of punishment if this was the customary practice of the company. Deviations from this course were deemed discriminatory unless justified by mitigating circumstances. The corrective course might be as lengthy as first offense—reprimand; second offense—suspension; third offense—discharge. Or it might be as immediate as limited furlough to clear up the garnishment. In either case the disciplinary step or steps had to be rigorously followed.

¹⁸ 43 LA 1268, 1965 (BNA).

¹⁹ 27 LA 160, 1956 (BNA).

²⁰ Ortner Freight Car Company, 64-2 ARB 8726, 1964 (CCH).

²¹ 64-2 ARB 8848, 1964 (CCH).

²² American Radiator & Standard Sanitary Corp., 37 LA 85, 1961 (BNA).

Superficially, *American Standard*, described earlier, may seem an exception as the employer's disciplinary regularity was deemed discriminatory. It is not exceptional. The appeal of the principle of equal treatment is to a higher court than mere regularity of paperwork. It calls for the same application of principle irrespective of vagaries of incident.

Extenuating Circumstances

Even if the garnishment rule was reasonable and well-known and the worker had been accorded equal treatment, he might still escape discharge if the arbitrator found that personal circumstances mitigated the facts in the case to the extent that discharge was an excessive penalty.

In the garnishment cases, arbitrators reinstated more workers because of extenuating circumstances than for all other reasons combined. Even in cases where the worker was reinstated primarily for some other reason, arbitrators often shored up their decision by reference to mitigating circumstances. Anything from the attitude of the grievant toward his debts to chronic layoffs, from quashing of the garnishment to lack of knowledge of the debt, might be considered extenuating circumstances.

The typical reinstatement based on personal circumstances was made because the worker had entered bankruptcy or taken other action to lift the debt prior to receipt of the final garnishment and discharge. One arbitrator ruled that by going into bankruptcy, an employee had done all in his power to avoid another garnishment and subsequent discharge, that "equity would consider the employee blameless. . . ." ²³

Another extenuating circumstance that resulted in reinstatement occurred when the debt was unknown to the grievant. This situation arose as a result of debt endorsement, faulty income tax returns, or failure of the other party in a joint venture to meet his responsibilities. In *J. D. Jewell, Inc.*, the arbitrator found for the grievant, an estranged wife, because she did not know that her

husband had failed to repay, as agreed, an erroneous joint income tax refund. Her first knowledge that the debt was unpaid was the levy against her wages.²⁴ A discharge arising from debt endorsement was set aside by one arbitrator due to the "sordid" behavior of the creditor's attorney and the sincere efforts of the grievant to pay off another's debt. The arbitrator was able to overturn the discharge because the supplemental union agreement permitted discharge in garnishment cases,²⁵ but did not make discharge mandatory.

Personal circumstances could exert an influence on the arbitrator's opinion even when he affirmed the discharge. In *Great Lakes Pipe Line Company*, the arbitrator recommended that after 30 days the worker be reinstated without backpay or seniority if he showed reasonable control of personal finances. Despite the worker's 14 years of seniority and good work record, the arbitrator was compelled to deny the grievance because the worker had taken no action to prevent garnishment. In making his recommendation, the arbitrator noted that part of the employee's ballooning expenses arose as a result of the employer transferring his job.²⁶

Personal circumstances could also exert a potent negative influence. One arbitrator denied a grievance because change of ownership without change of rules continued the employees' liability to observe the rules. Despite the supposed withdrawal of the third and fatal garnishment prior to discharge, the arbitrator affirmed the discharge because the employee's history of financial disorder portended more indebtedness and disorder.²⁷ A parallel line of reasoning in another case led to a similar award. The arbitrator noted the ineffectuality of the grievant's attorney in preventing garnishments but could not overlook the grievant's poor work record (tardiness, damage to company property, and general carelessness).²⁸

A Few Generalizations

This has been an attempt to discover how general principles of industrial discipline evolved by arbitrators have been applied in cases of garnishment discharge. In the absence of statutory law, the arbitral opinion sought will influence the course of arbitrated discharges for garnishment, as well as the handling of garnishment problems by employers.

²³ Capital Packing Co., 36 LA 101, 1961 (BNA).

²⁴ 32 LA 50, 1958 (BNA).

²⁵ International Smelting & Refining Co., 45 LA 885, 1965 (BNA).

²⁶ 37 LA 226, 1961 (BNA).

²⁷ Celanese Plastics Co., 65-1 ARB 8162, 1964 (CCH).

²⁸ Hubbard & Co., 65-1 ARB 8260, 1965 (CCH).

It was found that garnishment—the result of off-duty behavior—has, in the published arbitration decisions, equal status with on-duty infractions as grounds for discharge. In interpreting the just cause provision of the union contract, arbitrators found that employers had cause for discharging workers who were garnisheed more than once, provided procedural matters supported and personal circumstances did not mitigate the penalty.

The employer's right to discipline, including discharge, for garnishment was sustained under the controversial theory of management's residual rights: All rights and powers not expressly forbidden by the collective bargaining agreement

were reserved to the management and to the supervisors. With this issue decided, arbitration of discharge for garnishment became largely a matter of applying general principles of industrial discipline to the discharge.

If the rule was reasonable, if it was well-known to the workers, if equal treatment had been given, the worker could be spared only if the personal circumstances of the case were compelling enough to mitigate the discharge. To a great extent, favorable personal circumstances meant discharging the debt through bankruptcy or payoff, speedily lifting the garnishment prior to discharge, lacking knowledge of the debt, and having a good work record.

Garnishment statutes originated in an era when consumer credit was all but unknown. Until recently, debt was something devoutly to be avoided; to "commit" debt was faintly, or not so faintly, immoral. To let creditors jeopardize a man's job by garnishing his wages is a manifestation of this attitude. . . .

The time when a family had few, if any, debts except perhaps a home purchase mortgage may be remembered nostalgically, but it has passed. The years following the end of World War II saw the development of what might be called the American way of debt. A trend toward the use of consumer credit, which started before the war, accelerated rapidly during the past two decades. . . .

—George Brunn.

The Decentralization of Jobs

Job Opportunities Multiply
in the Suburbs, Out of Reach
of the City-Center Poor

DOROTHY K. NEWMAN*

THE UNEMPLOYMENT RATE has remained below 4 percent for almost a year now—for the first time in over a decade. Nevertheless, 3 million or so persons are unemployed, plus an uncounted number underemployed, in terms of capacity for more or higher level work. At the same time, many jobs are vacant; these vacancies exist along the full range of skills, but especially at the upper and lower ends of the occupational ladder.¹ Thus it appears that matching jobs with workers is one of the more intractable problems in the present economy.

One of the prime causes of this failure to match available jobs with available personnel is the movement of new jobs into the suburbs² and out of large central cities. It is in these cities that unemployment, underemployment, and poverty are greatest.³

New Business Buildings

The steady trend of this movement is illustrated by the concentration of new factory and commercial buildings in the ring of metropolitan areas rather than in the central city, as evidenced by data on the value of building permits issued, both recently (1960-65) and since 1954.⁴ (See table 1.) In the same periods, also, a relatively large proportion of community buildings, such as schools and hospitals, has been constructed in the suburbs instead of the city. These buildings represent a large capital investment, leading to substantial increases in suburban employment, especially in industry, retail and wholesale trade, and business, professional, and technical services. Many of the jobs created are within the capabili-

ties of the people who need employment opportunities, but most of the new jobs are too distant and difficult to reach.

*Of the Division of Economic Studies, Bureau of Labor Statistics. With the assistance of Laura L. Irwin and Sylvia S. Small.

¹ See "The Economy in 1966," *Monthly Labor Review*, February 1967, p. 5.

² "Suburbs" and "ring" are used interchangeably in this article to represent the entire area outside of the central city or cities of the Standard Metropolitan Statistical Area, as defined by the U.S. Bureau of the Budget.

³ See *Income, Education, and Unemployment in Neighborhoods*, a series of reports on 34 cities by the Bureau of Labor Statistics, based on 1960 Census data for Census tracts (January 1963); "Poverty Areas of Our Major Cities," *Monthly Labor Review*, October 1966, pp. 1105-1110; from the U.S. Bureau of the Census, *Special Census Survey of the South and East Los Angeles Areas: November 1965* (Series P-23 No. 17, Mar. 23, 1966); *Changes in Economic Level in Nine Neighborhoods in Cleveland: 1960 to 1965* (Series P-23, No. 20, Sept. 22, 1966); *Characteristics of Selected Neighborhoods in Cleveland, Ohio: April 1965* (Series P-23, No. 21, Jan. 23, 1967); and Mollie Orshansky, "The Poor in City and Suburb, 1964," *Social Security Review*, December 1966, p. 30.

⁴ Data on the valuation and number of nonresidential buildings authorized by building permits, by type of building, in individual localities and counties throughout the country are compiled by the Bureau of the Census from almost all known permit-issuing places. These comprehensive statistics are available for individual localities and areas, and are used to develop national and regional estimates. For a large proportion of Standard Metropolitan Statistical Areas (SMSA's), reports from building-permit officials on building permits authorized in the individual localities or counties that comprise the SMSA's are complete or virtually so. The data for this section of this study are based on information for selected SMSA's for which the data are complete or virtually so, and on Census estimates for 4 regions and the Nation.

The valuation placed on a building at the time of permit issuance varies from the true construction cost, and is usually somewhat lower. The differences between permit valuation and final construction cost are assumed to be relatively consistent within localities and are estimated not to affect the trends and relationships reflected in the data presented in this article.

Permits which are issued are almost invariably used, according to special Census surveys. For further information on the building permit series, see *Construction Statistics, 1915-1964: A Supplement to Construction Review* (U.S. Department of Commerce, Business and Defense Services Administration, 1965). See also Bureau of the Census, *Construction Reports*, Series C-40 and Series C-42.

TABLE 1. PERCENT OF NEW PRIVATE NONRESIDENTIAL BUILDING OUTSIDE THE CENTRAL CITIES OF STANDARD METROPOLITAN STATISTICAL AREAS (SMSA'S), BY REGION, 1960-65 AND 1954-65¹

Type of new nonresidential building	Percent of valuation of permits authorized for new nonresidential building				
	United States	North-east	North Central	South ²	West ²
	1960-65				
All types ³	47	53	49	34	53
Business.....	47	54	47	33	52
Industrial.....	62	71	59	46	69
Stores and other mercantile buildings.....	52	68	57	34	56
Office buildings.....	27	26	30	22	32
Gasoline and service stations.....	51	61	52	39	57
Community.....	45	47	47	33	53
Educational.....	45	47	46	34	50
Hospital and institutional.....	35	35	36	20	48
Religious.....	55	66	57	42	60
Amusement.....	47	41	60	46	45
	1954-65 ⁴				
All types ³	49	55	51	34	55
Business.....	46	56	50	33	50
Industrial.....	63	73	59	47	72
Stores and other mercantile buildings.....	53	69	55	33	58
Office buildings.....	27	25	31	20	32
Gasoline and service stations.....	53	66	54	40	59
Community.....	45	52	50	33	57
Educational.....	50	53	54	36	58
Hospital and institutional.....	36	38	36	21	50
Religious.....	54	67	55	39	62
Amusement.....	48	48	51	41	50

¹ Data for groups of years are used to avoid erroneous impressions from erratic year-to-year movements in building construction.

² Data for southern and western SMSA's reflect a more significant degree of annexation and area redefinition and are therefore less reliable than figures for other regions.

³ Includes types not shown separately and excludes major additions and alterations for which type of building is not known.

⁴ Excludes data for 1959, for which comparable information is not available.

SOURCE: Unpublished data of the Bureau of the Census, tabulated at the request of the Bureau of Labor Statistics. Based on a sample of over 3,000 permit-issuing places.

The trend to place new structures in the suburbs—particularly those devoted to factories and trade, and, to a smaller extent, to schools and hospitals—is especially marked in the North, where central cities of the largest SMSA's tend to be old and the flight of population to the suburbs has been going on for many years. Northern cities are frequently handicapped by narrow streets, one-way traffic patterns, obsolescent structures, and rapidly changing neighborhoods. A metropolitan-area view of city planning is only beginning, that might, in the future, accommodate city industrial parks and shopping centers. At the same time, large cities are the locus of the largest and oldest urban slums, and the magnet of most Negroes migrating from the South to seek jobs and improved living conditions.⁵

The ring is not as likely to be the location of new office or amusement buildings as the central city, which is usually considered the hub of business services and finance, as well as of the arts and other entertainment. However, in a number of the 14 areas selected for study,⁶ these new structures (in addition to new business buildings) were concentrated outside the city proper either in the past 5 years or during the past decade. (See table 2.)

In 10 of the 14 metropolitan areas (Boston, Chicago, Cleveland, Dayton, Detroit, Indianapolis, Philadelphia, St. Louis, San Francisco, and Washington), more than half the permit valuation for new amusement buildings in 1960-65 was for construction outside of the central city. In 6 of the 14 SMSA's (Boston, Chicago, Dayton, Detroit, Philadelphia, and Washington), more than half the value of new office buildings in 1960-65 went to the ring. The average permit value of new office and amusement buildings (as of most new building) is lower outside than inside the central city, where construction costs tend to be higher. Therefore, the higher ratio of outside to inside central city building shown in tables 1 and 2 involves either more or larger buildings in the ring, and, consequently, even greater job opportunities than the permit value of new building construction itself would indicate.

Trade and Employment

This substantial outmigration of facilities precedes and also mirrors the huge increase of business and employment in the ring, where population growth is greatest also.

Department store sales, for example, have risen much more in the outskirts of major metropolitan areas than in their central cities. Payroll employment⁷ has soared in the suburbs compared

⁵ *The Negroes in the United States* (BLS Bulletin 1511), pp. 3-17 and 66-70. See also *Census of Population: 1960, Standard Metropolitan Statistical Areas*, PC(3) 1D, lists 1, 2, and 3 on pp. XVI-XIX, and table 1 (U.S. Bureau of the Census). See J. R. Meyer, J. F. Kain, M. Wohl, *The Urban Transportation Problem* (Cambridge, Mass., Harvard University Press, 1965), chapters 1 and 2 and accompanying footnotes to related literature.

⁶ The 14 SMSA's selected for study are among those for which building-permit data were most comprehensive and comparable, based on evaluation by experts in the Bureau of the Census. These SMSA's were studied also for the effects of annexation, and for changes in definition during the period 1954-65. The effects, while relatively sizable between some years for a few areas, could not be said to bias the results in any area for cumulative data covering 5 years or more.

⁷ Excludes the self-employed and Government workers.

with the SMSA as a whole (and, therefore, compared with the central city) in virtually all the SMSA's studied for which estimates of change could be obtained. (See table 3.) For example, from 1959-65, total payroll employment increased more than 40 percent in the Washington, D.C., suburbs and in those of New Orleans, Atlanta, and Detroit, while the increase in the total SMSA in each of these places was substantially less than 40 percent.

The differences in employment change between city and suburb are pronounced—and consistently greater in the ring—in manufacturing, wholesale and retail trade, and services.⁸ These industries account for 2 of 3 employees on nonagricultural payrolls. Their employees are concentrated in clerical and sales work, in skilled and semi-skilled industrial production, and as service workers outside of private households. In 1964, over 3 of 5 of all heads of families in central cities were in such occupations.⁹ It is likely, therefore that many central-city residents might qualify for new openings in the suburbs. Early in 1967, about 60 percent of those unemployed 15 weeks or more were last employed in such jobs.

Despite the sharp employment increase in the ring, most payroll employment remains in the central city in all of the SMSA's studied, except Boston and San Francisco-Oakland. In every case, however, the proportion of employment in the ring has risen, and in most instances, substantially, as the following tabulation indicates:

Standard metropolitan statistical area	Percent of payroll employment outside the central city-county ¹	
	1959	1965
Total of 12 SMSA's ²	23	27
Atlanta	11	13
Boston	59	61
Chicago	10	12
Cleveland	6	7
Dayton	14	14
Detroit	20	26
Indianapolis	9	10
New Orleans	18	22
New York	15	19
Philadelphia	40	45
San Francisco	53	57
Washington	38	46

¹ Excludes Government workers and the self-employed. For definition of central city, see table 3, footnote 1.

² Excludes Los Angeles and St. Louis.

SOURCE: *County Business Patterns* (U.S. Bureau of the Census, 1959 and 1965).

Residents of the Central City

In 1964, of all the working age people in SMSA's who were poor (according to the Social Security Administration Index), half the whites and 80 percent of the nonwhites lived in the central cities.¹⁰ And for every major industry and occupational group, whether involving relatively low-paid business repair services or higher paid professions, median family income in 1964 was lower among city than suburban residents.¹¹

The incidence of unemployment and poverty in central cities is greatest among Negroes.¹²

In 1964 (the latest year for which such figures are available), the median income of all nonwhite households in the central cities of SMSA's was \$3,656 compared with \$6,034 for white central-city households. Even among those who worked full time all year, the median for nonwhite households was \$5,292 compared with \$7,718 for the whites.¹³

Transportation, Income, and Jobs

Getting to a suburban job, therefore, imposes a greater burden on central city residents than is experienced by the suburban commuter to the city. Thus, transportation difficulties particularly affect Negroes, who are frequently confronted with discriminatory housing practices in the ring.

Public transportation to the suburbs is usually expensive, often circuitous, or simply not available. Detailed fare schedules from the American Transit Association show that fares on public transit lines from the central city to the closest suburban area range from 30 cents one way in 1 of the 14

⁸ See also "Transportation Implications of Employment Trends in Central Cities and Suburbs," by Edmond L. Kanwit and Alma F. Eckart, presented at the 46th annual meeting of the Highway Research Board, in Washington, D.C., January 1967, especially pp. 10-15.

⁹ Orshansky, op. cit., table 7, p. 31.

¹⁰ For a few readings on the extent and influence of residential segregation, see George and Eunice Grier, *Equality and Beyond: Housing Segregation and the Goals of the Great Society* (New York, Anti-Defamation League of B'nai B'rith, 1966); Harry Sharp and Leo F. Schnore, "Changing Color Composition of Metropolitan Areas," *Land Economics*, May 1962; and Karl and Alma Taeuber, *Negroes in Cities* (Chicago, Aldine Publishing Co., 1965).

¹¹ Census Bureau, op. cit., Series P-60, No. 48, Table 8, pp. 20-21.

¹² Orshansky, op. cit., pp. 30-31; see also footnote 2.

¹³ See "Income in 1964 of Families and Unrelated Individuals by Metropolitan-Nonmetropolitan Residence," *Current Population Reports, Consumer Income*, Series P-60, No. 48, table 1, p. 13 (U.S. Bureau of the Census). Data relate to families and unrelated individuals.

TABLE 2. PERCENT OF NEW PRIVATE NONRESIDENTIAL BUILDING OUTSIDE THE CENTRAL CITIES OF 14 SELECTED SMSA'S¹ 1960-65 AND 1954-65¹

Type of new nonresidential building	Percent of valuation of permits authorized for new nonresidential building in—													
	Atlanta	Boston	Chi- cago	Cleve- land	Dayton	De- troit	Indi- anapolis	Los Angeles	New Orleans	New York	Phila- delphia	St. Louis	San Francisco	Wash- ington
	1960-65													
All types ²	47	64	65	56	62	69	41	59	42	38	65	41	60	74
Business.....	44	68	64	60	66	69	49	60	49	39	70	39	63	70
Industrial.....	71	81	77	61	56	70	52	85	58	61	75	67	84	96
Stores and other mercantile buildings.....	44	74	67	74	78	80	55	63	66	64	75	75	72	91
Office buildings.....	25	52	58	38	53	55	21	41	10	21	52	32	38	58
Gasoline and service sta- tions.....	63	91	54	57	98	58	54	60	60	51	66	55	72	76
Community.....	60	61	64	44	49	71	33	61	37	31	60	37	58	77
Educational.....	59	63	64	51	28	68	24	61	35	29	67	67	57	57
Hospital and institutional.....	59	38	56	15	56	61	14	72	44	25	38	35	52	78
Religious.....	69	92	73	84	56	81	56	69	35	55	77	86	62	86
Amusement.....	31	59	80	60	99	86	58	35	41	19	59	85	74	96
	1954-65 ³													
All types ²	42	68	63	58	(4)	71	44	62	(4)	44	67	(4)	63	64
Business.....	41	70	61	59	(4)	73	50	63	(4)	44	69	(4)	64	62
Industrial.....	66	82	73	60	(4)	75	61	86	(4)	75	76	(4)	84	84
Stores and other mercantile buildings.....	40	74	67	73	(4)	77	52	66	(4)	71	72	(4)	72	89
Office buildings.....	21	51	39	37	(4)	58	21	41	(4)	18	51	(4)	37	47
Gasoline and service sta- tions.....	60	82	59	62	(4)	65	56	62	(4)	65	73	(4)	73	81
Community.....	48	67	66	44	(4)	70	40	63	(4)	38	68	(4)	64	64
Educational.....	57	72	69	61	(4)	79	46	59	(4)	34	72	(4)	73	57
Hospital and institutional.....	32	41	58	33	(4)	62	10	70	(4)	32	43	(4)	53	61
Religious.....	59	86	68	81	(4)	74	59	70	(4)	61	80	(4)	65	75
Amusement.....	30	64	75	57	(4)	43	52	50	(4)	33	72	(4)	55	94

¹ Data for groups of years are used to avoid erroneous impressions from erratic year-to-year movements in building construction. Data for southern and western SMSA's reflect a more significant degree of annexation and area redefinition and are therefore less reliable than figures for other regions.

² Includes types not shown separately and excludes major additions and alterations for which type of building is not known.

³ Excludes data for 1959, for which comparable information is not available.

⁴ Not available.

SOURCE: Unpublished data of the Bureau of the Census, tabulated at the request of the Bureau of Labor Statistics. Based on a sample of over 3,000 permit-issuing places.

SMSA's studied to 65 cents in another. The distances for which public transportation is provided vary, but it is obvious that a minimum of \$3 a week (or almost \$15 a month), plus more than an hour a day, including transfers and waiting, would have to be spent by a city resident to work in the suburbs. Furthermore, rush-hour schedules are not usually arranged to speed transit users to the outside in the morning and to the inside in the evening, as is frequently done for commuters in the opposite direction.

There is substantial evidence that central city residents using public transport spend more money and time to reach suburban jobs than those commuting to the city.¹⁴ Those wanting jobs at a substantial distance, or beyond bus or rapid transit lines, pay an especially high price. According to estimates by the Traffic Commission of New York City, it would cost a worker in Harlem \$40 a month to commute by public transportation to work in an aircraft plant in Farmingdale (Long Island), in a parts plant in Yonkers or Portchester (Westchester), or in a basic chemical plant or

shipyard on Staten Island. The estimate includes \$1.50 a week for the New York City subway, \$30 a month for a commutation ticket on the Long Island or New Haven railroad, and \$3 a week for transportation from the suburban station to the plant. The public transit cost for a Bedford-Stuyvesant resident to work in the same places would be nearly \$50 a month.

Persons whose incomes are most limited are most likely to use public transportation to work.¹⁵ Also, public transit usage declines with auto ownership; auto ownership rises with earnings, even in the suburbs.

¹⁴ Meyer, Kain, and Wohl, op. cit.; a national study of urban transportation patterns by John B. Lansing, *Residential Location and Urban Mobility: The Second Wave of Interviews* (Ann Arbor, University of Michigan, Survey Research Center, 1966); and independent analysis of Cleveland and Washington, D.C., transit schedules.

¹⁵ These data are chiefly from the *Census of Population: 1960, Journey to Work*, PC(2)-6B, table 2, and *Census of Housing: 1960, United States Summary*, HC(1), No. 1, table 19 (U.S. Bureau of the Census). Additional tabular material is available upon request to the author.

Most nonwhite families living in central cities do not have an automobile. Fewer than half owned a car in 8 of the 14 central cities in the SMAS's selected for study. The six cities where half or more of the nonwhite families owned a car were all in the Midwest or the West, where median incomes are highest.¹⁶

Irrespective of earnings, however, central city residents and workers tend to use public transit most. The accompanying chart shows the patterns in six of the SMSA's. This is a reflection of convenience and availability, since a large percentage of workers in SMSA's live and work in the central city. Almost all the rest live in the ring and work either in the ring or in the central city. The smallest proportion usually are those who travel from the city to the suburbs.

¹⁶ Census of Housing: 1960, United States Summary, States and Small Areas, HC(1), No. 1, table 19 (U.S. Bureau of the Census).

¹⁷ Those living and working in the central city; living in the central city and working in the ring; living in the ring and working in the central city; and living in the ring and working in the ring.

An illustration of the effect of convenience and availability is seen in the influence of a rapid transit system, such as a subway or railway, on public transportation use. This is revealed by results of a multiple regression analysis, which introduced seven selected determinants of public transit use in the 14 SMSA's studied. Of the seven variables used (auto ownership, land area, population density, income adjusted for price and city budget differences, sex, color, and whether or not a rapid transit system is available), clearly the most significant and influential was the availability of rapid transit. The seven indicators together explained virtually all of the variability in public transit use for each group of residents for which the regression was run,¹⁷ except for those living and working in the ring. Even for the latter, well over half the variability is explained; availability of rapid transit remains the most influential determinant.

TABLE 3. PERCENT CHANGE IN PAYROLL EMPLOYMENT IN SELECTED SMSA'S AND IN THEIR RING, BY INDUSTRY GROUP, 1959-65¹

Standard Metropolitan Statistical Area	All industries		Manufacturing		Trade			
	Total SMSA	Ring	Total SMSA	Ring	Retail		Wholesale	
					Total SMSA	Ring	Total SMSA	Ring
Total of 12 SMSA's ²	12	30	4	15	15	39	8	46
Atlanta	32	51	21	39	26	58	38	138
Boston	9	14	-24	-2	14	24	7	37
Chicago	10	34	6	27	16	47	9	60
Cleveland	10	36	3	34	14	35	5	9
Dayton	17	20	10	20	12	8	33	(³)
Detroit	16	48	11	36	16	57	11	76
Indianapolis	11	25	10	20	-1	29	14	10
New Orleans	24	54	26	12	14	77	-1	17
New York	9	37	1	15	11	40	4	66
Philadelphia	9	22	1	12	11	37	3	44
San Francisco	19	27	6	13	25	37	10	29
Washington	34	61	34	75	28	58	24	57
	Construction		Transportation and public utilities		Finance, insurance, and real estate		Services	
Total of 12 SMSA's ²	18	31	14	19	14	55	30	55
Atlanta	67	80	35	130	44	88	37	81
Boston	27	31	-1	18	12	23	32	42
Chicago	5	6	(³)	11	10	30	24	60
Cleveland	18	10	16	33	20	29	27	71
Dayton	36	27	23	20	10	11	42	48
Detroit	14	80	7	67	19	276	34	82
Indianapolis	8	8	14	13	14	20	24	52
New Orleans	53	151	20	48	18	125	34	73
New York	4	24	20	19	7	51	26	58
Philadelphia	8	14	23	4	17	41	28	49
San Francisco	19	19	12	21	31	35	36	50
Washington	43	59	10	13	47	106	47	78

¹ Excludes government workers and the self-employed. Employment in the ring is estimated from employment outside of the county in which the central city is located. The central city and county were coterminous in both years in New Orleans, New York, Philadelphia, and Washington. For the following the ratio of the central city to central county employment in 1960 was 107 in San Francisco-Oakland, 89 in Boston, 70 in Indianapolis, 68 in Chicago, 64 in Detroit, 61 in Atlanta, 53 in Cleveland, and 52 in Dayton. Since the central county was used to establish the central city, the figures for

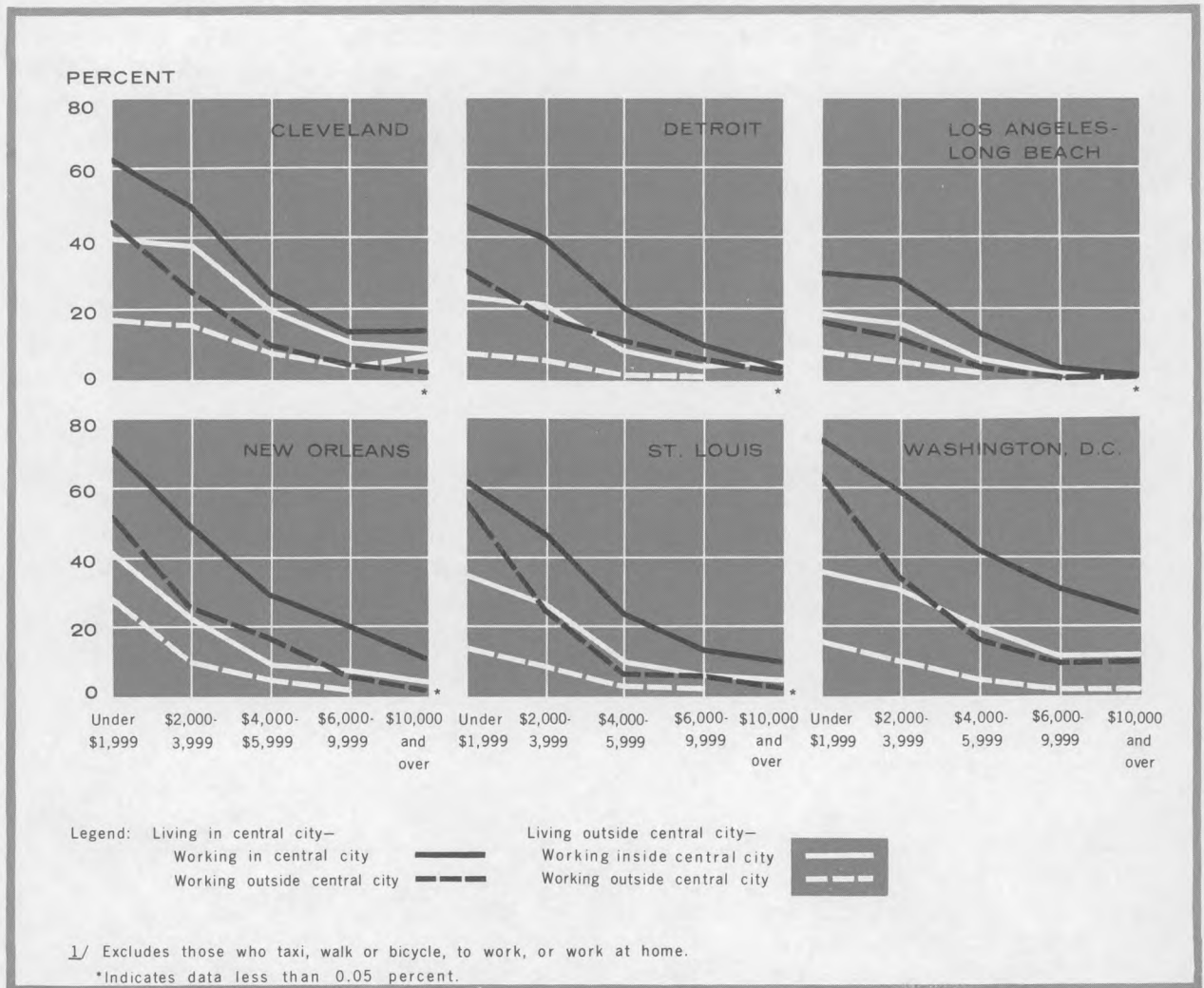
the ring underestimate the suburban trend in all central cities which are smaller than the central city-county.

² Excludes Los Angeles and St. Louis; for Los Angeles, data for the central city-county do not permit close enough approximation with the city proper, and for St. Louis, data are not yet available for 1965.

³ Less than 0.5 percent change.

SOURCE: County Business Patterns (U.S. Bureau of the Census, 1959 and 1965).

Percent of Workers¹ With Specified Earnings Using Public Transportation, in Six Cities, 1960



Central city residents and workers tend to use public transit most, regardless of earnings, but the lower the earnings the more likely are workers to use public transit.

Dependence on public transit among poor and relatively low-paid workers lends importance to the change in public transit costs as well as the level. Fares for public transportation have risen twice as fast as the cost of buying and operating an automobile since 1957-59. The rate of increase is more than for any other group of commodities or services in the Bureau of Labor Statistics Consumer Price Index, with the exception of medical care, and even exceeded medical care in Atlanta, Boston, Los Angeles, and Philadelphia.¹⁸

Of all who traveled from home to work in 1960, the smallest journey-to-work group (less than 10

percent of the total) commuted from central city to the suburbs. This percentage is surprisingly small, considering that high unemployment rates and low-income populations are concentrated in the city, whereas employment opportunities are expanding in the outskirts.

Of the men who did travel to the ring in 1960, half were craftsmen or production workers and another 13 percent were in professional or technical work. Of the women, about 1 of 5 were cler-

¹⁸ Public transit fares outside as well as inside the central city are used in computing the Index.

ical or production workers. These occupational distributions for those traveling to the suburbs are not greatly different from those of the major group, which both lives and works in the central city. The occupational distribution of central city-to-suburb commuters varies most from the suburban residents who commute to the city and who are more likely to be in professional and managerial work. The central city-to-suburb commuters' occupational pattern differs little from those who live and work in the ring. Among the latter, the proportions of men and women are about the same, and, as in all four journey-to-work groups, women tend to be much more concentrated in clerical and service jobs than the men. The men predominate in industrial jobs. They are not more professionally oriented than in the other groups and are less so than among the commuters to the city from the ring.

Even without a detailed occupational classification, it is possible to judge that a great many of those who work in the suburbs (or of those engaged to work in the new job openings there) are paratechnical, subprofessional, clerical, sales, or semiskilled employees in plants, stores, warehouses, hospitals, and the like. These are the kinds of jobs for which the unemployed and underemployed in cities could be hired directly, or trained by employers or the Government with little effort or expense. But these jobs are not accessible or always open to unemployed or underemployed city dwellers, many of whom are Negroes. This significantly limits the contribution expanding job opportunities in the ring could make toward overcoming the competitive disadvantage and unused skill potential of those living in the city.

Many members of minority groups are forced to endure a frustrating waiting period until they are able to obtain incomes which are appropriate to their education. This lag between income and education can be understood in part to be a result of the fact that in our society the flow of causation is frequently from income to education rather than in the reverse direction. In spite of this, minority persons may be able to match the majority in education, but they will not obtain comparable incomes if they do not have access to income opportunities which are available to similarly educated members of the majority population.

—Walter Fogel.

Seasonal Behavior of Components in the CPI

PATTERNS of seasonal price movements are apparent for many components of the Consumer Price Index (CPI), but they largely counterbalance one another and cause little or no seasonal variation in the total index.¹

Extent of Variation

Among the CPI components, the magnitude of seasonal movement varies widely. For example, there is no perceivable seasonality for most of the service categories, but there is a spread of up to 50 index points or more² within the year for some individual foods. The index for food eaten at home varies seasonally by 1.6 points from its low in May to its peak in July. As a group, fresh fruit and vegetable indexes rise over 18 points from low to high, and meats, poultry, and fish, nearly 4 points. Seasonal price movements are also apparent for apparel and upkeep, fuel oil and coal, and private transportation. Many components, however, do not exhibit seasonal price behavior. Among the series with little or no seasonality are services, shelter, health and recreation, public transportation, gas and electricity, and household furnishings and operation. Table 1 shows the updated seasonal factors for the index series having significant seasonality for the months of January through September 1966, expressed in terms of the yearly average as 100.

The apparent seasonal stability of the all items index masks an array of seasonal fluctuation patterns of its components, which counterbalance one another. The offsetting seasonal movements of

four of the larger component series are illustrated in chart 1. The food and apparel groups generally have opposite patterns, as have transportation and the fuel and utilities group. Table 2 shows the highest and lowest seasonal factors for the individual components, the month or months in which the peaks and troughs occur, and the variation from trough to peak. Of the 60 series, 42 are food groups or items. Offsetting seasonal movements of subseries tend to have a dampening effect within the groups. The most striking example is the total food index whose seasonal amplitude of 1.4 points masks differences from 0.7 for cheese to 54 points for fresh tomatoes. Table 3 shows by month the series which exert opposing forces on the total index, i.e., reach their respective peaks and troughs in a given month.

Many series are characterized by a more or less smooth flow from peak to trough. Some series have a somewhat irregular pattern, however, and may have two changes or more of direction within a year. Thus, turning points of these cycles sometimes are not immediately apparent. Some of the irregular series are fresh and frozen fish, butter, nondurable commodities, and housefurnishings.

The months of greatest change usually are not the peak or low months but the months before or after the extreme seasonal peaks and troughs have been attained. For example, although the peak month for prices of bacon is August, the greatest month-to-month upswing in prices occurs between June and July. In the case of foods available only part of the year, such as watermelons, strawberries, and grapes, the greatest upswing usually occurs

EDITOR'S NOTE.—This article was prepared in the Division of Consumer Prices and Price Indexes, Bureau of Labor Statistics.

¹ As an aid to interpretation of price trends, the Bureau of Labor Statistics began to publish, in January 1966, seasonally adjusted indexes of the CPI components subject to seasonal influences. (See "Seasonally Adjusted CPI Components," *Monthly Labor Review*, August 1966, pp. 887-889.) The seasonal factors used to adjust indexes during 1966 were those for 1965, derived from actual indexes for the period of 1956 through 1965. The factors have now been updated to include 1966 data. The BLS seasonal factor method does not call for calculation of factors for the first or last 3 months of the period for which original data are provided. Factors for October, November, and December of 1966 will be published later.

Of the 156 index series published monthly in the national release, 60 show significant seasonal variations and are published both on unadjusted and seasonally adjusted bases. (City indexes are not seasonally adjusted.)

The national Consumer Price Index for all items is not seasonally adjusted because it shows little seasonal fluctuation, owing to the offsetting influence of its various components.

² All references to index points are based on the latest available seasonal factors, for the period of October 1965 to September 1966, unless otherwise indicated.

when the items reach the market at the beginning of their selling season and their supply is limited.

Changing Seasonal Patterns

For many components there has been a narrowing of seasonal swings in price movements during the last 10 years. Improved technology, faster transportation, and more efficient marketing methods have helped to smooth out the variations in amounts produced, and to some extent in demand, within a calendar year. Yet certain seasonal influences persist, notably those associated with weather and growing conditions, and, of course, Christmas, with its attendant special demand factors.

Some items have seasonal patterns which have remained substantially unchanged over the years. These consistent patterns indicate that seasonality is a longstanding and accepted factor in their pricing. Among these commodities are fuel oil and coal, men's and boys' clothing, and women's and girls' apparel. For others, changes in seasonal patterns are apparent.

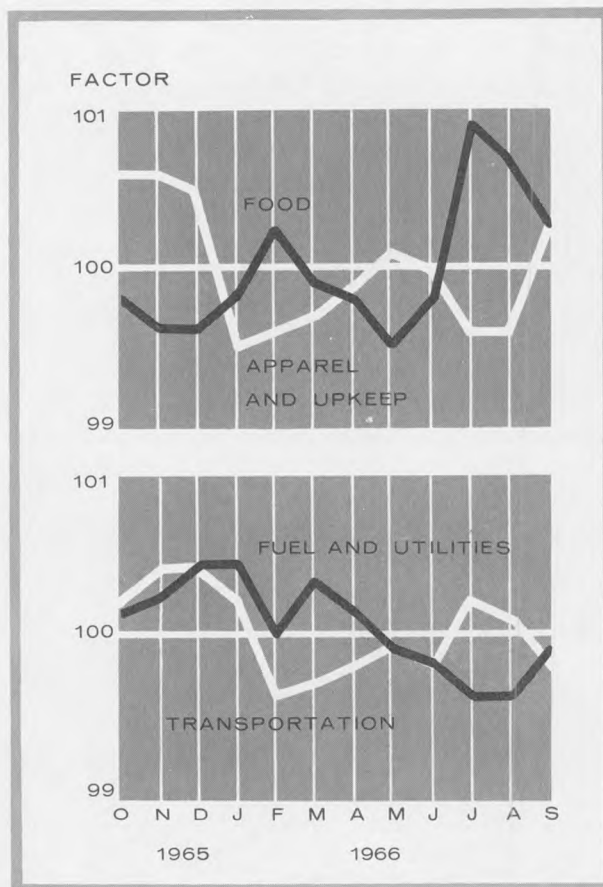
Charts 2 and 3 illustrate two series which have experienced gradually changing seasonal patterns. (The colors are separated only for ease of reading.) In the automobile industry, new car prices have experienced a narrowing of swings from peak to trough, but prices of used cars (not shown), a slight widening of their seasonal swings. Otherwise, the patterns have remained substantially unchanged in these series. The long-term seasonals for beef and veal illustrate both decreasing and increasing seasonal variation as well as other alterations in the seasonal patterns, as changes in marketing and production factors have induced changes in seasonal price movements. The peak month has shifted from July in 1956 to September in 1966; the trough shifted from October to June.

Food Prices and Harvest Cycles

Seasonal movements of prices of many foods are caused by crop and livestock production cycles. The most pronounced seasonals occur for fresh fruits and vegetables, meats, and eggs.

Prices of fresh fruits and vegetables as a whole are highest in July and drop, rather sharply,

Chart 1. Seasonal Factors for Major Groups in the Consumer Price Index With Measurable Seasonal Variations, October 1965–September 1966 [Year=100]



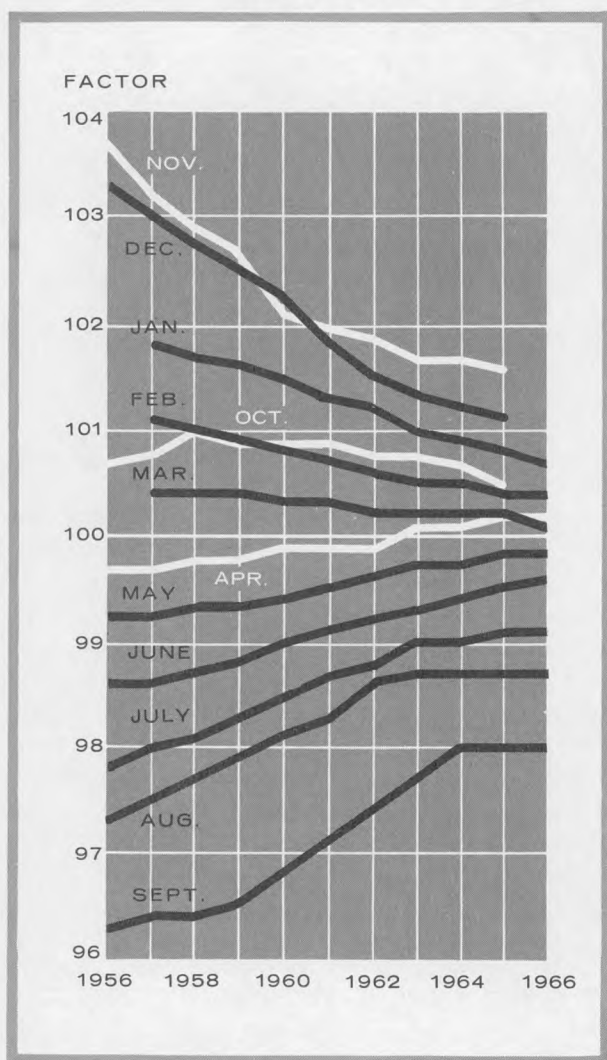
through October as the year's crops of vegetables and noncitrus fruits come to market in volume. Prices of tender fruits and vegetables have quite a different movement from those items that can be stored. Fresh strawberries, for example, appear on the market in volume only during the spring months and are priced for the index for only those months (although some are produced or imported every month of the year). Prices are high at the start of the season in April but quickly drop to a low in June. Watermelon prices have a similar movement during the months of June through August.

Crops such as apples, potatoes, and onions, which are produced over wide areas of the country and can be stored, show different seasonal movements. Their prices are lowest in October or November, when the bulk of the crops are harvested,

and rise to a peak in July as storage supplies dwindle. Oranges and grapefruits grown in Florida, the Southwest, and California are harvested throughout the year, but chiefly between November and April. Since they can be kept in storage for only a relatively short time, prices drop sharply from October to January, remain low for the duration of the major harvest period, and rise to a peak in October before the new season's crop becomes available in quantity.

Because of the importance of meats,³ poultry, and fish, their seasonal swings, though less pronounced than for fruits and vegetables, have a

Chart 2. Seasonal Factors for New Cars in the Consumer Price Index, 1956-66
[Year=100]



noticeable effect on movements of the food index as a whole. Retail meat prices vary about 3½ points between their low in the spring and their high in the fall, with pork cuts fluctuating much more than either beef and veal or chicken. Causes of seasonal price behavior for meats are complex. Numbers of cattle and hogs slaughtered for ultimate sale to the consumer are affected by pasture conditions on the range, by the relation of feed prices to meat prices, by farmers' decisions to ship cattle to market or feed them to heavier weights, by customers' preferences for special meats at certain times of the year, and even by relative prices of the various types of meats.

Pork production shows a double seasonal movement as two pig crops are farrowed each year, a large spring crop which reaches the retail market from July through December or January of the next year, and a smaller fall crop which reaches the market from January through June. However, pork supplies can be stored in periods of high production for consumption later. Prices drop from a peak in September to a low in May and then rise because of limited supplies until pork from the spring pig crop become available in the fall. Beef production is more evenly spread throughout the year and prices, therefore, show less seasonal fluctuation.

Egg prices are particularly volatile, with a spread of 22 index points between their low in June (about a month after egg production and productivity per layer have reached their seasonal peaks) and their high in September, when production has reached its seasonal low.

Apparel and Transportation

The only other major groups in the index displaying significant seasonal price variations are apparel and transportation. (Two components of the housing group also demonstrate significant seasonal price variation, although the index for the group as a whole does not.) Apparel prices traditionally attain their seasonal peak in October as new fall lines are introduced. As would be expected, they are always higher at the beginning of a season than they were at the close of the previous

³ Includes beef, veal, pork (fresh and cured), lamb, and canned and luncheon meats.

season, when sales and clearances were featured in preparation for the spring season. The seasonal low point for apparel prices occurs in January and reflects the traditional sales of fall and winter apparel following the holiday buying period. Spring and summer apparel prices also follow a seasonal pattern, reaching a peak in June, but the magnitude of the changes is considerably less than during the fall season. Prices of women's and

girls' apparel show a much larger seasonal variation, over 2 index points from trough to peak, than do those of men's and boys' wear, which vary by only 1 point. The variation in footwear prices, while conforming to the general timing of seasonal movements for apparel items, is small, only 0.4 points between the seasonal high and the low.

Three components of the transportation index—new and used cars and gasoline—account for its

TABLE 1. SEASONAL FACTORS TO BE USED FOR ADJUSTING COMPONENTS OF THE CONSUMER PRICE INDEX, JANUARY THROUGH SEPTEMBER 1967

[Year=100]

Component	January	February	March	April	May	June	July	August	September
Food.....	99.8	100.2	99.9	99.8	99.5	99.8	100.9	100.7	100.3
Food at home.....	99.8	100.3	99.9	99.9	99.5	99.7	101.1	100.8	100.3
Meats, poultry, and fish.....	99.9	100.3	99.6	99.1	98.4	98.7	100.1	100.8	102.0
Meats.....	100.1	100.1	99.3	98.8	98.1	98.4	99.9	100.9	102.4
Beef and veal.....	100.3	100.3	100.0	99.5	99.1	98.1	99.1	99.6	101.5
Round steak.....	99.7	100.3	100.1	99.6	98.9	98.1	99.1	100.8	100.4
Rib roast.....	101.4	100.3	99.7	99.3	99.0	98.5	99.4	100.1	101.1
Chuck roast.....	100.8	101.3	101.0	100.3	99.0	95.7	96.7	98.5	101.9
Hamburger.....	100.6	99.8	99.8	99.6	99.5	99.1	99.3	99.0	101.5
Veal cutlets.....	99.8	100.6	100.6	100.4	99.9	100.1	100.2	99.9	100.0
Pork.....	99.8	99.4	98.5	96.7	95.8	98.6	101.5	104.0	104.8
Pork chops.....	100.0	99.6	97.9	95.9	94.7	99.2	103.1	105.2	103.9
Ham, whole.....	101.3	101.3	99.7	98.6	96.8	98.1	99.3	100.2	100.6
Bacon.....	97.2	97.9	97.6	95.8	96.5	98.1	102.0	107.4	106.7
Other meats.....	100.0	100.2	99.7	99.5	100.1	100.1	99.9	100.0	100.3
Frankfurters.....	99.6	99.6	100.0	99.5	99.5	100.0	99.5	100.3	100.6
Frying chickens.....	98.5	101.7	101.7	101.0	98.6	100.8	101.8	100.5	100.6
Fish.....	100.4	100.6	99.9	100.1	100.1	100.0	99.9	99.9	99.8
Fish, fresh or frozen.....	100.3	100.6	100.1	100.1	100.4	99.6	99.7	99.8	99.8
Dairy products.....	100.5	100.2	100.1	99.5	99.4	99.1	99.5	100.0	100.2
Milk, fresh, grocery.....	100.6	100.3	100.0	99.5	98.9	98.3	99.3	100.2	100.5
American cheese.....	100.1	100.2	100.4	100.1	100.2	100.0	99.7	99.8	99.7
Butter.....	100.4	100.1	100.0	99.8	99.6	99.3	99.5	99.4	99.8
Fruits and vegetables.....	97.3	99.8	100.4	101.9	102.6	104.2	107.1	101.7	96.5
Fresh fruits and vegetables.....	95.5	99.5	100.5	102.9	103.8	106.7	111.6	102.7	94.2
Apples.....	86.8	90.8	94.7	100.2	107.4	118.5	128.8	124.3	100.3
Bananas.....	95.0	100.4	99.1	100.7	101.9	101.6	99.8	102.3	101.3
Oranges.....	92.4	93.1	94.0	96.5	98.0	99.0	100.3	103.9	107.4
Grapefruit.....	86.0	89.9	89.1	89.3	95.4	108.8	113.4	118.9	117.3
Potatoes.....	91.7	94.1	94.6	98.6	104.8	116.7	128.9	106.5	96.0
Onions.....	92.5	95.2	94.8	98.7	102.2	112.7	111.8	114.4	98.7
Cabbage.....	106.9	121.1	112.1	107.9	111.2	103.6	97.7	90.3	87.7
Carrots.....	102.6	99.2	95.5	93.6	96.9	106.3	106.6	104.1	99.0
Celery.....	101.9	103.6	105.2	97.0	100.4	100.7	111.4	97.6	93.9
Lettuce.....	108.4	113.2	105.2	93.9	94.0	94.1	93.0	96.4	97.0
Tomatoes.....	109.9	107.0	111.1	113.6	113.3	101.2	103.7	79.3	70.7
Grapes.....							128.7	99.4	86.0
Strawberries.....				111.5	98.0	90.5			
Watermelon.....						118.0	98.6	83.4	
Frozen orange juice.....	101.5	101.0	101.2	101.9	99.8	98.9	98.4	98.9	99.0
Other foods at home.....	100.5	100.2	99.5	99.5	99.0	98.4	99.1	99.9	101.4
Eggs.....	103.1	102.9	99.2	98.1	91.3	87.5	91.7	96.9	109.4
Fuel and utilities.....	100.4	100.0	100.3	100.1	99.9	99.8	99.6	99.6	99.9
Fuel oil and coal.....	102.0	102.0	101.6	100.6	98.6	98.3	98.0	98.1	98.7
Apparel and upkeep.....	99.5	99.6	99.7	99.9	100.1	100.0	99.6	99.6	100.3
Men's and boys'.....	99.7	99.6	99.6	99.9	100.0	99.9	99.6	99.6	100.3
Women's and girls'.....	99.0	99.4	99.6	99.7	100.0	99.9	99.5	99.3	100.6
Footwear.....	99.9	99.9	99.9	100.1	100.0	100.1	99.7	99.8	99.8
Transportation.....	100.2	99.6	99.7	99.8	99.9	99.8	100.2	100.1	99.8
Private transportation.....	100.1	99.6	99.6	99.8	99.9	99.9	100.2	100.1	99.7
Special groups:									
Commodities.....	99.8	99.9	99.9	99.9	99.9	99.9	100.2	100.1	100.1
Nondurables.....	99.8	100.0	99.9	99.9	99.8	99.9	100.4	100.2	100.2
Durables.....	100.0	99.8	99.9	100.0	100.0	100.0	100.0	99.8	99.7
Commodities less food.....	99.9	99.7	99.8	100.0	99.9	100.0	99.9	99.8	99.9
Nondurables less food.....	99.9	99.7	99.8	99.9	99.9	99.9	99.8	99.8	100.2
Apparel commodities.....	99.4	99.5	99.6	99.8	100.1	99.9	99.5	99.5	100.3
Apparel commodities less footwear.....	99.3	99.4	99.6	99.8	100.0	99.9	99.6	99.4	100.4
New cars.....	100.7	100.4	100.1	100.2	99.8	99.6	99.1	98.7	98.0
Used cars.....	98.2	97.3	98.3	99.5	99.6	101.2	101.6	101.5	100.9
Housefurnishings.....	99.7	99.8	100.1	100.2	100.1	100.1	99.9	99.7	100.0

NOTE: These factors were derived by the BLS seasonal factor method using data for 1956-66. Factors for October, November, and December will be calculated after March 1967 data become available.

seasonal changes. The variation of new car prices, 3½ points, reflects practices of dealers, who introduce new models each fall at prices fairly close to manufacturers' new suggested retail prices and give progressively larger discounts in succeeding months until the end of the model year. In recent years, as mentioned previously, there has been a narrowing in the amplitude of seasonal price changes for new cars. This reflects the fact

that dealers are now allowing considerably larger concessions during the first month or two of the model year, whereas in earlier years most dealers introduced new models at levels at or near their list prices and consequently offered larger discounts during subsequent months.

Used car prices, unlike those of new cars, are primarily determined by supply and demand. The seasonal variation in these prices is some-

TABLE 2. CONSUMER PRICE INDEX: SEASONAL FACTORS IN PEAK AND TROUGH MONTHS AND VARIATION FROM TROUGH TO PEAK, OCTOBER 1965-SEPTEMBER 1966

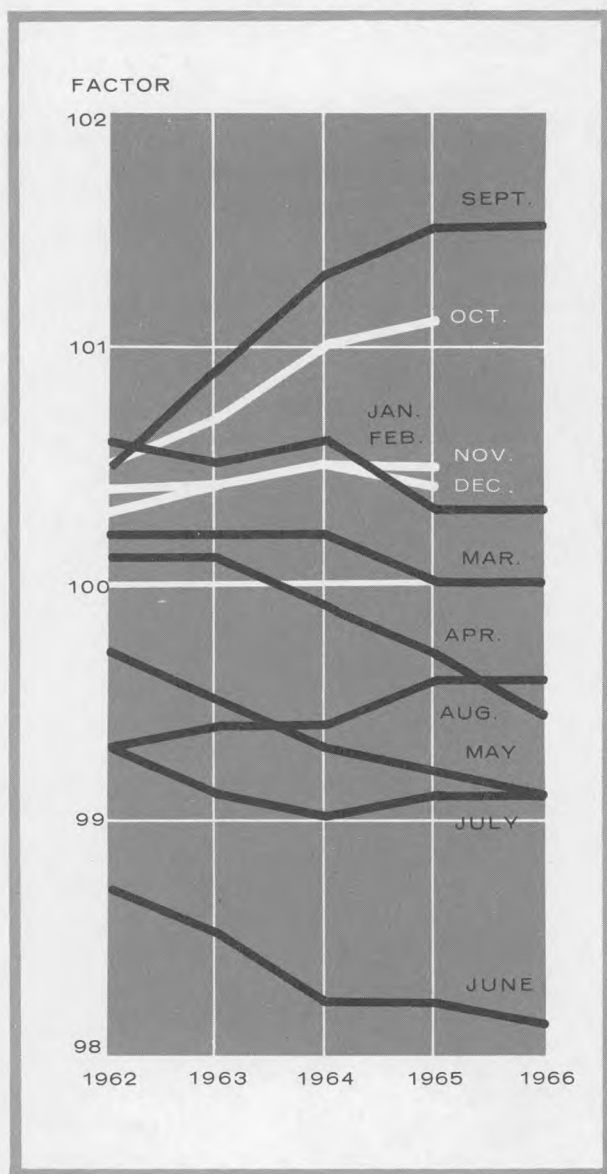
[Year=100]

Series	Trough		Peak		Difference between peak and trough
	Month	Factor	Month	Factor	
Food.....	May	99.5	July	100.9	1.4
Food at home.....	May, November	99.5	July	101.1	1.6
Meats, poultry, and fish.....	May	98.4	September	102.0	3.6
Meats.....	May	98.1	October	101.4	3.3
Beef and veal.....	June	98.1	September	101.5	3.4
Steak, round.....	June	98.1	October	101.7	3.7
Rib roast.....	June	98.5	January	101.4	2.9
Chuck roast.....	June	95.7	September	101.9	6.2
Hamburger.....	August	99.0	September	101.5	2.5
Veal cutlets.....	November	99.2	February-March	100.6	1.4
Pork.....	May	95.8	September	104.8	9.0
Chops.....	May	94.7	August	105.2	10.5
Ham, whole.....	May	96.8	December	102.4	5.6
Bacon.....	April	95.8	August	107.4	11.6
Other meats.....	April	99.5	November	100.4	.9
Frankfurters.....	April-May	99.5	November	100.7	1.2
Frying chicken.....	December	97.5	July	101.8	4.3
Fish.....	September, November, December	99.8	February	100.6	.8
Fish, fresh or frozen.....	June, October	99.6	February	100.6	1.0
Dairy products.....	June	99.1	October, January	100.5	1.4
Milk, fresh, grocery.....	June	98.3	October-November	100.9	2.6
Cheese, American process.....	July, December	99.7	March	100.4	.7
Butter.....	June	99.3	October, December	100.7	1.4
Fruits and vegetables.....	October	95.4	July	107.1	11.7
Fresh fruits and vegetables.....	October	93.0	July	111.6	18.6
Apples.....	November	81.1	July	128.8	47.7
Bananas.....	January	95.0	October	104.0	9.0
Oranges.....	January	92.4	October	110.0	17.6
Grapefruit.....	January	86.0	August	118.9	32.9
Grapes.....	September	86.0	July	128.7	42.7
Strawberries.....	June	90.5	April	111.5	21.0
Watermelon.....	August	83.4	June	118.0	34.6
Potatoes.....	November	89.3	July	128.9	39.6
Onions.....	November	91.9	August	114.4	22.5
Cabbage.....	November	84.5	February	121.1	36.6
Carrots.....	April	93.6	July	106.6	13.0
Celery.....	September	93.9	July	111.4	17.5
Lettuce.....	July	93.0	February	113.2	20.2
Tomatoes.....	September	70.7	December	124.6	53.9
Orange juice conc., frozen.....	July	98.4	January	101.5	3.1
Other food at home.....	June	98.4	September-October	101.4	3.0
Eggs.....	June	87.5	September	109.4	21.9
Fuel and utilities.....	July-August	99.6	December-January	100.4	.8
Fuel oil and coal.....	July	98.0	January-February	102.0	4.0
Apparel and upkeep.....	January	99.5	October-November	100.6	1.1
Men's and boys'.....	February-March, July	99.6	November-December	100.6	1.0
Women's and girls'.....	January	99.0	November	101.2	2.2
Footwear.....	July	99.7	November-December	100.3	.6
Transportation.....	February	99.6	November-December	100.4	.8
Private.....	February-March	99.6	November	100.5	.9
Special groups:					
Commodities.....	January	99.8	July, November	100.2	.4
Nondurables.....	January	99.8	July	100.4	.6
Durables.....	September	99.7	November	100.4	.7
Commodities less food.....	February	99.7	November	100.4	.7
Nondurables less food.....	February	99.7	October-December	100.3	.6
Apparel commodities.....	January	99.4	October, November	100.8	1.4
Apparel commodities less footwear.....	January	99.3	November	100.9	1.6
New cars.....	September	98.0	November	101.6	3.6
Used cars.....	February	97.3	July	101.6	4.3
Housefurnishings.....	January, August	99.7	April	100.2	.5

TABLE 3. CONSUMER PRICE INDEX: SEASONAL PEAKS AND TROUGHS OF SERIES, BY MONTH, BASED ON SEASONAL FACTORS, OCTOBER 1965-SEPTEMBER 1966

Position	October 1965	November 1965	December 1965	January 1966	February 1966	March 1966	
PEAK	Groups and Subgroups						
	Meats Beef and veal Dairy products Other foods at home Apparel and upkeep	Food at home Other meats Apparel and upkeep Men's and boys' clothing Women's and girls' apparel Footwear Transportation Private transportation	Fuel and utilities Men's and boys' clothing Footwear Transportation	Dairy products Fuel and utilities	Fuel oil and coal Fish including canned fish Fish, fresh or frozen		
	Items						
	Round steak Butter Milk, fresh, grocery Bananas Oranges	Frankfurters Milk, fresh, grocery New cars	Ham, whole Butter Tomatoes	Rib roast Frozen orange juice	Veal cutlets Cabbage Lettuce	Veal cutlets Cheese	
TROUGH	Groups and Subgroups						
	Fish, fresh or frozen Fruits and vegetables Fresh fruits and vegetables	Food at home Fish including canned fish	Fish including canned fish	Apparel and upkeep Women's and girls' apparel Housefurnishings	Men's and boys' clothing Transportation Private transportation	Men's and boys' clothing Private transportation	
	Items						
		Veal cutlets Apples Potatoes Onions Cabbage	Frying chicken Cheese	Bananas Oranges Grapefruit	Used cars		
Position	April 1966	May 1966	June 1966	July 1966	August 1966	September 1966	
PEAK	Groups and Subgroups						
	Housefurnishings			Food Food at home Fruits and vegetables Fresh fruits and vegetables		Meats, poultry, and fish Beef and veal Pork Other food at home	
	Items						
	Strawberries		Watermelon	Frying Chicken Apples Potatoes Carrots Celery Grapes Used cars	Pork chops Bacon Grapefruit Onions	Hamburger Chuck roast Frozen orange juice Eggs	
TROUGH	Groups and Subgroups						
	Other meats	Food Food at home Meats, poultry, and fish Meats Pork	Beef and veal Fish, fresh or frozen Dairy products Other food at home	Fuel and utilities Fuel oil and coal Men's and boys' clothing	Fuel and utilities Fuel oil and coal Footwear Housefurnishings	Fish including canned fish	
	Items						
	Bacon Frankfurters Carrots	Pork chops Ham, whole Frankfurters	Round steak Rib roast Chuck roast Milk, fresh, grocery Butter Strawberries Eggs	Cheese Lettuce Frozen orange juice	Hamburger Watermelon	Celery Tomatoes Grapes New cars	

Chart 3. Seasonal Factors for Beef and Veal in the Consumer Price Index, 1962-66
[Year=100]



what greater than that for new cars—4.3 points. Although there may be departures from the usual pattern in any given year, used car prices gen-

erally rise during the spring and summer months, reaching their peak in September. This increase generally coincides with the "driving season," those months in which the weather is best suited for driving. Conversely, used car prices begin to decline during the fall months, in response to decreased demand, and to a lesser extent to an increased supply of trade-ins on new cars during the first months of the new model year. Used car prices reach their seasonal low point during the winter when bad weather conditions in many parts of the country discourage the use of cars for pleasure driving.

Indexes for gasoline are not available on a monthly basis, and no attempt has been made to adjust the published quarterly indexes for seasonal variation. However, seasonal changes in gasoline prices do affect the index for transportation every month. Seasonal increases in gasoline prices generally coincide with the spring and summer "driving season" and are, of course, the result of the rise in demand during these months. Conversely, these prices normally decline seasonally during the fall and winter.

Fuel oil prices, included in the housing group, follow an opposite seasonal pattern to that for gasoline, rising to their highest levels during the coldest winter months, January and February, when the demand for heating fuel is greatest. Since the refining process yields both fuel oil and gasoline and the peak seasonal requirements and demand for each occur during different times of the year, the production of one type may to some extent increase the supply of the other at exactly the time it is not needed, thereby further reducing its price. In addition, the limitations imposed by storage facilities may cause producers to dump gasoline or fuel oil at the end of a season to make room for the other fuel during the coming season.

Prices of household furnishings show a slight seasonality which reflects the traditional January "white sales" for household textiles as well as the regular winter and summer furniture sales.

Full Employment and Workers' Education

Unemployment Rates at Different Levels of Educational Attainment

EINAR HARDIN*

THE EFFECT OF A RISE in aggregate demand for labor upon unemployment rates in particular labor force groups is one of the many important factors that determine what level of employment is consistent with price stability and economic growth. Little quantitative information is available about this factor. This article presents estimates of the effect of changes in aggregate demand upon unemployment rates for the labor force as classified according to years of formal education.

There are marked differences in unemployment rates among persons with different amounts of schooling. If economic expansion has the effect of reducing unemployment at all educational levels, it will naturally generate intense shortages of more highly educated manpower. Expecting such a result, society might decide to be satisfied with a higher level of unemployment, to do everything possible to increase the supply of more educated manpower, and to encourage private and public employers to hire less educated manpower. These decisions may be quite wrong, however, if economic expansion instead causes a substantially smaller reduction in unemployment for persons at high educational levels than for those at low levels. Since sample survey data on unemployment according to educational attainment are now available for 7 recent years, it is possible to make preliminary estimates of the effect of economic expansion upon labor force groups that differ in educational attainment.

*Associate Professor of Labor and Industrial Relations, Michigan State University.

The Model and Its Rationale

The statistical model which was used for estimating the effect of an expansion in aggregate demand was the same for all of the labor force groups. The group unemployment rate, as the dependent variable, was assumed to be a linear function of the national rate of unemployment and the year of observation:

$$Y_{it} = \alpha_i + \beta_{1i}X_t + \beta_{2i}t + \epsilon_{it} \text{ for } i = 1, \dots, n$$

Where

Y_{it} = the observed unemployment rate in group i , year t ,

X_t = the observed national unemployment rate, year t ,

t = actual year minus 1966,

n = the number of labor force groups,

α_i , β_{1i} , and β_{2i} = the population regression coefficients, and

ϵ_{it} = the disturbance term.

Changes in the level of aggregate demand for goods and services, corrected for changes in labor productivity, were no doubt the major influence upon the national unemployment rate during the period of observation. The national rate was included as an explanatory variable on the premise that it would be an adequate proxy for the level of aggregate demand. The regression coefficient of the national rate, β_{1i} , would then be a

measure of the effect of changes in aggregate demand upon the level of unemployment in the particular group. More precisely, it would measure the change in the group rate which would accompany changes in aggregate demand that led to an increase in the national rate by one percentage point.

The year of observation was chosen as a second explanatory variable since unemployment in a particular labor force group may change over time, even if the national rate remains constant. Changes in the composition of final demand and in technology within particular industries transform the composition of demand for labor. Changes in labor force participation rates and in the composition of the population and its educational attainment alter the composition of the supply of labor. The effects of simultaneous changes on the labor demand and supply sides need not cancel each other in every group, but may raise the rates in some groups and lower them in others. The regression coefficient of the time variable, β_{2t} , would be a measure of the change in the group rate, in percentage points per year, which occurs over time, apart from any changes in the national rate.

The model implied two assumptions: That the group rate was a linear function of the national rate, and that the effect of the national rate upon the group rate did not change over time. Objections may be raised to both assumptions. However, the second order and interaction terms that would be needed if these assumptions were abandoned were left out of the model, since meaningful estimates of their regression coefficients could not be expected to result from an analysis of a sample of only seven observations.

The model did not represent explicitly the influence of certain recent Federal programs. The increased draft into the Armed Forces and the creation of the Job Corps, the Neighborhood Youth Corps, and the Manpower Development and Training Act programs no doubt influenced the unemployment rates, but the effect differed between men and women and among persons at different educational levels. The estimates of the structural shift represented by the coefficient of the time variable for the years 1957-66 in reality also included the effects of growth in these programs. The coefficients of the time variable

should, therefore, be interpreted with caution, since it is very difficult to make proper allowance for these effects.

Data and Statistical Method

The dependent variables were represented by the unemployment rates for persons 18 years and older as reported in the sample surveys of the labor force conducted in March of 1957, 1959, 1962, 1964, 1965, and 1966 and in the 5-percent sample of the 1960 U.S. Census of Population for the survey week in April of that year.¹ The national rate was represented by the unemployment rate for the civilian labor force, age 14 and over, in the corresponding months. Even though the group rates were of necessity seasonally unadjusted, the seasonally adjusted data were used for the national rate, since policy issues involving full employment are customarily and usefully stated in terms of the seasonally adjusted national rate. After recombination of data for some of the years, there remained 14 labor force groups consisting of men and women at seven educational attainment levels: Less than 5, 5 to 7, 8, 9 to 11, 12, 13 to 15, and 16 years and more of schooling.²

The regression coefficients of the model were estimated by the method of least squares for each of the 14 labor force groups separately. In reality, however, the 14 equations were not independent of each other. First, since the national rate was a weighted average of group rates, the regression

¹ For the raw current population survey data for 1957-65, see *Educational Attainment of Workers: March 1957, Current Population Reports, Series P-50, No. 58* (Washington, U.S. Bureau of the Census, 1957), table 1, p. 8; and "Educational Attainment of Workers, 1959," *Monthly Labor Review*, February 1960, pp. 113-122; "Educational Attainment of Workers, March 1962," *Monthly Labor Review*, May 1963, pp. 504-515; "Educational Attainment of Workers, March 1964," *Monthly Labor Review*, May 1965, pp. 517-527; and "Educational Attainment of Workers in March 1965," *Monthly Labor Review*, March 1966, pp. 250-257; reprinted as Special Labor Force Reports Nos. 1, 30, 53, and 65, respectively. (See particularly table C of supplementary tables.) The unemployment rates for April 1960 were computed from *U.S. Census of Population, 1960, Educational Attainment, PC (2)-5B* (Washington, U.S. Bureau of the Census, 1963), table 4, pp. 54-55.

² Sample survey data on unemployment in different educational attainment groups were also available from an October 1952 survey and from the 1950 Census of Population. The former were disregarded because of the difference in season, while the latter were excluded because of the wide discrepancy between unemployment rates reported in the 1950 Census and those of the April 1950 Current Population Survey. (See R. A. Gordon et al., *Measuring Employment and Unemployment*, President's Committee to Appraise Employment and Unemployment Statistics, Washington, 1962, appendix J, pp. 373-386.)

TABLE 1. REGRESSION ANALYSIS OF UNEMPLOYMENT RATES 1957-66, FOR CIVILIAN LABOR AGE 18 AND OVER, BY SEX AND YEARS OF FORMAL SCHOOLING COMPLETED
[N=7 in each group]

Labor force group	Observed rate		Regression of observed group rate							
	Average	Standard deviation	R ²	Intercept		National rate		Year		Standard error of estimate
				Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error	
Men:										
0-4	8.4	1.5	0.75	0.29	2.49	¹ 1.56	0.51	-0.14	0.11	0.9
5-7	7.3	1.5	¹ 1.86	-1.21	1.78	² 1.66	.36	-.11	.08	.7
8	5.9	1.3	² .92	-2.37	1.24	² 1.70	.25	-.00	.06	.5
9-11	6.4	1.3	¹ 1.77	-1.12	2.11	¹ 1.57	.43	-.04	.10	.8
12	3.8	.9	² .89	-1.51	.93	² 1.05	.19	-.04	.04	.3
13-15	3.2	.5	.66	.86	.95	¹ .53	.19	.05	.04	.4
16-up	1.2	.3	² .97	-.39	.18	² .37	.04	² .05	.01	.1
Women:										
0-4	7.6	1.9	.59	-1.11	3.93	1.62	.80	-.19	.18	1.5
5-7	7.3	2.2	¹ 1.86	-6.06	2.76	² 2.69	.56	-.06	.13	1.0
8	5.9	.7	.53	3.08	1.49	.52	.30	-.07	.07	.6
9-11	7.8	1.4	¹ 1.80	-.03	2.09	¹ 1.69	.43	.09	.10	.8
12	4.6	1.0	² .93	-.31	.89	² 1.14	.18	¹ .16	.04	.3
13-15	3.6	.8	.26	1.92	2.21	.42	.45	.08	.10	.8
16-up	1.3	.2	¹ 1.86	.57	.23	¹ .19	.05	¹ .04	.01	.1

¹ .01 < P < .05 for the null hypothesis that the population value was zero.

² P < .01 for the null hypothesis that the population value was zero.

for any one group could have been deduced from the equations for the rest of the groups, except that the national rate was seasonally adjusted and covered the labor force age 14 and up. Second, the disturbance terms should probably be regarded as correlated across equations, since differential changes in labor shortages probably caused substitution of manpower among labor force groups. As there was no satisfactory method for taking account of these interrelationships, the single equation approach was employed.

Because most of the regressions upon time turned out to be statistically nonsignificant, simple linear regressions of the group rates upon the national rate were also computed. The two sets of regression coefficients were used in calculating alternative predictions of the group unemployment rates that would exist in March 1967, if the national rate were brought down to 3 percent.

Findings

The main results of the analysis can be found in table 1. The unemployment rate, averaged over the 9 years or the seven observations studied, was clearly lower among persons with a greater, rather than a smaller, number of years of formal schooling. The variability of the unemployment rate was also lower among persons with more education. The high school dropouts were exceptions, as their unemployment rates exceeded those of grade and

high school graduates. The college graduates, who might be thought to be the main barrier to fuller employment, showed the lowest average unemployment rate, 1.2 to 1.3 percent, and also the lowest variability, 0.2 to 0.3 percentage points.

Clearly, if an expansion in aggregate demand were to lower the unemployment rates by the same number of percentage points in all groups, the manpower shortages would first arise in the better educated portion of the labor force, particularly among the college graduates. The coefficient of partial regression of the group rate upon the national rate would then equal +1.0 in all 14 equations. Table 1 shows that all these regression coefficients had positive signs, as could be expected, but that they varied substantially in size, from 0.37 to 1.70 for men and from 0.19 to 2.69 for women. Although the limited number of observations did not permit a test of most of these coefficients, the two deviations pertaining to the college graduates could be classified as significant beyond reasonable doubt. The regression coefficients of 0.37 for men and 0.19 for women college graduates differed from unity by about 16 standard errors.

These results were not merely the consequence of the fact that the dependent variable was also a component of one of the explanatory variables. An analysis of the frequency distribution of the 91 coefficients of simple correlation among group rates showed that there were no negative values and that almost two-thirds of the coefficients were

TABLE 2. PREDICTED MARCH 1967 UNEMPLOYMENT RATES, BY SEX AND EDUCATION, AT NATIONAL UNEMPLOYMENT RATE OF 3 PERCENT

Years of schooling	Alternative I ¹	Alternative II ²
Men:		
0-4.....	4.8	5.4
5-7.....	3.6	4.1
8.....	2.7	2.7
9-11.....	3.6	3.5
12.....	1.6	1.8
13-15.....	2.5	2.3
16-up.....	.8	.8
Women:		
0-4.....	3.6	4.4
5-7.....	1.9	2.2
8.....	4.6	4.0
9-11.....	5.1	4.7
12.....	3.3	3.3
13-15.....	3.3	3.4
16-up.....	1.2	1.2

¹ Based on regression coefficients from table 1.

² Based on simple linear regressions of group upon national rates, when the time trend in table 1 was not statistically significant, and otherwise (men and women at age 16 and over and women with 12 years of schooling) based on table 1.

in the range from 0.60 to 0.99. High values of R^2 for the multiple regression equations, therefore, no doubt represented primarily a genuine positive interrelationship among group rates instead of simply mirroring the definition of the national rate.

The partial regressions of the group unemployment rates upon the year represented the extent, in percentage points per year, to which the group rate changed for other reasons than in response to changes in the national rate. (The correlation between the national rate and time was only $r = -0.11$). Significantly nonzero coefficients of regression upon time would reflect discrepancies between demand and supply in the direction or rate of transformation. Very few of the coefficients were significantly different from zero even at the 5-percent level. There was a faint suggestion that the regression coefficients tended to be positive among the relatively well-educated persons and negative among those with little education, and there was no evidence at all of the opposite relationship. In fact, both the men and the women college graduates did show significant positive regressions, and the unemployment rate in each group was estimated to rise by about 0.04 to 0.05 percentage points per year at a constant national unemployment rate.

Rates at 97-Percent Employment

Economic policy has for several years sought to achieve an interim level of full employment

defined in terms of a national unemployment rate of 4 percent, and this aim was realized in 1966. When the U.S. Department of Labor in the near future publishes the results of the March 1966 survey of the educational attainment of the labor force, direct evidence will become available on unemployment rates in various educational categories roughly at this interim level of full employment. The estimated regression coefficients in table 1 may be used for predicting the unemployment rates that will result, if another step is now taken toward full employment by bringing the national unemployment rate down to 3 percent.³

Table 2 shows predictions of the seasonally unadjusted unemployment rates for March 1967 that would have existed in the 14 groups if the seasonally adjusted national rate had been brought down to 3 percent at that time. Alternative I was based on the coefficients shown in table 1; alternative II was based on recomputed regressions which omitted the time variable when the regression coefficient upon time was not statistically significant in table 1.

Men with less than 5 years of schooling who, over the 1957-66 period, had an average unemployment rate of 8.4 percent would probably have had an unemployment rate of no more than 5.4 percent, and women with low education would also have experienced a sharp drop in unemployment. The unemployment rate for men with 12 years of schooling would have dropped very markedly and reached a level not recorded in the period, and the rate for women high school graduates would also have dropped noticeably. Men college graduates would have had an unemployment rate of about 0.8 percent, which would be lower than the average for the period but higher than the March 1957 rate of 0.6 percent. Women college graduates would have had an unemployment rate almost identical with their historical average.

³ In using the coefficients for this purpose, one should remember that the national rate and the year did not fully explain the variation in the group rate, even though they typically explained substantially more than one-half of it. The standard errors of estimate, which were necessarily smaller than the standard errors of the forecasts, ranged from 0.1 to 0.9 points for men and from 0.1 to 1.5 points for women; the lowest values were found for the college graduates. Furthermore, because the model was linear, any pronounced manpower substitution at 3-percent unemployment could not influence the estimates adequately. The predictions should therefore be regarded only as rough indicators: Predicted low rates are likely to fall somewhat below the true rates, and the reverse holds for predicted high rates.

An Improving Balance

The findings of this study, tentative in view of the small sample size, suggest the following conclusions:

Decreases in the national unemployment rate in the 1957-66 period were associated with substantially larger reductions in unemployment (in percentage points) among those educational groups with typically high than in groups with typically low unemployment. Hence, the disparities in unemployment rates among persons with unequal levels of education diminished, as the national rate of unemployment declined. Although the unemployment rates among both men and women college graduates were positively and highly correlated with the national unemployment rate, they fell by only about 0.4 for men and 0.2 for women per unit change in the national rate.

If transformations of demand and supply create a growing imbalance, increasing the shortage of highly educated manpower and increasing the surplus of manpower with low education, the coefficient of regression upon time will have a negative sign for persons with high education and a positive sign among those with low education. Although most regressions upon time were not statistically significant, the few significant coefficients had signs opposite to these expectations. There was, if anything, some evidence of an improving balance. This was particularly clear in the case of college graduates. If shortages of this group of manpower were in fact barriers to full employment, they appeared to have declined instead of growing in importance during the period.

An expansion in aggregate demand sufficient to reduce the seasonally adjusted national unemployment rate to 3 percent would probably have generated a March 1967 unemployment rate of about 0.8 percent among male college graduates and of about 1.2 percent among female college graduates. The unemployment rates predicted for March 1967 were not startlingly low for any of the other labor force groups except male high school graduates.

It is well known that the employment which characterized calendar year 1966 was accompanied by a more rapid increase in prices of consumer goods and services than occurred in several recent years. Survey data show that the unemployment rate among male college graduates was lower than in 6 of the 7 years for which data exist. This does not demonstrate that the shortage of college graduates was a major inflationary force. If the March 1966 rate is lowered to 3 percent in 1967, there might also be pronounced increases in prices. If this should happen, however, the causes are more likely to be found in general shortages in manpower, in shortages of physical capital in the economy, and in institutional forces of inflation than in a bad distribution of educational attainment in the labor force. Whether government programs to achieve 97-percent full employment in 1967 would be compatible with a moderate price stability cannot be determined from the results of this statistical analysis. The results suggest, however, that if a policy to lower the national unemployment rate to 3 percent is otherwise desirable, it need not be held in abeyance while vast and expensive programs to increase the supply of college graduates are taking effect.

According to the most optimistic projections of the Census Bureau, the percentage of family heads with less than an eighth-grade education will fall from 21.9 percent in 1960 to 15.9 percent in 1970 and 11.1 percent in 1980. This suggests that education alone will reduce the incidence of poverty to 18.8 percent in 1970 and to 16.8 percent in 1980, if the economy is able to generate enough capital to equip a more highly educated labor force.

—Lester C. Thubow.

Recent Developments in Productivity and Unit Labor Costs

JEROME A. MARK AND MARTIN ZIEGLER*

FOR THE SECOND CONSECUTIVE YEAR, productivity in 1966 rose by 2.8 percent—somewhat less than the long-term (postwar) trend, and substantially less than the 3.5-percent average for the most recent 5-year period (table 1). Two successive years of somewhat smaller than average productivity gains alone may not be indicative of a significant change in the secular trend. Short-term fluctuations above and below the trend rate for as many as 2 or 3 years have occurred in the past (chart 1), but they were usually explained by short-term changes in output. However, the growth rate of the private Gross National Product during the past 5 years has been consistently higher than the long-term trend in output, and yet, for 2 consecutive years, the productivity growth rate has fallen significantly below the trend. (See table 2.)

To some extent, the forces which dampened productivity growth in 1965 were still operating in 1966. After 4 years of uninterrupted growth in output, as the economy continued to operate at higher and higher levels to meet increased demands, more reserve resources were drawn upon in the production process. In general, these were less efficient and tended to dampen productivity gains.

The pressures of sustained growth of output on available resources are indicated, in part, by the information available on the rate of capacity utilization. For manufacturing, for example, the operating rate during 1966 reached 91 percent,

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

¹ Frank de Leeuw, "A Revised Index of Manufacturing Capacity," *Federal Reserve Board Bulletin*, November 1966, p. 1615.

compared with a relatively high rate of 89 percent in 1965.¹ Other factors were the shortage of skilled workers and, consequently, the increased hiring of less skilled workers.

Movements of Component Sectors

Although the productivity gains for the private economy in both 1965 and 1966 were identical, the movements of the component sectors were substantially different. In 1966, productivity in agriculture, for example, rose 4.7 percent in contrast to the 11.3-percent gain the previous year. However, the phenomenal rise in farm productivity in 1965 marked the largest increase of farm output in 17 years, whereas the smaller gain in 1966 was accompanied by an actual 5-percent drop in output.

A different pattern emerged for the nonfarm sector in these 2 years. The gain in nonfarm productivity in 1966 was slightly higher than in 1965, 2.4 as against 2.1 percent, while output rose slightly less, 5.8 percent as compared with 6.1 in 1965. Thus, the less-than-average productivity gain in 1966 for the total private economy reflects, to some extent, the sharp fluctuation in the movement of agriculture.

TABLE 1. AVERAGE ANNUAL PERCENT CHANGE¹ IN OUTPUT PER MAN-HOUR AND RELATED DATA, 1947-66

Item	1947-66	1961-66
Total private economy:		
Output per man-hour ²	3.2	3.5
Output ²	3.7	5.5
Employment.....	.9	2.0
Man-hours.....	.5	1.9
Farm:		
Output per man-hour.....	5.9	5.7
Output.....	1.4	.8
Employment.....	-3.6	-4.8
Man-hours.....	-4.2	-4.6
Nonfarm:		
Output per man-hour.....	2.6	3.1
Output.....	3.8	5.7
Employment.....	1.4	2.5
Man-hours.....	1.1	2.5

¹ Computed from least squares trend of the logarithms of the indexes.

² Output refers to Gross National Product in constant (1958) dollars; man-hours are based primarily on establishment reports to the Bureau of Labor Statistics.

Although the gain in productivity in the nonfarm sector in 1966 was slightly higher than that of 1965, it was below the long-term rate of 2.6 percent and was substantially below the gain of the last 5 years (3.1 percent). This indicates that the short-term pressures on capacity which tended to inhibit productivity growth were still operating during the year, but perhaps with less intensity.

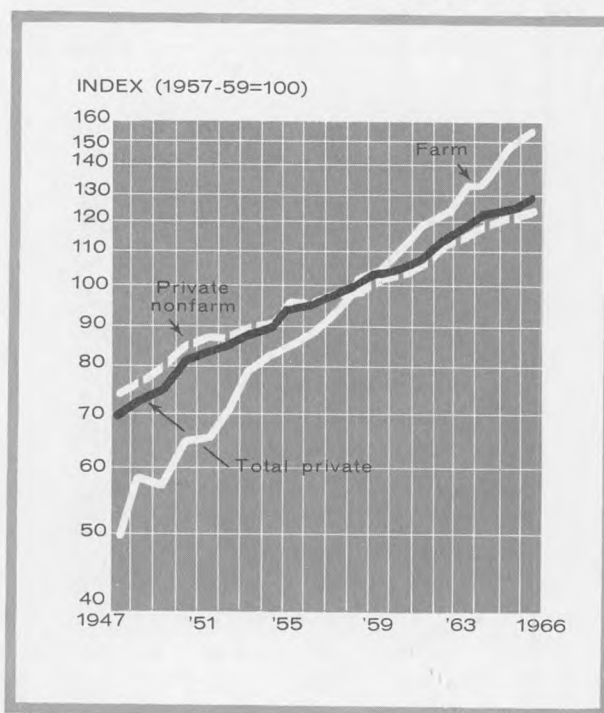
It is doubtful that increases in output of the magnitude experienced during the past 5 years

can be sustained. Most estimates of future growth over the next few years are not very high, generally around 4 to 4½ percent. Usually, a significant drop in the rate of increase in output is accompanied by a decline in the rate of productivity growth. In this case, however, other factors in the economy may tend to run counter to this pattern and stimulate rather than retard productivity growth.

Foremost among these factors is the high level of investment in new plant and equipment, which has been growing at an unprecedented rate since 1963. In each of the last 3 years, nonresidential fixed investment rose by at least 10 percent. In both 1965 and 1966, investment in plant and equipment rose over 13 percent, and most of these additional expenditures were for producers' durable equipment. Such a sustained increase in capital formation had not occurred since World War II. There is, however, a lag between the time when expenditures for plant and equipment are made and when these operating facilities—which usually incorporate new technological advances—become fully productive. Although such increases in investment have been taking place during the past 3 years, their effect on productivity has not been very significant as yet. The small gain which occurred in productivity in the nonfarm sector this year may reflect, to some extent, the cumulative increases in investment over the last few years. Undoubtedly, this cumulative effect will be a factor for several years to come.

Just as investment in capital which incorporates technological innovations serves to stimulate pro-

Chart 1. Output Per Man-Hour, Total Private Economy, Farm and Nonfarm Sectors, 1947-66



ductivity growth, so does investment in human resources through manpower development and training programs.

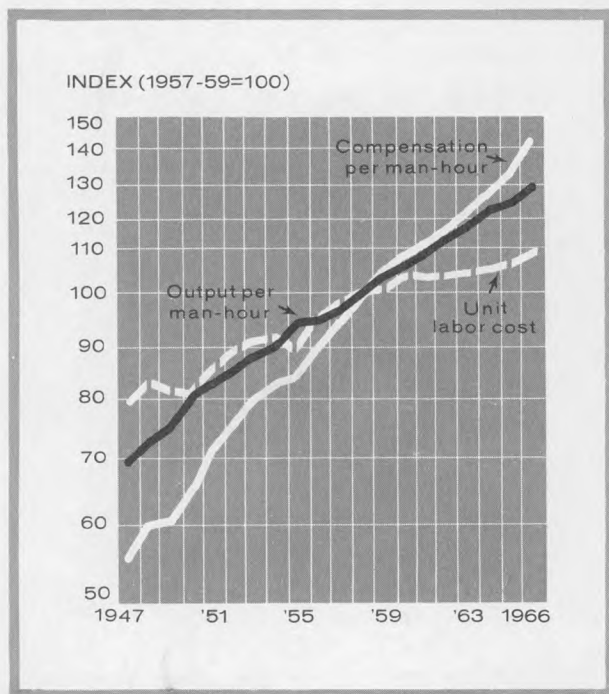
While the decline in the rate of increase in output may dampen productivity growth, the effect of the cumulative investment and manpower programs should more than offset this result, causing some improvement in productivity over the next few years.

TABLE 2. YEAR-TO-YEAR PERCENT CHANGE IN OUTPUT, OUTPUT PER MAN-HOUR, AND MAN-HOURS, 1947-66¹

Years	Total private economy			Farm			Nonfarm		
	Output	Output per man-hour	Man-hours	Output	Output per man-hour	Man-hours	Output	Output per man-hour	Man-hours
1947-48	4.7	4.3	0.4	11.8	16.5	-3.9	4.5	3.1	1.3
1948-49	-3	3.2	-3.4	-3.2	-2.6	-.7	-.1	3.9	-3.8
1949-50	10.3	8.2	2.0	5.4	14.0	-7.4	10.5	6.3	3.9
1950-51	6.3	3.0	3.2	-5.1	.5	-5.6	7.1	2.1	4.9
1951-52	2.4	1.8	.6	3.3	8.7	-5.0	2.4	.8	1.6
1952-53	5.1	4.3	.8	5.2	13.2	-7.0	5.1	3.0	2.1
1953-54	-1.3	2.3	-3.6	2.1	5.2	-3.0	-1.6	2.1	-3.6
1954-55	8.5	4.4	3.9	2.4	.8	1.5	8.8	4.5	4.2
1955-56	1.9	.1	1.8	-.5	4.3	-4.5	2.1	-.5	2.6
1956-57	1.4	3.0	-1.5	-2.4	6.0	-8.0	1.5	2.1	-.6
1957-58	-1.3	3.0	-4.2	2.4	10.4	-7.1	-1.4	2.6	-3.8
1958-59	7.0	3.6	3.3	1.4	1.7	-.4	7.2	3.4	3.7
1959-60	2.4	1.5	.8	3.8	5.6	-1.6	2.4	1.3	1.1
1960-61	1.9	3.3	-1.4	1.3	7.9	-6.1	1.9	2.8	-.9
1961-62	6.8	4.7	2.0	-.4	2.3	-2.7	7.2	4.6	2.5
1962-63	4.1	3.5	.6	3.1	8.9	-5.4	4.2	3.0	1.2
1963-64	5.5	3.8	1.7	-3.5	.5	-3.9	5.9	3.7	2.2
1964-65	6.1	2.8	3.3	8.2	11.3	-2.8	6.1	2.1	3.8
1965-66	5.3	2.8	2.5	-5.0	4.7	-9.3	5.8	2.4	3.4

¹ See footnote 2, table 1.

Chart 2. Output Per Man-Hour, Compensation Per Man-Hour, and Unit Labor Cost, Total Private Economy, 1947-66



Unit Labor Costs

In 1966, compensation per unit of output (unit labor costs) in the private economy rose 3.7 percent, the largest increase in over a decade and over twice the average annual gain for the entire postwar period (table 3). Moreover, this sizable rise represented a sharp break in a pattern that has developed since early 1961, when the current expansion began.

During the 1961-65 period, unit labor costs had been fairly stable, with increases averaging about one-half percent per year and small year-to-year fluctuations about the average. In 1965, for example, the increase was only 1 percent; but in 1962, when labor resources were in abundant supply, unit labor costs actually declined by 0.3 percent.

Movements in unit labor costs are affected by both productivity growth and changes in average labor compensation. (See chart 2.) A rise in compensation per man-hour will not lead to an increase in unit labor costs if there is a commensurate gain in productivity. As indicated earlier, output per man-hour (productivity) in 1966 increased by 2.8 percent. In contrast, compensation

per man-hour that year soared by 6½ percent, a jump which not only offset the growth in productivity but also led to a substantial increase in unit labor costs.

The relative stability in unit labor costs during the business expansion of 1961-65 can be explained by the interplay of productivity growth and rising labor compensation. During the 4-year period, the average annual increase in compensation per man-hour (4.3 percent) was somewhat lower than the annual long-term rate for the postwar period (4.9 percent). Conversely, during the same 5-year period the annual growth in productivity (3.7 percent) was significantly higher than the postwar secular trend (3.2 percent). In 1966, however, a shift in this pattern took place, resulting in the rise in unit labor costs.

The only other year in which the rise in compensation per man-hour exceeded the postwar annual average occurred in 1964, when compensation per man-hour rose by 5.1 percent. However, in contrast to 1966, productivity in 1964 grew faster (by 3.8 percent) than the postwar trend, resulting in only a modest increase in unit labor costs (1.2 percent).

Just as the growth in productivity may be affected by short-range fluctuations in output, compensation per man-hour is influenced by developments in the job market and the relationship between labor demand and labor supply. With the decline of unemployment during 1965 and the early part of 1966, the reserve of experienced workers was gradually being dried up. This created pressure on producers, who were competing for the limited supply of skilled and semi-skilled workers, and influenced the rise in wage rates.

A comparison between compensation per man-hour and unemployment rates on an annual basis tends to confirm this point. The last time the in-

TABLE 3. AVERAGE ANNUAL RATES OF CHANGE IN OUTPUT PER MAN-HOUR, HOURLY COMPENSATION, AND UNIT LABOR COSTS IN THE PRIVATE ECONOMY FOR SELECTED YEARS¹

Item	1947-66	1961-66
Unit labor costs.....	1.7	1.1
Output per man-hour.....	3.2	3.5
Compensation per man-hour.....	4.9	4.6
Real compensation per man-hour.....	3.1	3.0

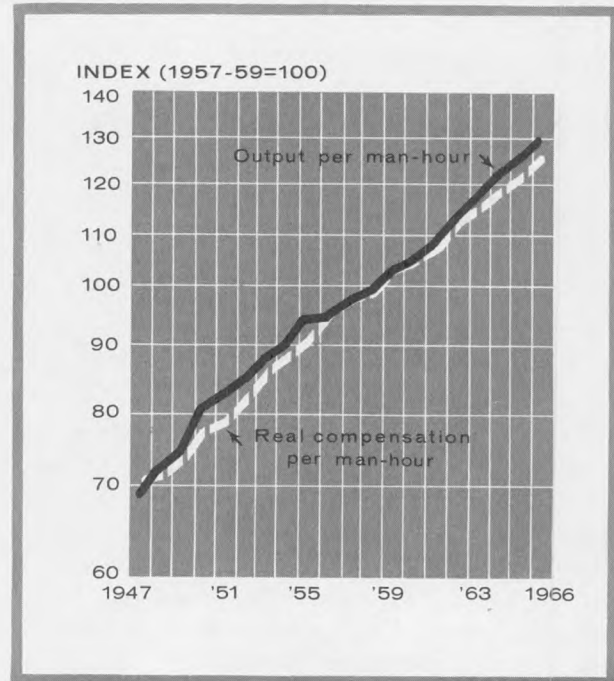
¹ All rates computed from the least squares trend of the logarithms of the index numbers.

crease in compensation per man-hour rose substantially above the postwar average annual rate of change was in 1957, when the unemployment rate was 4.3 percent. Since 1958—a recession year—through 1964, unemployment rates hovered around 5.5 percent, finally dropping in 1965 below the 5-percent level. In all but 1 of these 8 years, compensation per man-hour grew at a rate somewhat lower than the postwar average annual rate of change. This seems to indicate that the sharp increase in compensation per man-hour in 1966 was influenced by pressures on the available labor supply.

Although the sizable increase in hourly compensation in 1966 led to a rise in unit labor costs, in terms of real income a substantial part of the returns to labor was diluted by increases in consumer prices. When hourly compensation is adjusted for changes in purchasing power, the increase in real earnings of workers can be compared with the growth in productivity. Despite the increase in consumer prices in 1966, there was a substantial rise in real hourly compensation (3.6 percent), which exceeded the gain in productivity. This represented a departure from the relationship for the previous 5 years, when the growth in productivity (3.5 percent) outpaced the increase in real compensation per man-hour (3.0 percent).

Too much emphasis should not be placed on this 1 year's departure. Annual fluctuations and even extended differences in the relationship between

Chart 3. Output Per Man-Hour and Real Compensation Per Man-Hour, Total Private Economy, 1947-66



real earnings and productivity have occurred in the past. (See chart 3.) Over the whole period since World War II, the average increase in real compensation and productivity has been about the same, 3.1 and 3.2 percent.

Useful and realistic statistics available for the determination of policy can only arise from an organization that is primarily concerned with solving such problems of policy. When the collection of statistics becomes a mere routine job of collecting and tabulating figures by people who have no contact or appreciation of the problems concerning which statistics are being collected, the nature of the data becomes mechanical and of much less value than it otherwise might be.

—Isador Lubin.

Composition of Wages and Supplements: U.S.-Japan Comparisons

JANET L. NORWOOD*

DIFFERENTIALS based on age and length of service, traditionally part of the Japanese wage system, have been diminishing in recent years. This trend illustrates the way in which the wage and benefit structures of Japan and the United States have become more comparable. Nevertheless, differences still exist. Wage rates are lower in Japan—but they are increasing at a faster rate. Both countries have fringe benefits, but certain kinds of benefits are more prevalent in Japan than in the United States. These observations are based on data from the Joint United States-Japan Wage Study.¹ The following examination of the composition and structure of wages and supplementary benefits in the two countries completes an assessment of the similarities and contrasts in the two wage systems, begun in last month's *Monthly Labor Review*.

Wage Structure

The methods of wage determination and the patterns of wage differentials in Japan are, in many ways, dissimilar from those in the United States. In Japan, the amount of compensation received by a regular worker² is determined more by personal attributes and family requirements than by his performance. Employment is not viewed as an impersonal exchange of services where the cash reward is determined by the job held or the amount produced. A regular worker is usually hired when he leaves school and generally remains with the same employer until re-

tirement. His basic wage is determined by his age and education at the time he enters employment, and he receives an annual increment designed primarily as a reward for loyalty and service to the company. Relatively little attention is given to the task performed.

In the United States, on the other hand, wages usually reflect time rates based upon the job or task performed or incentive rates based upon the amount produced. Wage differentials specifically related to job requirements—in terms of skill, responsibility, and other factors—are characteristic of the American wage structure.

In practice, a similar though less marked system of skill differentials prevails in Japan. As workers become older, they are paid higher wages. They also usually receive training and develop skills not yet possessed by young workers beginning their employment careers. In both countries, therefore, wages vary in accordance with the training and experience of the workers, as well as with the type and location of the industry, the size of the establishment, and the extent of unionization. However, the degree of difference is usually greater in Japan than in the United States, and the bases upon which these variances are determined are different in the two countries.

The wage spread, the difference between the lowest and the highest significant wage level, is wider in Japan than it is in the United States, and a higher proportion of Japanese workers earn less than the average. In 1964, for example, monthly contract cash earnings (without bonuses and other special payments) reported for Japanese factory employees ranged from about 5,000 yen to more than 80,000 yen. An estimated 61 percent earned less than the monthly average of 26,390 yen.³ In the United States, nearly all factory workers earned at least the \$1.25-per-hour Federal mini-

*Of the Office of Foreign Labor and Trade, Bureau of Labor Statistics.

¹ *Wages in Japan and the United States: Report on the Joint United States-Japan Wage Study* (U.S. Department of Labor and Japan Ministry of Labor and Ministry of International Trade and Industry, 1966).

² Regular workers are generally defined as those employed for an indefinite period or for a fixed term of more than 1 year. For purposes of the establishment survey, however, regular workers are defined to include in addition day workers employed by the same establishment for 18 days or more in each of the 2 preceding months or for a total of 60 days in the preceding 6 months.

³ Average monthly total cash earnings in 1964 were 33,089 yen; contract cash earnings amounted to 26,390 and special cash payments to 6,699 yen.

imum wage or \$50 for a full-time week (effective at the time of the study), and a few had hourly earnings of \$7 or more (\$280 for a full-time week). About one-fifth had earnings of \$3 an hour or more in 1964. About 51 percent of American factory production workers earned less than the \$2.33 per hour average (without overtime).

When data for 1964 are compared with those for 1958, they show that, as wages have increased, the wage distribution in both countries has shifted, but the change has been much greater in Japan than in the United States. (See charts 1 and 2.) Most notably, the concentration of workers at the lowest wage intervals has been reduced considerably in Japan.

This rapid change in the distribution of wages in Japan is in large part the result of changes in the supply and demand of labor. In recent years, the importance of age in the determination of wages has been decreasing, while emphasis on performance and skill has been increasing. The job market has grown tighter, and employers must offer young workers higher starting wages than before. In addition, because of the increasing mechanization of industry, employers tend to seek persons who are trained in modern technical processes. As a result, the wages of young workers have risen more rapidly than those of older workers, and, consequently, the wage differential based on age and length of service has contracted. As this trend continues, the wage structure of Japan will become increasingly similar to that of the United States.

Supplementary Benefits

In addition to actual wages, workers in both countries enjoy a large number of wage supplements which greatly enhance their standards of living. Paid leave is provided for vacations, holidays, and illness; overtime is usually compensated at premium rates. In addition, both countries have public or private programs designed to protect workers against the hazards of old age, illness and disability, or unemployment, and many companies provide their employees with special educational, social, athletic, or welfare facilities.

The structure of these programs in the two countries is not the same, however, and some of

the benefits enjoyed by Japanese workers are more varied and less direct than those of American workers. A permanent worker in Japan, for example, may be offered an extensive system of company-provided welfare facilities and may gain in personal security from his lifetime employment tenure. In many Japanese plants, the employer provides his workers with a meal at noontime, low-priced supplies at company-supported stores, houses or dormitory rooms, and athletic or welfare facilities.

In the United States, a worker generally measures his success on the job on the basis of his cash wage and receives most of his supplements to wages in the form of insurance or annuities. As a result of these differences, it is not possible to make a comprehensive direct comparison of all of the supplementary benefits of Japanese and American workers. Nevertheless, a number of the

Chart 1. Distribution of Earnings in Manufacturing, United States, 1958 and 1964

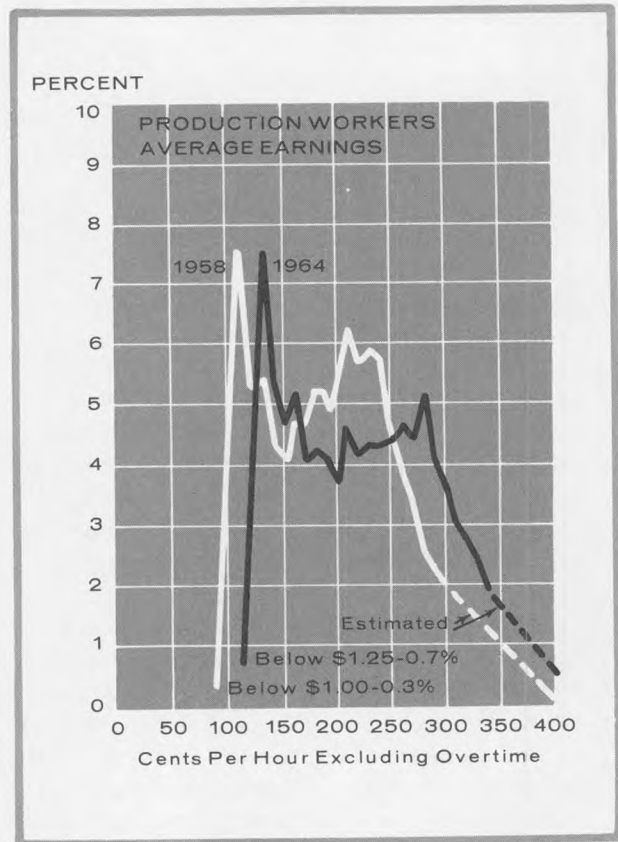
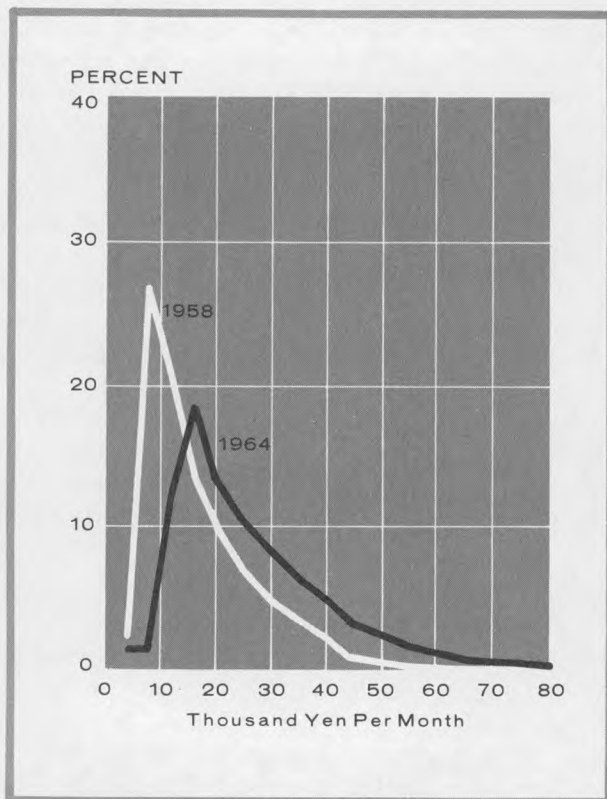


Chart 2. Distribution of Wages of Workers in Manufacturing, Japan, 1958 and 1964



programs in the two countries are quite similar, and can be used for comparison.⁴

Premiums and Paid Leave. Premium pay for overtime and paid leave are provided by employers in both countries. Factory working hours are generally longer in Japan than they are in the United States, although the average workweek in Japanese manufacturing industries has been decreasing since 1960. In 1965, Japanese factory employees worked an average of 44.3 hours per week, whereas American factory workers had an average paid workweek of 41.2 hours.⁵

In Japan, premiums are paid for time worked in excess of 8 hours a day or 48 hours a week. Overtime work must be based upon an agreement between the employer and the employee, and overtime hours must be compensated at $1\frac{1}{4}$ times the regular rate of pay. In the United States, the general practice is $1\frac{1}{2}$ times the regular rate of pay for time worked in excess of 40 hours per week

and, in a substantial number of cases, after 8 hours per day.

In both countries, the length of paid vacation leave varies according to the length of service. Most workers in Japan get from 1 to 3 weeks of paid vacation each year, and some workers in larger establishments receive more than 3 weeks. In addition, many employers treat all or some of the 12 national holidays as paid holidays. In the United States, most workers receive 1 or 2 weeks of paid vacation, and a substantial group receive 3 weeks after 10 years of service.⁶ American workers also typically receive 6 to 8 paid holidays each year.

Retirement. When a regular Japanese worker retires, usually at 55 years of age, he receives a lump-sum retirement payment. The amount of this payment, which may equal as much as 5 years' basic earnings, depends upon the earnings and length of service of the worker and the size of the firm in which he is employed. For example, a male production worker with a primary school education who is employed in a medium-size enterprise (100 to 499 workers) can expect about 1.5 million yen (\$4,167 at the official rate of exchange) at the time of his retirement. Some Japanese companies have adopted pension plans which provide monthly payments in lieu of or in addition to the lump-sum payment.

These payments are beginning to be supplemented by pensions under the social security system. A retired Japanese worker who has contributed to the social security system for 20 years becomes eligible for a small monthly pension when he reaches 60 years of age.

In the United States, the principal retirement protection is provided by the Federal social secu-

⁴ As indicated in the companion article, summer and yearend bonuses frequently amounting to 1 to 3 months' wages are paid to most workers in Japan, but these bonuses are regarded as a part of wages rather than fringe benefits. The bonus is included in the earnings statistics for the month in which it is paid.

⁵ In Japan the average workweek in establishments with 30 or more employees was 44.3. Hours of work are generally longer in smaller establishments. Japanese workers employed in manufacturing establishments with 5 to 29 workers had an average workweek of 46.3 hours. The data for Japan represent hours actually worked; rest periods and leave are excluded. The data for the United States represent hours for which wages are actually paid, including paid vacations and other paid leave.

⁶ A few major collective bargaining agreements, i.e., those in the steel, aluminum, and can manufacturing industries, contain special provision for extended vacations at special intervals, such as every 5 years.

rity legislation, although the Federal system is supplemented by private programs covering large numbers of workers. American workers generally do not retire until they are 60 to 65 years of age. In 1964, more than 10.6 million retired workers and almost 3 million aged wives or dependent husbands of retired or disabled workers received social security pensions. The average retirement pension was about 17 percent of the average wage, and the added pension for the wife or dependent husband raised the amount to about 26 percent of the average wage. In many cases, benefits received under private programs raise the total pension to one-half the average wage. In many cases, benefits received under private programs raise the total pension to one-half the average wage.

Each country's social security pension system is financed jointly by workers and employers through payroll contributions. Lump-sum retirement payments are financed entirely by employers in Japan, and employers in the United States usually bear the entire cost of private pension plans. Japanese employers are estimated to have spent about 6 percent of payroll for these pension programs in 1962. About 5 percent of factory employers' payroll in the United States, according to the BLS survey, went to production worker retirement programs (both legally required and voluntary) in 1962.

Workmen's Compensation. The system of insurance against on-the-job injury in Japan is similar to that in the United States, although the premium cost is higher in the United States. U.S. factory employers spent about 2 percent of their production worker gross payroll for workmen's compensation programs in 1962, and Japanese employers spent a little less than 1 percent of their payroll in 1964.

Unemployment Insurance. In Japan, unemployed workers receive benefits equal to about 60 percent of their usual basic contract cash earnings,⁷ with a maximum of 860 yen (\$2.39 at the official rate of exchange) a day. In the United States, on the other hand, workers who lose their jobs receive average benefits during the period of unemployment amounting, on the average, to

about 35 percent of their usual earnings. In a number of important industries, unemployed workers are also eligible for benefits under supplementary unemployment programs which raise the total received by such workers to about 75 percent of total earnings.

In the United States, both public and private unemployment insurance plans are financed entirely by employers; in Japan, both workers and employers contribute to the scheme. Employer expenditure for unemployment insurance programs for manufacturing production workers in the United States was about 2 percent of payroll in 1962. The cost of Japanese employers was less than 1 percent.

Health and Medical Insurance. Everyone in Japan is covered by a comprehensive system of public health insurance. Workers and their families are insured through their places of employment if they are employed in an enterprise with five employees or more. Other groups (seamen, day laborers, public employees, etc.) have their own schemes, and the remainder of the population pay premiums directly to the Government. These programs pay almost the entire cost of medical treatment and hospitalization as well as up to 26 weeks of sickness benefits equal to about 60 percent of wages. Employee health insurance is financed through payroll contributions from employers and employees; in 1964, factory employers spent 2.8 percent of payroll for health insurance programs.

The United States does not have a health insurance program comparable to the one in Japan, although many companies pay part or all of the premiums for life insurance, hospitalization, and surgical or major medical insurance for employees and their families. In 1964, more than 70 percent of all wage and salary earners and their dependents were covered by insurance which paid part or all of the cost of hospital and surgical care, and some workers also had insurance for medical treatment. In some cases, the premiums for this insurance are paid entirely by employers and in some cases, they are paid jointly by employers and employees. A BLS survey of manufacturing industries showed that employers spent the equivalent of 2.7 percent of the gross payroll for production workers' life, accident, and health insurance in 1962.

⁷ Contract cash earnings do not include semiannual bonuses and special cash payments not based upon prior agreement.

This review of data on the wage systems of Japan and the United States shows that a regular Japanese factory worker has considerably lower earnings than his American counterpart. Although wages are rising much faster in Japan than in the United States, the gap in average wage levels between the two countries remains very large.

A few of the wage supplements which are provided in certain industries (free or subsidized housing, meals, company stores) are more prevalent in Japan than in the United States but cannot be compared because statistical data are not available. However, the data for many of the major programs (medical insurance, retirement, and unemployment and workmen's compensation insur-

ance) show that workers' benefits differ but that the proportion of total payroll spent on these programs by employers in the two countries is surprisingly similar.

The areas of comparability in the supplementary benefits and wage structures of Japan and the United States are considerably larger than is commonly assumed. Differences between the two systems, nevertheless, remain significant. However, many of the contrasts which now exist are the result of long-standing cultural and social differences or stem from different patterns of economic development. In many cases, however, economic and social forces are operating within each country to produce greater similarities between them.

Special Labor Force Reports

Low Earners and Their Incomes

VERA C. PERRELLA*

IN AN INDUSTRIALIZED SOCIETY, an individual's economic well-being is largely determined by his money income—and income, for the majority of people, is chiefly derived from earnings. Some men and women have low yearly earnings because unemployment, illness, or a combination of factors has prevented them from working steadily all year. Others have low earnings even though they have worked all year at full-time jobs. This paradox of fully employed persons with poverty earnings warrants attention, out of concern both for the individual and for the society.

The following article presents data on the 5½ million men and women who reported that in 1965 they worked 50 to 52 weeks, usually full time, for money earnings of less than \$2,500.¹ The criterion of \$2,500 money earnings was chosen because this is the minimum amount which would have been earned by year-round full-time workers covered by the provisions of the Fair Labor Standards Act and its amendments, under the assumption of 50 weeks of work at 40 hours each week and at the minimum wage of \$1.25 an hour in effect at that time. The most common scheduled workweek, and the standard set by the Fair Labor Standards Act beyond which workers in employment covered by the act must receive overtime pay, is 40 hours. The 50 weeks was used as an approximation of a full year of work because only persons who work at least 50 weeks are classified as year-round workers; also, this allows for a small loss of time through unpaid illness or vacation in an otherwise full year of employment. It should be borne in mind that persons classified as full-time workers are those who report that they “usually” work full-time (at least 35 hours in most of the weeks; in some weeks they may work less than 35 hours and in others over 40 hours, and may even receive overtime pay).

The \$2,500 cutoff is used solely as a rough measure of the level below which earnings or income may justifiably be described as low, relative to those of the majority of year-round full-time workers;² it is not used to denote marginally productive or underpaid employment.

In addition, it should be remembered that some persons receive part of their compensation for work in the form of income in kind, rather than in money. Persons living on farms, for example, often receive part of their income in the form of rent-free housing and goods produced and consumed on the farm, rather than in money, and some nonfarm residents receive meals, lodgings, transportation, and so on, as part of their pay.³

The extent and equivalent money value of such nonmoney income are difficult to determine, as is the intangible loss to the receiver in terms of forfeiture of options. A restaurant worker who, as part of his pay, receives his meals at the restaurant where he works might, if he had the equivalent money, occasionally prefer to skip his meal in order to use the money for some other purpose.

*Of the Division of Labor Force Studies, Bureau of Labor Statistics.

¹The data are based on tabulations prepared by the Bureau of the Census which relate to money earnings and income of persons. Included in the totals are persons classified as having a loss in net income from farm and nonfarm self-employment.

²An indication of the increasing attention which low earnings are receiving is contained in the following statement from *Fair Labor Standards Amendments of 1966* (U.S. Senate, 89th Cong., 2d sess., Report 1487):

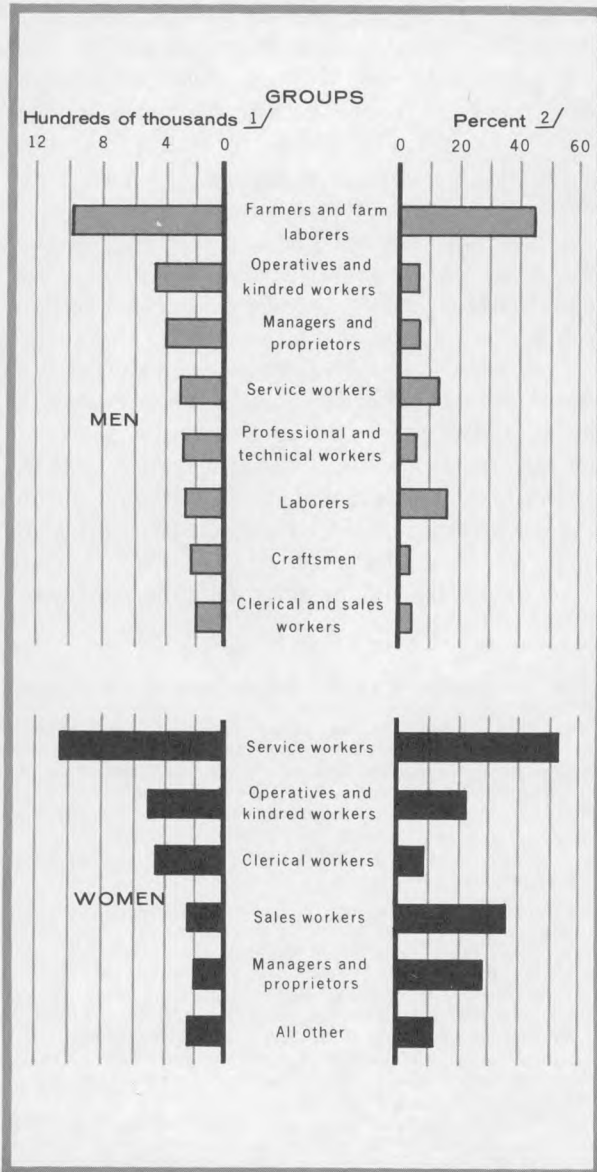
It is imperative, if the act is to have real meaning, that the minimum wage provide earnings above the poverty level. . . . Full employment, and equal employment opportunity, are now widely endorsed objectives, but to be employed equally to sub-standard wages is no social achievement at all. The “minimum standard of living necessary for health, efficiency, and general well-being of workers” must be attained. . . . Poverty is not restricted to the unemployed alone. Many who are counted among the ranks of the poor are workers who receive less than a living wage. . . .

³For farm-nonfarm comparisons, a recent estimate indicates that approximately 30 percent of the nonfarm family's money income is the average equivalent of the farm family's nonmoney income. If this is used as a rough measure to equate the farm and nonfarm earnings of persons, only those farm workers earning \$1,923 to \$2,499—a relatively small proportion of those earning less than \$2,500—would be earning the equivalent of \$2,500 or more.

Of the persons who were fully employed in 1965, more than 5½ million had total money earnings of less than \$2,500 in 1965; half of these low earners earned less than \$1,500.

The 3 million men and the 2.6 million women who earned less than \$2,500 from year-round full-time work (hereafter termed "low earners" and

Year-Round Full-Time Workers With Earnings of Less than \$2,500, 1965: Number and Percent of Total Workers in Specified Occupation Group



¹ Within the occupation group, the number with earnings of less than \$2,500.

² Male (or female) workers in the occupation group whose earnings are below \$2,500 as a percent of all the male (or female) year-round full-time workers in that occupation group.

"low earnings," respectively) were 12 percent of all persons who were fully employed in 1965. A much greater proportion of women (21 percent) than of men (9 percent) were in the low-earners group. This wide difference reflects not only industry and occupation concentrations, but also the historical pattern of wage differentials between men and women.

Are these low earners found only in particular industries? Do they typically work for someone else? Are they all unskilled workers? Do they have any money income besides their earnings? For the answers to these questions, national data for the year 1965 were used to analyze the occupation, industry, and class of worker groups with the largest concentrations of workers with low earnings, and the extent to which the total money income of such persons consists solely or preponderantly of earnings, in comparison with the income of other fully employed earners.

Earnings

Among the low earners, there is a sharp difference between the proportion of men and the proportion of women who were private wage and salary workers.⁴ As shown below, half of the men were in this group compared with four-fifths of the women:

Classification of worker by longest job	Percent distribution		Low earners as percent of all year-round full-time workers	
	Men	Women	Men	Women
Total: Number (thousands)	3,028	2,596	3,028	2,596
Percent	100.0	100.0	8.7	21.1
Private wage and salary workers	50.8	80.0	6.2	21.9
Agriculture	7.7	.5	41.7	(1)
Nonagriculture	43.1	79.5	5.4	21.9
Government workers	7.7	8.1	4.8	9.2
Self-employed workers	40.0	10.7	23.2	53.7
Agriculture	24.1	1.4	42.8	(1)
Nonagriculture	15.9	9.3	13.7	50.7
Unpaid family workers ²	1.6	.5	(1)	(1)

¹ Percent not shown where base is under 150,000.

² Worked most of the year as unpaid workers, but also had a paid job.

On the other hand, the proportion of low-earning men who were self-employed was four times that of women. About 500,000 self-employed women worked in nonagricultural industries, and fully half of them were low earners.

The incidence of low earnings is greater among self-employed workers than among wage and

⁴ Class of worker, occupation, and industry group are for the job held longest in 1965.

salary workers, either private or public. Each year an appreciable number of sole proprietorship enterprises and partnerships report that they operated at a loss.

There is a heavy concentration of low earners among the relatively small number of year-round full-time workers in agriculture; over 40 percent of all farmers and farm workers had earnings below \$2,500. (See chart.) Although only 7 percent of all the men worked in agriculture, nearly one-third of the men with low earnings were in this group.

The large proportion of farmers with low money earnings includes a sizable number who operated at a loss or close to it, either because of adverse crop conditions or because investment costs had not yet been absorbed. Also, many small farms are of the marginal kind. One-fourth of the farmers had earnings under \$1,500. For both farmers and farm laborers, however, the very high percentage with low earnings should be weighed against the prevalence of income in kind such as living quarters and food.

Their Occupations

Of the 47.1 million persons who worked year-round full time in 1965, all but 2½ million worked in nonfarm occupations. Practically all of the women were nonfarm workers, with fewer than 1 percent in farm occupations. In the nonfarm sector, 10 percent of the full-time year-round workers were low earners, but the proportion among women was three times that among men. Thus, women constituted 55 percent of the 4.5 million low earners in nonfarm employment, although they were only 27 percent of all nonfarm workers.

Two million men in nonfarm occupations were low earners, the largest groups being operatives and kindred workers and managers, officials, and proprietors. The dominance of operatives in the low-earner group is a result of the importance of this occupation among all workers, rather than of an exceedingly high proportion of low earners in the occupation. The proportion of operatives in nonmanufacturing industries who were low earners was greater than the proportion in manufacturing; this is not surprising, since factory workers are more likely both to be unionized and to be covered under the minimum wage provisions

TABLE 1. YEAR-ROUND FULL-TIME WORKERS WITH EARNINGS OF LESS THAN \$2,500 IN 1965, BY INDUSTRY AND SEX

[Persons 14 years of age and over]

Industry group ¹	Percent distribution		Percent of all year-round full-time workers ²	
	Men	Women	Men	Women
All industry groups:				
Number (thousands)-----	3,028	2,596		
Percent-----	100.0	100.0	8.7	21.1
Agriculture ³ -----	34.0	2.8	43.4	(4)
Nonagriculture-----	66.0	97.2	6.2	20.7
Nonagriculture, total-----	100.0	100.0	6.2	20.7
Mining-----	.6	.2	3.5	(4)
Construction-----	10.3	.6	7.8	(4)
Manufacturing-----	25.0	16.6	4.3	13.4
Durable-----	15.7	4.6	4.3	8.7
Nondurable-----	9.3	12.0	4.3	16.9
Transportation and public utilities-----	6.5	1.4	4.1	5.9
Transportation-----	3.8	.6	4.1	9.6
Other-----	2.7	.8	4.0	4.6
Trade-----	25.3	26.2	8.5	30.4
Wholesale trade-----	4.9	1.0	5.7	8.8
Retail trade-----	20.5	25.2	9.6	33.8
Service and finance-----	30.3	52.9	9.6	25.0
Finance, insurance, and real estate-----	3.2	4.6	4.5	10.5
Business and repair service-----	4.3	1.7	8.0	16.9
Personal services-----	16.0	40.3	17.3	37.9
Entertainment and recreation services-----	1.0	.3	11.0	(4)
Professional and related services-----	5.8	6.1	6.5	12.1
Public administration-----	2.0	2.0	1.7	6.2

¹ Industry of job held longest in 1965.

² Within each industry group, workers with earnings of less than \$2,500 as a percent of total men (or women) year-round full-time workers in that industry.

³ Includes a small number in forestry and fisheries, not shown separately.

⁴ Percent not shown where base is less than 150,000.

of the Fair Labor Standards Act. A majority of the low earners in the managers, officials, and proprietors group were self-employed proprietors, a comparatively high proportion of whom (12 percent) had little or no net income from their business.

About the same number of service workers, laborers, and professional and technical workers were in the low-earner group, but there was a substantial difference in the proportions of low earners in these three occupation groups. The proportions of laborers and service workers with low earnings were more than twice that for the whole professional and technical group.

Unskilled and semiskilled workers in the service occupation group, such as hospital attendants, barbers, cooks and other kitchen workers, janitors and porters, contributed to the high proportion of low earners; at 13 percent, the proportion was double that for all nonfarm year-round full-time workers. Undoubtedly, the proportion of service workers classified as low earners would be somewhat smaller if the value of food and lodging re-

ceived by some of them—hospital attendants, restaurant workers, and janitors, for example—were included in earnings.

Approximately the same proportions of self-employed professional and technical workers as laborers (15 percent each) were among the low earners. However, since many of the professional workers with earnings under \$2,500 are undoubtedly new in their field and are in the process of building up a practice—doctors and lawyers, for example—their earnings will increase with time; nearly 6 out of 10 self-employed professional and technical workers earned \$10,000 or more in 1965.

The proportion of the workers with low earnings did not go as high as 2 out of 10 in any of the non-farm occupation groups of men. Among the women there were three broad occupation groups in which the proportion of low earners ranged upward from that level: More than half the service workers, over a third of the sales workers in retail trade, and a fifth of the operatives and kindred workers. Among the service workers, the private household workers inevitably had the highest proportion—8 out of 10, followed by waitresses and

cooks—6 out of 10. The 1 million service workers with low earnings accounted for 4 out of 10 women with low earnings.

Nearly one-half million women in the low-earner group were operatives; this large number results more from the high proportion of operatives who had low earnings than from the large number in the occupation group. On the other hand, among clerical workers, the relatively large number of low earners results from the heavy concentration of women in this occupation (40 percent of all year-round full-time workers) rather than a high proportion of low earners (about 9 percent).

The number of men and women in the service industries with low earnings was almost as large as the total with low earnings in all other non-farm industries combined, some 2 million out of 4.5 million. (See table 1.) The personal services sector of the service industry includes private households, barber and beauty shops, hotels, and laundry and cleaning establishments—employers of many unskilled and lesser skilled workers, many of whom are not covered by the minimum wage provisions of the Fair Labor Standards Act. In this sector, a high proportion of men and

TABLE 2. MONEY INCOME OF YEAR-ROUND FULL-TIME WORKERS WITH EARNINGS IN 1965, BY SOURCE OF INCOME AND SEX

[Percent distribution]

Total money income	Total		Earnings only			Earnings and income other than earnings				
	Number (thousands)	Percent	Total	Wages or salary only	Self-employment income only	Wages or salary and self-employment income ¹	Total	Wages or salary and other income	Self-employment income and other income ²	Wages or salary, self-employment income and other income
MEN										
Total with income.....	34,837	100.0	67.7	54.9	8.6	4.2	32.2	25.1	4.7	2.5
Less than \$2,500.....	2,780	100.0	82.0	46.4	23.7	11.9	18.0	7.6	8.2	2.3
Under \$1,500.....	1,313	100.0	82.0	35.3	31.5	15.2	17.8	5.6	9.8	2.4
\$1,500 to \$1,999.....	540	100.0	77.8	41.9	20.7	15.2	22.4	12.0	8.7	1.7
\$2,000 to \$2,499.....	927	100.0	84.6	64.9	14.5	5.2	15.6	7.8	5.5	2.4
\$2,500 or more.....	32,056	100.0	66.5	55.6	7.3	3.6	33.5	26.6	4.4	2.5
\$2,500 to \$4,999.....	7,642	100.0	82.1	66.2	10.7	5.3	18.0	12.6	3.4	1.9
\$5,000 to \$9,999.....	18,397	100.0	67.2	59.3	4.8	3.1	32.9	27.5	3.1	2.2
\$10,000 or more.....	6,017	100.0	44.8	31.1	10.9	2.8	55.2	41.4	9.4	4.3
WOMEN										
Total with income.....	12,292	100.0	78.9	74.7	3.1	1.1	21.1	19.5	1.3	.3
Less than \$2,500.....	2,446	100.0	86.3	77.2	8.1	.9	13.7	11.4	2.1	.2
Under \$1,500.....	1,074	100.0	87.6	72.7	13.9	1.0	12.4	8.7	3.3	.5
\$1,500 to \$1,999.....	435	100.0	80.0	75.2	3.2	1.6	20.2	17.5	2.8	-----
\$2,000 to \$2,499.....	937	100.0	87.6	83.4	3.8	.4	12.2	11.6	.5	-----
\$2,500 or more.....	9,846	100.0	77.1	74.0	1.9	1.2	22.9	21.6	1.0	.3
\$2,500 to \$4,999.....	6,320	100.0	82.7	80.6	1.5	.6	17.3	16.6	.7	.1
\$5,000 to \$9,999.....	3,310	100.0	68.4	64.0	2.2	2.2	31.7	30.1	1.2	.4
\$10,000 or more.....	216	100.0	47.4	36.2	8.4	2.8	52.6	39.0	9.4	4.2

¹ Includes a small number of persons reporting income from wages or salary, nonfarm self-employment, and farm self-employment.

² Includes a small number of persons reporting income other than earnings, and both nonfarm and farm self-employment income.

women earned under \$2,500. (Of course, there are workers not covered by the act who earned at least as much as the minimum wage.)

The second largest group of low earners worked in retail trade, about 1 million. Approximately 10 percent of the men in this industry, many of them owners of a business, had earnings below \$2,500; among women the proportion reached 34 percent. Comparatively few men and women factory workers had low earnings, but because one-third of all nonfarm workers were in manufacturing the number of low earners (900,000) is relatively high.

Other Sources of Income

Some people do not have to depend entirely upon their earnings to meet living expenses, because they have other sources of money income. Amount aside, nonearnings money income is not limited to the relatively affluent to the extent that it once was. In addition to income derived periodically from inheritance, investment, or savings, such as estate or trust fund income, dividends, or interest, there are other kinds, such as veterans' payments, pensions, and alimony.

Since total money income largely determines one's level of living, it is relevant to inquire what proportion of persons with low earnings have supplementary income to draw upon.

Approximately 8 out of 10 of the year-round full-time workers who earned less than \$2,500 during 1965 had no other source of money income. Women were less likely than men to have any supplementary income. For two-thirds of the low earners who did have other sources of income, the amount was not enough to increase their income level to \$2,500. Within the income groups, 82 percent of the men with income below \$2,500 had no money income but that derived from earnings (table 2). The proportion of the low-income women with sources other than earnings was similar to that of the low-income men.

Of the men with low incomes, approximately 12 percent had a combination of wage and salary and self-employment earnings. It is not possible to tell to what extent the two kinds of earnings were concurrent (as in the case of the farmer who also has a wage and salary job) or whether the men had part-year employment of each kind. The proportion of low-income men whose only source of in-

come was wages or salary was double that of men with self-employment income only.

Their Family Status

Two-thirds of the men with low income were family heads, although the proportion of low earners was higher among men who were relatives of the family head or who did not live with their family. The central ages, in which earnings and income are highest, contain most of the family heads, who constituted 85 percent of all male workers. Men who are not family heads include larger proportions of younger and older workers, for whom earnings and income are lowest, on the average. Some 6 percent of the men 25 to 54 years of age had incomes below \$2,500 in 1965, compared with one-fourth of the men age 65 and over, and an even higher percentage of boys 14 to 19 years old.

Among women, the proportion with low earnings was about the same—1 out of 5—in each of the marital status categories, in contrast with the variations among men. Because married women were so large a proportion of women workers, they constituted about half of the low-income women; about 12 percent of the women with low incomes were heads of families. About 2 out of 5 of the youngest and oldest groups of women had incomes under \$2,500. In the central age groups, the proportions of women with low earnings were at least three times those for men of comparable ages.

Where They Live

Farm residents were much more likely than nonfarm residents to have low money income, as has already been indicated by the occupation and industry data. Practically all year-round full-time workers in agricultural occupations are men. One-third of the farm men had low income, a proportion almost six times that of nonfarm men. (The much higher proportion for farm workers is, to some extent, due to the fact that income in kind is more widespread among farm than nonfarm workers.) Among employed women farm residents, the preponderant majority worked in occupations other than farming, but nonetheless roughly half had low incomes.

Year-round full-time workers with low incomes are most numerous in the South, due in part to the industrial composition and comparatively low

wage rates in the region. Relatively more workers in the South than in other regions are in agriculture and other low-paying industries such as textiles, lumber, and furniture manufacturing. Half the men and a somewhat lower proportion of the women with incomes below \$2,500 lived in the South, compared with one-fourth of those with incomes of \$2,500 or more. Also, the proportions of both white and nonwhite workers with low incomes were greater in the South than in the United States as a whole, as shown below:

	Percent of year-round full-time workers who were low earners, 1965	
	United States	South
<i>Men</i>		
Total.....	8.0	14.3
White.....	6.7	10.7
Nonwhite.....	22.1	36.0
<i>Women</i>		
Total.....	20.4	28.6
White.....	17.2	21.1
Nonwhite.....	44.1	64.9

Approximately half the nonwhite full-time workers, both men and women, lived in the South; but of the nonwhites with low incomes, three-fourths of the men and two-thirds of the women were in that region. Overall, nonwhites were a small proportion of the year-round workers—10 percent—but they constituted a fourth of the total with low income, due primarily to their concentration in relatively low-paid service, laborer, and farm jobs.

Work Status, March 1966

When information was obtained in March 1966 on earnings and incomes of year-round full-time workers in 1965, relatively fewer of the men and women with low income than of those with incomes of \$2,500 or more were still employed, as shown in the following tabulation.

Labor force status in March 1966	Income in 1965			
	(Percent distribution)			
	Men		Women	
	Under \$2,500	\$2,500 or more	Under \$2,500	\$2,500 or more
Total.....	100.0	100.0	100.0	100.0
Employed.....	91.6	98.3	88.7	96.5
Unemployed.....	3.1	.8	1.9	.7
Not in labor force.....	5.4	.9	9.3	2.8

The higher proportions of low-income men and women out of the labor force are largely the result of age distribution. Relatively more of the low earners were in the youngest and oldest age groups, in which the propensity to leave the labor force is greatest—because of retirement in the case of the oldest, and for a variety of reasons among the youngest, such as going to school, waiting to join the Armed Forces, and, among the young women, marriage and childbearing.

* * *

This brief review indicates a significant incidence of low earnings among year-round full-time workers, and the major role that earnings play in total money income, particularly for low earners. Some workers with low earnings are secondary earners (married women and youngsters), and some are undoubtedly only temporarily low earners, who with time will be earning more. Some may be underemployed in terms of their abilities and skills.⁵ However, for an appreciable number of wage and salary workers—among them adult men and women who are the main support of themselves and other family members—such low earnings persist throughout their work life.

⁵ For a discussion of the concepts of underemployment, see Report IV, International Labor Organization, "Measurement of Underemployment—Concepts and Methods," prepared for the Eleventh International Conference of Labor Statisticians (Geneva, 18–28 October 1966), published by International Labor Office, Geneva, 1966.

Overtime Hours and Premium Pay

JAMES R. WETZEL*

THE PREVALENCE of overtime work and the payment of premiums for it has increased significantly in recent years. Between May 1963, the time of the first study, and May 1966, the number of workers on extended workweeks rose by 2 million to a total of 17 million and the number of workers receiving premium pay for their extra hours rose by an equal number to 6½ million. Because of these equivalent increases, the proportion of overtime workers receiving premium pay escalated sharply, rising to 38 from 29 percent.

Recent Trends

The 1963–66 expansion in overtime work reflects both the continued growth in employment and a slight rise in the proportion of workers on overtime (table 1).¹ The increase in overtime was distributed relatively evenly by occupation but was concentrated in the manufacturing industries. The magnitude of the manufacturing rise (by nearly 1.6 million to a total of 5.9 million in May 1966) reflects the increased economic growth rate and the need to adjust working hours to meet the increased demand for final output.

The greater concentration of overtime work in manufacturing had an important influence on the rise in the proportion of workers receiving pre-

mium pay. These are the workers most likely to receive premium pay for overtime—69 percent of all overtime workers in manufacturing received premium pay in May 1966—and any disproportionate increase in their number tends to raise the average for all workers.² The alteration in the distribution of overtime accounted for about one-third of the overall increase in the proportion receiving premium pay between 1963 and 1966. The remainder of the improvement was attributed to increased payments of premiums in all industries.

Another feature of the 1963–66 increase in overtime was its concentration among persons who reported working overtime regularly. Presumably overtime work for premium pay is an important adjustment mechanism in a dynamic and rapidly growing economy. The inducement offered by premium pay should play an important role in providing experienced labor with minimum schedule adjustments, minimum training requirements, and maximum flexibility; however, these surveys have shown that the majority of overtime workers are regularly on extended workweeks.

Some drift in this direction could be expected on the basis of increased employment in the white-collar occupations where uncompensated extra hours are common. A substantial part of the rise, however, occurred in the blue-collar occupations. The tendency to schedule regular overtime for workers, who by law, contract, or custom receive premium pay, suggests that during a strong business expansion, the “penalty” aspect of premium pay is outweighed by the benefits of using available and experienced workers for more hours.

Payment of Premiums

The premium pay experience of overtime workers varied significantly on the basis of both the regularity of overtime and the number of extra hours worked. As chart 1 illustrates, there is an inverse relationship between the number of extra hours worked and the receipt of premium pay. At the same time, the likelihood of receiving premium pay for overtime is much higher for workers who did not usually work overtime.

The practice of paying premiums varies markedly with occupation and industry, a result of both legal and social differences. The vast majority (85 percent) of workers who received premium

*Of the Division of Employment and Unemployment Analysis, Bureau of Labor Statistics.

¹ All figures exclude multiple jobholders and the self-employed. Information on overtime work and the receipt of premium pay is collected each year in the May survey of the labor force, conducted for the Bureau of Labor Statistics by the Bureau of the Census. The data apply to wage and salary workers with one job who worked 41 hours or more during the week. The questions are (1) Did (this person) get a higher rate of pay, like time and a half or double time, for the hours he worked over 40? and (2) Does (he) usually work more than 40 hours a week?

All hours in excess of 40 are treated as “long,” “extended” or “overtime” hours in this article. Though more detailed criteria are specified in legislation or union contracts governing the payment of premium rates, this arbitrary 40-hour standard should not influence the overall relationships discussed. This survey was not designed to measure extent of compliance with laws or union agreement; the coverage of individual workers under specific legislation or union agreements cannot be determined from the survey. In addition, the figures are affected by sampling variability and response error.

² Over one-third of all persons on long workweeks were employed in manufacturing; almost half were in either service or trade. Of all persons receiving premium pay, however, nearly three-fifths were in manufacturing, only one-fifth in trade and service.

pay were employed in blue-collar or clerical occupations. The bulk of these workers are covered by premium pay provisions of either the Fair Labor Standards Act or collective bargaining agreements. Nearly 65 percent of all blue-collar workers who worked some overtime received premium pay. Those who did not receive it were mainly in noncovered, and not heavily organized, occupations (i.e., auto mechanics, local drivers and deliverymen, and laborers and operatives in the nonmanufacturing industries).

Each of the surveys supported the long-accepted observation that overtime work is literally a way of life for some workers. Managers, officials, foremen, and professional workers are frequently expected to work extended workweeks and often do so voluntarily. For these workers, the likelihood of receiving premium pay is small, while the probability of usually working extra hours is large. Extended workweeks were less likely to be usual for the blue-collar workers. These occupational differences go a long way toward explaining why only 33 percent of the persons who usually worked long hours received premium pay, while

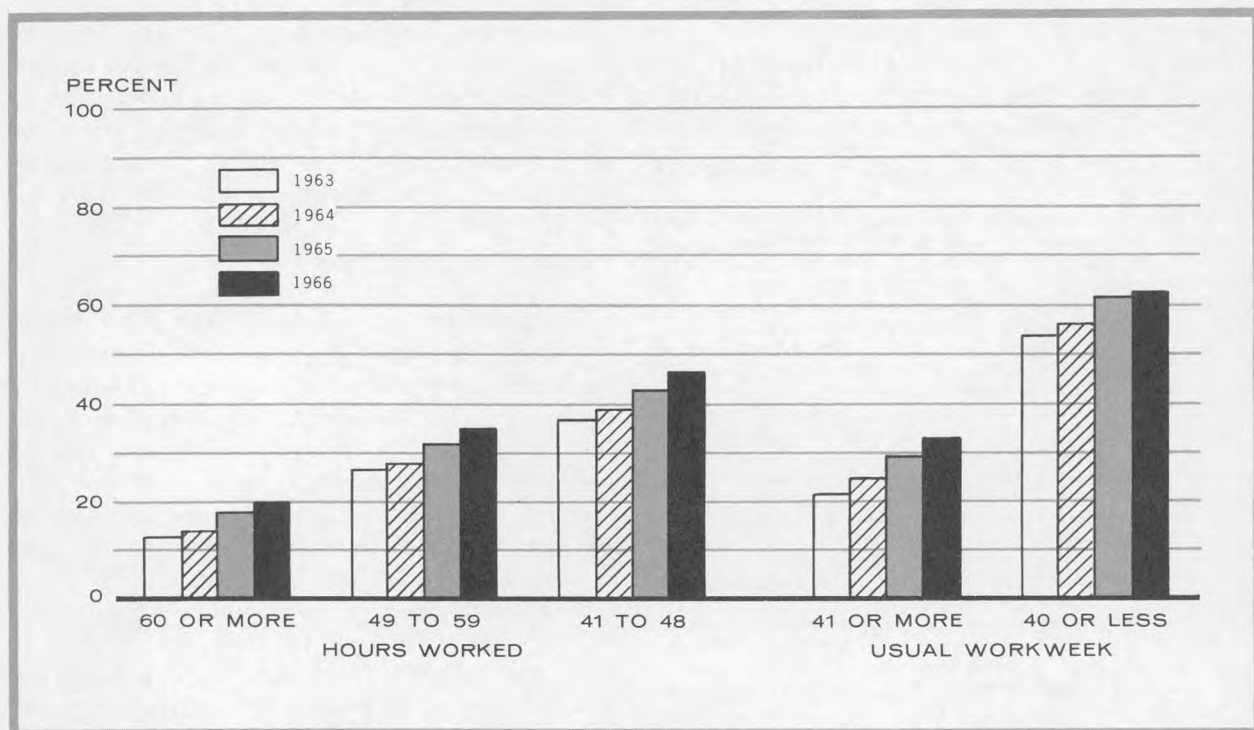
62 percent of those who usually did not put in extra hours received it.

Nearly 12 million of the 17 million who worked more than 40 hours reported that they generally worked extra hours; these workers constitute the nucleus of a fluctuating overtime work force. Nearly 4 million received premium pay for their extra hours; they were mainly craftsmen and operatives employed in the manufacturing industries. In all industries, white-collar and service occupations accounted for most of those who usually worked long hours but did not receive premium pay.

Among the persons working extra hours in May 1965, 3.3 million reported that they generally did not work overtime. Over two-thirds of these workers put in 48 hours or less; more than 60 percent received premium pay for the extra hours. Though the survey does not reveal specific reasons for overtime work, nonrecurring production problems or seasonal demand caused some of the overtime.

There are at least four distinct and substantial groups among those overtime workers who earned

Chart 1. Percent of Overtime Workers Receiving Premium Pay, by Hours Worked, May 1963-66



their livelihood on a single wage or salary job. There are the professional and managerial workers who often work extra hours regardless of their pay status. Then, there are numbers of craftsmen and other blue-collar workers who frequently work overtime and generally receive premium pay; the bulk of these highly trained workers are in occupations, industries, or areas with borderline labor shortages. Thirdly, there is an amorphous group of workers who were temporarily on extended workweeks; their overtime is probably in response to seasonal demand or production problems and is generally compensated at premium rates. Finally, there is a relatively large group of workers holding marginal, low-paying jobs which often require excessive hours. These workers rarely receive premium pay for their overtime and a significant number of them have low weekly earnings. The size of these groups cannot be precisely measured, though each group includes several million workers.

Industry Variations

There were 16½ million nonfarm and one-half million farm workers on extended workweeks in May 1966. About 27 percent of all nonfarm jobholders worked 41 hours or more; 39 percent received premium pay for their extra hours. In contrast, 43 percent of all farm workers reported extended workweeks, but only 3 percent received premium pay.

The likelihood of working overtime and receiving premium pay showed a substantial industry variation. In manufacturing, 31 percent of all wage and salary workers reported extended workweeks and 69 percent received premium pay. The comparable figures for May 1963 were 24 and 61 percent respectively. Both increases were statistically significant and each represents the impact of sustained high demand for manufactured goods. Approximately seven-eighths of the 1963-66 increase in manufacturing overtime occurred in the blue-collar and clerical occupations. Since 80 percent of these workers received premium pay for overtime—only 24 percent of the remaining white-collar workers received it—there was also a distributional effect on the average rate of receipt within manufacturing. Hours cutbacks in periods of stable or declining demand may reverse

TABLE 1. SELECTED DATA ON PERSONS AT WORK AND PERSONS WORKING OVERTIME

[In thousands]

Characteristics	May 1966	May 1965	May 1964	May 1963
Total at work.....	71,349	70,005	68,706	66,888
Working full time (35 hours or more).....	57,195	56,482	54,956	53,872
Working overtime (41 hours or more).....	23,619	24,152	23,226	22,688
Wage or salary single jobholders:				
Working overtime.....	17,056	16,538	15,730	15,244
Percent of total at work.....	23.9	23.6	22.9	22.8
Percent of full-time workers.....	29.8	29.3	28.6	28.3
Number receiving premium pay.....	6,489	5,810	4,849	4,479
Percent of wage and salary working overtime.....	38.0	35.1	30.8	29.4

this effect in varying degrees, depending on the industries affected and the extent of the change.

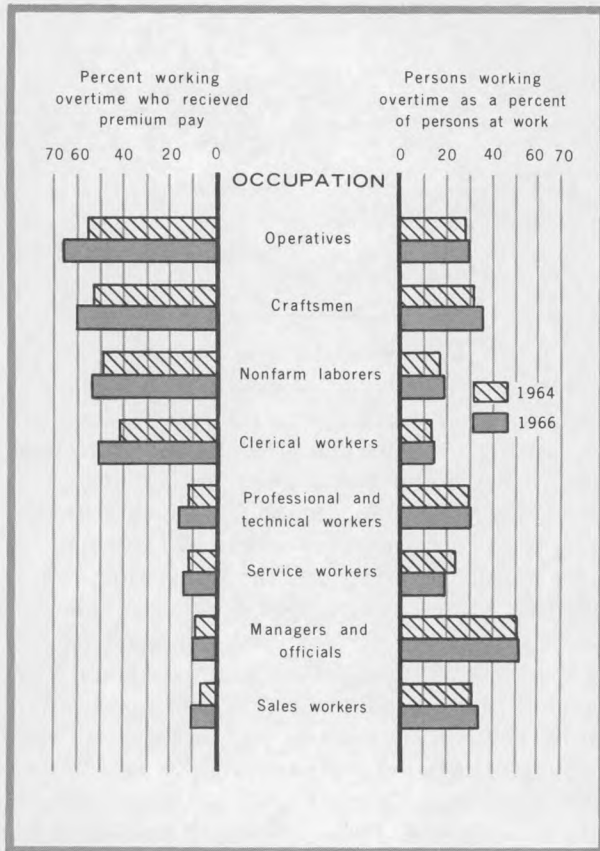
Sharply contrasting with the pattern for manufacturing, overtime and premium pay in the service-oriented industries showed little change over the 1963-66 period. In the service industry itself, the proportion of workers on overtime was unchanged, while in trade the proportion dipped slightly. The likelihood of workers in these industries receiving premium pay was small; slightly more than 1 out of 10 overtime workers in service and finance and 1 out of 5 overtime workers in trade received premium pay in 1966. In each instance, the percentage was slightly higher than corresponding figures from earlier surveys. Measures to extend the coverage of Federal legislation governing overtime pay practices to large segments of trade and services became effective in early 1967. These changes will generate both more extensive payment of overtime premiums and, probably, reductions in the amount of overtime work.

Occupational Variations

The proportions of white-collar and blue-collar workers who received premium pay for hours over 40 were strikingly different, although nearly the same number and the same percentage reported extended workweeks in May 1966. Only 21 percent of the white-collar workers received premium pay for overtime, while 63 percent of the blue-collar workers received extra compensation (chart 2).

The premium pay experience of clerical workers was quite different from the pattern for other white-collar workers. A comparatively small proportion of clerical workers (14 percent) reported

Chart 2. Rates of Receipt of Premium Pay and Persons Working Overtime, by Occupation, May 1964 and 1966



long workweeks, but those who did work extra hours were more likely to receive premium pay (51 percent) than were other white-collar workers, presumably because relatively more clerical workers are covered by legislation or by union contracts. When clerical workers were excluded from the white-collar group, only 1 out of 8 workers in the remaining white-collar occupations received premium pay.

In May 1966, managers and officials were the nonfarm workers most likely to put in long workweeks, although among the least likely to receive premium pay for their overtime hours. A similar situation existed for sales workers. In both occupation groups, approximately 9 out of 10 workers on long workweeks reported that their usual workweek exceeded 40 hours. The importance of premium pay to these workers is difficult to assess. Managers and officials tend to be concentrated in higher than average income brackets,³ and their

overtime work may be motivated by nonmonetary goals which are related to the responsibility they exercise and the satisfaction they derive from their work. Sales workers are frequently paid on a salary or wage plus commission basis. In such cases, the payment of premiums for extra hours could easily be of secondary importance to the worker.

In the heterogeneous professional and technical worker group (encompassing such occupations as accountants, musicians, teachers, and doctors) more than 1 in 4 persons reported long workweeks. One-third of these were primary and secondary school teachers. Only 16 percent of all the professional and technical workers, and 1 percent of the teachers, received premium pay for their extra hours.

Almost 10.3 million of the persons who worked extended hours in nonagricultural industries were blue-collar workers, clerical workers, and service workers. The largest concentration of workers (4.7 million) was in manufacturing, where 80 percent were compensated for overtime at premium rates. Another sizable group (nearly 2 million) were employed in trade; there the proportion receiving premium pay was only 29 percent.

The exclusion of white-collar occupations, except clerical, does little to alter the pattern of industry variation in the proportion receiving premium pay. While their exclusion does increase the proportions receiving premium pay in each industry, it is by a smaller amount than might have been anticipated. For example, the proportion of all nonagricultural employees working long hours who received premium pay was 38 percent; when the specified occupations are excluded, the proportion rises to 55 percent. Although this increase is significant, the fact remains that only half of those working long hours receive overtime pay at premium rates.

Because the rates seemed low even for operatives and craftsmen (66 and 60 percent, respectively), the occupation data were examined in more detail. While practically all of the operatives in the durable goods industries received premium pay for their extra hours, less than one-third of all drivers and delivery men received extra compensation; a

³ In 1965, the median annual income of salaried male managers and officials, \$8,646, was second only to the income of self-employed male professional workers. *Current Population Reports*, Series P-60, No. 50 (U.S. Bureau of the Census, August 1966).

large proportion of drivers and deliverymen are exempt from coverage under overtime legislation. Among craftsmen where low rates of receipt are common for carpenters, foremen, and auto mechanics, coverage sometimes does not extend to their occupation or place of employment.

Personal Characteristics

Men were more than twice as likely as women to work extra hours in May 1966.⁴ Of the 17 million persons working overtime, 13.6 million were men. The majority were married (11.6 million) and in their prime working years (25 to 54 years of age). Approximately 4 out of 10 men and 3 out of 10 women received premium pay for their overtime; this disparity is the result of differences between the jobs held by women and those held by men and not of outright discrimination against women.

The educational commitment of teenagers combines with legal restrictions to prevent extensive overtime for them. In all other age groups, the likelihood of working extra hours tended to vary within a comparatively small range for men (31 to 38 percent) as well as for women (14 to 17 percent). As table 2 shows, the likelihood of receiving premium pay is inversely related to the workers' age. These small differences reflect occupational differences; younger workers tend to be concentrated in those jobs where the likelihood of receiving premium pay for overtime is highest. In May 1966, for example, nearly 70 percent of 25 to 34 year-olds were in the four occupation groups with the highest rates of receiving premium pay. On the other hand, nearly half the employed men age 45 to 54 were in the five occupation groups

TABLE 2. PERCENTAGE OF WAGE AND SALARY WORKERS ON EXTENDED WORKWEEKS AND PERCENTAGE RECEIVING PREMIUM PAY, BY SEX, AGE, COLOR, AND MARITAL STATUS, MAY 1966

Characteristic	Percent working overtime ¹		Percent receiving premium pay	
	Male	Female	Male	Female
Total.....	35.0	15.0	39.8	30.9
Nonagricultural industries.....	34.9	15.0	41.2	31.3
By age:				
14 to 19.....	9.8	6.8	43.7	39.4
20 to 24.....	33.2	15.4	51.3	38.3
25 to 44.....	40.1	14.8	41.4	36.4
45 to 54.....	36.5	16.3	39.6	30.1
55 and over.....	29.4	18.4	34.9	16.7
By color:				
White.....	35.6	14.8	41.2	32.9
Nonwhite.....	25.6	15.8	41.7	20.8
By marital status:				
Married, spouse present.....	38.2	13.7	41.6	36.4
Single.....	17.9	14.0	38.8	27.0
Other.....	35.1	19.4	39.5	25.1

¹ Wage or salary single jobholders as a percent of wage or salary employees at work.

where the proportion receiving premium pay was smallest.

The proportion of married men working extra hours was greater than that of single men; however, the proportions receiving premium pay were the same. Color was not a significant factor in the receipt of premium pay for men, but white men were more likely to put in extended workweeks. Among women, the proportions of whites and nonwhites working long hours were the same, yet white women were more likely to receive premium pay, presumably because of the heavy concentration of nonwhite women in private household work, where long workweeks are common and the payment of premiums is almost nonexistent.

⁴ In 41 States there are laws regulating the number of hours women may work. For a summary of these laws, see *Summary of State Laws Affecting Women* (U.S. Department of Labor, Women's Bureau, 1967).

A Primer for a Theory of White-Collar Unionization

VINCENT LOMBARDI AND ANDREW J. GRIMES*

THE GREATEST DIFFICULTY encountered in approaching the questions of why white-collar unions emerge and why workers join them stems from the heterogeneity of white-collar employment. The broad spectrum of occupations to which the term "white-collar" has been applied makes any blanket generalization meaningless. The discussion here will be limited to two main groups—professionals and clerical workers.

The Model

A theory of white-collar unionization must take into consideration not only the emergence of the union, but its growth as well. Some writers have attempted to account for the casual factors of union growth on both a short- and long-run basis. Dunlop and Bernstein, for example, have developed short-run theories which have been labeled "disaster" theories of union growth,¹ such as wars, periods of deep unrest, and economic depressions. While both Dunlop and Bernstein have observed that unionism has expanded during certain periods, they have not attempted to ferret out the underlying causal factors. As Rezler has pointed out, the determinants of unionization during the various disaster periods were not the same.²

To explain white-collar unionization, the model includes four causal, functional variables: The social and economic situation as perceived by the white-collar worker,³ the threshold level of unionization for the group, leadership, and public policy.

Socioeconomic Situation

The "socioeconomic" variable refers to any factor signaling the employee that his position is

becoming insecure, that his status within the firm is declining, or that his wage level relative to other groups is diminishing. This variable bears some resemblance to Shister's compound determinant called "work environment," which embraces several factors. It includes the pattern of economic change, structure of relevant industry, and proximity influence.⁴

Both Dunlop and Shister see advancing technology and change of market structure as a variable. Although this may be an important factor in the socioeconomic situation influencing blue-collar organization, it is not so clear-cut for non-manual employees. Advancing technology may portend both positive and negative effects for non-manual unionization, depending on whether personal or task specialization results. In instances where personal specialization is the concomitant of innovation, there is a tendency for affected white-collar workers to experience increasing security. Increased personal specialization causes the power and status of individuals to be enhanced since they come to possess valuable knowledge and ability. Note, for example, the increasing demand for and status of the specialized medical doctors and lawyers.

On the other hand, task specialization—the negative influence—has a tendency to reduce the realm of the worker's responsibility, to increase routinization, and lower skill requirements. Such technological development reduces the worker's security in his job. This negative concomitant is probably the most common effect experienced by workers in the lower levels of employment. Its influence on higher level positions is not so clear.

Therefore, technological and market structure change per se as a causative factor in union organization is not meaningful for the white-collar sector of employment. Indeed, in evaluating the socioeconomic conditions and their effect on the propensity for unionization, it is necessary to review each

*Of the University of Wisconsin and Michigan State University, respectively.

¹ Julius Rezler, *Union Growth Reconsidered: A Critical Analysis of Recent Growth Theories* (New York, The Kossuth Foundation, Inc., 1961).

² *Ibid.*, pp. 2-8.

³ No attempt will be made here to discuss the effects of social and family background, or of functional relationship to management, on threshold level.

⁴ Joseph Shister, "The Logic of Union Growth," *Journal of Political Economy*, October 1953, p. 413 ff.

group of white-collar workers individually. An attempt will be made here to present some of the conditions for selected white-collar groups that have given rise to unionization.

Engineers

The socioeconomic situation within the professional sector of white-collar employment will be explored from an historical perspective as a means of observing the influence of this variable over time. Since it is impossible to include here the variegated groups of professional workers, the number of professional groups will be held to three: engineers, nurses, and teachers.

The generative conditions for unionization of engineers have been many: The loss of employment and large amount of unemployment during the depression; the use of Government cost-plus contracts following World War II and during the 1950's; the depersonalization of relationships resulting from mass employment of engineers; finally, the telescoping of engineers' salaries.

The union movement among professional engineers made its first substantial thrust forward during the depressed years of the 1930's, when unemployment was high and opportunities were meager. About one-third suffered unemployment at one time or another during the years 1929-34, while large numbers of graduating engineers remained unemployed for an extensive period of time during those years. The number of engineering jobs rose by less than 5 percent in this period while the number of graduate engineers was increasing by 25 percent.⁵

A revolution in the engineer's employment status—from independent consultant to salaried employee—was complete by the end of World War II. By 1946, less than 5 percent of engineers en-

gaged in independent practice. Moreover, the mass entrance into industrial organization has tended to further reduce the status of the engineer owing to task specialization and team work.⁶ In the former situation, the work of the engineer becomes routinized and specialized so that exercise of judgment is reduced to a level at which substitution can be easily made.⁷ No longer do engineers, in many instances, perceive their position as valued and possessing power because of the scarcity of individuals who could occupy them. Furthermore, the micro division of tasks for efficient operation has a concomitant effect of reducing pride in work and employee security.

Teamwork, in conjunction with task specialization, also increases the pangs of insecurity of the engineer. This condition often blurs the line of demarcation between the professional men on the team and the technicians. Indeed, it often facilitates the technician's assimilation of the professional's functions.

The competition for lucrative Government contracts (cost plus) during the 1950's made stockpiling of engineers by large defense contractors a common practice. The large inventory of engineers was often, at best, underemployed to reduce potential staffing problems should a large contract be acquired or, at worst, laid off should the contract be awarded to a competitor. In either case, the experience for the individual engineer was often unpleasant.

Probably the most important single problem today influencing the engineers to organize is the distorted wage structure that resulted from the salary telescoping effect.⁸ Bambrick suggests that widespread telescoping has occurred in the principal fields of white-collar activity, is especially pervasive in engineering employment, and is a reason for white-collar unionization.⁹ Such a practice is bound to cause dissatisfaction.

The disheartening fact about engineering employment for many is the devaluation of the older engineer as a result of his job specialization within a large firm. Employers are able to ignore the older worker since his competitive position relative to the novice—except in his own specialized area—is unfavorable. The novice is more flexible and freshly equipped to enter into many specialized areas. Undoubtedly, such a situation acts as a deterrent to a search for alternative employment for the older worker.

⁵ Herbert R. Northrup, "Industrial Relations and Professional Workers," *Harvard Business Review*, September 1948, pp. 543-545.

⁶ Herbert R. Northrup, *Unionization of Professional Engineers and Chemists* (New York, Industrial Relations Counselors, Inc., 1946), pp. 3-5.

⁷ In the case of some engineers, however, personal specialization rather than task specialization has developed. This is especially true of the electronic and electrical engineers.

⁸ James J. Bambrick, *White-Collar Unionization*, an address before the Controllers Institute of America, January 1961, Detroit, Mich. (p. 7). Telescoping is defined by Bambrick as the practice of "pushing up the bottom or entering rate while not making similar adjustments in salaries in the intermediate and top brackets."

⁹ *Ibid.*

Teachers

The salient factors confronting teachers have been low pay, low status, and subordination to the school committee. The socioeconomic situation for some teachers was adverse enough to cause the early adoption of the goals of trade unionism to enhance their position. For example, Chicago teachers were organized in the early 1900's to combat the political machines that imposed their will on this group of professionals.¹⁰ Insecurities, indignities, and humiliations suffered by the teaching profession have been extensively documented. The five main sources of discontent suggested by one writer are substandard salaries, unequal pay for equal work, "second class citizenship," inadequate retirement systems, and overcrowded classrooms.¹¹

In addition to these sources of discontent, teachers experience interference from the two non-professional groups, parent-teacher associations and school committees.

Nurses

The present state of discontent in the nursing profession needs no extensive documentation. This group has long been accustomed to maltreatment and abuse. They have experienced low and stagnant wages in an economy of rising costs. The average salary earned by a registered nurse employed in a hospital (nongovernment) is \$3,900 per year, while the average wage of a factory worker is \$4,730 per year.¹²

Moreover, nurses have been subjected to extremely burdensome work, in fact overwork. The shortage of nurses has made it necessary in many instances for nurses to supervise many auxiliary workers in addition to performing their professional functions. Nurses are also subject to a dual professional bureaucratic hierarchy and often con-

flicting authority structures. The hospital administration on the one hand and the attendant physicians on the other make incompatible demands on the nurse.

There can be little doubt that the socioeconomic conditions of nurses are fertile for unionization. In 1946, the American Nurses Association (ANA) decided upon advocacy of collective bargaining activities to its affiliates.¹³ The ANA has had some recent success in its collective bargaining role.

Clerical Workers

There has been a great deal more investigation of the unionization potential of clerical workers than of the other groups mentioned. Bambrick, for one, has listed four main reasons why clerical workers have joined unions: They were discontented over their earnings and economic position vis-a-vis the blue-collar workers; they lacked a sense of security and felt they had no guarantee that they would not be laid off arbitrarily and capriciously; they felt their grievances were not handled justly, and their supervisors' word was law from which there was no appeal; and they felt the importance of the work they were doing was not recognized by the company or community.¹⁴

Although there is a manifestation of dissatisfaction among the nonmanual employees, the question remains, why has unionization not become pervasive? The following section will endeavor to explore another variable which has considerable influence on the choice between individualism and collective action: the threshold level.

Threshold Level for Unionization

As already noted, disparities exist in the various strata of white-collar employment, yet only a small proportion of white-collar workers have been unionized. One of the important variables that has influenced the emergence and growth of organization has been the "threshold level" of white-collar workers. For the purpose of this article, threshold level is viewed as the level below which disturbances and dissatisfactions within a group of common interest are tolerated. It is conceived as a function of the value orientation¹⁵ of the individual workers, and of their conception of man-

¹⁰ Robert F. Pearse, *Studies in White Collar Unionism—Teachers*, Ph. D., dissertation, University of Chicago, 1950.

¹¹ Vera Shlakman, "White Collar Unions and Professional Organizations," *Science and Society*, Summer-Fall 1950.

¹² Barbara Carter, "Medicine's Forgotten Women," *The Reporter*, March 1, 1962, p. 35.

¹³ Northrup, *Industrial Relations and Professional Workers*, op. cit. pp. 552-554.

¹⁴ Bambrick, op. cit., p. 4.

¹⁵ No attempt will be made to develop and distinguish the value orientation of the various groups of white-collar workers or to reconcile them with those of blue-collar workers.

agement's attitude and potential reaction to collective action.

Perhaps Parsons' notion of the sociologicistic theorem may provide a beginning for the long-needed analysis of the process by which values of a group form "need-dispositions" of an individual member of the group. Parsons suggests that conforming to generally accepted "role-expectations" provides the ego gratifying responses from others. Everyone attempts to do what others want him to do. "The interests of [a group are] bound to conformity with a shared system of value-orientation standards."¹⁶

The white-collar worker, therefore, would view his socioeconomic situation and the role of the union not subjectively, but by the standard of value of the group with which he identifies himself. If such is the case, the worker's conceptualization becomes a blend of reason and emotion; in many instances, reason and cognition are overcome by emotion—the union becomes a negative means toward the end. Unions are conceived as bad with no criteria established for a valid evaluation; they are "bad," antiprofessional, unethical, and corrupt, and they have a tendency to reduce performance to mediocrity or have usurped management's prerogatives.

These emotional reactions to unionization serve to keep the threshold level high. Indeed, in many instances they appear to shift the workers' concern from the inadequacies and need for adjustment toward a concerted movement to prevent unionization. The white-collar worker's inertia to change, his resistance to collective action, is rationalized by expounding the very argument—the doctrine of individualism—that illustrates their weak bargaining position.

¹⁶ Talcott Parsons, *The Social System* (Chicago, Free Press, 1951), p. 42.

¹⁷ Michels suggests that "he who says organization says oligarchy." He provides in his classic study on political parties a discussion of the process through which an oligarchy develops within organizations. See Robert Michels, *Political Parties*, translated by Eden and Cedar Paul (New York, Dover Publications, Inc., 1959).

It appears, therefore, that the value orientation of the white-collar worker influences the perception of the work situation and the role of unionism. Another important factor influencing the threshold level is the fear of management reprisal. There is apprehension among white-collar workers of loss of position if management becomes aware of worker activity to introduce collective action.

Leadership and Public Policy

The level of discontent has historically given rise to interest groups. However, discontent may remain latent either because the individual regards corrective action as impossible, in which case he adjusts to it, or simply because he believes it is easier to ignore it. The interest group develops when individuals begin to recognize that they share a common aim, problem, or interest of some sort.

In the work situation, the level of social and economic discontent may be quite high in many instances without the group taking remedial action. However, when it grows to certain intolerable levels, the tension and discontent give rise to a leader or an articulator who transforms latent into manifest discontent.

White-collar unionization, therefore, is dependent on the ability of a leader to articulate the need for collective action. This is only one aspect of the leadership in union organizing—the emergence function; the other is the perpetuation or growth function. Once a union is organized it develops an institutional personality with a desire to perpetuate itself, basically the desire of the few who come to control the organization.¹⁷

As for public policy, in a broad sense, it is thought of as embracing not only statutory law, but also attitudes of administering agencies and decisions of the courts. Public policy reflecting the climate of public opinion can increase or retard union growth.

Foreign Labor Briefs*

Botswana—Advisory Board

The Government of Botswana (formerly the United Kingdom protectorate of Bechuanaland) has established a tripartite Labor Advisory Board of Government, employer, and labor representatives. The Board is to aid the Government in formulating labor legislation and policy; advise Government, employers, and employees on such matters as the peaceful settlement of labor disputes and the application of workmen's compensation legislation; and serve as a medium of contact between the groups.

EEC—Economic Plan

The European Economic Community (Belgium, France, the Federal Republic of Germany, Italy, Luxembourg, and the Netherlands) adopted its first 5-year economic plan. Covering 1966-70, the plan envisages a 4.3-percent annual rate of economic growth, to be achieved primarily through improvements in productivity for labor shortages in the Community as a whole are expected to continue. A comprehensive program of scientific and technological research and development is to be designed to improve productivity. Moreover, to prevent consumer demand from outstripping supply, the plan includes an incomes policy designed to keep wage increases in line with productivity increases. Accordingly, the planners established a guideline for wage increases amounting to the estimated annual productivity increase—3.8 percent.

EFTA—Labor Problems

The countries of the European Free Trade Association (Austria, Denmark, Finland, Norway, Portugal, Sweden, and the United Kingdom) have begun to cooperate in seeking solutions to labor problems. The new tripartite Economic and Social Subcommittee of the Consultative Committee which was established by the EFTA Council in

1966 discussed these problems at meetings held in December and February. The Subcommittee's chairman, Sir Harry Douglas, who is also chairman of the British Trades Union Congress (TUC), suggested a study of "methods for improving labor mobility, both between sectors of industry and geographically, including relevant social benefits, and with special regard to retraining of manpower."

Germany—Unemployment

The pendulum has swung from extreme tightness in the West German job market to concern over unemployment. By mid-January 1967, the number of unemployed had risen to 580,000 (2.6 percent of the work force), more than twice the figure for January 1966 (270,000, or 1.2 percent). At the end of 1966, the number of vacancies fell below the number of unemployed for the first time in 6 years. The number of workers on short time—particularly in the automotive, textile, metalworking, and machinery industries—is at its highest level in almost 8 years, and for the first time the number of foreign workers has declined, with 300,000 or more not returning to Germany after the Christmas holidays.

India—Incomes Policy

A Report on a Framework for Incomes and Prices Policy of January 1967, prepared by prominent economists under Government sponsorship, recommended that wage increases be lower than the level justified by gains in productivity, because of the dangers of inflation and the need to promote capital formation. The report also recommended that taxation on income, wealth, and gifts be made more effective through the elimination of widescale tax evasion. The report rejected as impractical the establishment of both a national minimum income and a direct limitation on higher income. According to the report, differentials in the salaries of Government employees have lessened in recent years; those in the private sector have widened despite Government control of the earnings of top executives.

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

Indonesia—*Economic Stabilization*

The Government's stabilization program began to show results in recent months as the rise in prices slowed, and the exchange value of the rupiah achieved some stability. For the first time in almost a decade, price increases were lower than increases in the money supply. In effect since December, the stabilization program includes restrictions on credit, the raising of interest rates by State banks, improved tax collection, and abolition of subsidies to public utilities. To offset the rise in utility rates, gasoline prices, and other goods, the Government granted civil servants and Armed Forces personnel a 100-percent increase in pay effective January 1, and, in addition to the traditional yearend bonus of 1 month's pay, a small New Year's bonus. Trade unions have supported the Government's program and have been moderate in their demands for further measures to offset the rising cost of living.

Kenya—*Cooperatives*

The Cooperative Societies Act, 1966, became effective January 1, 1967. It authorizes the Commissioner for Cooperative Development to approve the registration, amalgamation, and division of cooperative societies, to inspect their assets, to approve remuneration of their officials, to authorize loans to nonmembers, and to grant a monopoly on a product in an area or throughout Kenya to a cooperative society if it handles 60 percent of that product in a specified area or throughout Kenya. Every registered society must submit a copy of its bylaws and annually supply a copy of its audited balance sheet. The dividends and bonuses paid to members must not exceed 10 percent of a society's net balance. The act also provides for control of investments and contributions to charitable causes.

Panama—*Vocational Training*

A new law authorizing the construction of vocational schools in several cities provides for

partial financing of the construction and operation of such schools by a 1-percent tax on all imported merchandise (except medicines and medical equipment), including merchandise coming through the Colon Free Zone and the Panama Canal Zone. Signed January 30, the law permits the borrowing of \$2 million for strengthening of existing public and private vocational schools, establishment of new agricultural training centers, and provision of in-service training to skilled and semiskilled workers in the private sector.

U.S.S.R.—*Economic Statistics*

The Central Statistical Administration reported that during 1966 industrial output increased 8.6 percent over 1965, national income 7.5 percent, real per capita income more than 6 percent, and labor productivity 5 percent. The population ("over 234 million" as of January 1, 1967) increased by about 2 million during 1966, compared with an increase of about 3 million in 1965; the slowdown is being attributed in part to overcrowded urban housing. The average number of wage and salary earners in 1966 was 79.7 million, or 2.8 million more than in 1965; the increase in 1965 was 3.6 million.

The average monthly monetary earnings of all wage and salary earners rose from 95.6 rubles (\$106) in 1965 to 99 rubles (\$110) in 1966. According to the report, Government expenditures for free consumer services and other benefits raised the 1966 average monthly earnings to 133 rubles (\$148). Retail sales in State and cooperative outlets increased, in comparable prices, by 8.7 percent in 1966, but the demand for certain types of clothing, footwear, household chemicals, furniture, building materials, and refrigerators was reported not fully met. The increase of 22 percent in personal savings during the year would appear to confirm Soviet newspaper accounts of resistance to buying consumer goods of poor quality and a tendency to save money until a supply of more desirable goods becomes available—including such expensive items as television sets, furniture, refrigerators, and even passenger cars.

Communications

EDITOR'S NOTE.—*The Monthly Labor Review is always eager to publish communications from its readers. Letters should be held to 500 words. The Review reserves the right to choose the comments for publication and to make minor editorial changes to clarify meaning and to reduce length to the prescribed limits.*

Samuelson at Random

THERE IS NO QUESTION that you should be commended very highly for bringing some discussion of economics to the *Monthly Labor Review* [February 1967]. Many of us have the feeling that the MLR has published too many nuts-and-bolts articles and has not stressed economic theory half as much as it should. Your attempt to bring the labor economists to the watering trough of theory is both novel and commendable. I wonder whether they will drink.

Because of the very novelty of your departure, you will excuse my hypercritical attitude about the review article. No doubt Samuelson is a giant among economists. Yet, because of his theoretical orientation, he has missed an important dimension of recent economic developments—the study of stochastic processes. This criticism of Samuelson, I think, is somewhat more to the point than what may sound as ungracious carping by Professor Routh about Samuelson's abstract theoretical constructions.

What Samuelson and his ilk have tried to do is to teach us to think more systematically about more complex subjects. Labor economists should listen to this message attentively.

—JOSEPH FROMKIN

Assistant Commissioner for
Program Planning and Evaluation
Department of Health, Education,
and Welfare

Economic Paleontology

YOUR INVITATION to comment on Dr. Routh's essay is much too tempting for someone who has lived through the excitement created by the appearance of J. M. Keynes' *General Theory*, Samuelson's *Economics*, and Schumpeter's *History of Economic Analysis*. But what should the

comment center on? The depth, scope, and presentation of the essay itself? The scintillating personalities who have dominated the field of economic thought during the last 40 years, of whom Professor Samuelson is one? Or the rise and fall of economic theory, and its final mummification in a shelf full of books as overawing outwardly as they are harmless when waded through?

I do not think we need to worry too much about econometrics which is, essentially, what Keynes called a puzzle for children, where you add up your age, height and weight, multiply or divide by something else, ending up with the number of the beasts in Revelations. This game is great fun, provided you can afford it. Have we not seen the incidence of toxemia of pregnancy explained on the basis of multiple correlation analysis encompassing not only the case histories of the patients, but also the income brackets of the families, and the weather reports for the particular localities during the period under consideration? Isn't it also fun, though, watching the Keynesian multiplier knock, cap in hand, on the Porte de St. Cloud, asking for admission to the unscientific European Common Market? And what did the students nurtured on Professors Schumpeter's and Samuelson's fare fail to grasp, in view of their inability to stop the drain on U.S. gold reserves?

Dr. Routh's essay has suggested to me that the time may have come for a new discipline—economic paleontology—to be added to the edifice of self-respecting academic institutions. If you know of any postgraduate scholarships that may be available to outsiders, I would love to apply for one, in order to enroll as a student in such a university department as soon as one has been set up.

—GEORGE SOTIROFF

Director, Research and Planning Branch
Department of Labor
Province of Saskatchewan
Canada

Original Intent

IN THE MARCH ISSUE of the *Monthly Labor Review* you reprinted a condensed version of the paper on discriminatory promotion systems which I presented at the December 1966 meetings of the Industrial Relations Research Association. Your staff, on the whole, performed admirably the difficult job of reducing a lengthy manuscript to two pages, while preserving its continuity. As I read the summarization, however, the impression which it conveys, as a result of certain deletions, differs somewhat from my original intent.

First, insufficient emphasis was placed upon the desirability of reducing, wherever possible, the direct involvement of the Federal courts in the regulation of promotion systems. I intended that review by the courts of promotion systems and the development of suitable remedies, with some *moderate* costs, should be utilized only as a last resort after a variety of voluntary procedures had been exhausted.

Second, while the additional "compensation" which I indicate might be awarded, as part of a *voluntarily* ne-

gotiated remedy, to Negro employees who have suffered from discrimination might include monetary arrangements such as the "red-circling" of wage rates in certain specific cases, broader forms of compensation such as changes in work rules, additional job security, and especially training should be emphasized.

Finally, I believe mention should have been made of my suggestion that private arbitrators and mediators be involved in developing solutions to a broad range of problems of discrimination through the development of additional procedures to implement voluntary compliance. Such procedures hold great potential for resolving these sensitive issues. They can introduce an expertise into the compliance process which is not usually available in the courts and can assist in formulating remedies, including face-saving arrangements, while preserving some of the initiative and flexibility which characterizes voluntary compliance with title VII.

—PETER B. DOERINGER
Professor of Economics
Harvard University

Erratum

In the dead of night, the evil spirit that haunts all publications worked overtime to wreak havoc on our April issue. The three paragraphs on page 44 beginning with the words "This is a sort . . ." and credited to Louis Sherman, should be paragraphs four through six in the piece credited to A. H. Raskin which follows. Mr. Sherman writes that while he admires no end Mr. Raskin's prose style, he must disclaim authorship. We herewith return to Mr. Raskin his lost lines, with apologies to both authors.

Significant Decisions in Labor Cases*

Labor Relations

Fair Representation. In a landmark decision on union representation, the United States Supreme Court ruled¹ that the National Labor Relations Board does not have exclusive jurisdiction of "cases involving alleged breaches of the union duty of fair representation." It further held that Federal law requires the employee suing his union for breach of that duty, either in Federal or State courts, to prove that the union's conduct toward him was "arbitrary, discriminatory, or in bad faith."

An employee who had been hospitalized and on sick leave was permanently discharged when company doctors refused to recognize the certificates of fitness issued by his private physicians. The union processed his grievance according to the contractual grievance procedure, but stopped short of arbitration when an additional examination of the worker, at the union's expense, failed to support his claim of fitness. The union recommended, instead, that the worker accept the employer's offer of referral to a rehabilitation center. When the employee turned the offer down and demanded arbitration, the union refused to press the grievance any further. The employee brought suit in a State court and obtained judgment against the union on charges of unfair representation.

In appealing to the U.S. Supreme Court, the union claimed that the State court did not have jurisdiction. It argued that breach of the duty of fair representation was an unfair labor practice and, under the preemption theory,² was within exclusive jurisdiction of the NLRB. The Court recognized that the duty of fair representation was grounded in Federal statutes and that Federal law must govern the suit, but rejected the contention that the court's authority was preempted by the Board's. The Court pointed out that courts had provided a remedy for unfair union representation

years before the Board recognized the court-established doctrine, and held that Congress did not intend "to oust the courts of their traditional jurisdiction to curb arbitrary conduct by the individual employee's statutory representative."

The union also contended that the employee had failed to prove that it had breached the duty of fair representation, and that the State's highest court had applied the wrong standard to determine the breach, a standard that was inconsistent with Federal law. With this contention the Supreme Court agreed. It found that the State court had upheld the verdict for the employee because it thought the evidence supported his assertion that he had been wrongfully discharged. This was not enough, the Court held. An employee does not have "an absolute right to have his grievance taken to arbitration regardless of the provisions of the applicable collective bargaining agreement." Under the applicable agreement, the question of whether to press for arbitration lies within the discretion of the union. To find that a union's decision not to press for arbitration was a breach of its duty of fair representation merely "because a judge or jury later found the grievance meritorious" would have a dampening effect on the entire grievance procedure, an effect which is neither necessary nor desirable. Therefore, the Court held, only if the union acts in bad faith or in an arbitrary fashion can it be found to have breached its duty of fair representation.

In conclusion, the Court found that the damage award against the union alone was improper because, if the claim was valid, the employer's breach of contract made it liable for damages too.

The dissenting Justice Black disagreed with the majority's opinion, holding that it established a "rule . . . that before an employee can sue his employer under section 301 of the Labor Management Relations Act for a simple breach of his employment contract, the employee must prove not only that he attempted to exhaust his contractual

*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 *Manuel Vaca v. Niles Sipes* (U.S. Sup. Ct., Feb. 27, 1967).

² Enunciated in *San Diego Building Trades Council v. Garmon*, 356 U.S. 236; see *Monthly Labor Review*, June 1959, pp. 669-670.

remedies, but that his attempt to exhaust them was frustrated by 'arbitrary, discriminatory, or . . . bad faith' conduct on the part of the union."

Remedy. The NLRB decided³ that its usual remedies were insufficient to redress the injury inflicted upon the union during a long period of organizing activities and, for the first time in an unfair labor practice case, ordered a company to supply the union with the names and addresses of all its employees because the union had no effective means of personal contact with them.

The employer, a southern textile manufacturer, had successfully thwarted a union organizing drive by means found in a prior Board decision⁴ to have been "flagrantly unlawful." At that time the Board determined that the situation warranted additional remedies and ordered the company to read the Board's notice to all the employees during company time, to mail it to their homes, and to allow the union access to the company's bulletin boards for a year. The current proceeding revealed that the company had persisted in its unlawful antiunion actions. As a result, the union requested that the company also be required to supply it with the names and addresses of all the employees.

The Board found that through a long and illegal campaign against the union, the company had so intimidated the employees that they could no longer make an effective presentation of the union position. "The atmosphere of fear generated by the illegal threats, interrogations, and discharges in the plant undoubtedly will hinder lawful propaganda activities during nonworking time on company premises," the Board held. Since the union could not effectively reach the employees during nonworking time on the company premises, and nonemployee union organizers ordinarily have no right of access to the plant, the Board granted the union's request for the names and addresses of the company's employees. "As the respondent [company] was responsible for the unfair labor practices in the plants and for the attendant lack of organizational opportunities, and as all the employees' names and addresses are not available from sources other than the respondent, we think it reasonable to require it to furnish the list," the Board held.

The Board, however, refused to order the company to negotiate with the union since the latter

had not obtained authorization of a majority of employees.

Refusal to Bargain. A Federal court of appeals ruled⁵ that a successor company which unilaterally instituted its own wage scales for employees of a newly acquired transportation business, and refused to recognize and to bargain with an incumbent union, committed an unfair labor practice. The facts that the union's contract with the previous owner had terminated prior to the sale and that the union was aware of the intended wage change did not justify the new employer's conduct.

In an attempt to bring this case within the purview of the *Wiley* decision⁶ the union had contended that the contract was still in effect. The court upheld the Board's decision that the collective bargaining agreement had terminated before the sale and, thus, *Wiley* was not directly in point. (In *Wiley*, a union contract was in effect at the time of sale.) However, the court used that decision to buttress "the more limited successor doctrine developed by the courts of appeal but not as yet expressly declared by the Supreme Court." Thus the court found that it was now "settled [law] that if the transfer of assets and employees from one employer to another leaves intact the identity of the employing enterprise, then the former's duty to recognize and bargain with an incumbent union devolves upon the latter as successor employer." The court determined that the transfer had left the identity of the enterprise intact and, therefore, the new owner was a "successor," with a duty to bargain with the union prior to making changes.

Antitrust Laws

Application to Unions. A musician's union that tightly regulated the music market was found by a Federal court of appeals to have violated the antitrust laws by establishing prices to be charged by orchestra leaders for single "club date" or-

³ *J. P. Stevens & Co. and Industrial Union Department, AFL-CIO*, 163 NLRB No. 24 (Mar. 6, 1967).

⁴ *J. P. Stevens & Co.*, 157 NLRB No. 90. See *Monthly Labor Review*, May 1966, pp. 533-534.

⁵ *Overnite Transportation Co. v. NLRB* (C.A. 4, Feb. 6, 1967).

⁶ *John Wiley & Sons, Inc. v. Livingston*, 376 US 543 (1964). The Supreme Court held that, under certain circumstances, a successor company may incur obligations under a collective bargaining agreement between the union and the prior owner.

chestral engagements.⁷ However, the court found the union immune from the law in imposing upon the leaders other regulations designed to protect the musicians' job interests. The ruling applied only to the litigants involved.

The American Federation of Musicians regulates single engagements in the "nonclub date" and "steady" engagement fields through collective bargaining agreements with large "purchasers" of music. In the club date field (covering such affairs as weddings, parties, and dances), with which this case is primarily concerned, the union has unilaterally established, through its bylaws, the lists of minimum prices to be charged for appearances, and thus the terms and conditions of employment governing "all musical engagements not subject to any of the local's outstanding collective bargaining agreements." The orchestra leaders have had no effective part in establishing the "price floor," except as individual union members.⁸ The union's regulations also restrict the travel of orchestras and musicians by requiring them to charge for performances 10 percent more than the local rate, and govern the transfer of membership from one local to another.

Two orchestra leaders objected to the union's complete control of the performing music business, charging that the union was in violation of the antitrust laws. After a preliminary finding that the charging parties did not represent a class—as there was no evidence to show that orchestra leaders generally objected to the union controls—the court stated that the "Sherman Act's area of application in labor cases is now restricted to certain narrowly defined practices; and the Norris-LaGuardia Act takes all labor disputes⁹ outside of the reach of the Sherman Act."¹⁰ Contrary to the leaders' contention that there was a conspiracy in restraint of trade between the union and "nonlabor groups," the court found no evidence of a conspiracy between the local or national union and orchestra leaders "to eliminate competitors, fix prices or achieve any other commercial restraint . . ." but that "all restraints were instituted unilaterally by the unions and acquiesced in by the orchestra leaders." Since the Norris-LaGuardia Act only exempts from the Sherman Act only actions pertaining to terms or conditions of employment, the question was whether price fixing by the union fell into that category.

After brushing aside various arguments purporting to justify the price-fixing arrangement,

the court concluded that as representatives of the rank and file membership, the union was not sufficiently interested in the price of an orchestral engagement for it to be a subject of mandatory bargaining (a term or condition of employment); and since the leaders are treated as employers, the union did not have sufficient interest as their representatives to justify a minimum price scale. Fixing of minimum prices, the court held, was in violation of the Sherman Act. A different outcome might result, the court reasoned, when the orchestra leader actually performs with his orchestra.¹¹ By not having to pay a subleader, he could undercut a nonperforming leader, and this might give the union sufficient interest to bring price-fixing within the exemption. But the court stated that "price-fixing generally is not only not a mandatory subject for collective bargaining but is one toward which union activity may not be directed without violating the antitrust laws."

The court then examined travel restrictions, employment quotas, and the closed shop and found them "mandatory subjects of collective bargaining and not in furtherance of a conspiracy with a non-labor group and, therefore, immune under the Norris-LaGuardia Act." The leaders' objections to union bylaws prohibiting members from accepting engagements with caterers and regulating booking agents were rejected by the court on the ground that the leaders could show no loss as a result of these regulations and, therefore, had no standing to challenge them.

Although the union's refusal to bargain with the orchestra leaders and the pressure it brought to bear upon them to join the union, were prima facie violations of the LMRA, they did not violate the Sherman Act, the court said. That this refusal to deal with the leaders is exempt is apparent as the union's purpose is to "achieve uniformity of labor standards," not to eliminate a competitor, reasoned the court.

⁷ *Carrol v. American Federation of Musicians* (C.A. 2, Jan. 30, 1967).

⁸ In the court's language, "Once promulgated, the members must comply with such regulations. There is no collective bargaining with orchestra leaders concerning the wage scales, price restrictions, or other regulations established in the price list."

⁹ Those concerned with a term or condition of employment. (Section 13, 29 USC 113(c).)

¹⁰ With the exception of a dispute involving conspiracy between a union and nonlabor group. *United Mine Workers v. Pennington*, 381 US 657 (1965). See also *Monthly Labor Review*, November 1966, p. 1269.

¹¹ Since the suing parties were not members of the union, under union bylaws they had to hire sub-leaders to conduct their orchestras.

Chronology of Recent Labor Events

March 1, 1967

THE TEXTILE WORKERS UNION announced an agreement negotiated under the reopener provision of a 3-year contract with the Wyandotte Worsted Co. in Boston. The pact calls for a 9-cent-an-hour wage increase, effective May 1, 1967, for about 800 workers in three New England worsted and woolen plants. The previous minimum wage was \$1.74 an hour. (See p. 63, this issue.)

March 7

TEAMSTER PRESIDENT James R. Hoffa's last-minute court appeals having failed, he entered the Federal penitentiary at Lewisburg, Pa., to start an 8-year sentence for jury tampering. In the meantime, Frank E. Fitzsimmons, the Teamster's general vice president, took over the union's current contract negotiations and, generally, active leadership of the union. (See p. 67, this issue.)

March 9

IN ITS 10-year effort to organize a southern textile chain, J. P. Stevens & Co. of Greenville, S.C., the Textile Workers Union won another decision from the National Labor Relations Board, this time ordering the firm to furnish the union with names and addresses of its 40,000 employees. The Board also found the company engaged in antiunion activity, but refused to order bargaining with the union since it had not obtained authorizations of a majority of the workers. It was the first such NLRB order in an unfair labor practice case. (See p. 55, this issue.)

March 11

A WILDCAT STRIKE—second within a month—by most of the workers at the General Motors Fisher Body plant in Mansfield, Ohio, ended as the striking members of Local 549 of the United Auto Workers returned to their jobs. Previously, the UAW International Executive Board had informed all members of the local that the stoppage was unauthorized and had appointed an administrator over the local. The stoppages (one in February, lasting 8 days, and the other begun March 5) had threatened a serious disruption of the company's production throughout the country. Reportedly, they were attributable to "a combination of long-standing and festering troubles within

the union . . ." and other misunderstandings. Later reports indicated that, although the strike was ended, discontent among the workers remained. (See p. 68, this issue.)

March 13

THREE-AND-A-HALF-YEAR AGREEMENTS between Armour and Co. and the Meat Cutters and the United Packinghouse Workers, providing an estimated package gain of 66 cents an hour in wages and fringe benefits for about 12,000 workers in 47 plants, went into effect. The old contracts were due to expire next August 31. (See pp. 61-62, this issue.) Later in the month, similar agreements were concluded by Wilson & Co., Inc.

March 14

TO HELP RESTORE New York City's position as a film-producing center, 12 labor unions comprising the East Coast Motion Picture Production Council announced they would give "special consideration in regard to rates and regulations" to all producers willing to make entire films in the city. City authorities have suggested contracts on terms equivalent to those that prevail in Hollywood, but so far the unions have been reported only as "in the mood" to approve flexible daily starting hours as a step toward lower costs of production. The decision was a culmination of about 2 months of discussion among the unions and talks with city officials concerned with the problem.

March 17

AN ANNUAL CONVENTION of the Pacific Coast Metal Trades Council representing 14 shipyard unions with a total of 250,000 members wound up with the announcement of a joint bargaining pact between the unions, to cover negotiations in San Francisco, Seattle, and Portland. The agreement came on the heels of an unsuccessful strike of one union, the Brotherhood of Electrical Workers, which had idled 10,000 men in 13 shipyards since early last November and had only recently been terminated by court order upon request of the Government. (See p. 68, this issue.) Member unions may not bargain separately, but they retain the right to decide on acceptance of a contract. All of them are represented on the Council's negotiating committee.

March 23

THREE MARITIME UNIONS—the National Maritime Union, the Masters, Mates and Pilots, and the Marine Engineers—called off a strike scheduled to begin a few days later against foreign ships under temporary U.S. registry, used to haul Government-sponsored cargo. The announcement followed the Government's assurance to the unions that the practice would not be continued. The unions had threatened to strike when they learned that a ship formerly under Chinese Nationalist flag had been manned, after the change of registry, by American officers and Chinese seamen to take a cargo to Viet Nam.

Major Collective Bargaining Agreements Expiring in May 1967

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 that month. The list will include almost all agreements covering 1,000 workers or more.

Industry	Company and location	Union ¹	Number of workers
Chemicals.....	American Cyanamid Co., Lederle Laboratories Division (Pearl River, N. Y.).	Chemical Workers.	1, 800
Steel and aluminum.	Anaconda Wire and Cable Co. (Hastings-on-Hudson, N. Y.).	Electrical Workers (IUE).	1, 000
Utilities.....	Arkansas Power & Light Co. (Arkansas).	Electrical Workers (IBEW).	1, 750
Electrical products.	Arrow-Hart & Hegeman Electric Co. (Connecticut).	Electrical Workers (IBEW).	1, 800
Construction...	Associated General Contractors of America, Inc.; Concrete Contractors Assn.; and Eugene Contractors Assn., Heavy-Highway-Utility Building Agreement (Oregon).	Laborers.	4, 000
Construction...	Associated General Contractors of America, Inc., Heavy-Highway Agreement (Oregon).	Laborers.	4, 000
Construction...	Associated General Contractors of America, Inc., Heavy and Railroad Construction Agreement (Alabama).	Operating Engineers; Carpenters; Laborers; and Teamsters (Ind.).	1, 000
Construction...	Associated General Contractors of America, Inc., Building Division, Cincinnati Chapter (Ohio and Kentucky).	Carpenters.	3, 200
Construction...	Associated General Contractors of America, Inc.; Portland Home Builders Assn., Inc. (Oregon and Washington).	Operating Engineers.	5, 500
Construction...	Associated General Contractors of America, Inc., Building Division, Cincinnati Chapter; Mason Contractors Assn.; and Plastering and Lathing Contractors Assn. (Ohio and Kentucky).	Laborers.	2, 100
Hotels.....	Associated Hotels and Motels, Inc., Master Hotel Agreement (New York, N. Y.).	Building Service Employees.	2, 250
Hotels.....	Associated Hotels and Motels, Inc., Master Residence Hotel Agreement (New York, N. Y.).	Building Service Employees.	1, 350
Leather.....	Auburn Shoe Manufacturers Assn. (Auburn and Lewiston, Maine).	Lewiston-Auburn Shoe Workers Protective Assn. (Ind.).	2, 100
Construction...	Building Contractors' and Mason Builders' Assn. of Greater New York.	Bricklayers.	9, 000
Construction...	Building Trade Employers Assn. of Westchester and Putnam Counties (New York).	Operating Engineers.	1, 100
Construction...	Builders' Assn. of Chicago (Chicago, Ill.).	Plasterers and Cement Masons.	2, 300
Construction...	Builders' Assn. of Chicago (Chicago, Ill.).	Laborers.	16, 000
Food products...	Blue Lake Packers, Inc. (Salem and Corvallis, Ore.).	Teamsters (Ind.).	2, 500
Food products...	Brewers Board of Trade, Inc. (New York, N. Y.).	Teamsters (Ind.).	5, 000
Food products...	Brewery Proprietors of Milwaukee, Wis.	Brewery Workers.	5, 000
Machinery, except electrical.	Burroughs Corp. (Plymouth and Detroit, Mich.).	Auto Workers.	5, 000
Food products...	California Brewer Assn. (California).	Teamsters (Ind.).	6, 000
Transportation equipment.	Cleveland Pneumatic Tool Co. (Cleveland, Ohio).	Aerol Aircraft Employees' Association (Ind.).	1, 300
Utilities.....	Connecticut Light & Power Co. (Connecticut).	Electrical Workers (IBEW).	1, 750
Transportation equipment.	Defoe Shipbuilding Co. (Bay City, Mich.).	Marine and Shipbuilding Workers.	1, 400
Wholesale trade.	Distributors Assn. (Northern California).	Longshoremen and Warehousemen (Ind.).	4, 000
Chemicals.....	E. I. du Pont De Nemours & Co. (Deepwater, N. J.).	Chemical Workers Association, Inc. (Ind.).	4, 500
Trucking.....	Eastern Conference Area Truckaway and Driveaway Agreement (Interstate).	Teamsters (Ind.).	3, 500

See footnotes at end of table.

Industry	Company and location	Union ¹	Number of workers
Transportation equipment.	Fruehauf Corp., Fruehauf Division (Avon Lake, Ohio).	Allied Industrial Workers.	1,800
Communication.	General Telephone Co. of Michigan, Traffic Department (Michigan).	Electrical Workers (IBEW).	1,550
Communication.	General Telephone Co. of the Southwest (Interstate).	Communications Workers.	2,550
Rubber-----	General Tire and Rubber Co. (Ohio and Texas).	Rubber Workers.	3,500
Rubber-----	B. F. Goodrich Co., Footwear Division (Watertown and Lawrence, Mass.).	Directly Affiliated Local Union of the AFL-CIO.	4,300
Machinery, except electrical.	I-A ² Chicago tool and die shops (Chicago, Ill.).	Machinists.	2,450
Hotels-----	I-A ² hotels (Hawaii).	Hotel and Restaurant Employees.	2,500
Trucking-----	I-A ² National Master Automobile Transporters Agreement (Central and Western Conferences areas).	Teamsters (Ind.).	11,500
Wholesale trade.	I-A ² Newspaper deliverers (New York, N.Y., and vicinity).	Newspaper and Mail Deliverers (Ind.).	1,000
Hospitals-----	I-A ² Twin City hospital nurses (Minneapolis and St. Paul, Minn.).	Minnesota Nurses Association (Ind.).	2,900
Furniture-----	I-A ² Upholstering Manufacturing Agreement (Chicago, Ill.).	Upholsterers.	1,200
Apparel-----	Infants' and Children's Coat Assn., Inc.; and Manufacturers of Snowsuits, Novelty Wear and Infants' Coats, Inc. (Interstate).	Ladies' Garment Workers.	3,500
Apparel-----	Infants' and Children's Novelties Assn., Inc. (Interstate).	Ladies' Garment Workers.	6,000
Paper-----	International Paper Co., Northern Mills (New York, Maine, and Pennsylvania).	Papermakers and Paperworkers; Pulp and Sulphite Workers; and Firemen and Oilers.	4,200
Paper-----	International Paper Co., Southern Kraft Division (Interstate).	Papermakers and Paperworkers; Pulp and Sulphite Workers; and Electrical Workers (IBEW).	12,000
Construction---	Ironworkers Employers Assn. of Western Pennsylvania.	Iron Workers.	2,100
Paper-----	Keyes Fibre Co. (Waterville and Shawmut, Maine).	Pulp and Sulphite Workers.	1,150
Apparel-----	Los Angeles Coat and Suit Manufacturers Assn. (Los Angeles, Calif.).	Ladies' Garment Workers.	5,000
Machinery except electrical.	Leesona Corp. (Warwick, R.I.).	Machinists.	1,250
Miscellaneous manufacturing.	Louis Mark Company, Inc. of Pennsylvania (Erie, Pa.).	Machinists.	1,300
Rubber-----	Mansfield Tire and Rubber Co. (Mansfield, Ohio).	Rubber Workers.	1,250
Construction---	Mason Contractors Assn. of Allegheny County (Pennsylvania).	Bricklayers.	1,100
Construction---	Master Builders Assn. of Western Pennsylvania, Inc. (Pennsylvania).	Laborers.	5,000
Construction---	Master Builders Assn. of Western Pennsylvania, Inc. (Pennsylvania).	Operating Engineers.	2,500
Construction---	Master Builders Assn. of Western Pennsylvania, Inc.	Carpenters.	5,000
Construction---	Metropolitan Detroit Plumbing Contractors Assn.; and Mechanical Contractors Assn. of Detroit, Inc. (Detroit, Mich., area).	Plumbers and Pipefitters.	1,200
Construction---	Mechanical Contractors Chicago Assn. (Illinois and Indiana).	Plumbers and Pipefitters.	8,000
Apparel-----	National Association of Blouse Manufacturers, Inc. (Interstate).	Ladies' Garment Workers.	4,200
Apparel-----	National Skirt and Sportswear Assn. (Interstate).	Ladies' Garment Workers.	15,000

See footnotes at end of table.

Industry	Company and location	Union ¹	Number of workers
Paper-----	Nekoosa-Edwards Paper Co. (Port Edwards and Nekoosa, Wis.).	Papermakers and Paperworkers; Pulp and Sulphite Workers; Machinists; and Plumbers and Pipefitters.	1,850
Food products--	New Jersey Brewers Assn. (Newark and Orange, N.J.).	Teamsters (Ind.).	4,550
Apparel-----	New York Coat and Suit Assn., Inc. (Interstate).	Ladies' Garment Workers.	40,000
Finance-----	New York Stock Exchange; and Stock Clearing Corp. (New York, N.Y.).	Office Employees.	1,400
Food products--	Northwest Brewers Assn. (Washington).	Teamsters (Ind.).	1,000
Trucking-----	Oregon Draymen and Warehousemen's Assn. (Interstate).	Teamsters (Ind.).	1,000
Restaurants---	Oregon Restaurant and Beverage Assn. (Portland, Ore.).	Hotel and Restaurant Employees.	2,750
Construction---	Painting and Decorating Contractors of America (Pittsburgh, Pa., area).	Painters and Paperhangers.	1,000
Utilities-----	Panhandle Eastern Pipe Line Co., Field Employees (Interstate).	Oil, Chemical and Atomic Workers.	1,100
Lumber-----	Potlatch Forests, Inc., (Warren, Ark.).	Woodworkers.	1,350
Utilities-----	Public Service Electric and Gas Co., Electric Operating Department (New Jersey).	Electrical Workers (IBEW).	4,750
Restaurants---	Restaurants of Oregon Assn., Inc.; and Oregon Restaurant and Beverage Assn. (Portland, Ore., area).	Hotel and Restaurant Employees.	2,750
Communications.	Rochester Telephone Co. (Rochester, N.Y.).	Communications Workers.	1,150
Wholesale trade.	San Francisco Employers Council (San Francisco, Calif., area).	Teamsters (Ind.).	1,500
Retail trade---	San Francisco Retailers Council, Department Stores (San Francisco, Calif., area).	Retail Clerks.	5,000
Machinery, except electrical.	Scott & Williams, Inc. (Laconia and Lakeport, N.H.).	Steelworkers.	1,000
Hospital-----	Seattle Area Hospital Council.	Washington State Nurses Assn. (Ind.).	1,100
Apparel-----	Slate Belt Apparel Contractors Assn. ³ (Allentown, Pa.).	Ladies' Garment Workers.	8,000
Machinery, except electrical.	Sperry Rand Corp., Univac Division (St. Paul, Minn.).	Electrical Workers (IBEW).	1,300
Electrical products.	Square D Co., Industrial Controller Division (Glendale and Milwaukee, Wis.).	Electrical Workers (IBEW).	1,500
Fisheries-----	Seafood Producers Assn. of New Bedford, Mass.	Seafarers.	1,500
Transportation equipment.	TRW, Inc. (Cleveland, Ohio area).	Aircraft Workers Alliance, Inc. (Ind.).	5,000
Electrical products.	Tung-Sol Electric, Inc. (Newark and Bloomfield, N.J.).	Local No. 433, Independent (Ind.).	2,000
Construction---	Underground Contractors Assn. (Chicago, Ill.).	Laborers.	1,000
Food products---	Utah Dairy Employers Labor Council (Utah).	Teamsters (Ind.).	1,000
Utilities-----	Washington Gas Light Co. (Washington, D.C., area).	Chemical Workers.	1,350
Electrical products.	Whirlpool Corp. (St. Joseph, Mich.).	Machinists.	1,600
Food products---	Wholesale Bakers Group (California).	Bakery and Confectionery Workers (Ind.).	1,800
Utilities-----	Wisconsin Power and Light Co. (Wisconsin).	Electrical Workers (IBEW).	1,300
Lumber-----	Woodworkers Assn. of Chicago, Millmen's Division (Chicago, Ill., area).	Carpenters.	3,100

¹ Unions affiliated with AFL-CIO except where noted as independent (Ind.).

² Industry area (group of companies signing same contract).
³ Information is from newspaper account of settlement.

Developments in Industrial Relations*

THE IMPRISONMENT of Teamsters' President James R. Hoffa in early March culminated a long court fight and interrupted his controversial career as head of the Nation's largest union. General Vice President Frank E. Fitzsimmons assumed active leadership of the Teamsters and resumed negotiations on a new master freight agreement for 450,000 workers; the current agreement expired March 31.

Armour and Co. got a head start on the 1967 round of bargaining in the meatpacking industry by agreeing to a 3½-year contract covering 12,000 Meat Cutters and United Packinghouse Workers. On March 22, Wilson & Co., Inc., followed the Armour lead and agreed to similar contracts for over 6,000 employees. Contracts for an additional 65,000 workers in the industry expire in the latter half of the year.

A 4-month strike by 1,400 Electrical Workers (IBEW) which had affected an additional 8,000 workers at 13 major west coast shipyards was temporarily halted under the 80-day "cooling off" provisions of the Taft-Hartley Act. A Federal judge issued an injunction ordering the Electricians back to work at 10 of the yards directly engaged in work supporting the war in Viet Nam.

Wages and benefits for 50,000 seamen in the Atlantic and Gulf Coast maritime industry were affected by arbitration awards. Another 50,000 workers, employed by the Southwestern Bell Telephone Co., received improvements in wages and benefits as part of a 3-year agreement that followed the Bell pattern. Some 400,000 Laborers and 200,000 Painters were expected to be included within portable pension plans announced by the two unions.

Meatpacking

The first settlements in the 1967 round of bargaining in the meatpacking industry occurred when Armour and Co. and Wilson & Co., Inc.,

signed new contracts 5 to 6 month before the August 31 expiration date of current contracts. The agreements between Armour and Co. and the Meat Cutters and the United Packinghouse Workers were effective on March 13, the date of ratification and were to expire on August 31, 1970. About 12,000 workers in 47 plants were affected. Negotiated about 2 weeks after the Armour settlement, the new Wilson agreements covered more than 6,000 Packinghouse Workers and Meat Cutters in 15 plants, mostly in the Midwest.

Under the Armour agreement, wages were immediately increased by 12 cents. On September 1, 1968, there was to be an 11-cent general increase, plus a ½-cent increase in increments between job grades to be followed by another 11-cent general increase on September 1, 1969. During the contract term, workers in 15 plants, primarily in the South, were to receive additional increases to narrow or eliminate wage differentials. Semiannual cost-of-living reviews were continued, and any adjustment due in July 1967 was included in the immediate 12-cent wage increase.

Other terms included: A ninth paid holiday, beginning September 1, 1969; 4 weeks of paid vacation after 15 instead of 20 years of service and a fifth week after 20 years (effective January 1, 1968); for employees retiring after February 22, 1967, pension benefits were raised from \$3.25 to \$5 a month for each year of service effective January 1, 1968; retirement without actuarial reduction was to be permitted at age 62 instead of 65; vesting of pension rights was provided after 10 years of service, regardless of age (previously a worker had to be at least 40 and have 15 years of service); and disability pensions were provided after 10 years of service for employees physically unable to continue working for Armour (previously, the disability had to prevent any type of work).

Company-paid life insurance was increased from \$2,700 to \$5,000 effective December 1, 1967. The major medical plan was revised to pay 80 percent of costs in excess of \$300, instead of 75 percent above \$500, and the duration of basic hospital, medical, and surgical coverage for nervous and mental problems was increased to 365 days, from 30, effective December 1, 1968. The company

*Prepared in the Division of Wage Economics, Bureau of Labor Statistics, on the basis of published material available in mid-March.

agreed to pay the full cost of retirees' hospital, medical, and surgical insurance effective December 1, 1967 (previously, retirees paid \$18.28 a month for family coverage and \$5.04 for single-person coverage, with the company assuming all premium increases). Workers will receive 6 months' instead of 3 months' notice of a plant closing, and employees who lose their jobs because of plant or departmental closings but are not old enough to receive unreduced pensions may collect separation pay and hold their vested rights to a pension (previously, they could not receive both). The Armour Automation Committee was continued.

Apparel and Textiles

The Ladies' Garment Workers invoked reopening provisions in contracts with the Kansas City Garment Manufacturers Association to gain increases in wages and minimum rates for workers in the coat and suit and the dress and sportswear industries. The 2,000 coat and suit workers were employed in Kansas City, Mo., and the dress and sportswear workers, also numbering 2,000, employed in Kansas City and other areas of Missouri, and in Kansas, and Arkansas. Three-year contracts negotiated in 1966 permitted reopenings on general wage increases after the CPI rose 2 percent and on minimum rates when the Federal minimum wage was increased.

Both settlements increased wages 5 cents effective immediately (with coat and suit cutters receiving 15 cents). The effective dates of 1968 deferred wage increases provided by the 1966 settlements were advanced to February 1, from May 1 for the coat and suit industry and from June 1 for dress and sportswear manufacturing. Minimum rates were increased by 10 cents for coat and suit workers and 10 or 15 cents for the other employees on February 1 and by 20 cents in both settlements effective February 1, 1968.

Some 20,000 workers in the children's dress industry in New York, New Jersey, Pennsylvania, and Connecticut were covered by 3-year Ladies' Garment Workers contracts. Wages were increased 7½ percent, retroactive to February 6, with an additional 5 percent to be effective February 1, 1968. Minimum hourly rates were also increased. Retroactive to February 6, minimums

were raised to \$1.80 (from \$1.65) for operators, ironers, and shipping clerks and to \$1.60 (from \$1.50) for floorworkers. On February 1, 1968, these rates will be increased to \$1.95 and \$1.80, respectively. Election Day was made a full instead of a half holiday, bringing the total number of holidays to 7, and, effective July 1, 1968, employer payments to the health and welfare fund were to be increased.

The first of these agreements was reached on February 21 with the Industrial Association of Juvenile Apparel Manufacturers, Inc., representing manufacturers and jobbers. A week later, workers in contracting shops employed by members of the Children's Dress, Cotton Dress, and Sportswear Contractors Association and the New Jersey Apparel Contractors Association struck as a result of an interemployer dispute over reimbursement for work performed by contractors for manufacturers and jobbers. Wage increases for contractors' employees under the new agreement would require higher payments by the manufacturers and jobbers for contracted work, but the amount of such increases and the method of negotiating them had not been resolved. The strike ended March 2 when the associations reached agreement on this issue.

In mid-February, five employer associations¹ and Cloak and Dress Drivers Local 102 of the Ladies Garment Workers negotiated a 3-year contract affecting 2,000 apparel truckdrivers and helpers in New York City. Wages were increased \$9 a week retroactive to February 1, \$6 in February 1968, and \$3 in February 1969. Minimums were also increased during the contract term, and it was stipulated that they would be maintained at least 15 percent above the Federal minimum wage.

The number of paid holidays was increased to 9½, from 8½, beginning in 1968. (The increase was to occur in 1967 if the union's pending negotiations with the coat and suit industry for other types of workers resulted in an additional holiday in 1967.) Employer payments for health and welfare benefits were increased to \$7 a week, from \$6, and 3 days of funeral leave were established.

¹ Master Truckmen of America, Cloak and Suit Trucking Association, New York and New England Dress Carriers Association, Garment Truckmen of New Jersey, and Brooklyn and Queens Dress Carriers Association.

A mid-February arbitration award raised minimum rates for 8,500 apparel workers in Philadelphia. Granted under a reopening of a 3-year contract between the Knitted Outerwear Manufacturers Association and the Ladies' Garment Workers, the award increased minimums as follows: effective February 6, \$1.75 for Grade I and \$2.15 for Grade III shipping room employees (from \$1.60 and \$2), \$1.80 (from \$1.70) for operators, and \$2.15 (from \$2.05) for a knitter group and increasing to \$2.35 on July 3, 1967; and effective February 1968, additional increases to \$1.95, \$2.35, \$2, and \$2.50, respectively. Negotiations continued on piecework rates which were to be adjusted as a result of the new minimums.

The Apparel Corp. of America, a men's clothing manufacturer, and the Amalgamated Clothing Workers signed initial contracts in January for 2,600 workers at four recently organized plants in Knoxville, Rockwood, and Limestone, Tenn., and Cordele, Ga. The agreements provided 10-cent hourly wage increases in both 1967 and 1968, an increased number of paid holidays, up to 3 weeks of paid vacation, participation in the Amalgamated Cotton Garment retirement and life and health insurance plans, and other benefits similar to those in the national cotton garment agreements.

On January 19, members of the Textile Workers ratified their first agreement with Montgomery Mills, Inc., of Montgomery, Pa. The union had gained the right to represent the 1,275 workers in an April 1966 NLRB election. Both an 8-cent-an-hour general wage increase and an average of 3 cents for inequity adjustments were retroactive to January 1, 1967. An additional 7-cent general increase was to be effective on July 1, 1967, followed by 10-cent increases on January 1 of both 1968 and 1969. The contract also specified 5- and 10-cent increases in differentials for the second and third shifts, respectively; premium pay for Saturday and Sunday work; 8 paid holidays; improved vacations; company-paid hospitalization and medical benefits for employees and dependents; improvements in other types of insurance (including sickness and accident benefits); and 3 days of funeral leave.

Under a wage reopener, Wyandotte Worsted Co. and the Textile Workers (TWUA) agreed in late February to a 9-cent hourly wage increase,

effective May 1, 1967, for 800 workers in Waterville, Maine; Rochester, N.H.; and Central Village, Conn. The reopener provision was contained in a 3-year contract negotiated in 1966, which also provided for a wage-fringe reopener in 1968.

In mid-February, Alamo Industries, Inc., announced a 5-percent general wage increase, to be effective February 19, for 500 production workers at its olefin fiber plant in Spartanburg, S.C. A sixth paid holiday and other benefit improvements were also granted. Alamo was among the first companies to announce wage increases during the 1966 round of increases in southern textiles.

Transportation and Utilities

Arbitration awards by Theodore W. Kheel and David L. Cole were issued in the Atlantic and Gulf Coast maritime industry in early February. Mr. Kheel's action covered members of the National Maritime Union (NMU) on vessels operated by companies represented by the Maritime Service Committee, Inc. (six major subsidized passenger and dry cargo shipping lines) and the Tanker Service Committee, Inc. (16 petroleum carriers). He awarded basic increases of \$25 per month to seamen in entry ratings and \$30 a month to all other ratings, effective June 16, 1967. Overtime rates were raised proportionately.

Mr. Cole rendered two awards covering members of the Marine Engineers' Beneficial Association (MEBA), one applying to companies represented by the Maritime Service Committee (MSC) and the other to those represented by the Tanker Service Committee (TSC). The MSC award provided for company payments of \$4.395 a man-day effective June 16, 1967 (\$2.165 of which constitutes retroactive payments from June 16, 1965 to June 15, 1967), to be allocated between wages and benefits by the union. An additional 6.5 cents a day was to go into effect June 16, 1968. However, depending upon similar leveling action in other maritime union contracts, 20 cents a day might be deducted from the total. The TSC award grants \$4.29 a day (including \$2.145 retroactive payments) effective June 16, 1967. This award also provided for a reduction in payments contingent upon similar action in other contracts.

Pension provisions were major elements in each of the awards. The Kheel award directed com-

panies to increase contributions to the NMU Pension and Welfare Fund by an amount sufficient to increase the current service pension to \$250 (from \$175) monthly and to provide proportionate increases for other pensions under the plan. Lump-sum benefits and special \$50-disability benefits remained unchanged. Both arbitrators incorporated agreements of the parties that effective June 16, 1967, companies should increase their contributions to fund on a 25-year basis from June 16, 1967 all accrued liabilities for prior service. (Companies whose fleets have an average age from date of construction or major reconversion of 20 years or more were to fund within 15 years.)

These awards followed one rendered in November by Herman A. Gray covering members of the American Radio Association. The Gray award dealt with the financing of pensions and called for full pension funding by 1970.

The Kheel and Cole awards were coordinated in an effort to curb whipsaw bargaining in the shipping industry.

The Communications Workers and the Southwestern Bell Telephone Co., agreed on February 9 to a 3-year contract providing immediate wage increases ranging from \$3.50 to \$9.50 a week for 50,000 employees in six States.² The contract followed the Bell pattern on improvements in vacations, pensions, life insurance, and health benefits. Provision was made for wage bargaining after 18 months, and some jobs were reclassified upward.

Trade and Services

Retail Clerks Locals 1179 in Contra Costa County and 870 in Alameda County, Calif., signed a 1-year agreement in February with the Northern California Food Employers Labor Relations Association covering some 5,000 employees. The contract provided a 15-cent-an-hour wage increase effective March 1. Effective July 1, the employer's contribution to the health and welfare plan was to be raised 3 cents to finance more thorough physical examinations, a limited orthodontics plan, and a vision care plan.

Employer payments to the pension plan were raised from 9 to 12 cents an hour, beginning September 1, to finance the increase in the maximum monthly pension at age 65 after 30 years of service

to \$250 from \$150. Sick leave was increased to 9 from 6 days annually, with a total accumulation of 45 rather than 30 days. Sunday premium pay was advanced to one and two-thirds times the regular rate.

The agreement was similar to those negotiated by the Association in January with Local 648 in San Francisco, representing 2,000 workers, and Local 1179 in Marin County, representing 1,000 employees.

Local 692 of the Retail Clerks reached agreement in mid-February with the Baltimore Food Employers Labor Relations Association, representing seven food chains³ with 275 stores in Maryland and the Delmarva Peninsula. Covering 5,600 employees, the 30-month contract provided wage increases, retroactive to January 22, of \$6 a week for full-time employees with less than 2 years of service, \$7.50 for those with more service, and \$9 for department heads. Matching increases were to be effective April 21, 1968. Part-time workers were to receive 30 to 37½ cents an hour during the contract term. The employer's contribution for health and welfare benefits was raised to 20 cents an hour from 14 cents to provide dental, optical, and medical prescription coverage for employees and dependents, as well as improvements in sickness and life insurance benefits.

The Food Retailers Association of Greater New York and Local 342 of the Meat Cutters reached agreement February 2 on a 3-year contract covering 6,000 workers. The agreement provided wage increases effective in February 1967, 1968, and 1969, respectively, of \$8, \$5, and \$6 a week to journeymen meatcutters; \$6, \$3.50, and \$4 to women wrappers and cashiers; and \$6, \$5, and \$5 to delicatessen, seafood, and general clerks. Meat department managers were to receive a \$22 increase during the contract term, including an initial \$11.

Employer contributions to the welfare fund were to be increased after an actuarial study to determine the amount needed to replenish the fund, which the union reported was nearly bankrupt. Pension contributions were also to be increased to finance an advance in monthly benefits to \$150, from \$100. A fourth week of vacation

² Arkansas, Oklahoma, Texas, Missouri, Kansas, and part of Illinois.

³ The chains were A. & P., Acme, Food Fair, Giant, Grand Union, Penn Fruit (Big Valu), and Safeway.

was added for employees with 18 years of service; payment for unused sick leave was added; and employees will receive a paid personal holiday each year beginning in February 1969. Premium pay for night crews and ice box workers was increased to \$12.50 from \$10 a week.

By February 27, 11 unions representing 7,500 employees had accepted a 3½-percent (6½ to 10 cent) wage increase offered by three Pittsburgh department stores,⁴ and by United Parcel Service, Inc. Six unions representing 500 workers were still considering the offer, made under reopening provisions of contracts to expire in February 1968.

The Stage Employees and 10 film distribution and service companies⁵ reached agreement in late January. Covering 6,000 workers throughout the country, the 2-year agreement provided a \$6-weekly wage increase retroactive to December 1, 1966 and \$4 on December 1, 1967. Other terms included 3 weeks of vacation after 10 instead of 11 years; \$5.25 a week company contributions to the union's national pension plan, effective January 1, instead of \$4.50, with a further increase to \$5.625 effective July 1, 1967;⁶ hospitalization benefits increased to a maximum 120 instead of 21 days; 3 weeks of severance pay after 3 instead of 4 years of service, with a maximum 15 weeks after 26 instead of 28 years; 2 hours off for voting in State or national elections; and up to 5 days of funeral leave.

In late January, members of the State, County, and Municipal Employees ratified their first contract with Milwaukee County, Wis. Under the 2-year agreement covering 5,100 workers, pay was increased 3.5 percent retroactive to December 25, 1966. A \$7.42 a month (4.25 cents an hour) cost-of-living increase granted in December was incorporated into the agreement and provision was made for further quarterly escalator adjustments. Beginning in January 1968, the County was to assume the employees' pension contribution (4 percent of earnings). Other terms included job re-

classification wage adjustments for 2,000 workers effective January 1, 1968, and adjustments for pharmacists and probation officers effective in June 1967; elimination of the social security offset against pensions; and establishment of payment options for terminal leave.

In a special referendum held the first week of February, Denver voters approved 10-percent pay increases for about 1,500 policemen and firemen. Under the city's charter, salaries for these employees can be changed only by the voters. The increases (annual salaries of \$6,000 for beginners, \$10,496 for police captains, and \$9,092 for fire captains) were to be effective July 1, 1967, for policemen and in January 1968 for firemen. The city also agreed to be codefendants with policemen in any suits arising from on-duty actions, providing the action was not against orders or abusive.

Metalworking

On March 2, Sylvania Electric Products, Inc., announced a 31-month program of wage increases and improvements in benefits for hourly and eligible salaried employees at 44 unorganized plants. The company also offered the package to six unions⁷ representing workers in 15 plants whose contracts expire during the last 5 months of 1967. Under the program, wages and salaries were increased 3 percent on March 6, 1967, with similar changes scheduled for September 1967, 1968, and 1969. Some production workers were to receive inequity adjustments of up to 10 cents an hour prior to application of the March 6 general increase.

Hourly employees received a 10th paid holiday, beginning in 1969, and 2 weeks of vacation after 2 rather than 3 years of service effective July 1967. Beginning in September 1967, both hourly and eligible salary employees were to benefit from improvements in fringes, including lowering the early retirement age to 60, from 62, and hospital, disability, and other insurance.

Some 1,700 Machinists employed by Hughes Aircraft Co. at Tucson, Ariz., accepted a novel agreement under which they will receive 16 long holiday weekends over the 3-year contract term, including 5 days off during Christmas 1968. The contract provided 6 scheduled holidays a year, plus 9 others to be selected by the workers over the

⁴ Joseph Horne Co., Gimbel Bros., and Kaufmann Department Stores, with United Parcel bargaining as the Labor Standards Association.

⁵ MGM, Paramount, 20th Century-Fox, United Artists, Universal, Columbia, Buena Vista, National Film Service, Bonded Film Service, and National Screen Service.

⁶ As a result, pensions were expected to be raised above the current maximum of \$80 a month.

⁷ The three electrical workers unions (IBEW, IUE, and UE), the Machinists, the Steelworkers, and the Oil, Chemical, and Atomic Workers.

3 years; employee choices resulted in the long weekends. (The previous 3-year agreement contained 6 scheduled holidays a year plus 6 optional holidays over the contract term.) Wage increases of 23 to 29 cents an hour were provided over the contract term, a quarterly cost-of-living clause was included, and overtime and hospitalization provisions were improved. A new clause permits a worker to be laid off 36 consecutive months without loss of seniority and workers have the right to refuse one recall in each layoff, without affecting their seniority rights.

After winning a representation election in December 1966, the Electrical Workers (IUE) negotiated its first contract for 3,800 employees at a new Radio Corporation of America plant in Memphis in February. The agreement included fringe benefits similar to those in the RCA-IUE national contract. Wages were increased 15 to 53 cents an hour and there was provision for a wage reopening on April 1, 1967, the wage reopening date of the national agreement. The plant, which produces television sets, began operation in 1966.

In Philadelphia, 1,600 members of Local Union 18887 (a local directly affiliated with the AFL-CIO) received a 5-cent wage increase retroactive to January 30 after their employer, Midvale-Heppenstall Co., agreed to reopen their contract, even though it does not provide for reopening until September 30, 1968. The union president had requested the wage bargaining last autumn after some of his members had reported personal financial difficulties resulting from increasing prices. A company spokesman said that the firm had agreed to the request because the firm's profits were satisfactory and because the union had made contract concessions in the past. The company makes forgings and die steel.

A 2-week strike against Hoover Ball and Bearing Co.'s Stubnitz Spring Division plants at Chester, Pa. and Vincennes, Ind., and an 8-week strike at its Adrian, Mich., plant ended on January 29 after agreement on a 3-year contract for 2,000 Auto Workers. Immediate wage increases afforded 16 cents to hourly paid production workers, 18 cents to incentive workers, and 31 cents to skilled workers, with deferred wage increases of 5, 7, and 5 cents, respectively, in both the second

and third years. A fund was established for adjusting wage inequities. Vacations and pensions were also improved.

In Cicero, Ill., Local 1859 of the Electrical Workers (IBEW) ratified a 3-year contract with the Western Electric Co. on March 5. The 11,600 production and maintenance workers received an immediate wage increase averaging 16.7 cents. Improvements in benefits followed the pattern of Bell System settlements.

The New Orleans Division of Todd Shipyards Corp. and the Marine and Shipbuilding Workers agreed in early March on a 3-year contract. The agreement provided four 5- to 9-cent wage increases and improvements in vacation, pension, and health and welfare benefits during its term.

On the West Coast, Todd's yards in Alameda, Calif., and Seattle, Wash., resumed work on March 11 under a Taft-Hartley injunction ending a 4-month strike by the Electrical Workers (IBEW) against the Pacific Coast Shipbuilders Association.⁸

Other Industry

In New York City, the American Newspaper Guild and Time, Inc., agreed on February 11 to a 2-year contract for 1,400 clerical, editorial, art, and photographic employees of five publishing operations.⁹ Retroactive to December 1, the contract included a salary increase of \$10 to \$16 a week, improved vacation and overtime provisions, revised promotion procedures, and provisions to reduce job losses as a result of automation.

The Pittsburgh Plate Glass Co. on February 16 announced establishment of an Employment Stabilization Plan for the 150 employees of its Tipton, Pa., plant. Designed to minimize layoffs, the plan granted employees up to 50 weeks of paid leave in the event of reduced operations. If reductions occur, those low-seniority employees who would otherwise be laid off would continue working and a matching number of higher-seniority employees would be given leave at full pay. After 50 weeks, normal layoff procedures would prevail. Paid leave under the plan would be in addition to regular paid vacations.

⁸ See p. 68 of this issue.

⁹ *Time*, *Life*, *Fortune*, and *Sports Illustrated* magazines and the book division.

The company also announced a 15-cent an hour wage increase, improved hospital benefits, and a thrift plan, under which employees would be permitted to invest part of their earnings and the firm would match part of the investment with shares of its stock.

The Tipton plant, which manufactures automobile glass, began operation in May 1966.

In Cook and Lake Counties, Illinois, the Painters negotiated a 3-year, \$1.05-an-hour package agreement with the Chicago Painting and Decorating Contractors Association representing 800 employers. The March agreement provided wage increases of 35 cents an hour on April 1 of 1967, 1968, and 1969 for 10,000 workers. A savings plan financed by a 10-cent deduction from the initial wage increase and 5 cents from both the 1968 and 1969 increases was to be effective April 1, 1967. The previous wage scale was \$4.60 an hour, with employer contributions of 17½ cents to the health and welfare fund and 20 cents to the pension fund.

On March 3, E. I. du Pont de Nemours & Co. announced an 11-cent-an-hour wage increase for 2,100 hourly employees at its Belle Works in Charleston, W. Va. The increase became effective on February 27, along with comparable gains for salaried employees. Also, Union Carbide Corp. announced increases ranging from 8 to 12 cents an hour for 1,100 hourly employees at its technical center in Charleston. The increases were effective March 12.

A 2-year contract covering an estimated 3,500 workers in 25 slipper and play shoe manufacturing shops in the New York City area was signed in February by Joint Council 13, United Shoe Workers, and the Associated Footwear Manufacturers, Inc. The contract provided a general wage increase of 15 cents an hour for all workers on the payroll at least 1 year effective February 16, 1967. Minimum rates were increased to \$1.50 (from \$1.25) for new hires, and to \$1.55 (from \$1.35) after 4 months of service, with minimums for longer service being increased by 15 cents (to \$1.60 after 8 months and \$1.65 after 1 year of service). A 10-cent general wage increase and 10-cent increases in each minimum on February 1, 1968 as well as 2 weeks of paid vacation after 3 years instead of 5 of service and a third week of vacation

pay (without corresponding time off) after 10 years were also provided.

Other Developments

Teamster President James R. Hoffa entered the Federal Penitentiary at Lewisburg, Pa., on March 7, to begin an 8-year sentence for jury tampering. His imprisonment followed the Supreme Court's refusal to reconsider its December 1966 decision affirming Mr. Hoffa's 1964 conviction on the jury tampering charge.¹⁰ A 5-year sentence resulting from a July 1964 conviction for conspiracy and fraud in connection with the Teamsters pension fund is still under appeal before the Supreme Court, and Mr. Hoffa's attorneys continue their legal efforts on his behalf to upset the jury tampering conviction.¹¹ If both convictions are upheld, Mr. Hoffa would be eligible for parole in 4 years and 3 months—in July 1971, time of the next Teamsters' convention and election.

Frank E. Fitzsimmons, who was elected to the newly created post of General Vice President at the Teamsters' July 1966 convention,¹² assumed leadership of the 1.7 million-member union. Mr. Hoffa, however, retains his title as president, at least while his appeals are pending. Under Mr. Fitzsimmons' leadership, negotiation of agreements for 450,000 Teamsters, scheduled to expire on March 31, were resumed.

Establishment of voluntary national plans to provide portability of pension credits were announced in January by the Laborers and in February by the Painters. Both unions also said that they hoped to set up similar health and welfare arrangements.

Under the Laborers' plan which is expected to cover 400,000 workers eventually, any of the 100 local pension plans could become a "related plan" by signing reciprocity agreements. This would enable construction laborers moving among the jurisdiction of signatory plans to retain credits. The local plans would continue to be administered

¹⁰ See *Monthly Labor Review*, February 1967, p. 72.

¹¹ Two motions for a new trial were pending with the U.S. Court of Appeals for the Sixth Circuit in Cincinnati. An appeal alleging new evidence of illegal Government eavesdropping was under consideration by the U.S. District Court in Chattanooga, Tenn.

¹² See *Monthly Labor Review*, July 1966, p. III-IV.

locally, with the International acting as a clearing house, between different areas and different pension plans.

Under the Painters' plan, a national fund would be created to finance benefits for 200,000 members. The union's general president, S. Frank Raftery, said this approach was used to simplify local bargaining (the parties would only have to agree on the amount employers would pay into the national fund), to minimize administrative costs, and to provide uninterrupted accrual of credits for workers who change jobs. Details were being worked out, but it was expected that normal retirement would be at age 65 after 10 years of service, early retirement at age 60 after 10 years, and disability retirement at age 50 after 15 years. Each employee's pension would depend on contributions made on his behalf. The plan will be administered by a board of trustees, with half the members appointed by employers and half by the union.

In San Francisco on March 10, U.S. District Court Judge Albert C. Wollenberg signed an injunction under the provisions of the Taft-Hartley Act ordering nearly 800 striking members of the Electrical Workers (IBEW) back to work at 10 of the 13 major shipyards affected by the work stoppage. The strike that began November 4, 1966, affected major members of the Pacific Coast Shipbuilders Association which represents firms in the Puget Sound, Portland, and San Francisco Bay areas, as well as subcontractors and independent firms. The Electricians were demanding an

agreement separate from the Metal Trades Council agreement negotiated July 1965 and obtain wage parity with construction and maintenance electricians. Current shipyard electricians earnings are \$3.50 an hour. The Machinists and Carpenters already negotiate separately.

The second unauthorized walkout within a month by Local 549 of the Auto Workers at a General Motors' parts plant in Mansfield, Ohio, ended after 2 days following the international's appointment of an administrator to replace the local's dissident leadership. On March 8, the Auto Workers' international leadership condemned the walkout and arranged a conference of delegates representing over 400,000 GM Auto Workers. The delegates voted 249 to 2 to support the international executive board's decision to appoint the administrator with powers superseding those of Frank Petty, the rebel leader and shop committee chairman of the 2,700-member local. The March walkout had been triggered by rumors that Mr. Petty and four other local members who had been suspended indefinitely by GM as a result of the February strike had in reality been fired. The February dispute over subcontracting of work eventually caused the layoff of nearly 200,000 GM Auto Workers.¹³ In March, the company issued a statement indicating it might move some of the metal fabricating work performed at the Mansfield plant to other locations. Mr. Petty resolved the "indefinite suspension" issue by quitting his job.

¹³ See *Monthly Labor Review*, April 1967, p. 67.

Book Reviews and Notes

Basic Reasoning

Determining Forces in Collective Wage Bargaining. By Harold M. Levinson. New York, John Wiley & Sons, Inc., 1966. 283 pp. \$8.95.

Economists have been without a satisfactory theory of wages since the rise of modern labor unions forced them to abandon the basic assumptions underlying the marginal productivity theory. And, as Harold Levinson points out, the efforts in recent years to correct this deficiency of economic theory have fallen short of their goal. On the other hand, the numerous empirical studies of wage determination under collective bargaining, while providing important insights, have been limited to quantifiable variables such as union membership, profit rates, and concentration ratios. The empirical studies have generally neglected "the equally important qualitative factors—such as the degree of union political rivalry, the size and cohesiveness of employers, or the militancy of the union's membership—that have an important bearing on the final outcome."

Dr. Levinson has made a careful study of six Pacific Coast industries with the purpose in mind of developing meaningful generalizations about the major variables which determine wages and fringe benefits. His analysis includes three manufacturing industries (airframe, lumber, paper) and three nonmanufacturing industries (long-shore, offshore maritime, over-the-road trucking). Each industry study covers the period from 1945 to 1962.

Readers of this book will be impressed with the thoroughness with which the author has analyzed collective bargaining developments in the selected industries. Each case study presents an explanation of the economic environment within which bargaining has taken place in the postwar period.

The author first concentrates on those economic variables which other investigators have found to be important. Next, he outlines the nature of bargaining relationships in the industries studied. These relationships are broadly defined to include political pressures within and between unions as well as the "pure power" variables which determine the relative bargaining strength of labor and management. The third section includes a detailed chronology of the movement of negotiated wages and fringe benefits. Negotiated settlements in the automobile industry are used as a benchmark for comparison.

The research is well documented from the standard works in this field, from unpublished doctoral dissertations, and from extensive personal interviews with union, management, and government officials. Each industry study could, in fact, stand alone as an important scholarly achievement.

However, the primary purpose of this book is to make some progress toward a theory of wage determination under collective bargaining. To this end the author assesses the relative importance of the economic, political, and "pure power" variables in determining the level of negotiated wages and fringe benefits. The importance of his conclusions rests not so much with the relative weight he assigned to each of these environmental forces but to the fact that all three of the forces "were clearly of importance in affecting the relative movement of wage-fringe benefits in the six bargaining situations analyzed."

This conclusion will, of course, come as no great surprise to those engaged in the reality of the collective bargaining process; but the academic economists who build economic maximization models, who employ utility theory to explain bargaining relationships, or who concern themselves solely with the strategy and tactics of the bargaining process must take serious note of Dr. Levinson's fundamental conclusion. Even the empiricists who, more often than not, limit their wage analysis to one or two quantifiable variables must redirect their efforts, in the light of the author's findings.

For those who have long been dissatisfied with modern wage theory, Dr. Levinson points the way to reaching a more acceptable resolution.

—KEITH DIX
School for Workers
University of Wisconsin

Case for Canada

International Unionism. By John Crispo. Canada, McGraw-Hill, 1967. 327 pp. \$8.60.

At the present time, 70 percent of the organized workers in Canada belong to unions headquartered and administered in a foreign country, i.e., the United States. This situation, unparalleled in the world, has persisted and developed for over a century despite what a Canadian historian has called, "the oldest and most tenacious tradition in our communal memory . . . our determination not to become American." It is a paradox that today, at the high point of their strength, the international unions face perhaps their greatest challenge to adjust to Canadian needs. This is why John Crispo's book is of extraordinary timeliness.

Published in Canada, the book is written from a Canadian viewpoint. Few of the over 400 interviews included were with American union officials.

Crispo begins with an explanation of the coming of the international unions in Canada, using history only when it illuminates questions of current interest. A particularly interesting example of this is his tracing of the evolution of the Canadian Labor Congress (CLC), and its predecessors, from a subservient legislative arm of the AFL to a vigorously independent body.

The book deals chiefly with the current relationships: Canadian workers' allegiance to their internationals; the methods for giving a specifically Canadian response of that section of the membership, bargaining policies including the controversial wage parity issue, and differences and similarities in such areas as international policies and political action.

The differences in these last fields, as they relate to the CLC and the AFL-CIO, are most striking. The CLC is the mainstay of the New Democratic Party (for example, the CLC has for years advocated admission to lead China to the U.N.), while the AFL-CIO maintains the traditional American stance of nonpartisanship between the major U.S. parties.

Crispo concludes that, on balance, international unionism has brought many substantial benefits to Canadian workers, particularly those employed by subsidiaries of American firms. But the help of the international unions has also enabled many struggling groups in entirely local trades to orga-

nize and maintain themselves. However, the ties can be broken. Usually, Crispo finds, this arises from some deficiency on the part of an international union, such as lack of service, and comes when an effective alternative union exists. In Quebec, for example, the Confederation of National Trade Unions (CNTU) was organized after World War I under Catholic auspices. It claims one-tenth the members of the CLC (centered almost entirely in Quebec), but it is growing at three times the rate of the CLC. The CNTU is militant, cohesive, and riding the crest of the Quebec version of Canadian nationalism; but it is challenging the international unions and the CLC in their Ontario stronghold, as well.

Spurred by rivalry from the CNTU, and its own sense of need for modernization, the CLC has established a Committee on Structure. Its findings, which are almost sure to include proposals for consolidation of the many small local unions into larger units, and the response of the international unions will be a test of the flexibility of the American leadership.

Since this test will not come until after the 1968 CLC convention, the international unions will have time to digest the implications of Crispo's findings. Samuel Gompers half a century ago wrote an editorial in *The American Federationist*, entitled "The American Labor Movement is Continental, Not Local." This was sparked by proposed legislation which would have forced severance of U.S. and Canadian ties. Today, with the continent becoming increasingly a single economic unit, a closely knit labor movement has even more meaning for union goals. But how the union is knit together is the question. The hope would be that the years have built enough confidence between the workers and their leaders in the two countries to make possible a rational search for realistic accommodation.

Crispo, one of Canada's brightest young economists, is currently director of the Center for Industrial Relations at the University of Toronto. His lucid style and sense of organization makes this not only a provocative and stimulating work but one which is a pleasure to read. Only an index would have improved it.

—KENNETH DOUTY

Office of Country Programs
Bureau of International Affairs

The Other End of the Scale

Economic Behavior of the Affluent. By Robin Barlow, Harvey E. Brazer, James N. Morgan. Washington, Brookings Institution, 1966. 285 pp. \$6.75.

Since Michael Harrington's *The Other America* was published in 1962, we have had a deluge of studies detailing the number, characteristics, and behavior of the poor. By contrast, the number of studies of those persons fortunate to be at the other end of the income spectrum has been slim indeed. Yet the saving, investment, and working behavior of high-income individuals obviously has great significance for the American economy. In the past, important public policy decisions have been predicated on the assumed behavior of the wealthy (particularly with respect to our tax laws), but little empirical evidence has ever been gathered to support these commonly held assumptions.

Now we are fortunate to have an interesting study by Barlow, Brazer, and Morgan, based on interviews by the University of Michigan Survey Research Center with 957 "high-income" (more than \$10,000 a year) individuals. The study attempts with some success to dispel certain "myths" about the behavior of the affluent in our society. For example, the authors find little evidence to support the notion that a high marginal income tax rate serves as a disincentive to work effort. High-income persons work longer hours (48 per week, on the average) than lower income workers. Moreover, the authors find that the "awareness of preferential tax treatment and the inclination to take advantage of it appeared to be confined to a small minority of high-income people . . ."

This reviewer has a few reservations about some of the findings of the study. For example, the overwhelming majority of the respondents interviewed in 1964 expressed a preference for common stocks over other forms of investment. One wonders about the stability of this preference. Would the respondents have been similarly disposed in the middle of the "bear" market of 1966? Labor economists will be surprised to learn that the labor force participation of wives declined only after family income reached the \$30,000 level!

—DAVID LIPSKY

School of Business Administration
State University of New York at Buffalo

Theory of Organizations

Changing Organizations. By Warren G. Bennis. New York, McGraw-Hill Book Co., 1966. 233 pp. \$8.25.

Professor Bennis originally wrote each paper for a different occasion, but together they represent a unified theme. They all deal with the search for standards in judging the effectiveness of organizations and the techniques used in bringing about organizational change based on those standards. The main test of the organization's effectiveness is its ability to develop a "scientific attitude," essentially a capacity for problem solving, analogous to what "mental-health specialists call health in the individual." Bennis argues strongly for the possibilities of applying behavioral science to improve organizational health.

Bennis' science does not preclude what might be called organizational humanism. Indeed, "the norms of science are both compatible and remarkably homogenous with those of a liberal democracy It is *necessary* to emphasize the 'human side of enterprise' . . . if organizations are expected to maintain mastery of their environment."

Bennis places little stress on profits, the uncertainty of the market, or trade unionism as a measure of a firm's effectiveness. These terms appear in passing but are not of sufficient importance to be cited in the index. Efficiency, which does get into the index, is discussed but is not central in Bennis' analysis.

These papers represent an affirmation by the author of the compatibility between organizational humanism and organizational effectiveness. At points he seems to endow the organization with an autonomous personality that verges on a kind of mysticism.

Specific organizations are rarely discussed; the emphasis is on general organizational theory. As a consequence, we are treated to several surveys of organizational theory literature which I found uncommonly instructive and provocative. Bennis writes with force, expository skill, and cultivation.

—JACK BARBASH

Department of Economics
University of Wisconsin

Summaries of Recent Books

Training in Industry: The Management of Learning. By Bernard M. Bass and James A. Vaughan. Belmont, Calif., Wadsworth Publishing Co., Inc., 1966. 164 pp., bibliography. \$1.75.

Personnel Selection and Placement. By Marvin D. Dunnette. Belmont, Calif., Wadsworth Publishing Co., Inc., 1966. 239 pp., bibliography. \$2.95.

Both of these little volumes are part of a series edited by Victor Vroom of the Carnegie Institute of Technology under the heading, "Behavioral Science in Industry." According to Messrs. Bass and Vaughan, the strategy of training requires first a clear statement of the program in relation to the organization's goals; second, a decision on the method of instruction as well as on the instructors themselves needs to be made; and, third, the administration of the training program needs to be developed so that there is plenty of room for evaluation once the program is underway. Though concise, the discussion is thorough.

In Mr. Dunnette's discussion of selection of personnel, the reader learns of the various procedures used to gather information about people, job behavior, and the relation between the two. In addition to methods of gathering evidence, the author offers a model for test validation and examples of placement studies and research results. The book's beginning sentence, "People differ greatly . . ." sets the theme; individual behavior must be studied to assure sound personnel decisions.

Other Recent Publications

Education and Training

New Education for Adults. By Jules Pagano. (In American Federationist, AFL-CIO, Washington, February 1967, pp. 5-7.)

Apprenticeship in the United States: Labor Market Forces and Social Policy. By David J. Farber; Discussion by A. Harvey Belitsky and Jack Barbash. (In

Journal of Human Resources: Education, Manpower, and Welfare Policies, Madison, Wis., Winter 1967, pp. 70-96. \$2.)

Allied Health Professions Personnel Training Act of 1966 (P.L. 89-751). By Raymond F. Dixon and Margaret D. West. (In Health, Education, and Welfare Indicators, U.S. Department of Health, Education, and Welfare, Washington, January 1967, pp. 1-8. 45 cents, Superintendent of Documents, Washington.)

Negro Participation in Apprenticeship Programs. By Ray Marshall and Vernon M. Briggs, Jr. (In Journal of Human Relations: Education, Manpower, and Welfare Policies, Madison, Wis., Winter 1967, pp. 51-69. \$2.)

Your Career in the Space Industry. By Waldo T. Boyd. New York, Julian Messner, Inc., 1966. 222 pp., bibliography. \$3.95.

Health and Safety

National Health Expenditures, 1950-65. By Ruth S. Hanft. (In Social Security Bulletin, U.S. Department of Health, Education, and Welfare, Social Security Administration, Washington, February 1967, pp. 3-13. 25 cents, Superintendent of Documents, Washington.)

Comprehensive Health Planning and Public Health Service Act of 1966 (P.L. 89-749). (In Health, Education, and Welfare Indicators, U.S. Department of Health, Education, and Welfare, Washington, January 1967, pp. 9-18. 45 cents, Superintendent of Documents, Washington.)

National Health Survey Findings of Occupational Health Interest. By Margaret F. McKiever. Washington, U.S. Department of Health, Education, and Welfare, Public Health Service, 1966. 62 pp. (PHS Publication 1418.)

Group Health Insurance Plans for Public-School Personnel, 1964-65. Washington, National Education Association, 1966. 82 pp., bibliography. (Research Report 1966-R10.) \$1.50.

Doctors and Nurses in Industry: Social Aspects of In-Plant Medical Programs. By Rhoda L. Goldstein and Bernard Goldstein. New Brunswick, N.J., Rutgers-The State University, Institute of Management and Labor Relations, 1967. 96 pp. \$2.

California Work Injuries, 1965. San Francisco, Department of Industrial Relations, Division of Labor Statistics and Research, 1966. 46 pp.

Industrial Relations

Silverberg's How to Take a Case Before the National Labor Relations Board. Revised by Kenneth C. McGuiness. Washington, BNA Incorporated, 1967. xvii, 442 pp. 3d ed. \$10.50.

Who's Who in Industrial Relations: Vol. 1 (A-L); Vol. 2 (M-Z). By Harold S. Roberts. Honolulu, University of Hawaii, Industrial Relations Center, 1966; 1967. 171 and 133 pp., respectively. \$1 each.

When Management Negotiates: A Guidebook for Sound Collective Bargaining. New York, National Association of Manufacturers, Industrial Relations Committee, 1967. 56 pp. \$3.

Rights and Obligations of Parties Under Collective Agreements. Proceedings of twin seminars on collective bargaining held at Niagara University and St. Bonaventure University, May 6-7, 1966. Edited by Luke Power, O.F.M. St. Bonaventure, N.Y., St. Bonaventure University Press, 1967. 97 pp.

Duplication of Arbitration With Other Litigation. By Morris L. Myers. (In *Labor Law Journal*, Chicago, February 1967, pp. 103-111. \$1.35.)

Discharge in the "Law" of Arbitration. By Roland P. Wilder, Jr. (In *Vanderbilt Law Review*, Nashville, Tenn., December 1966, pp. 81-139. \$2.)

Management Under Strike Conditions. By John G. Hutchinson. New York, Holt, Rinehart and Winston, Inc., 1966. 179 pp., bibliography.

The Changing Employment Relationship in Public Schools: Implications for Quality Education. Edited by Robert E. Doherty, Joan R. Egner, William T. Lowe. Ithaca, N.Y., Cornell University, New York State School of Industrial and Labor Relations, 1966. 42 pp. 50 cents; free to New York State residents.

College Students and Labor Unions: An Attitude Survey. By S. M. Zdep. (In *Personnel Journal*, Swarthmore, Pa., February 1967, pp. 105-108. 75 cents.)

Élites, Intellectuals, and Consensus: A Study of the Social Question and the Industrial Relations System in Chile. By James C. Morris. Ithaca, N.Y., Cornell University, New York State School of Industrial and Labor Relations, 1967. 292 pp., bibliography. (Cornell International Industrial and Labor Relations Report 7.) \$6.

Labor Force

Farm Labor in the United States. Edited by C. E. Bishop. New York, Columbia University Press, 1967. 143 pp. \$6.

Trends in Farm Labor Services. (In *Employment Service Review*, U.S. Department of Labor, Bureau of Employment Security, Washington, January-February 1967, pp. 1-18, 24-45. 40 cents, Superintendent of Documents, Washington.)

Demand for Engineers and Technicians, 1966. By John D. Alden and others. New York, Engineering Manpower Commission of Engineers Joint Council, 1966. 96 pp. \$4.

The Health Manpower Crisis: Cause or Symptom? By Morris Schaefer and Herman E. Hilleboe, M.D. (In *American Journal of Public Health and the Nation's Health*, New York, January 1967, pp. 6-14. \$1.50.)

Symposium on Forecasting of Manpower Requirements, June 23-25, 1966, Washington, D.C. Conducted by International Manpower Institute under sponsorship of Agency for International Development and U.S. Department of Labor. Washington, U.S. Department of Labor, International Manpower Institute, 1967. 93 pp.

Occupational Job Requirements: A Short-Cut Approach to Long-Range Forecasting. By Norman Medvin. (In *Employment Service Review*, U.S. Department of Labor, Bureau of Employment Security, Washington, January-February, 1967, pp. 61-74. 40 cents, Superintendent of Documents, Washington.)

Seminar on Manpower Policy and Program: How Well is the Employment Act of 1946 Achieving Its Goal? By Leon Keyserling. Washington, U.S. Department of Labor, Office of Manpower Policy, Evaluation, and Research, 1966. 50 pp.

Labor Supply and Employment in Less Developed Countries. By Jan L. Sadie. (In *Annals of the American Academy of Political and Social Science*, Philadelphia, January 1967, pp. 121-130. \$2.50; \$2 to Academy members.)

New Definitions for Employment and Unemployment. By Robert L. Stein. (In *Employment and Earnings and Monthly Report on the Labor Force*, U.S. Department of Labor, Bureau of Labor Statistics, Washington, February 1967, pp. 3-13. 65 cents, Superintendent of Documents, Washington.)

Unemployment and the Labor-Force Participation of Secondary Workers. By Glen G. Cain. (In *Industrial and Labor Relations Review*, Ithaca, N.Y., January 1967, pp. 275-297. \$1.75.)

How Business Employs the "Unemployable." (In *Nation's Business*, Washington, January 1967, pp. 33-34, 74-78.)

Urban Job Discrimination: Abuses and Redress. By Leonard Rico. (In *Quarterly Review of Economics and Business*, University of Illinois, Urbana, Ill., Winter 1966, pp. 7-24. \$1.50.)

Seminar on Manpower Policy and Program: Investment in Poor People. By Theodore W. Schultz. Washington, U.S. Department of Labor, Office of Manpower Policy, Evaluation, and Research, 1967. 26 pp.

The Financial Effects of Labor Turnover [Australia]: Case Study No. 1. By K. Choularton. (In *Personnel Practice Bulletin*, Commonwealth of Australia, Department of Labor and National Service, Melbourne, December 1966, pp. 77-81. 50 cents.)

Labor Organizations

The Conflict Between Union Discipline and Union Security. By Mack A. Moore. (In *Labor Law Journal*, Chicago, February 1967, pp. 116-124. \$1.35.)

Trade Unionism. (The evidence of the Trades Union Congress to the Royal Commission on Trade Unions and Employers' Associations.) London, Trades Union Congress, 1966. 186 pp.

Personnel Management

Personnel: A Behavioral Approach to Administration. By Leon C. Megginson. Homewood, Ill., Richard D. Irwin, Inc., 1967. 688 pp. \$12.

A Theory of Achievement Motivation. Edited by John W. Atkinson and Norman T. Feather. New York, John Wiley & Sons, Inc., 1966. 392 pp., bibliography. \$11.50.

Human Behavior in Organizations. By Leonard R. Sayles and George Strauss. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1966. 500 pp. 2d ed. \$11.95.

Prices and Consumption Economics

Understanding Consumer Behavior. Edited by Martin M. Grossack. Boston, The Christopher Publishing House, 1966. 339 pp. Revised edition. \$6.50.

The British Standard of Living, 1750-1850. By J. E. Williams. (In *Economic History Review*, Economic History Society, Cambridge, England, December 1966, pp. 581-589. \$4.)

Productivity and Technological Change

Indexes of Output Per Man-Hour, Selected Industries, 1939 and 1947-65. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1966. 92 pp. (BLS Bulletin 1537.) 50 cents, Superintendent of Documents, Washington.

Computer Systems Analysts—Problems of Selection, Education, and Training. By Frank Greenwood and Erwin M. Danziger. New York, American Management Association, 1967. 40 pp. (Management Bulletin 90.) \$4.50; \$3 to AMA members.

Technological Change and Manpower in a Centrally Planned Economy. A study based on Soviet literature dealing with the metalworking industry in the U.S.S.R. Geneva, International Labor Office, 1966. 92 pp., bibliography. (Labor and Automation Series, 3.) \$1. Distributed in United States by Washington Branch of ILO.

The Computer Revisited. By Glenn Gilman. (In *Business Horizons*, Indiana University, Graduate School of Business, Bloomington, Ind., Winter 1966, pp. 77-89. \$2.)

Social Security

The "Heart Cases" in Workmen's Compensation: An Analysis and Suggested Solution. By Arthur Larson. (In *Michigan Law Review*, Ann Arbor, Mich., January 1967, pp. 441-476. \$2.)

Report of the New York State Advisory Council on Employment and Unemployment Insurance for 1966. New York, State Department of Labor, 1967. 81 pp.

Income Guarantees and Incentives. By James Tobin. (In *IUD Agenda*, Industrial Union Department, AFL-CIO, Washington, January 1967, pp. 23-26. 35 cents.)

Health Insurance for the Aged: The Statistical Program. By Howard West. (In *Social Security Bulletin*, U.S. Department of Health, Education, and Welfare, Social Security Administration, Washington, January 1967, pp. 3-16. 25 cents, Superintendent of Documents, Washington.)

Wages and Hours

Industry Wage Survey—Communications, 1965. By Joseph C. Bush. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1967. 16 pp. (Bulletin 1521.) 20 cents, Superintendent of Documents, Washington.

Industry Wage Survey—Women's and Misses' Dresses, March 1966. By Frederick L. Bauer. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1967. 34 pp. (Bulletin 1538.) 30 cents, Superintendent of Documents, Washington.

The Relationship Between Wage Changes and Unemployment in Metropolitan and Industrial Labor Markets. By William P. Albrecht, Jr. (In *Yale Economic Essays*, New Haven, Conn., Fall 1966, pp. 279-341. \$2.50.)

Reducing Labor Costs Through Short-Interval Scheduling. By Martin R. Smith. (In Management Review, American Management Association, New York, February 1967, pp. 44-49. \$1.25; \$1 to AMA members.)

Area Wage Survey: The Davenport-Rock Island-Moline, Iowa-Ill., Metropolitan area, October 1966. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1967. 34 pp. (Bulletin 1530-19.) 30 cents, Superintendent of Documents, Washington. Other recent bulletins in this series include the metropolitan areas of Columbus, Ohio; Waterloo, Iowa; Seattle-Everett, Wash.; Richmond, Va.; San Diego, Calif.; Dallas, Tex. (Bulletins 1530-20 through 1530-25, respectively.) Various prices.

Employee Earnings and Hours in Eight Metropolitan Areas of the South. By William L. Dansby. Washington, U.S. Department of Labor, Bureau of Labor Statistics, 1966. 59 pp. (Bulletin 1533.) 40 cents, Superintendent of Documents, Washington.

Salary Schedules for Classroom Teachers, 1966-67. Washington, National Education Association, 1966. 129 pp. (Research Report 1966-R17.) \$3.

Summary of Reports on Unratified Conventions and on Recommendations: Hours of Work. Geneva, International Labor Office, 1967. 106 pp. (Report III Part II prepared for International Labor Conference, 51st session, 1967.) \$1.50. Distributed in United States by Washington Branch of ILO.

Wage Rates, Salaries and Hours of Labor, 1965. Ottawa, Canada Department of Labor, 1966. 400 pp. (Annual Report 48.) In English and French. \$2.50, Queen's Printer, Ottawa.

Miscellaneous

Fifty-Fourth Annual Report of the United States Department of Labor [1966]. Washington, 1967. 213 pp. 60 cents, Superintendent of Documents, Washington.

Labor Economics: Wages, Employment, and Trade Unionism. By Allan M. Cartter and F. Ray Marshall. Homewood, Ill., Richard D. Irwin, Inc., 1967. 584 pp., bibliographies. (Irwin Series in Economics.) \$11.35.

The Age of the Economist: The Development of Modern Economic Thought. By Daniel R. Fusfield. Glenview, Ill., Scott Foresman and Co., 1966. 147 pp. \$3.50.

The Economy of the American People. By Gerhard Colm and Theodore Geiger. Washington, National

Planning Association, 1967. 220 pp. (Planning Pamphlet 123.) \$3.

The Impact of the Social Sciences. By Kenneth E. Boulding. New Brunswick, N.J., Rutgers University Press, 1966. 117 pp. \$3.75.

Social Problems: A Modern Approach. Edited by Howard S. Becker. New York, John Wiley & Sons, Inc., 1966. 770 pp. \$8.95.

The Social Psychology of Organizations. By Daniel Katz and Robert L. Kahn. New York, John Wiley & Sons, Inc., 1966. 498 pp., bibliography. \$8.50.

Government and Business. By Ronald A. Anderson. Cincinnati, Ohio, South-Western Publishing Co., 1966. 710 pp. 3d ed.

How to Move in Management: An Executive's Guide to Changing Jobs. By James Menzies Black and Edith M. Lynch. New York, McGraw-Hill Book Co., 1967. 234 pp. \$6.95.

The International Transfer of Corporate Skills: Management Contracts in Less Development Countries. By Peter P. Gabriel. Boston, Harvard University, Graduate School of Business Administration, 1967. 230 pp. \$5.

Intergovernmental Fiscal Relations in the United States. By George F. Break. Washington, Brookings Institution, 1967. 273 pp. (Studies of Government Finance.) \$6.75.

College and University Retirement Programs: A Review of Their Adequacy Under Realistic Assumptions. By Robert M. Soldofsky. Iowa City, University of Iowa, Bureau of Business and Economic Research, 1966. 55 pp.

Work, Age and Leisure: Causes and Consequences of the Shortened Working Life. By F. Le Gros Clark. London, Michael Joseph Ltd., 1966. 152 pp.

Mexican American Youth: Forgotten Youth at the Crossroads. By Celia S. Heller. New York, Random House, Inc., 1966. 113 pp., bibliography. \$1.95, paperbound.

Labor and Working Conditions in Modern Europe. Edited by Val R. Lorwin. New York, Macmillan Co., 1967. 152 pp., bibliographies. \$1.50, paperbound.

The Role of the Member States in the Unification Work of the International Labor Organization. By Antti Suviranta. Helsinki, University of Helsinki, Institute of Comparative Law, 1966. 79 pp., bibliography.

Royal Commission of Inquiry Report Into Post Office Working Conditions [Canada]. (In Labor Gazette, Canada Department of Labor, Ottawa, January 1967, pp. 9-11, 27. 50 cents, Queen's Printer, Ottawa.)

Current Labor Statistics

TABLES

A.—Labor Force and Employment

- 77 A-1. Summary employment and unemployment estimates, by age and sex, seasonally adjusted
- 77 A-2. Seasonally adjusted rates of unemployment
- 78 A-3. Rates of unemployment, by age and sex, seasonally adjusted
- 78 A-4. Employed persons, by age and sex, seasonally adjusted
- 79 A-5. Unemployed persons, by duration of unemployment, seasonally adjusted
- 79 A-6. Full- and part-time status of the civilian labor force, not seasonally adjusted
- 80 A-7. Employment status, by color, sex, and age, seasonally adjusted ¹
- 81 A-8. Total employment and unemployment rates, by occupation, seasonally adjusted ¹
- 82 A-9. Employees in nonagricultural establishments, by industry
- 87 A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry
- 91 A-11. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted
- 91 A-12. Production workers in manufacturing industries, by major industry group, seasonally adjusted
- 92 A-13. Unemployment insurance and employment service program operations

B.—Labor Turnover

- 93 B-1. Labor turnover rates, by major industry group

C.—Earnings and Hours

- 96 C-1. Gross hours and earnings of production workers, by industry
- 109 C-2. Average weekly hours, seasonally adjusted, of production workers in selected industries
- 109 C-3. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group
- 110 C-4. Average weekly overtime hours of production workers in manufacturing, by industry
- 112 C-5. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities
- 112 C-6. Gross and spendable average weekly earnings of production workers in manufacturing

D.—Consumer and Wholesale Prices

- 113 D-1. Consumer Price Index—U.S. city average for urban wage earners and clerical workers, all items, groups, subgroups, and special groups of items
- 114 D-2. Consumer Price Index—U.S. city average for urban wage earners and clerical workers, selected groups, subgroups, and special groups of items, seasonally adjusted
- 115 D-3. Consumer Price Index—U.S. and selected areas for urban wage earners and clerical workers
- 116 D-4. Indexes of wholesale prices, by group and subgroup of commodities
- 118 D-5. Indexes of wholesale prices for special commodity groupings
- 119 D-6. Indexes of wholesale prices, by stage of processing and durability of product

E.—Work Stoppages

- 120 E-1. Work stoppages resulting from labor-management disputes

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 *Techniques of Preparing Major BLS Statistical Series* (BLS Bulletin 1168, 1954), and cover the United States without Alaska and Hawaii.

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		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
TOTAL															
Total labor force.....	79,959	80,443	80,473	80,154	79,934	79,360	79,268	79,247	78,905	78,767	78,194	78,349	78,091	78,893	77,178
Civilian labor force.....	76,523	77,025	77,087	76,764	76,612	76,081	76,039	76,069	75,770	75,668	75,149	75,341	75,117	75,770	74,455
Employed.....	73,747	74,137	74,255	73,893	73,897	73,199	73,195	73,141	72,846	72,730	72,253	72,542	72,266	72,895	71,088
Agriculture.....	3,855	3,890	4,015	4,011	3,892	3,779	3,886	3,935	3,926	3,981	3,902	4,199	4,113	3,979	4,361
Nonagricultural industries.....	69,892	70,247	70,240	69,882	70,005	69,420	69,309	69,206	68,920	68,749	68,351	68,343	68,153	68,915	66,726
Unemployed.....	2,776	2,888	2,832	2,871	2,715	2,882	2,844	2,928	2,924	2,938	2,896	2,799	2,851	2,875	3,366
MEN, 20 YEARS AND OVER															
Total labor force.....	47,921	48,081	48,591	47,842	47,604	47,493	47,465	47,506	47,370	47,376	47,278	47,404	47,297	47,437	47,115
Civilian labor force.....	45,047	45,222	45,239	44,987	44,797	44,723	44,736	44,822	44,723	44,759	44,707	44,811	44,769	44,787	44,857
Employed.....	44,010	44,236	44,227	43,898	43,711	43,654	43,655	43,688	43,577	43,615	43,624	43,731	43,617	43,667	43,422
Agriculture.....	2,795	2,875	2,861	2,884	2,807	2,800	2,875	2,852	2,846	2,854	2,888	3,035	2,974	2,894	3,174
Nonagricultural industries.....	41,215	41,361	41,366	41,014	40,904	40,854	40,780	40,836	40,731	40,761	40,736	40,696	40,643	40,773	40,246
Unemployed.....	1,037	986	1,012	1,089	1,086	1,069	1,081	1,134	1,146	1,144	1,083	1,080	1,152	1,119	1,435
WOMEN, 20 YEARS AND OVER															
Civilian labor force.....	24,862	25,071	25,221	25,139	25,145	24,884	24,938	24,504	24,321	24,193	24,061	24,019	23,942	24,427	23,687
Employed.....	23,834	24,057	24,128	24,167	24,278	23,891	23,994	23,556	23,422	23,271	23,142	23,139	23,070	23,507	22,630
Agriculture.....	628	636	702	729	663	593	645	652	684	690	631	712	735	675	748
Nonagricultural industries.....	23,206	23,421	23,426	23,438	23,615	23,298	23,349	22,904	22,738	22,581	22,511	22,427	22,335	22,832	21,882
Unemployed.....	1,028	1,014	1,093	972	867	993	944	948	899	922	939	880	872	919	1,056
BOTH SEXES, 16-19 YEARS															
Civilian labor force.....	6,614	6,732	6,627	6,638	6,670	6,474	6,365	6,743	6,726	6,716	6,361	6,511	6,406	6,557	5,910
Employed.....	5,903	5,844	5,900	5,828	5,908	5,654	5,546	5,897	5,847	5,844	5,487	5,672	5,579	5,721	5,036
Agriculture.....	432	379	452	398	422	386	366	431	396	437	383	452	404	410	439
Nonagricultural industries.....	5,471	5,465	5,448	5,430	5,486	5,268	5,180	5,466	5,451	5,407	5,104	5,220	5,175	5,310	4,598
Unemployed.....	711	888	727	810	762	820	819	846	879	872	874	839	827	836	874

TABLE A-2. Seasonally adjusted rates of unemployment

[In thousands]

Selected unemployment rates	1967				1966								Annual average		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Total (all civilian workers).....	3.6	3.7	3.7	3.7	3.5	3.8	3.7	3.8	3.9	3.9	3.9	3.7	3.8	3.8	4.5
Men, 20 years and over.....	2.3	2.2	2.2	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.4	2.4	2.6	2.5	3.2
Women, 20 years and over.....	4.1	4.0	4.3	3.9	3.4	4.0	3.8	3.9	3.7	3.8	3.9	3.7	3.6	3.8	4.5
Both sexes, 16-19 years.....	10.7	13.2	11.0	12.2	11.4	12.7	12.9	12.5	13.1	13.0	13.7	12.9	12.9	12.7	14.8
White workers.....	3.1	3.3	3.3	3.3	3.1	3.4	3.2	3.3	3.4	3.4	3.5	3.3	3.3	3.3	4.1
Nonwhite workers.....	7.4	7.1	6.6	7.6	6.9	7.4	7.2	8.0	7.5	7.5	7.4	7.1	7.3	7.3	8.1
Married men.....	1.7	1.6	1.7	1.7	1.7	1.9	1.9	2.0	2.0	1.9	1.8	1.8	1.9	1.9	2.4
Full-time workers.....	3.1	3.0	3.1	3.3	3.4	3.4	3.4	3.4	3.4	3.7	3.4	3.3	3.3	3.4	3.5
Blue-collar workers.....	4.2	4.1	4.2	4.3	4.3	4.1	4.1	4.5	4.5	4.3	4.3	4.1	4.2	4.3	5.3
Experienced wage and salary workers.....	3.4	3.4	3.5	3.5	3.4	3.5	3.6	3.7	3.5	3.7	3.7	3.4	3.5	3.5	4.3
Labor force time lost ¹	4.1	4.0	4.1	4.1	3.8	4.1	4.2	4.2	4.5	4.7	4.3	4.1	4.1	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

[In thousands]

Age and sex	1967			1966									Annual average		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Total, 16 years and over.....	3.6	3.7	3.7	3.7	3.5	3.8	3.7	3.8	3.9	3.9	3.9	3.7	3.8	3.8	4.5
16 to 19 years.....	10.7	13.2	11.0	12.2	11.4	12.7	12.9	12.5	13.1	13.0	13.7	12.9	12.9	12.7	14.8
16 and 17 years.....	12.0	16.4	13.1	13.8	12.9	14.7	14.8	14.2	14.9	15.0	16.8	15.2	15.9	14.8	16.5
18 and 19 years.....	9.8	11.0	9.5	10.8	10.6	11.4	11.2	11.3	11.9	11.9	11.8	11.5	10.8	11.3	13.5
20 to 24 years.....	5.4	5.2	5.6	5.6	5.0	5.4	5.2	5.4	4.7	5.6	5.4	5.2	5.3	5.3	6.7
25 years and over.....	2.6	2.5	2.6	2.6	2.5	2.6	2.6	2.7	2.8	2.6	2.5	2.5	2.6	2.6	3.2
25 to 54 years.....	2.6	2.6	2.6	2.5	2.5	2.7	2.6	2.7	2.7	2.7	2.6	2.5	2.6	2.6	3.2
55 years and over.....	2.5	2.2	2.9	2.5	2.4	2.5	2.5	2.6	2.7	2.5	3.0	2.5	2.7	2.6	3.2
Males, 16 years and over.....	2.9	3.0	2.9	3.2	3.0	3.1	3.1	3.2	3.3	3.3	3.2	3.1	3.3	3.2	4.0
16 to 19 years.....	10.1	12.6	11.1	12.2	10.5	11.7	12.3	10.9	11.7	11.8	12.6	11.3	12.0	11.7	14.1
16 and 17 years.....	11.3	14.8	13.9	13.8	11.5	14.1	14.1	12.5	13.3	13.5	15.8	13.0	14.7	13.7	16.1
18 and 19 years.....	9.0	10.3	8.8	10.8	9.7	9.9	10.2	9.7	10.5	10.9	10.6	10.1	9.9	10.2	12.4
20 to 24 years.....	4.2	3.6	4.2	5.3	4.9	4.3	4.3	4.7	3.7	4.8	4.8	4.4	5.0	4.6	6.3
25 years and over.....	2.1	2.0	2.0	2.1	2.2	2.1	2.2	2.3	2.5	2.3	2.1	2.2	2.3	2.2	2.8
25 to 54 years.....	2.0	1.9	1.8	2.0	2.1	2.1	2.1	2.2	2.2	2.2	1.9	2.0	2.1	2.1	2.7
55 years and over.....	2.4	2.2	2.8	2.3	2.4	2.1	2.6	2.7	3.0	2.8	3.3	2.8	2.8	2.7	3.3
Females, 16 years and over.....	4.9	5.1	5.0	4.7	4.4	5.0	4.8	5.0	4.9	5.0	5.1	4.8	4.7	4.8	5.5
16 to 19 years.....	11.6	13.9	10.8	12.2	12.6	13.9	13.6	14.6	14.9	14.5	15.2	14.9	14.1	14.1	15.7
16 and 17 years.....	13.1	18.7	11.9	13.7	14.9	15.7	15.8	16.8	17.3	17.2	18.3	18.7	17.9	16.6	17.2
18 and 19 years.....	10.7	11.7	10.2	10.7	11.5	13.0	12.2	13.0	13.5	13.0	13.1	13.1	11.7	12.6	14.8
20 to 24 years.....	6.9	7.3	7.4	6.1	5.2	6.9	6.5	6.4	6.1	6.5	6.3	6.3	5.8	6.3	7.3
25 years and over.....	3.6	3.5	3.8	3.5	3.1	3.5	3.3	3.4	3.3	3.3	3.4	3.2	3.3	3.3	4.0
25 to 54 years.....	3.9	3.7	4.0	3.6	3.4	3.8	3.6	3.7	3.6	3.6	3.9	3.5	3.5	3.6	4.3
55 years and over.....	2.8	2.1	3.3	3.0	2.3	3.1	2.3	2.3	2.3	2.1	2.5	2.0	2.4	2.4	2.8

TABLE A-4. Employed persons, by age and sex, seasonally adjusted

[In thousands]

Age and sex	1967			1966									Annual average		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
TOTAL															
16 years and over.....	73,747	74,137	74,255	73,893	73,897	73,199	73,195	73,141	72,846	72,730	72,253	72,542	72,266	72,895	71,088
16 to 19 years.....	5,903	5,844	5,900	5,828	5,908	5,654	5,546	5,897	5,847	5,844	5,487	5,672	5,579	5,721	5,036
16 and 17 years.....	2,478	2,399	2,389	2,427	2,362	2,233	2,229	2,311	2,277	2,264	2,135	2,230	2,204	2,269	2,074
18 and 19 years.....	3,465	3,495	3,516	3,487	3,537	3,386	3,304	3,587	3,568	3,543	3,319	3,440	3,409	3,452	2,962
20 to 24 years.....	8,348	8,355	8,228	8,126	8,062	7,977	7,916	7,937	7,937	7,993	7,994	7,971	7,907	7,963	7,702
25 years and over.....	59,516	60,000	60,125	59,886	59,925	59,593	59,761	59,294	59,056	58,875	58,789	58,870	58,797	59,212	58,351
25 to 54 years.....	46,391	46,616	46,742	46,541	46,399	46,146	46,119	45,845	45,739	45,698	45,719	45,713	45,721	45,944	45,318
55 years and over.....	13,224	13,450	13,468	13,405	13,544	13,332	13,417	13,394	13,243	13,249	13,079	13,144	13,132	13,268	13,033
MALE															
16 years and over.....	47,358	47,475	47,533	47,116	47,011	46,824	46,769	47,036	46,917	46,960	46,736	47,016	46,859	46,919	46,340
16 to 19 years.....	3,348	3,239	3,306	3,218	3,300	3,170	3,114	3,348	3,340	3,345	3,112	3,285	3,242	3,252	2,918
16 and 17 years.....	1,512	1,444	1,453	1,463	1,451	1,369	1,347	1,405	1,399	1,406	1,288	1,389	1,367	1,390	1,284
18 and 19 years.....	1,854	1,852	1,867	1,802	1,858	1,790	1,778	1,934	1,930	1,910	1,789	1,891	1,883	1,862	1,634
20 to 24 years.....	4,762	4,812	4,721	4,588	4,594	4,586	4,570	4,592	4,575	4,607	4,599	4,615	4,640	4,599	4,583
25 years and over.....	39,276	39,474	39,493	39,259	39,098	39,085	39,090	39,087	39,022	39,005	39,025	39,099	39,004	39,069	38,839
25 to 54 years.....	30,645	30,697	30,776	30,519	30,331	30,313	30,302	30,311	30,264	30,313	30,390	30,426	30,417	30,378	30,240
55 years and over.....	8,670	8,777	8,758	8,767	8,805	8,741	8,748	8,738	8,715	8,731	8,605	8,639	8,618	8,691	8,599
FEMALE															
16 years and over.....	26,389	26,662	26,722	26,777	26,886	26,375	26,426	26,105	25,929	25,770	25,517	25,526	25,407	25,976	24,748
16 to 19 years.....	2,555	2,605	2,594	2,610	2,608	2,484	2,432	2,549	2,507	2,499	2,375	2,387	2,337	2,469	2,118
16 and 17 years.....	966	955	936	964	911	864	882	906	878	858	847	841	837	879	790
18 and 19 years.....	1,611	1,643	1,649	1,685	1,679	1,596	1,526	1,653	1,638	1,633	1,530	1,549	1,526	1,590	1,328
20 to 24 years.....	3,586	3,543	3,507	3,538	3,468	3,391	3,346	3,345	3,362	3,386	3,395	3,356	3,267	3,364	3,119
25 years and over.....	20,240	20,526	20,632	20,627	20,827	20,508	20,671	20,207	20,054	19,870	19,764	19,771	19,793	20,143	19,512
25 to 54 years.....	15,746	15,919	15,966	16,022	16,068	15,833	15,817	15,534	15,475	15,385	15,329	15,287	15,304	15,566	15,078
55 years and over.....	4,554	4,673	4,710	4,638	4,739	4,591	4,669	4,656	4,528	4,518	4,474	4,505	4,514	4,577	4,434

TABLE A-5. Unemployed persons, by duration of unemployment, seasonally adjusted

[In thousands]

Duration of unemployment	1967			1966										Annual average	
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Less than 5 weeks.....	1,408	1,678	1,542	1,562	1,397	1,493	1,523	1,576	1,592	1,653	1,604	1,536	1,494	1,535	1,628
5 to 14 weeks.....	986	771	787	760	789	900	831	891	882	816	854	667	796	804	983
15 weeks and over.....	560	439	455	496	484	517	493	462	446	486	538	590	583	536	755
15 to 26 weeks.....	354	249	282	269	287	293	291	254	228	263	262	333	316	245	404
27 weeks and over.....	206	190	203	227	197	224	202	208	218	223	276	257	267	241	351
15 weeks and over as a percent of civilian labor force.....	.6	.6	.6	.6	.6	.7	.6	.6	.6	.6	.7	.8	.8	.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	
	March	February	January	December	November	October	1966	1965
FULL TIME								
Civilian labor force.....	65,425	65,445	65,610	66,205	66,312	66,400	66,943	66,145
Employed:								
Full-time schedules ¹	60,916	60,793	60,953	62,285	62,713	62,878	62,734	61,144
Part time for economic reasons.....	2,209	2,283	2,195	1,875	1,632	1,638	1,894	2,209
Unemployed, looking for full-time work.....	2,300	2,369	2,462	2,045	1,967	1,884	2,315	2,792
Unemployment rate.....	3.5	3.6	3.8	3.1	3.0	2.8	3.5	4.2
PART TIME								
Civilian labor force.....	10,088	10,246	9,710	10,047	10,261	9,809	8,830	8,310
Employed (voluntary part time) ¹	9,433	9,432	9,013	9,439	9,650	9,228	8,270	7,735
Unemployed, looking for part-time work.....	655	814	697	608	611	581	560	575
Unemployment rate.....	6.5	7.9	7.2	6.1	6.0	5.9	6.3	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-7. Employment status, by color, sex, and age, seasonally adjusted

[In thousands]

Characteristics	Quarterly averages													Annual averages	
	1967	1966				1965				1964				1966	1965
	1st	4th	3d	2d	1st	4th	3d	2d	1st	4th	3d	2d	1st	1966	1965
WHITE															
Civilian labor force.....	68,410	67,999	67,293	66,926	66,829	66,539	66,204	66,057	65,683	65,134	64,928	65,014	64,538	67,274	66,136
Men, 20 years and over.....	66,190	65,794	65,058	64,650	64,570	64,075	63,599	63,240	62,841	62,232	62,055	61,963	61,388	65,019	63,445
Women, 20 years and over.....	2,220	2,205	2,235	2,276	2,259	2,464	2,605	2,817	2,842	2,902	2,873	3,051	3,150	2,253	2,691
Both sexes, 14-19 years.....	3.2	3.2	3.3	3.4	3.4	3.7	3.9	4.3	4.3	4.5	4.4	4.7	4.9	3.3	4.1
Employed.....	40,712	40,365	40,239	40,311	40,349	40,227	40,362	40,523	40,469	40,283	40,228	40,160	40,003	40,318	40,401
Men, 20 years and over.....	39,897	39,512	39,347	39,419	39,405	39,208	39,241	39,273	39,218	38,967	38,883	38,772	38,555	39,417	39,232
Women, 20 years and over.....	815	853	892	892	944	1,019	1,121	1,250	1,251	1,316	1,345	1,388	1,448	901	1,169
Both sexes, 14-19 years.....	2.0	2.1	2.2	2.2	2.3	2.5	2.8	3.1	3.1	3.3	3.3	3.5	3.6	2.2	2.9
Unemployed.....	21,726	21,724	21,239	20,829	20,733	20,664	20,519	20,410	20,276	20,002	19,900	20,104	19,814	21,128	20,468
Men, 20 years and over.....	20,924	21,011	20,540	20,119	20,043	19,903	19,729	19,572	19,405	19,146	19,035	19,174	18,823	20,426	19,652
Women, 20 years and over.....	803	713	699	710	690	761	790	871	871	856	865	930	991	703	817
Both sexes, 14-19 years.....	3.7	3.3	3.3	3.4	3.3	3.7	3.9	4.1	4.3	4.3	4.3	4.6	5.0	3.3	4.0
Unemployment rate.....	5,972	5,911	5,814	5,785	5,747	5,648	5,324	5,124	4,939	4,850	4,800	4,751	4,721	5,828	5,265
Men, 20 years and over.....	5,370	5,271	5,171	5,112	5,122	4,964	4,630	4,395	4,219	4,120	4,137	4,018	4,010	5,170	4,562
Women, 20 years and over.....	602	640	644	673	624	684	694	729	720	730	663	733	711	651	703
Both sexes, 14-19 years.....	10.1	10.8	11.1	11.6	10.9	12.1	13.0	14.2	14.6	15.1	13.8	15.4	15.1	11.2	13.4
NONWHITE															
Civilian labor force.....	8,638	8,534	8,534	8,431	8,475	8,400	8,339	8,266	8,244	8,259	8,156	8,167	8,087	8,496	8,319
Men, 20 years and over.....	8,030	7,911	7,885	7,812	7,885	7,775	7,669	7,603	7,514	7,505	7,363	7,373	7,294	7,875	7,643
Women, 20 years and over.....	608	623	649	619	590	625	670	663	730	754	793	794	793	621	676
Both sexes, 14-19 years.....	7.0	7.3	7.6	7.3	7.0	7.4	8.0	8.0	8.9	9.1	9.7	9.7	9.8	7.3	8.1
Employed.....	4,515	4,490	4,478	4,429	4,480	4,466	4,422	4,400	4,462	4,447	4,401	4,438	4,411	4,468	4,456
Men, 20 years and over.....	4,314	4,264	4,260	4,213	4,265	4,247	4,164	4,203	4,148	4,127	4,083	4,094	4,047	4,249	4,190
Women, 20 years and over.....	201	226	217	216	215	219	258	257	315	320	319	344	364	219	267
Both sexes, 14-19 years.....	4.5	5.0	4.8	4.9	4.8	4.9	5.8	5.8	7.1	7.2	7.2	7.8	8.3	4.9	6.0
Unemployed.....	3,381	3,327	3,292	3,289	3,290	3,265	3,249	3,180	3,174	3,199	3,141	3,134	3,073	3,299	3,218
Men, 20 years and over.....	3,150	3,098	3,055	3,080	3,096	3,040	3,003	2,937	2,930	2,925	2,847	2,853	2,791	3,082	2,979
Women, 20 years and over.....	232	229	237	209	194	225	246	243	244	274	294	281	282	217	239
Both sexes, 14-19 years.....	6.9	6.9	7.2	6.4	5.9	6.9	7.6	7.6	7.7	8.6	9.4	9.0	9.2	6.6	7.4
Unemployment rate.....	741	717	765	713	706	668	668	626	606	613	612	594	602	729	644
Men, 20 years and over.....	567	549	570	519	524	488	502	463	436	454	433	426	455	544	475
Women, 20 years and over.....	175	168	195	194	181	180	166	163	170	159	180	168	146	185	169
Both sexes, 14-19 years.....	23.6	23.4	25.5	27.2	25.6	26.9	24.9	26.0	28.1	25.9	29.4	28.3	24.3	25.4	26.2

TABLE A-8. Total employment and unemployment rates, by occupation, seasonally adjusted

Characteristics	Quarterly averages													Annual averages	
	1967	1966				1965				1964				1966	1965
	1st	4th	3d	2d	1st	4th	3d	2d	1st	4th	3d	2d	1st	1966	1965
EMPLOYED (in thousands)															
White-collar workers.....	33,541	34,007	33,676	33,029	32,567	32,389	32,256	32,084	31,621	31,428	31,095	31,001	30,890	33,316	32,086
Professional and technical.....	9,722	9,609	9,458	9,244	8,984	8,920	8,990	8,818	8,817	8,747	8,496	8,503	8,446	9,321	8,882
Managers, officials, and proprietors.....	7,192	7,433	7,556	7,382	7,244	7,157	7,371	7,528	7,298	7,425	7,452	7,459	7,469	7,404	7,340
Clerical workers.....	12,103	12,263	11,957	11,658	11,506	11,518	11,187	11,040	10,916	10,714	10,663	10,672	10,624	11,845	11,166
Sales workers.....	4,525	4,702	4,705	4,745	4,834	4,793	4,708	4,698	4,590	4,542	4,484	4,367	4,351	4,745	4,698
Blue-collar workers.....	27,393	26,956	27,014	27,007	27,070	26,680	26,321	26,001	26,218	25,625	25,418	25,363	25,157	27,012	26,305
Craftsmen and foremen.....	10,029	9,699	9,660	9,563	9,466	9,412	9,294	8,982	9,201	9,065	9,028	8,896	8,950	9,598	9,222
Operatives.....	13,879	13,842	13,784	13,936	13,956	13,577	13,382	13,354	13,241	13,048	12,988	12,915	12,737	13,879	13,392
Nonfarm laborers.....	3,485	3,415	3,570	3,508	3,651	3,691	3,645	3,665	3,777	3,513	3,403	3,551	3,470	3,535	3,691
Service workers.....	9,471	9,576	9,359	9,189	9,316	9,318	9,167	8,902	8,874	8,932	9,006	9,169	8,851	9,360	9,065
Farmers and farm laborers.....	3,671	3,625	3,637	3,758	3,863	3,931	4,060	4,257	4,145	4,216	4,321	4,236	4,297	2,095	2,244
UNEMPLOYMENT RATE															
White-collar workers.....	2.1	2.0	2.1	2.0	2.0	2.2	2.2	2.3	2.5	2.5	2.4	2.7	2.8	2.0	2.3
Professional and technical.....	1.3	1.3	1.5	1.2	1.3	1.5	1.3	1.5	1.7	1.4	1.8	1.8	1.8	1.3	1.5
Managers, officials, and proprietors.....	.9	.9	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.4	1.2	1.6	1.0	1.1
Clerical workers.....	3.0	3.0	3.0	2.7	2.7	2.9	3.1	3.5	3.5	3.5	3.3	4.0	4.1	2.8	3.2
Sales workers.....	3.3	2.4	2.7	2.9	2.8	3.4	3.2	3.6	3.6	4.2	3.1	3.7	3.4	2.7	3.3
Blue-collar workers.....	4.1	4.2	4.4	4.2	4.2	4.6	5.2	5.6	5.6	6.0	6.2	6.3	6.8	4.3	5.3
Craftsmen and foremen.....	2.3	2.9	2.7	2.7	3.0	2.8	3.6	4.0	3.8	4.2	4.2	4.0	4.3	2.8	3.6
Operatives.....	4.7	4.2	4.5	4.4	4.3	4.9	5.4	5.9	5.6	6.1	6.3	6.5	7.1	4.3	5.5
Nonfarm laborers.....	7.0	7.7	7.9	7.7	7.1	7.9	8.3	8.4	9.6	10.1	10.9	10.8	11.8	7.6	8.7
Service workers.....	4.5	4.6	4.6	4.9	5.4	4.8	5.2	5.4	5.9	5.6	5.8	6.1	6.3	4.7	5.3
Farmers and farm managers.....	2.1	2.2	2.0	2.7	2.2	2.9	2.7	2.5	2.6	3.1	3.2	3.2	3.3	2.3	2.7

TABLE A-9. Employees in nonagricultural establishments, by industry¹

[In thousands]

Revised series; see box, p. 90.

Industry	1967			1966									Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Total employees.....	64,579	64,254	64,334	65,904	65,389	65,190	64,867	64,484	64,274	64,563	63,465	62,928	62,243	63,864	60,770
Mining.....	610	609	614	625	628	631	637	649	645	645	630	590	620	628	632
Metal mining.....	86.6	85.5	85.5	85.9	86.1	85.7	87.3	88.6	87.7	87.8	85.3	84.4	84.0	85.9	83.6
Iron ores.....	26.1	25.3	25.8	26.0	26.0	26.4	26.4	26.4	25.8	26.4	25.7	24.6	24.0	25.5	25.7
Copper ores.....	32.9	32.7	32.4	32.4	32.6	32.2	32.7	33.2	33.0	32.8	31.9	31.9	32.0	32.3	30.1
Coal mining.....	142.9	142.8	143.3	142.9	143.7	143.7	142.7	142.5	139.5	142.2	140.7	104.3	141.3	139.0	141.8
Bituminous.....	134.7	134.9	135.3	134.9	135.7	134.7	134.7	134.3	131.9	134.1	132.2	95.8	132.2	130.6	132.0
Crude petroleum and natural gas.....	268.8	274.6	278.6	276.9	277.4	281.0	289.7	289.6	288.1	281.0	281.2	281.9	281.9	282.6	288.1
Crude petroleum and natural gas fields.....	148.4	148.6	148.9	149.6	150.2	153.3	156.6	156.9	155.1	151.7	151.9	151.9	152.1	152.6	156.0
Oil and gas field services.....	120.4	126.0	129.7	127.3	127.2	127.7	133.1	132.7	133.0	129.3	129.3	129.8	129.8	130.0	131.4
Quarrying and nonmetallic mining.....	110.7	111.3	117.6	121.7	123.9	126.2	127.8	127.8	126.9	122.5	119.9	112.4	112.4	120.6	118.3
Crushed and broken stone.....	37.4	37.5	40.7	42.0	42.8	43.8	44.4	44.3	43.8	42.3	41.2	37.6	37.6	41.4	41.0
Sand and gravel.....	33.9	34.3	37.0	39.8	41.2	41.9	42.5	42.4	42.2	40.5	39.3	35.8	39.3	39.4	
Contract construction.....	2,893	2,842	2,925	3,128	3,310	3,449	3,525	3,641	3,623	3,521	3,277	3,156	2,981	3,281	3,181
General building contractors.....	942.3	971.8	1,038.5	1,078.0	1,107.3	1,125.2	1,165.3	1,153.3	1,121.1	1,037.1	1,014.6	967.7	1,057.1	1,057.1	997.6
Heavy construction.....	499.0	511.9	572.7	673.9	740.6	758.8	781.5	782.2	756.8	680.1	618.0	521.1	655.7	643.2	643.2
Highway and street construction.....	209.6	214.1	259.2	335.5	386.9	401.1	411.9	411.7	397.8	345.3	296.4	224.3	324.2	323.6	323.6
Other heavy construction.....	289.4	297.8	313.5	338.4	353.7	357.7	369.6	370.5	359.0	334.8	321.6	296.8	331.5	319.6	
Special trade contractors.....	1,400.3	1,441.3	1,516.5	1,558.1	1,601.3	1,641.0	1,694.0	1,687.8	1,643.1	1,559.4	1,523.7	1,492.2	1,568.0	1,540.6	
Plumbing, heating, and air conditioning.....	359.4	364.4	369.2	374.8	377.8	380.3	383.6	384.6	376.7	366.3	363.8	360.6	371.2	365.5	
Painting, paperhanging, and decorating.....	106.1	107.5	124.5	134.9	147.1	153.0	161.0	157.7	148.5	137.3	130.3	124.0	138.1	142.3	
Electrical work.....	239.8	243.8	248.1	249.4	249.8	255.0	259.7	259.7	248.5	238.6	235.6	231.0	244.0	231.8	
Masonry, plastering, stone, and tile work.....	190.2	194.0	207.0	215.7	228.9	238.2	255.7	253.4	248.9	236.6	231.0	230.6	230.4	237.6	
Roofing and sheet metal work.....	97.8	105.2	112.4	116.5	117.7	117.1	118.7	117.8	115.1	107.6	106.8	104.4	111.4	110.0	
Manufacturing.....	19,163	19,183	19,233	19,430	19,522	19,538	19,533	19,391	19,123	19,258	18,906	18,774	18,651	19,081	18,032
Durable goods.....	11,301	11,311	11,347	11,446	11,480	11,470	11,434	11,249	11,213	11,319	11,130	11,039	10,921	11,186	10,386
Nondurable goods.....	7,862	7,872	7,886	7,984	8,042	8,068	8,099	8,142	7,910	7,939	7,776	7,735	7,730	7,896	7,645
Durable goods.....															
Ordnance and accessories.....	283.1	281.4	277.5	271.3	270.6	266.4	263.0	259.1	256.4	254.9	251.8	247.8	245.3	255.8	226.0
Ammunition, except for small arms.....	208.4	207.4	204.4	198.6	199.6	196.8	195.0	191.7	189.5	189.2	188.3	187.3	185.6	190.7	172.7
Sighting and fire control equipment.....	59.1	58.6	58.1	57.7	56.2	54.8	53.3	52.7	52.3	51.6	49.8	47.0	46.4	51.0	40.9
Lumber and wood products, except furniture.....	589.1	583.8	585.9	593.2	608.9	618.5	630.6	649.9	648.5	653.5	626.4	617.6	609.6	621.8	610.1
Logging camps and logging contractors.....	91.7	92.8	93.9	93.0	100.9	102.6	103.6	106.7	106.2	106.6	94.8	88.5	87.4	96.8	89.0
Sawmills and planing mills.....	235.7	234.0	234.4	236.1	240.7	244.4	250.5	257.4	256.5	259.0	251.3	251.3	248.8	249.0	250.8
Millwork, plywood, and related products.....	148.4	147.0	147.7	151.8	155.3	159.8	164.5	171.4	172.5	173.1	167.6	166.5	163.7	164.3	162.7
Wooden containers.....	35.6	35.5	35.8	35.3	35.0	35.0	35.1	36.5	36.1	36.9	36.3	35.4	34.4	35.4	34.4
Miscellaneous wood products.....	75.7	75.6	75.2	76.1	77.0	76.7	76.9	77.9	77.2	77.9	76.4	75.9	75.3	76.3	73.2
Furniture and fixtures.....	452.0	454.0	456.4	465.7	468.3	467.0	465.6	466.5	451.9	458.4	450.5	447.2	447.6	456.2	429.1
Household furniture.....	323.4	325.0	326.1	334.1	336.7	336.0	335.2	335.1	325.9	330.3	326.0	326.0	325.1	329.5	309.7
Office furniture.....	35.2	35.3	35.2	35.2	34.8	34.2	33.8	33.7	33.5	32.2	32.2	29.9	31.5	32.8	29.6
Partitions; office and store fixtures.....	46.3	46.9	47.1	47.3	47.0	47.0	48.3	48.6	46.5	47.2	45.1	44.8	44.5	46.1	43.2
Other furniture and fixtures.....	47.0	47.5	48.1	49.3	49.5	49.8	49.3	49.1	46.0	48.7	47.0	46.5	46.5	47.8	46.6
Stone, clay, and glass products.....	615.3	608.7	612.7	625.8	639.3	644.3	653.4	661.6	658.4	647.8	641.7	625.9	641.3	627.4	627.4
Flat glass.....	32.2	32.6	32.8	32.8	32.8	32.4	32.2	32.3	32.4	32.9	33.1	33.2	32.9	32.8	32.3
Glass and glassware, pressed or blown.....	121.7	121.4	122.3	123.4	124.8	124.3	125.9	126.3	125.2	125.6	123.1	120.3	118.6	122.6	115.4
Cement, hydraulic.....	36.3	34.8	35.1	36.2	37.8	38.3	39.0	39.7	39.6	39.4	37.7	37.1	35.5	37.6	38.0
Structural clay products.....	62.9	61.7	62.0	64.9	66.6	67.9	69.5	71.5	72.7	72.5	71.1	69.8	67.7	69.1	69.2
Pottery and related products.....	42.6	42.3	42.8	43.9	44.0	44.2	43.5	42.2	43.7	43.3	43.8	44.1	43.4	43.4	
Concrete, gypsum, and plaster products.....	165.6	161.9	164.4	170.3	176.5	180.2	184.2	187.7	189.4	188.4	183.1	180.5	172.1	179.1	177.9
Other stone and mineral products.....	129.8	130.2	129.6	130.9	132.2	132.9	134.1	136.3	136.3	132.1	132.1	132.7	130.8	132.5	129.2
Primary metal industries.....	1,315.4	1,317.2	1,327.6	1,326.7	1,328.6	1,332.2	1,344.9	1,351.8	1,353.4	1,355.7	1,329.6	1,321.7	1,303.4	1,326.4	1,295.6
Blast furnace and basic steel products.....	633.8	633.5	637.6	638.0	643.3	649.4	659.7	669.8	676.9	673.4	656.4	649.1	634.9	649.2	656.8
Iron and steel foundries.....	233.0	234.5	239.0	236.7	236.7	236.4	236.6	237.8	236.7	239.1	235.8	235.9	233.6	236.0	226.2
Nonferrous smelting and refining.....	80.2	80.2	80.1	79.6	78.8	77.9	78.5	78.6	79.2	78.6	76.8	76.2	75.7	77.6	73.8
Nonferrous rolling, drawing, and extruding.....	210.2	209.9	211.0	212.1	211.3	211.4	212.0	209.2	206.5	207.0	205.9	205.8	205.2	207.7	194.4
Nonferrous foundries.....	87.5	88.2	88.6	89.0	87.8	87.4	88.5	87.9	85.7	88.0	86.3	86.3	85.6	86.8	80.5
Miscellaneous primary metal industries.....	70.7	70.9	71.3	71.3	70.7	69.7	69.6	68.5	68.4	69.6	68.4	68.4	68.4	69.1	64.0
Fabricated metal products.....	1,353.3	1,360.3	1,367.9	1,382.8	1,387.5	1,379.7	1,372.5	1,360.9	1,339.2	1,360.8	1,340.7	1,337.0	1,326.8	1,351.5	1,288.3
Metal cans.....	62.8	61.9	60.9	61.5	61.8	62.0	64.0	65.9	66.0	65.2	63.5	62.1	61.4	62.8	60.4
Cutlery, hand tools, and general hardware.....	160.0	163.3	164.8	166.6	166.5	165.7	164.4	160.3	155.3	161.2	160.7	163.4	163.3	162.5	155.3
Heating equipment and plumbing fixtures.....	78.5	77.1	77.6	78.7	79.3	79.6	79.9	80.1	78.1	79.9	80.2	79.4	80.1	79.5	78.7
Fabricated structural metal products.....	391.9	393.9	395.6	401.6	404.5	405.5	408.9	411.2	410.7	406.6	394.4	390.4	385.1	399.0	375.5
Screw machine products, bolts, etc.....	114.6	115.1	114.9	114.5	112.7	110.8	109.3	108.1	107.2	108.0	105.9	105.6	105.0	107.8	97.8
Metal stampings.....	240.2	243.1	247.3	251.2	252.1	249.0	241.9	231.1	221.5	234.5	235.9	236.8	237.0	238.4	221.3
Coating, engraving, and allied services.....	82.6	82.9	82.7	84.0	85.0	84.8	83.7	84.0	81.6	84.9	82.2	81.9	82.3	83.0	76.7
Miscellaneous fabricated wire products.....	69.5	69.7	69.7	70.0	69.8	68.									

TABLE A-9. Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	1,946.6	1,939.2	1,936.7	1,926.9	1,899.9	1,897.1	1,895.3	1,891.1	1,887.5	1,882.0	1,855.2	1,841.7	1,828.8	1,867.7	1,725.8
Engines and turbines.....	101.4	100.7	101.2	94.5	88.4	98.6	99.7	99.1	98.4	94.7	96.3	95.2	94.5	95.5	90.1
Farm machinery and equipment.....	154.5	152.4	149.8	145.6	143.8	143.9	143.9	145.2	148.2	147.5	147.9	147.9	146.0	135.2	146.0
Construction and related machinery.....	276.5	276.1	277.3	279.0	277.3	277.5	279.2	279.2	281.4	279.2	274.2	270.8	268.7	274.4	255.3
Metalworking machinery and equipment.....	348.2	347.1	346.0	343.9	340.0	337.4	338.8	334.5	334.8	335.1	329.2	327.8	324.8	332.2	304.5
Special industry machinery.....	204.9	205.0	205.1	205.0	203.9	203.7	204.0	203.3	203.0	202.9	199.5	198.1	199.1	201.6	192.1
General industrial machinery.....	284.6	284.5	287.8	287.2	284.5	282.3	281.0	280.8	280.5	279.6	275.0	273.1	272.7	278.0	259.0
Office, computing, and accounting machines.....	230.4	229.3	227.4	226.3	223.7	220.7	218.6	217.3	214.8	213.1	210.2	208.4	206.1	213.8	189.5
Service industry machines.....	118.1	118.1	117.9	118.8	117.0	115.8	115.6	118.7	117.0	118.0	116.4	115.0	111.9	115.7	112.7
Miscellaneous machinery.....	226.1	223.9	221.6	222.4	219.5	217.3	214.5	214.3	212.4	211.2	206.9	205.4	203.1	210.4	187.5
Electrical equipment and supplies.....	1,943.5	1,956.4	1,969.8	1,978.9	1,980.9	1,981.5	1,958.0	1,939.6	1,887.8	1,898.4	1,858.1	1,842.8	1,810.8	1,892.9	1,658.1
Electric distribution equipment.....	197.0	199.1	198.8	198.8	197.2	198.9	198.8	198.2	195.0	193.4	187.1	185.6	184.1	191.6	170.5
Electrical industrial apparatus.....	221.4	224.8	225.3	219.9	216.9	220.6	218.7	219.8	216.6	215.8	206.9	208.8	206.6	213.1	191.9
Household appliances.....	179.1	182.5	185.6	192.9	190.1	192.9	187.5	184.1	173.4	181.6	184.1	181.7	168.6	182.3	166.6
Electric lighting and wiring equipment.....	189.9	191.2	193.9	194.6	193.6	195.4	194.7	192.8	190.1	193.4	190.6	188.7	186.5	190.6	172.3
Radio and TV receiving sets.....	183.0	185.1	188.7	192.5	195.4	191.5	185.1	177.1	163.4	162.9	154.6	153.2	152.3	169.4	135.1
Communication equipment.....	486.3	483.6	478.8	477.0	485.5	480.9	478.3	476.6	468.4	465.8	458.3	454.2	440.2	464.9	416.8
Electronic components and accessories.....	377.3	379.3	386.4	389.0	388.9	389.1	384.9	384.4	376.4	379.8	371.1	366.6	360.7	374.2	304.9
Miscellaneous electrical equipment and supplies.....	109.5	110.8	112.3	114.2	113.3	112.2	110.8	106.6	104.5	105.7	105.4	104.0	103.0	106.9	100.1
Transportation equipment.....	1,930.5	1,942.2	1,947.6	1,991.0	1,989.2	1,974.4	1,953.2	1,777.9	1,865.3	1,921.1	1,910.2	1,894.7	1,886.6	1,905.8	1,737.9
Motor vehicles and equipment.....	833.9	848.6	858.5	891.6	898.1	891.4	881.9	712.1	807.7	881.2	884.3	877.8	881.2	862.7	843.4
Aircraft and parts.....	816.9	809.9	810.8	815.5	808.6	794.6	786.8	776.2	748.6	735.6	726.6	715.5	755.6	625.2	666.6
Ship and boat building and repairing.....	167.9	170.6	169.9	170.6	165.7	170.8	166.7	171.3	173.1	170.9	171.9	173.2	177.1	171.7	158.8
Railroad equipment.....	59.2	60.2	61.7	61.6	60.8	61.0	60.3	59.1	60.0	59.7	59.2	58.0	59.7	55.7	55.7
Other transportation equipment.....	53.9	48.2	51.6	55.2	56.8	56.8	58.0	58.2	60.4	58.7	57.9	54.8	56.1	54.9	54.9
Instruments and related products.....	448.6	446.5	444.7	445.4	440.9	439.5	434.6	434.0	429.3	428.8	421.4	416.0	413.6	426.5	386.8
Engineering and scientific instruments.....	77.7	76.9	76.6	76.6	76.0	75.2	73.8	73.1	73.4	73.0	73.1	71.9	72.4	73.6	69.8
Mechanical measuring and control devices.....	106.3	106.3	107.3	108.0	107.8	107.6	107.4	107.3	107.1	106.6	103.9	103.3	102.1	105.2	98.4
Optical and ophthalmic goods.....	51.4	50.9	50.6	50.6	50.7	50.0	49.6	49.1	47.6	48.6	48.8	48.7	48.2	48.9	45.4
Ophthalmic goods.....	33.8	34.1	33.8	33.8	34.1	33.6	33.3	33.3	32.5	33.4	33.4	33.5	33.1	33.3	31.0
Surgical, medical, and dental equipment.....	69.9	68.5	67.9	68.1	67.5	66.9	66.2	65.4	65.4	65.1	63.8	63.1	62.4	64.7	57.2
Photographic equipment and supplies.....	101.6	101.3	102.0	101.4	100.8	99.1	100.2	99.0	97.9	95.2	93.8	92.6	97.0	84.1	84.1
Watches and clocks.....	41.5	40.7	40.1	37.5	39.0	38.5	37.9	36.8	37.6	36.6	35.2	35.9	37.1	31.9	31.9
Miscellaneous manufacturing industries.....	423.4	421.5	420.0	438.7	466.3	469.8	463.2	456.6	431.9	447.2	438.5	430.9	422.9	440.2	421.2
Jewelry, silverware, and plated ware.....	50.4	50.1	50.1	50.6	50.7	50.1	48.9	48.7	45.3	48.6	48.4	48.5	47.9	48.4	45.5
Toys, amusement, and sporting goods.....	103.4	102.0	115.5	138.0	141.4	138.6	132.2	121.5	125.7	121.3	114.9	109.1	121.8	118.0	118.0
Pens, pencils, office and art materials.....	36.2	35.7	36.2	36.4	36.4	36.4	36.4	36.5	36.1	36.2	35.5	35.4	35.3	35.7	33.6
Costume jewelry, buttons, and notions.....	56.4	56.0	57.8	59.6	59.7	58.7	58.7	59.6	54.8	58.6	57.5	57.0	56.8	57.5	56.0
Other manufacturing industries.....	173.9	175.4	176.2	178.6	181.6	182.2	180.6	179.6	174.2	178.1	175.8	175.1	173.8	176.8	168.1
Musical instruments and parts.....	27.4	27.1	27.9	27.8	27.8	27.4	27.2	26.8	26.6	26.6	26.5	26.7	27.0	24.6	24.6
<i>Nondurable goods</i>															
Food and kindred products.....	1,694.2	1,688.4	1,706.9	1,760.8	1,801.9	1,838.0	1,881.0	1,897.1	1,806.8	1,751.4	1,683.5	1,676.0	1,674.7	1,760.8	1,752.0
Meat products.....	317.2	318.9	321.4	329.2	330.9	330.0	327.9	329.7	326.8	319.9	311.3	307.3	307.6	320.0	317.3
Dairy products.....	270.2	268.9	269.7	271.3	272.2	275.2	279.8	289.0	291.1	288.1	279.8	278.1	275.9	279.3	286.3
Canned and preserved food, except meats.....	228.8	234.9	254.5	285.2	323.9	380.5	381.9	304.9	256.1	227.4	230.4	223.6	276.7	260.6	260.6
Grain mill products.....	122.9	122.4	122.8	123.1	121.7	124.4	125.5	127.1	128.0	127.0	122.5	120.9	122.1	123.8	125.6
Bakery products.....	284.5	283.8	282.7	284.4	285.2	282.3	281.9	285.3	275.5	285.2	279.1	278.9	280.1	281.4	286.4
Sugar.....	33.2	33.9	45.6	52.0	49.2	33.8	30.6	30.4	30.0	30.6	30.9	32.0	36.7	36.3	36.3
Confectionery and related products.....	72.3	74.0	75.1	84.7	84.0	80.2	77.8	75.5	69.5	71.2	70.0	69.6	75.3	75.7	76.5
Beverages.....	223.6	220.7	221.7	226.0	228.3	230.8	233.6	238.7	241.2	234.8	225.1	221.7	218.0	227.0	220.9
Miscellaneous food and kindred products.....	137.3	137.7	138.7	142.0	142.4	142.0	140.2	139.3	139.4	139.1	137.7	138.2	140.1	140.2	142.1
Tobacco manufactures.....	77.0	81.3	88.3	92.1	91.5	94.8	94.8	88.2	73.8	74.8	73.8	75.6	78.3	83.7	86.6
Cigarettes.....	39.7	39.8	39.8	39.8	39.7	39.5	39.8	40.0	39.7	39.4	38.7	38.6	38.3	39.1	38.6
Cigars.....	22.1	21.9	22.2	22.3	22.4	22.2	22.0	21.0	22.7	22.7	22.6	22.5	22.3	24.3	
Textile mill products.....	935.3	934.0	939.2	948.3	955.3	958.1	959.7	965.4	947.5	964.9	951.8	947.6	943.4	950.7	921.3
Cotton broad woven fabrics.....	237.5	237.6	240.1	240.6	240.1	238.9	238.3	238.3	238.3	239.3	235.8	235.0	234.7	237.3	229.2
Silk and synthetic broad woven fabrics.....	93.5	94.3	95.2	95.9	95.7	95.8	96.2	96.7	95.9	96.2	94.9	94.8	94.8	95.4	91.9
Weaving and finishing broad woolsens.....	43.1	43.0	42.7	42.1	42.0	42.6	43.8	45.0	45.4	45.5	45.2	44.8	44.9	44.2	44.2
Narrow fabrics and smallwares.....	32.1	32.2	32.5	32.6	32.3	32.0	31.8	30.6	31.8	31.4	31.3	31.0	31.0	31.6	29.4
Knitting.....	224.7	220.9	219.8	226.1	233.8	237.6	238.8	241.7	234.1	241.8	238.1	235.8	231.8	234.2	228.9
Finishing textiles, except wool and knit.....	75.9	75.8	76.1	76.7	76.5	75.8	75.9	76.4	75.9	77.0	76.2	75.9	75.5	76.0	75.9
Floor covering.....	42.3	42.9	43.3	43.3	43.4	43.5	43.1	42.6	39.8	41.3	41.4	41.4	41.5	42.1	40.9
Yarn and thread.....	113.0	113.7	114.9	115.5	115.5	116.1	116.5	117.9	114.4	116.7	114.6	113.8	113.8	115.1	109.0
Miscellaneous textile goods.....	73.7	74.2	75.0	75.4	75.7	75.5	75.1	74.8	73.1	75.3	74.2	74.8	75.4	74.9	71.9

See footnotes at end of table.

TABLE A-9. Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box, p. 90.

Industry	1967			1966									Annual average		
	Mar.	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,391.3	1,404.2	1,389.8	1,402.1	1,418.9	1,420.7	1,414.2	1,422.2	1,353.1	1,414.4	1,396.9	1,380.4	1,401.0	1,395.6	1,353.6
Men's and boys' suits and coats.....	119.4	120.7	120.9	121.9	120.6	120.0	120.7	120.7	115.3	123.5	122.4	120.4	121.1	120.6	118.6
Men's and boys' furnishings.....	361.1	363.3	364.6	365.5	367.5	369.2	370.4	373.1	360.5	373.2	368.4	365.4	364.4	366.3	350.7
Women's, misses', and juniors' outerwear.....	435.1	439.1	426.2	425.2	430.2	430.6	428.9	434.6	412.9	431.0	428.3	419.8	435.7	426.3	418.8
Women's and children's undergarments.....	128.1	128.4	127.1	129.7	132.1	131.7	130.0	128.8	120.4	126.9	124.9	124.8	124.6	126.3	121.0
Hats, caps, and millinery.....	29.2	28.9	28.3	27.2	28.2	28.2	28.4	29.2	27.0	27.2	24.9	26.1	30.7	28.0	29.0
Girls' and children's outerwear.....	77.9	80.9	79.5	78.5	80.4	80.4	80.3	82.3	81.5	83.6	80.5	78.1	80.9	80.4	78.4
Fur goods and miscellaneous apparel.....	75.9	75.9	74.8	78.8	82.6	83.7	82.0	82.4	76.8	79.8	77.9	77.9	76.8	78.6	76.0
Miscellaneous fabricated textile products.....	165.5	166.7	167.8	174.2	178.3	176.9	173.5	171.1	158.7	169.2	166.6	167.9	166.8	169.2	161.2
Paper and allied products.....	678.1	678.2	678.2	684.2	684.6	679.5	677.1	683.8	678.2	679.0	661.4	659.4	655.6	670.7	640.0
Paper and pulp.....	220.0	219.6	218.9	220.3	220.0	218.9	219.7	223.5	225.1	223.2	216.8	215.7	214.6	218.8	213.0
Paperboard.....	70.9	71.3	71.5	71.0	70.3	69.5	69.7	70.3	69.5	69.4	68.0	68.0	68.5	69.3	67.3
Converted paper and paperboard products.....	173.9	174.3	173.8	175.7	176.0	175.0	173.7	175.3	171.4	172.3	167.0	167.6	165.8	170.7	159.3
Paperboard containers and boxes.....	213.3	213.0	214.0	217.2	218.3	216.1	214.0	214.7	212.2	214.1	209.2	208.1	206.7	211.9	200.4
Printing, publishing and allied industries.....	1,062.2	1,056.9	1,051.2	1,054.8	1,047.9	1,044.0	1,038.2	1,035.1	1,030.4	1,026.8	1,015.3	1,014.6	1,005.8	1,026.2	981.0
Newspaper publishing and printing.....	361.3	360.0	358.3	361.2	359.5	358.4	356.8	353.3	354.1	353.7	350.7	352.3	346.7	353.8	345.6
Periodical publishing and printing.....	75.0	74.6	74.6	74.2	74.0	73.5	73.9	73.3	72.6	72.2	71.9	72.0	73.0	70.1	
Books.....	95.2	93.4	92.1	90.1	89.8	89.1	90.8	89.9	88.8	87.4	87.1	86.5	88.4	81.1	
Commercial printing.....	337.5	335.6	334.9	335.2	333.3	332.6	330.5	327.3	325.5	326.7	323.9	322.5	321.6	326.2	310.5
Bookbinding and related industries.....	56.9	56.2	55.8	56.3	56.2	55.9	56.5	57.9	56.5	55.5	53.5	53.6	53.3	54.9	51.2
Other publishing and printing industries.....	134.3	134.9	134.2	135.4	134.6	133.3	131.8	131.9	131.1	129.5	127.6	127.2	125.7	130.0	122.6
Chemicals and allied products.....	976.3	973.0	970.6	969.1	968.0	965.4	968.2	976.9	970.3	964.5	948.6	944.0	935.5	954.4	906.4
Industrial chemicals.....	306.3	305.6	304.9	304.0	303.6	301.2	304.5	307.2	305.5	302.8	296.7	296.1	294.6	300.1	289.7
Plastics materials and synthetics.....	203.2	207.0	208.6	210.1	209.9	209.8	212.2	215.1	214.1	210.8	205.5	205.2	204.6	208.5	194.5
Drugs.....	132.2	131.5	131.8	130.5	129.8	128.9	128.5	130.8	130.1	127.5	124.6	123.8	123.7	126.9	118.1
Soap, cleaners, and toilet goods.....	108.0	107.8	108.2	110.4	111.0	112.2	111.5	111.2	109.0	109.5	107.1	102.7	101.7	107.8	105.0
Paints, varnishes, and allied products.....	67.2	66.5	66.1	66.0	66.5	66.6	67.2	68.9	68.6	68.2	66.7	66.6	65.7	66.7	66.0
Agricultural chemicals.....	61.9	57.4	54.5	52.2	52.2	52.5	50.7	50.7	50.6	55.1	60.3	64.1	60.0	54.6	53.2
Other chemical products.....	97.5	97.2	96.5	95.4	95.0	94.2	93.6	93.0	92.4	90.6	87.4	86.1	85.2	89.8	80.0
Petroleum refining and related industries.....	178.3	178.5	178.4	180.3	182.0	182.8	185.4	188.2	190.1	186.4	182.9	180.6	178.7	182.8	182.0
Petroleum refining.....	145.9	145.9	145.8	146.6	146.8	146.9	148.1	149.8	151.6	148.5	146.6	145.6	145.5	147.2	147.5
Other petroleum and coal products.....	32.4	32.6	32.6	33.7	35.2	35.9	37.3	38.4	38.5	37.9	36.3	34.8	33.2	35.6	34.5
Rubber and miscellaneous plastic products.....	523.8	526.7	532.3	536.6	534.7	529.3	523.2	520.5	509.6	514.2	505.4	502.0	497.7	513.4	471.5
Tires and inner tubes.....	109.8	109.5	110.4	110.2	109.2	108.8	108.8	109.3	109.1	107.9	106.6	105.1	104.8	107.6	101.8
Other rubber products.....	180.5	183.8	187.6	187.5	185.2	183.5	182.7	180.9	177.9	180.9	179.7	177.9	178.1	180.9	172.4
Miscellaneous plastic products.....	233.5	233.4	234.8	238.7	239.3	236.6	231.7	230.3	222.6	225.4	219.1	219.0	214.8	224.9	197.4
Leather and leather products.....	345.8	350.9	350.8	355.5	357.2	355.1	356.9	364.8	350.3	362.2	356.4	354.9	358.8	357.2	350.9
Leather tanning and finishing.....	30.3	30.6	30.9	31.4	31.0	30.8	31.2	31.9	31.2	31.8	31.5	31.6	31.9	31.6	31.6
Footwear, except rubber.....	226.8	231.2	231.9	235.4	234.9	233.3	235.7	242.0	234.6	240.7	237.0	235.4	238.8	237.2	233.4
Other leather products.....	88.7	89.1	88.0	88.7	91.3	91.0	90.0	90.9	84.5	89.7	87.9	87.9	88.1	88.5	85.9
Handbags and personal leather goods.....	36.1	35.6	35.6	36.1	37.8	37.7	36.7	37.0	33.3	36.0	34.6	35.0	36.4	35.9	35.4
Transportation and public utilities.....	4,165	4,153	4,162	4,200	4,200	4,198	4,218	4,154	4,171	4,180	4,115	4,077	4,056	4,137	4,033
Railroad transportation.....	693.7	697.9	714.6	712.3	715.6	720.6	728.3	730.4	727.6	715.3	711.9	708.3	717.4	734.8	
Class I railroads ³	603.7	607.8	619.5	620.5	623.7	628.4	636.2	638.4	635.2	623.6	619.6	615.3	624.9	640.1	
Local and interurban passenger transit.....	271.1	271.7	270.9	268.0	267.5	264.3	246.3	246.8	255.0	267.5	269.3	272.8	264.6	267.5	
Local and suburban transportation.....	80.6	80.9	80.9	80.5	81.4	81.0	79.6	79.9	79.9	80.4	80.8	81.5	80.7	82.1	
Taxis.....	110.5	110.4	109.6	107.3	105.8	104.5	104.0	104.5	105.6	105.4	108.8	110.9	107.5	109.1	
Intercity and rural bus lines.....	42.1	42.7	42.7	42.5	43.0	43.9	44.7	44.1	39.5	42.3	41.7	41.1	42.4	42.0	
Motor freight transportation and storage.....	994.4	999.5	1,030.8	1,045.4	1,045.5	1,045.7	1,030.8	1,030.8	1,025.5	989.9	973.8	969.8	1,008.5	963.2	
Public warehousing.....	82.3	83.6	87.7	91.3	88.9	82.8	81.5	79.5	79.8	77.1	75.8	78.0	81.6	80.5	
Air transportation.....	277.5	274.1	269.3	266.1	264.5	261.6	201.7	215.6	259.9	254.2	250.8	246.6	248.1	229.7	
Air transportation, common carriers.....	248.4	245.1	240.4	237.4	236.2	233.6	174.1	187.7	232.1	227.0	223.8	220.0	220.5	205.8	
Pipeline transportation.....	18.1	18.2	18.3	18.4	18.5	18.9	19.4	19.4	19.3	18.7	18.6	18.7	18.8	19.5	
Other transportation.....	315.5	321.5	319.2	322.6	315.5	326.7	325.5	330.9	320.4	329.9	319.3	315.2	320.5	312.7	
Communication.....	949.6	946.2	943.6	942.8	937.3	938.8	949.0	944.9	928.7	911.4	906.6	899.4	923.8	880.4	
Telephone communication.....	796.3	793.4	790.6	790.4	784.9	786.5	796.3	792.2	777.7	767.6	757.7	751.4	773.2	735.2	
Telegraph communication.....	33.6	33.3	33.6	33.3	33.2	33.1	33.5	33.6	33.2	33.2	32.7	32.6	33.0	31.8	
Radio and television broadcasting.....	113.4	113.2	113.1	112.8	112.9	112.9	112.9	112.9	111.5	111.3	109.9	109.1	111.3	107.1	
Electric, gas, and sanitary services.....	632.8	632.8	632.9	632.0	633.2	641.4	652.7	652.4	643.6	627.7	627.1	624.7	634.6	625.3	
Electric companies and systems.....	257.9	257.9	257.4	257.4	257.6	260.3	264.6	263.9	261.0	254.8	254.6	253.4	257.6	253.4	
Gas companies and systems.....	155.1	155.2	155.9	155.9	156.1	158.6	161.7	162.0	159.6	154.6	154.9	154.8	157.0	155.0	
Combined utility systems.....	177.0	176.9	177.1	176.7	177.1	179.7	179.7	182.8	180.1	176.2	175.8	175.4	177.9	176.5	
Water, steam, and sanitary systems.....	42.8	42.8	42.5	41.8	42.4	42.8	43.6	43.7	42.9	42.1	41.8	41.1	42.2	40.5	

See footnotes at end of table.

TABLE A-9. Employees in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan. ²	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Wholesale and retail trade	13,289	13,188	13,322	14,241	13,599	13,285	13,253	13,224	13,225	13,239	13,061	13,015	12,826	13,220	12,683
Wholesale trade.....	3,496	3,493	3,509	3,554	3,533	3,521	3,498	3,521	3,511	3,473	3,400	3,386	3,374	3,459	3,317
Motor vehicles and automotive equipment.....	266.6	265.6	266.4	266.1	266.1	263.2	263.9	277.5	266.5	264.6	261.7	260.7	260.1	263.2	256.0
Drugs, chemicals, and allied products.....	209.0	209.9	211.9	212.2	210.5	208.9	210.6	207.8	207.8	204.2	203.2	202.8	202.8	207.1	198.2
Dry goods and apparel.....	152.8	152.6	151.9	152.7	151.2	150.5	150.1	148.6	148.3	146.2	145.4	145.8	145.8	148.2	141.0
Groceries and related products.....	500.2	506.4	525.4	523.8	529.5	515.1	517.4	532.1	530.2	506.4	499.0	498.4	498.4	515.3	509.2
Electrical goods.....	286.3	283.1	284.0	281.8	279.1	279.0	284.0	282.4	276.0	272.0	271.0	268.7	275.7	257.1	
Hardware, plumbing, and heating goods.....	157.4	157.8	158.7	158.9	159.4	158.4	160.1	159.3	158.2	155.8	155.6	155.1	157.4	151.0	151.0
Machinery, equipment, and supplies.....	636.7	642.6	640.3	636.3	633.3	632.7	637.8	635.5	625.5	614.2	611.8	606.0	622.6	579.3	
Miscellaneous wholesalers.....	1,191.4	1,190.9	1,205.4	1,198.6	1,192.8	1,187.9	1,194.5	1,188.1	1,174.9	1,154.2	1,152.4	1,147.8	1,147.8	1,173.5	1,124.8
Retail trade	9,793	9,695	9,813	10,687	10,066	9,864	9,755	9,703	9,714	9,766	9,661	9,629	9,452	9,761	9,366
General merchandise stores.....	1,885.8	1,990.4	2,539.3	2,160.8	2,009.0	1,938.9	1,892.3	1,885.5	1,907.2	1,890.9	1,888.0	1,846.5	1,875.0	1,875.1	1,875.1
Department stores.....	1,191.7	1,261.6	1,642.5	1,373.3	1,267.8	1,215.1	1,185.6	1,185.1	1,201.8	1,189.7	1,183.6	1,159.1	1,246.3	1,171.3	
Mail order houses.....	117.3	129.5	154.4	146.0	129.9	119.8	116.1	114.5	114.0	112.5	114.2	115.8	123.8	119.3	
Limited price variety stores.....	309.8	324.3	413.4	350.9	330.4	322.1	307.6	304.2	309.7	313.8	317.6	308.1	324.2	314.0	
Food stores	1,594.1	1,585.8	1,615.2	1,585.2	1,577.0	1,555.5	1,542.2	1,548.9	1,549.8	1,543.7	1,534.9	1,535.0	1,553.0	1,473.5	1,473.5
Grocery, meat, and vegetable stores.....	1,406.3	1,406.5	1,426.2	1,404.7	1,398.1	1,378.5	1,368.4	1,374.9	1,372.6	1,366.6	1,356.6	1,356.6	1,359.6	1,299.6	
Apparel and accessories stores.....	644.2	669.5	798.8	688.1	665.8	654.6	632.7	632.6	652.0	644.9	661.7	624.9	659.0	638.1	
Men's and boys' apparel stores.....	110.7	117.8	143.0	114.7	110.3	108.3	106.3	106.7	109.3	106.0	106.5	103.9	111.2	105.0	
Women's ready-to-wear stores.....	229.5	237.6	284.2	249.4	244.0	236.4	234.0	230.8	238.0	238.0	237.5	230.2	240.1	235.6	
Family clothing stores.....	105.0	110.2	136.7	109.4	103.5	102.6	97.9	100.4	102.2	98.3	98.4	96.6	103.6	102.4	
Shoe stores.....	125.0	129.1	148.3	133.7	129.8	131.3	123.3	124.1	127.8	127.9	143.6	121.1	129.0	123.9	
Furniture and appliance stores	432.8	432.7	442.8	438.0	431.6	427.1	426.7	426.4	425.3	421.2	420.4	420.7	427.2	411.2	411.2
Furniture and home furnishings.....	294.6	275.2	285.8	280.2	275.2	273.3	272.8	274.7	274.3	270.4	269.5	268.9	273.6	265.4	
Eating and drinking places.....	1,993.5	1,982.8	2,023.8	2,032.1	2,046.7	2,055.8	2,067.8	2,069.5	2,074.4	2,064.9	2,061.0	1,949.4	2,015.0	1,938.7	
Other retail trade	3,144.9	3,152.1	3,261.2	3,161.8	3,133.6	3,122.7	3,141.0	3,151.5	3,157.5	3,125.1	3,122.0	3,075.1	3,131.8	3,029.5	3,029.5
Building materials and hardware.....	516.6	519.1	536.8	537.6	544.5	549.6	563.0	568.5	568.8	550.4	538.3	547.8	547.8	541.8	
Auto dealers and service stations.....	1,478.2	1,486.6	1,499.5	1,488.1	1,477.5	1,477.6	1,485.4	1,490.6	1,479.6	1,463.0	1,454.3	1,445.0	1,470.8	1,425.5	
Motor vehicle dealers.....	749.8	752.0	754.9	752.5	747.3	745.3	747.5	751.5	749.3	745.1	746.4	746.6	747.9	726.1	
Other vehicle and accessory dealers.....	186.7	188.9	199.5	195.0	191.9	191.7	194.7	193.5	191.1	187.4	183.9	178.2	188.6	178.3	
Gasoline service stations.....	541.7	545.7	545.1	540.6	538.3	540.6	543.2	545.6	539.2	530.5	524.0	520.2	534.3	521.1	
Miscellaneous retail stores.....	1,150.1	1,146.4	1,224.9	1,136.1	1,111.6	1,095.5	1,092.6	1,092.4	1,109.1	1,107.3	1,117.3	1,091.8	1,113.1	1,062.2	
Drug stores.....	440.6	443.0	462.4	430.4	425.6	418.4	415.1	414.3	416.5	413.1	413.9	410.0	420.2	401.0	
Farm and garden supply stores.....	105.8	102.9	102.7	101.7	102.5	100.5	100.7	101.1	106.5	111.3	113.9	106.8	103.9	97.4	
Fuel and ice dealers.....	116.8	117.7	116.9	113.5	109.7	104.3	102.9	102.9	104.0	105.6	109.2	114.2	110.0	108.9	
Finance, insurance, and real estate	3,114	3,095	3,105	3,098	3,099	3,109	3,146	3,148	3,112	3,070	3,043	3,086	3,019	3,019	3,019
Banking.....	840.4	835.0	835.1	832.3	830.1	830.6	839.2	835.4	821.6	807.7	805.6	803.8	820.1	790.9	
Credit agencies other than banks.....	335.8	334.7	334.8	333.2	333.0	333.6	337.5	337.3	334.4	332.5	332.6	333.1	333.9	326.8	
Savings and loan associations.....	94.1	95.0	93.8	93.5	94.2	93.8	96.9	96.9	95.8	96.0	97.2	97.2	95.8	97.1	
Personal credit institutions.....	184.2	182.5	183.3	182.2	181.2	181.9	182.9	181.3	180.0	178.1	177.4	177.5	179.9	171.8	
Security dealers and exchanges.....	142.6	140.8	141.2	141.2	141.6	141.7	144.0	144.7	142.3	139.4	138.1	136.9	139.7	128.9	
Insurance carriers	923.3	914.4	914.3	909.1	907.3	908.3	915.1	911.2	899.4	891.4	890.9	890.1	901.2	890.8	890.8
Life insurance.....	483.5	481.1	481.8	479.2	479.6	480.8	484.0	482.5	476.1	474.1	475.3	474.9	478.4	478.7	
Accident and health insurance.....	70.8	68.1	67.0	66.0	65.0	63.7	64.0	62.7	60.4	58.2	57.2	56.8	56.1	54.5	
Fire, marine, and casualty insurance.....	331.6	327.6	327.0	325.8	324.0	324.7	327.1	325.2	322.0	318.3	317.7	317.5	321.8	315.7	
Insurance agents, brokers, and services.....	243.6	240.8	243.4	242.2	240.7	241.4	244.2	243.7	242.2	239.2	238.6	237.6	240.3	233.1	
Real estate.....	547.3	547.6	554.6	558.0	565.1	571.6	583.4	593.4	590.2	577.9	568.2	569.5	569.1	569.0	
Operative builders.....	34.5	34.4	35.5	36.7	39.1	40.1	43.2	44.2	45.5	45.8	45.9	45.0	42.3	46.9	
Other finance, insurance, and real estate.....	80.6	81.2	81.5	81.7	81.5	81.9	82.6	82.5	81.7	81.6	81.3	81.1	81.5	79.7	
Services and miscellaneous	9,831	9,746	9,672	9,733	9,739	9,751	9,707	9,772	9,782	9,702	9,572	9,465	9,331	9,582	9,098
Hotels and lodging places.....	614.2	605.1	609.5	620.8	645.1	687.9	789.5	789.5	702.7	661.7	640.4	617.7	665.1	653.8	
Hotels, tourist courts, and motels.....	558.9	549.9	552.2	562.4	583.0	612.2	650.9	653.1	624.4	594.9	579.4	561.5	589.9	578.8	
Personal services.....	1,002.7	1,001.8	1,008.3	1,013.8	1,015.1	1,008.1	1,013.7	1,016.8	1,014.7	1,001.6	995.3	988.2	1,003.5	982.2	
Laundries, cleaning and dyeing plants.....	541.9	543.3	548.5	552.2	555.6	552.7	561.1	565.6	565.2	553.5	548.1	542.3	552.0	546.5	
Miscellaneous business services.....	1,256.5	1,254.2	1,257.2	1,246.5	1,239.9	1,227.5	1,232.0	1,225.6	1,214.1	1,189.7	1,178.3	1,169.9	1,207.1	1,102.2	
Advertising.....	113.3	112.9	112.8	113.2	114.1	114.7	116.3	114.8	113.5	111.9	112.4	112.4	113.3	111.6	
Credit reporting and collecting agencies.....	68.1	67.9	68.9	68.9	68.6	67.7	68.2	68.7	68.5	67.9	67.4	67.3	68.0	65.6	
Motion pictures.....	172.3	175.5	183.4	185.0	187.3	190.7	199.8	202.1	192.7	180.9	179.8	173.6	185.4	183.3	
Motion picture filming and distributing.....	51.8	54.2	58.5	57.6	55.6	52.8	55.9	58.5	52.3	46.6	47.8	47.6	53.0	48.2	
Motion picture theaters and services.....	120.5	121.3	124.9	127.4	131.7	137.9	143.9	143.6	140.4	134.3	132.0	126.0	132.4	135.1	
Medical and other health services.....	2,368.0	2,336.9	2,315.6	2,304.3	2,286.5	2,268.7	2,266.3	2,260.1	2,232.7	2,197.4	2,192.2	2,178.0	2,234.5	2,087.8	
Hospitals.....	1,522.4	1,503.3	1,492.7	1,483.1	1,477.3	1,464.1	1,463.3	1,460.1	1,440.9	1,421.7	1,417.4	1,413.1	1,444.7	1,364.5	
Legal services.....															

TABLE A-9. Employees in nonagricultural establishments, by industry ¹—Continued

(In thousands)

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Government	11,493	11,419	11,311	11,442	11,285	11,139	10,885	10,507	10,557	10,906	10,834	10,795	10,735	10,850	10,091
Federal Government ⁴	2,673	2,652	2,643	2,769	2,641	2,612	2,589	2,641	2,637	2,592	2,513	2,496	2,460	2,565	2,378
Executive.....	2,619.7	2,609.3	2,609.3	2,736.4	2,608.2	2,579.3	2,556.4	2,608.0	2,604.2	2,559.8	2,481.5	2,461.5	2,428.8	2,533.3	2,346.7
Department of Defense.....	1,092.7	1,084.3	1,084.3	1,076.3	1,071.7	1,057.4	1,042.8	1,055.4	1,050.7	1,034.8	1,001.5	991.9	980.0	1,023.6	938.5
Post Office Department.....	689.4	697.2	697.2	837.8	706.3	689.6	682.0	689.4	683.1	673.6	660.2	652.8	639.5	680.9	614.2
Other agencies.....	837.6	827.8	827.8	822.3	830.2	832.3	831.6	863.2	870.4	851.4	819.8	816.8	800.3	828.7	793.9
Legislative.....	26.4	27.0	27.0	26.0	26.4	26.2	26.5	27.1	27.0	26.6	25.4	25.4	25.4	26.0	25.4
Judicial.....	6.2	6.2	6.2	6.1	6.2	6.1	6.1	5.9	5.9	5.9	6.0	6.0	6.0	6.0	5.9
State and local government ⁵	8,820	8,767	8,668	8,673	8,644	8,527	8,296	7,866	7,920	8,314	8,321	8,302	8,275	8,284	7,713
State government.....	2,283.3	2,257.3	2,257.3	2,249.7	2,247.4	2,219.0	2,147.6	2,091.4	2,112.4	2,156.7	2,139.1	2,132.2	2,129.9	2,152.0	1,985.9
State education.....	886.0	867.5	867.5	867.6	869.3	843.2	736.4	656.2	679.6	756.7	786.7	787.4	786.6	774.9	679.1
Other state government.....	1,397.3	1,389.8	1,389.8	1,382.1	1,378.1	1,375.8	1,411.2	1,435.2	1,432.8	1,400.0	1,352.4	1,344.8	1,343.3	1,377.1	1,316.8
Local government.....	6,483.5	6,410.7	6,410.7	6,423.4	6,396.2	6,308.4	6,148.7	5,774.9	5,807.4	6,156.8	6,182.0	6,170.0	6,144.7	6,132.4	5,717.4
Local education.....	3,737.1	3,679.8	3,679.8	3,690.5	3,673.0	3,599.4	3,391.2	2,926.1	2,959.6	3,387.2	3,504.1	3,507.6	3,494.9	3,412.9	3,119.9
Other local government.....	2,746.4	2,730.9	2,730.9	2,732.9	2,723.2	2,709.0	2,757.5	2,848.8	2,847.8	2,769.6	2,677.9	2,662.4	2,649.8	2,719.6	2,597.7

¹ Beginning with the October 1966 issue, figures differ from those previously published. The industry series have been adjusted to March 1965 benchmarks (comprehensive counts of employment). For comparable back data, see *Employment and Earnings Statistics for the United States, 1909-66* (BLS Bulletin 1312-4). Statistics from April 1965 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

[In thousands]

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Mining	469	468	474	485	487	490	496	506	502	504	491	452	482	488	494
Metal mining.....	71.8	70.8	71.2	71.2	71.2	70.9	72.5	73.5	72.8	73.3	70.1	69.5	71.3	69.5	69.5
Iron ores.....	21.8	21.1	21.6	21.8	21.8	21.8	22.3	22.2	21.7	22.4	21.7	20.6	20.0	21.4	21.8
Copper ores.....	27.1	27.0	26.7	26.2	26.2	26.5	26.9	27.3	27.0	27.0	26.2	26.3	26.3	26.6	24.8
Coal mining.....	124.5	124.4	124.9	124.5	124.5	124.5	124.2	124.0	121.0	123.8	122.5	86.8	123.6	120.7	124.1
Bituminous.....	117.3	117.4	117.8	117.4	117.4	117.4	117.0	116.8	114.3	116.5	114.8	79.3	115.5	113.2	115.3
Crude petroleum and natural gas.....	181.8	188.1	192.4	190.6	191.3	191.3	193.9	201.9	202.1	201.7	195.9	195.6	196.5	196.5	202.6
Crude petroleum and natural gas fields.....	80.4	80.7	81.2	81.4	82.0	84.4	84.4	87.0	87.3	86.9	84.2	84.3	84.7	84.5	88.4
Oil and gas field services.....	101.4	107.4	111.2	109.2	109.3	109.5	114.9	114.8	114.8	114.8	111.7	111.3	111.8	112.0	114.2
Quarrying and nonmetallic mining.....	89.7	90.2	96.5	100.7	103.0	105.2	106.4	106.5	105.4	105.4	101.7	99.3	92.0	99.7	98.0
Crushed and broken stone.....	31.0	31.0	34.1	35.5	36.7	37.5	38.0	37.9	37.5	37.5	36.0	35.0	31.5	35.1	34.9
Contract construction	2,399	2,351	2,431	2,631	2,812	2,950	3,026	3,141	3,122	3,026	2,788	2,673	2,499	2,789	2,707
General building contractors.....	795.0	825.3	890.6	930.7	959.3	977.3	1,017.3	1,004.4	975.0	891.6	869.7	823.9	811.0	856.2	856.2
Heavy construction.....	413.3	424.7	485.3	584.1	648.4	667.9	689.9	690.5	665.7	590.7	529.7	433.1	566.2	555.8	555.8
Highway and street construction.....	174.4	178.6	223.4	299.0	348.8	364.3	374.9	374.4	360.2	308.6	259.6	189.0	287.7	288.5	288.5
Other heavy construction.....	238.9	246.1	261.9	285.1	299.6	303.6	315.0	316.1	305.5	282.1	270.1	244.1	278.5	267.3	267.3
Special trade contractors.....	1,142.3	1,181.3	1,255.3	1,297.3	1,342.2	1,380.7	1,433.8	1,427.3	1,385.5	1,305.5	1,273.3	1,241.6	1,311.8	1,294.5	1,294.5
Plumbing, heating, and air conditioning.....	287.1	292.1	297.2	302.2	306.1	309.6	312.1	312.9	306.0	296.0	294.4	291.6	300.6	297.3	297.3
Painting, paperhanging, and decorating.....	91.6	92.9	109.5	119.9	131.9	137.5	145.3	141.8	133.3	122.6	116.0	109.1	122.9	127.6	127.6
Electrical work.....	190.2	194.1	197.2	199.8	201.2	206.4	211.1	206.4	200.2	191.1	188.5	184.1	195.8	186.0	186.0
Masonry, plastering, stone and tile work.....	168.7	172.7	185.8	194.4	208.2	217.4	234.3	231.8	227.7	215.4	209.9	209.6	209.4	216.5	216.5
Roofing and sheet metal work.....	77.0	83.4	91.3	94.9	96.1	95.5	97.1	96.2	93.9	86.6	85.9	83.6	90.1	89.5	89.5
Manufacturing	14,141	14,171	14,233	14,440	14,548	14,581	14,582	14,417	14,159	14,351	14,074	13,969	13,878	14,199	13,413
Durable goods.....	8,310	8,327	8,372	8,482	8,527	8,530	8,501	8,304	8,277	8,419	8,277	8,207	8,113	8,301	7,702
Nondurable goods.....	5,831	5,844	5,861	5,958	6,021	6,051	6,081	6,113	5,882	5,932	5,797	5,762	5,765	5,898	5,711
<i>Durable goods</i>															
Ordnance and accessories.....	142.4	141.2	138.4	135.1	132.6	129.3	126.6	122.8	120.2	119.1	117.0	113.4	111.9	120.4	96.0
Ammunition, except for small arms.....	93.2	92.5	90.2	87.0	86.0	83.9	82.6	79.4	77.2	76.7	76.1	75.2	74.2	78.5	63.6
Sighting and fire control equipment.....	42.5	42.2	41.9	41.7	40.3	39.1	37.8	37.2	36.8	36.4	35.1	32.5	32.2	35.9	27.4
Other ordnance and accessories.....															
Lumber and wood products, except furniture.....	511.0	506.5	509.4	516.5	532.1	541.0	552.6	570.0	568.5	573.9	548.1	539.1	532.2	543.8	535.4
Sawmills and planing mills.....	213.9	212.7	212.7	214.6	219.4	222.6	228.9	235.2	234.6	237.0	229.5	229.4	227.1	227.2	229.3
Millwork, plywood, and related products.....	123.4	121.7	122.8	126.2	129.6	134.0	138.1	144.3	145.6	146.4	140.9	139.5	137.1	137.9	137.0
Wooden containers.....	31.8	31.8	32.1	31.7	31.4	31.4	31.5	32.8	32.2	33.3	32.6	31.8	30.9	31.7	31.0
Miscellaneous wood products.....	64.6	64.6	64.2	65.1	66.0	65.6	66.0	66.9	66.2	66.9	65.6	65.2	64.6	65.5	62.6
Furniture and fixtures.....	373.0	375.0	377.0	386.4	389.5	387.9	386.9	387.6	374.4	380.5	373.2	370.6	370.6	378.4	356.2
Household furniture.....	274.3	275.8	276.8	284.5	286.4	286.7	286.6	278.4	282.5	278.9	278.9	277.5	277.7	281.5	265.0
Office furniture.....	27.6	27.5	27.6	27.5	27.5	26.8	26.5	26.2	26.3	24.9	25.1	23.5	24.6	25.6	23.1
Partitions, office and store fixtures.....	34.6	35.3	35.5	35.4	35.3	35.1	35.3	34.4	35.3	33.2	33.0	32.8	34.2	32.2	32.2
Other furniture and fixtures.....	36.6	37.0	37.4	38.8	39.2	39.3	38.9	38.5	35.3	37.8	36.0	35.6	35.5	37.1	35.9
Stone, clay, and glass products.....	487.3	480.7	486.2	499.6	512.2	517.4	525.7	533.2	532.7	529.7	521.3	515.6	502.1	514.8	503.9
Flat glass.....	25.0	25.6	26.0	26.0	26.0	25.6	25.3	25.2	25.4	25.9	26.4	26.5	26.2	25.9	26.1
Glass and glassware, pressed or blown.....	105.2	105.1	106.1	107.1	108.6	108.2	110.1	110.2	109.4	109.9	107.7	105.0	103.4	106.9	100.6
Cement, hydraulic.....	27.1	25.8	26.5	27.5	29.0	29.5	29.9	30.9	30.9	30.3	29.2	28.6	27.2	29.0	29.4
Structural clay products.....	51.9	50.3	50.9	53.9	55.8	57.0	58.9	60.6	61.9	61.6	60.2	59.1	57.2	58.4	58.7
Pottery and related products.....	35.9	35.6	36.4	37.2	37.4	37.6	37.0	35.4	37.2	36.9	37.3	37.9	37.0	37.0	37.0
Concrete, gypsum, and plaster products.....	125.2	122.0	124.5	130.0	135.5	139.2	142.8	146.1	146.9	145.6	141.0	138.6	131.7	137.9	137.2
Other stone and mineral products.....	97.2	97.1	97.1	98.7	99.9	100.6	101.2	103.5	103.4	99.8	99.8	100.3	98.4	100.0	97.0
Primary metal industries.....	1,063.6	1,068.2	1,077.1	1,076.8	1,079.6	1,083.4	1,095.0	1,100.2	1,102.2	1,108.3	1,085.3	1,080.0	1,063.6	1,080.5	1,057.8
Blast furnace and basic steel products.....	512.3	512.2	515.7	515.8	521.7	527.6	537.2	545.8	553.6	551.8	537.1	530.9	517.8	528.7	538.0
Iron and steel foundries.....	197.4	199.7	203.7	202.0	201.9	201.7	202.0	202.8	201.4	204.5	201.3	202.1	199.9	201.7	193.9
Nonferrous smelting and refining.....	61.3	62.2	62.0	61.6	60.8	60.1	60.3	60.2	61.3	60.7	59.4	58.9	58.7	60.0	57.3
Nonferrous rolling, drawing, and extruding.....	161.8	162.3	163.2	164.4	164.0	164.1	164.4	162.0	158.7	160.4	159.5	159.6	159.1	160.9	149.4
Nonferrous foundries.....	73.7	74.5	74.8	75.3	74.1	73.7	75.1	74.4	72.0	74.4	72.7	73.1	72.6	73.4	67.5
Miscellaneous primary metal industries.....	57.1	57.3	57.7	57.7	57.1	56.2	56.0	55.0	55.2	56.5	55.3	55.4	55.5	55.8	51.6
Fabricated metal products.....	1,048.4	1,055.5	1,063.4	1,078.7	1,084.0	1,077.3	1,071.1	1,057.9	1,035.2	1,060.9	1,045.7	1,041.6	1,031.5	1,052.4	982.4
Metal cans.....	53.4	52.5	51.7	52.2	52.3	52.6	54.6	56.2	56.2	55.4	54.1	52.7	51.9	53.3	50.7
Cutlery, hand tools, and general hardware.....	126.7	129.6	130.9	132.6	132.5	132.0	131.1	126.8	121.1	127.7	127.2	130.1	129.5	128.9	122.8
Heating equipment and plumbing fixtures.....	58.8	57.4	58.0	59.2	59.9	60.3	60.2	60.3	58.6	60.2	60.9	60.1	60.7	60.0	59.1
Fabricated structural metal products.....	282.4	284.1	285.7	291.0	293.7	295.2	299.0	301.1	300.5	297.7	287.7	283.6	278.6	290.5	271.3
Screw machine products, bolts, etc.....	91.8	92.3	92.1	91.8	90.2	88.2	86.8	85.5	84.7	86.0	84.2	83.9	83.3	85.7	77.4
Metal stampings.....	194.6	197.7	201.8	206.5	207.5	204.6	197.9	186.8	176.8	190.7	192.7	193.2	193.8	194.6	180.8
Coating, engraving, and allied services.....	69.1	69.5	69.4	70.8	72.1	72.0	70.7	71.0	68.5	71.9	69.4	9.1	69.4	70.0	64.4
Miscellaneous fabricated wire products.....	56.0	56.3	56.6	56.9	57.0	56.0	55.3	55.3	55.1	55.0	53.6	53.6	53.5	54.7	50.4
Miscellaneous fabricated metal products.....	115.6	116.1	117.2	117.7	118.8	116.4	115.4	114.9	113.7	116.3	115.9	115.3	110.8	114.6	105.5

See footnotes at end of table.

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	1,366.8	1,362.9	1,362.9	1,356.9	1,333.3	1,333.4	1,332.3	1,325.3	1,323.7	1,325.7	1,308.9	1,298.9	1,289.3	1,314.0	1,208.3
Engines and turbines.....	70.2	69.4	69.9	64.0	58.2	67.9	69.0	68.5	67.5	65.3	66.9	66.0	65.4	65.7	61.4
Farm machinery and equipment.....	115.7	113.7	111.8	111.8	107.7	105.9	106.0	104.5	106.7	110.1	109.6	110.1	110.3	108.0	98.6
Construction and related machinery.....	187.0	187.4	188.1	189.7	189.3	189.7	191.4	190.7	192.9	192.5	189.2	186.9	184.4	188.2	175.1
Metalworking machinery and equipment.....	265.3	264.2	263.1	262.0	258.0	255.7	255.6	253.0	252.7	253.8	250.2	249.0	247.0	252.0	229.6
Special industry machinery.....	140.8	141.0	141.2	141.5	140.8	141.0	141.2	140.7	139.9	140.5	138.1	136.9	137.8	139.5	132.9
General industrial machinery.....	188.4	189.5	193.4	193.2	191.1	189.4	188.3	186.8	187.2	188.2	185.5	184.3	185.0	187.0	174.5
Office, computing, and accounting machines.....	135.9	135.5	135.1	134.2	132.3	131.0	130.2	129.1	127.1	125.6	124.6	123.0	121.8	126.7	111.7
Service industry machines.....	83.7	83.2	83.3	84.3	84.3	82.4	81.2	81.1	83.7	82.1	83.2	81.9	80.6	77.7	78.5
Miscellaneous machinery.....	178.3	177.0	175.1	176.2	173.5	171.6	169.5	168.3	167.6	166.5	162.9	162.1	159.9	166.0	146.0
Electrical equipment and supplies.....	1,330.3	1,341.2	1,360.7	1,373.6	1,380.1	1,385.3	1,365.6	1,345.4	1,302.2	1,322.4	1,291.1	1,281.0	1,256.3	1,316.0	1,139.8
Electric distribution equipment.....	137.9	137.4	137.4	137.5	136.2	138.3	137.2	136.8	134.2	133.7	128.6	127.5	126.1	132.1	116.0
Industrial electrical apparatus.....	158.2	160.9	161.9	156.6	154.6	157.9	156.0	157.8	155.0	154.8	147.5	149.3	147.7	152.2	134.7
Household appliances.....	140.3	143.4	146.6	153.5	150.0	153.5	148.6	144.4	134.1	143.0	145.6	143.9	131.1	143.8	130.6
Electric lighting and wiring equipment.....	146.3	146.6	150.8	151.8	151.2	153.5	152.6	150.7	148.3	152.1	149.7	148.1	145.9	149.2	134.0
Radio and TV receiving sets.....	142.3	144.4	149.2	154.8	158.1	154.2	148.8	141.2	128.6	128.8	121.6	120.5	120.8	135.1	107.1
Communication equipment.....	238.5	238.2	235.4	234.4	244.5	241.9	240.3	236.8	233.0	234.9	232.3	229.7	227.5	233.6	209.0
Electronic components and accessories.....	282.2	284.2	291.9	295.7	297.0	298.0	295.8	295.9	289.3	293.5	284.2	281.5	277.5	287.3	231.1
Miscellaneous electrical equipment and supplies.....	84.6	86.1	87.5	89.3	88.5	88.0	86.3	81.8	79.7	81.6	81.6	80.5	79.7	82.8	77.3
Transportation equipment.....	1,366.3	1,378.7	1,382.0	1,425.1	1,424.1	1,413.6	1,392.9	1,215.4	1,299.2	1,362.9	1,364.9	1,354.9	1,352.0	1,354.9	1,238.1
Motor vehicles and equipment.....	647.5	660.4	668.6	702.4	708.1	701.5	692.0	519.1	608.9	685.6	691.5	686.5	690.4	671.1	659.5
Aircraft and parts.....	494.4	488.6	488.1	492.4	486.4	475.9	468.0	458.2	451.7	438.1	434.7	429.8	422.2	448.0	357.0
Ship and boat building and repairing.....	135.6	139.5	139.6	139.7	135.6	141.5	137.8	142.5	144.1	141.5	142.8	143.8	148.9	142.6	133.0
Railroad equipment.....	46.4	47.3	48.9	48.9	48.8	48.0	48.3	47.4	46.1	47.2	47.1	46.7	45.5	47.0	43.6
Other transportation equipment.....	43.8	38.4	41.7	41.7	45.2	46.7	46.8	48.2	48.4	50.5	48.8	48.1	45.0	46.3	45.0
Instruments and related products.....	287.6	285.6	285.5	285.8	283.7	282.4	279.8	279.4	274.9	277.4	271.2	267.9	267.0	274.5	247.3
Engineering and scientific instruments.....	41.0	40.8	40.5	40.2	40.0	39.0	38.9	38.1	38.3	37.6	37.3	37.7	37.7	38.5	35.9
Mechanical measuring and control devices.....	69.4	69.1	70.3	70.8	70.9	70.6	70.6	70.4	70.0	70.3	68.1	67.8	67.1	69.1	64.5
Optical and ophthalmic goods.....	36.8	36.4	36.4	36.1	36.5	35.7	35.6	35.1	34.0	35.0	35.4	35.3	35.0	35.2	32.6
Ophthalmic goods.....	25.8	25.8	25.6	25.6	26.0	25.6	25.4	25.5	24.8	25.6	25.7	25.7	25.5	25.4	23.6
Surgical, medical, and dental equipment.....	48.6	47.4	47.0	47.2	47.0	46.7	46.2	46.4	45.6	45.4	44.6	43.9	43.8	45.2	39.7
Photographic equipment and supplies.....	57.5	57.5	58.3	58.3	58.3	57.4	56.8	57.6	57.3	57.7	55.7	55.0	54.2	56.2	49.8
Watches and clocks.....	34.2	33.5	32.9	32.9	30.8	32.0	31.6	31.0	29.9	30.7	29.8	28.6	29.2	30.3	25.8
Miscellaneous manufacturing industries.....	332.8	331.6	329.7	347.8	376.2	378.5	372.0	366.7	343.6	358.3	350.6	343.6	336.4	351.6	336.9
Jewelry, silverware, and plated ware.....	39.0	39.1	38.7	39.7	39.8	38.8	37.9	38.0	34.9	38.1	38.1	38.0	37.7	37.8	35.8
Toys, amusement, and sporting goods.....	83.2	81.9	81.9	94.3	117.3	120.2	117.3	111.5	101.2	105.3	101.5	95.3	89.6	101.6	98.4
Pens, pencils, office and art materials.....	26.5	26.2	26.6	26.7	26.7	26.7	26.9	26.9	26.7	26.8	26.1	26.2	26.1	26.3	24.9
Costume jewelry, buttons, and notions.....	46.3	45.8	47.7	49.9	49.6	49.7	48.5	49.6	45.4	48.5	47.7	47.2	47.0	47.6	46.1
Other manufacturing industries.....	134.9	136.5	137.1	139.5	142.8	143.1	141.4	140.7	135.4	139.6	137.2	136.9	136.0	138.3	131.6
Musical instruments and parts.....	22.3	22.2	23.1	23.1	22.8	22.9	22.6	22.6	22.2	22.0	22.1	22.0	22.2	22.4	20.5
<i>Nondurable goods</i>															
Food and kindred products.....	1,103.0	1,097.1	1,117.0	1,166.4	1,209.0	1,243.9	1,283.8	1,291.0	1,200.4	1,151.8	1,093.2	1,086.4	1,087.1	1,166.3	1,155.1
Meat products.....	252.6	253.7	256.6	264.0	265.5	265.6	262.9	263.5	261.1	254.9	246.7	243.0	243.5	255.1	251.8
Dairy products.....	122.0	120.5	120.8	122.0	122.0	123.8	127.2	133.4	135.6	133.7	128.3	126.6	125.0	127.0	131.0
Canned and preserved food, except meats.....	186.1	192.0	211.8	242.7	280.1	335.8	336.2	260.9	213.7	186.0	189.1	181.9	234.0	220.1	
Grain mill products.....	86.1	85.4	86.7	86.8	85.3	87.9	88.8	90.3	90.5	89.7	85.3	83.5	84.9	86.9	88.2
Bakery products.....	163.6	163.4	162.8	164.2	166.1	164.0	164.6	167.3	157.1	166.6	161.2	160.7	161.7	163.0	165.8
Sugar.....	26.1	32.7	38.4	44.6	41.7	26.6	23.5	23.3	22.9	23.8	24.1	25.2	29.7	29.4	
Confectionery and related products.....	59.2	60.7	62.0	69.1	69.8	66.9	64.5	62.1	56.1	57.7	56.7	56.2	62.0	62.1	61.9
Beverages.....	113.9	110.9	112.3	116.3	118.8	120.6	121.7	124.2	126.6	122.7	116.2	113.7	111.4	117.1	113.3
Miscellaneous food and kindred products.....	89.5	90.3	91.1	93.8	94.2	93.3	91.7	90.5	89.8	89.9	89.0	89.5	91.5	91.5	93.4
Tobacco manufactures.....	64.9	69.3	76.0	79.5	79.1	82.2	82.1	75.5	61.7	62.6	61.7	63.6	66.2	71.3	74.6
Cigarettes.....	32.7	32.8	32.8	32.7	32.7	32.4	32.7	32.8	32.5	32.2	31.6	31.5	31.3	32.1	32.1
Cigars.....	20.6	20.5	20.8	20.8	20.8	20.9	20.6	20.4	19.5	21.0	21.0	21.0	20.8	20.7	22.6
Textile mill products.....	830.8	829.6	835.0	845.0	851.4	854.0	855.5	862.5	843.7	861.6	849.7	845.6	841.7	848.0	823.1
Cotton broad woven fabrics.....	218.0	218.0	220.5	221.4	220.9	219.6	218.7	219.4	219.3	220.0	216.8	215.8	215.7	218.1	210.5
Silk and synthetic broad woven fabrics.....	84.0	84.9	85.7	86.5	86.4	86.5	86.9	87.4	86.3	86.8	85.5	85.5	85.6	86.1	82.9
Weaving and finishing broad woolsens.....	37.3	37.3	37.0	36.5	36.4	36.9	38.2	39.3	39.1	39.9	39.6	39.3	39.4	38.5	38.8
Narrow fabrics and smallwares.....	28.7	28.6	29.0	29.1	29.0	28.8	28.5	28.3	27.1	28.3	28.0	27.9	27.6	28.1	26.2
Knitting.....	199.7	195.9	195.3	201.4	208.9	212.8	214.0	217.2	209.5	217.3	213.7	211.4	207.3	209.7	205.8
Finishing textiles, except wool and knit.....	63.9	63.9	64.2	65.0	64.4	63.8	63.9	64.4	63.9	65.0	64.4	64.3	63.9	64.2	64.5
Floor covering.....	34.5	35.0	35.7	35.7	35.7	35.7	35.3	34.9	32.2	33.6	33.7	33.8	34.0	34.5	33.7
Yarn and thread.....	104.6	105.1	106.4	107.0	107.1	107.6	108.0	109.6	106.1	108.5	106.5	105.7	105.7	106.9	101.0
Miscellaneous textile goods.....	60.8	61.4	61.9	62.4	62.6	62.3	62.0	62.0	60.0	62.2	61.5	61.9	62.5	62.0	59.7

See footnotes at end of table.

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

[In thousands]

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,234.8	1,248.1	1,233.3	1,244.6	1,260.5	1,263.4	1,257.3	1,264.7	1,198.5	1,257.9	1,241.6	1,225.6	1,246.1	1,240.0	1,205.1
Men's and boys' suits and coats.....	106.0	107.5	107.8	108.4	107.6	107.1	107.9	107.7	102.7	110.7	109.3	107.5	108.3	107.7	106.4
Men's and boys' furnishings.....	325.9	327.9	329.2	330.0	331.7	333.4	334.9	337.3	335.0	337.7	333.4	330.4	329.5	331.1	318.2
Women's, misses', and juniors' outerwear.....	388.2	392.3	380.2	379.1	383.8	385.2	383.3	389.0	368.6	385.3	383.1	374.2	390.0	381.0	375.1
Women's and children's undergarments.....	113.1	113.3	111.9	114.4	116.9	116.5	115.1	114.5	106.1	112.4	110.6	110.5	110.2	111.7	106.8
Hats, caps, and millinery.....	69.8	72.8	71.3	70.2	71.7	71.6	71.5	73.5	72.7	74.9	72.2	70.0	72.7	71.9	70.2
Fur goods and miscellaneous apparel.....	66.3	64.7	68.6	72.0	73.0	73.0	71.4	71.7	66.5	69.4	67.5	67.7	66.7	68.2	65.9
Miscellaneous fabricated textile products.....	140.1	141.6	142.1	148.5	152.5	151.5	147.9	145.0	132.9	143.4	143.6	142.3	141.2	143.6	136.7
Paper and allied products.....	526.2	526.0	526.4	532.1	533.5	528.7	526.5	533.5	527.8	529.8	515.0	514.0	509.6	521.9	498.5
Paper and pulp.....	172.8	172.7	172.0	173.5	173.4	172.0	173.2	176.5	178.0	177.0	171.5	170.8	169.7	172.8	169.1
Paperboard.....	55.6	55.6	55.7	55.4	55.3	54.6	54.9	55.2	54.9	54.9	53.7	53.7	53.3	54.4	53.4
Converted paper and paperboard products.....	127.9	128.2	127.7	129.1	129.5	128.8	127.3	128.8	125.7	126.5	122.8	123.5	121.9	125.3	116.6
Paperboard containers and boxes.....	169.9	169.5	171.0	174.1	175.3	173.3	171.1	172.0	169.2	171.4	167.0	166.0	164.7	169.4	159.3
Printing, publishing, and allied industries.....	674.2	670.2	665.8	670.9	666.2	664.0	661.4	657.8	653.2	653.0	645.6	645.2	640.5	652.4	621.8
Newspaper publishing and printing.....	181.2	180.4	179.4	182.9	181.7	181.3	181.2	177.8	178.0	178.2	177.8	178.7	175.3	178.9	175.6
Periodical publishing and printing.....	26.3	26.1	26.3	26.1	25.9	25.9	25.8	25.7	25.2	25.4	25.5	25.7	26.2	25.8	25.4
Books.....	58.9	57.3	56.3	56.1	54.7	54.7	54.7	56.5	55.9	55.3	54.6	54.4	54.5	54.8	49.9
Commercial printing.....	264.8	262.8	262.3	263.3	261.7	261.4	259.6	256.5	254.8	256.2	254.1	253.0	252.8	255.9	242.8
Bookbinding and related industries.....	47.0	46.5	46.1	46.5	46.5	46.3	47.0	48.3	46.9	46.3	44.0	44.2	43.8	45.4	41.8
Other publishing and printing industries.....	94.5	95.3	94.6	95.6	95.2	94.4	93.1	93.1	92.4	91.6	89.6	89.2	87.9	91.6	86.3
Chemicals and allied products.....	580.3	577.9	576.6	576.4	576.4	575.2	576.6	583.5	577.8	579.8	570.4	567.7	560.6	570.5	545.3
Industrial chemicals.....	172.2	172.0	172.0	171.2	170.9	168.8	171.4	172.9	171.8	171.7	168.2	168.1	167.7	166.4	166.4
Plastics materials and synthetics.....	131.5	135.2	136.7	138.6	138.9	138.8	139.9	142.1	141.2	140.5	137.2	137.0	136.1	139.4	131.3
Drugs.....	69.1	68.4	68.9	68.3	67.9	67.3	67.3	69.2	68.7	68.0	65.6	65.1	65.1	66.8	61.7
Soap, cleaners, and toilet goods.....	65.1	64.8	65.2	67.1	68.0	69.6	68.7	69.6	66.3	67.5	65.6	61.4	60.9	65.7	64.4
Paints, varnishes, and allied products.....	36.8	36.3	36.3	36.4	36.7	36.9	37.4	39.0	38.7	38.5	37.2	36.7	36.5	37.2	36.9
Agricultural chemicals.....	42.7	38.2	35.4	33.7	33.1	33.6	31.8	31.6	31.5	35.7	40.7	44.5	40.2	35.4	34.6
Other chemical products.....	62.9	63.0	62.1	61.1	60.9	60.2	60.1	60.1	59.6	57.9	55.9	54.9	54.1	57.3	50.0
Petroleum refining and related industries.....	110.9	111.0	111.0	112.9	114.2	114.7	116.2	118.2	118.2	117.0	113.7	111.9	110.3	113.9	112.4
Petroleum refining.....	88.7	88.7	88.6	89.3	89.2	88.8	89.3	90.4	90.3	89.6	87.9	87.6	87.4	88.7	88.3
Other petroleum and coal products.....	22.2	22.3	22.4	23.6	25.0	25.9	26.9	27.8	27.9	27.4	25.8	24.3	22.9	25.2	24.1
Rubber and miscellaneous plastic products.....	406.1	410.0	415.5	420.0	419.1	414.7	409.2	406.1	395.1	400.5	393.4	390.8	387.6	400.5	366.6
Tires and inner tubes.....	77.9	77.8	78.1	78.5	78.3	77.4	77.2	77.4	77.3	76.6	75.5	74.2	74.0	76.3	72.7
Other rubber products.....	141.9	145.3	149.1	149.0	147.2	146.0	145.0	143.0	140.0	143.0	142.4	141.0	141.5	143.5	136.4
Miscellaneous plastic products.....	186.3	186.9	188.3	192.5	193.6	191.3	187.0	185.7	177.8	180.7	175.5	175.6	172.1	180.8	157.5
Leather and leather products.....	300.0	304.5	304.7	310.2	312.0	310.3	312.4	319.9	306.0	317.9	312.4	310.7	315.1	312.9	308.3
Leather tanning and finishing.....	26.4	26.7	26.9	27.4	27.1	26.9	27.2	27.9	27.2	27.8	27.5	27.5	27.8	27.6	27.5
Footwear, except rubber.....	199.6	203.7	204.3	208.0	207.4	206.3	208.8	214.9	207.8	213.7	210.3	208.9	212.6	210.3	207.8
Other leather products.....	74.0	74.1	73.5	74.8	77.5	77.1	76.4	77.1	71.0	76.4	74.6	74.3	74.7	75.0	73.0
Handbags and personal leather goods.....	31.3	31.3	30.9	31.4	33.2	33.1	32.2	32.5	29.0	31.5	29.9	30.3	31.6	31.3	30.7
Transportation and public utilities:															
Local and interurban passenger transit:															
Local and suburban transportation.....															
Intercity and rural bus lines.....	38.2	39.1	39.1	39.0	39.0	39.4	40.4	41.2	40.6	36.3	38.7	38.0	37.5	38.8	38.7
Motor freight transportation and storage.....	900.6	905.9	938.0	953.7	955.1	956.0	942.0	942.4	935.7	901.5	886.3	882.5	919.4	878.2	
Public warehousing.....	71.6	73.1	77.2	80.8	78.5	72.8	71.6	69.7	69.9	67.2	66.1	68.1	71.5	70.7	
Pipeline transportation.....	15.1	15.1	15.2	15.3	15.4	15.4	16.3	16.3	16.3	16.3	15.6	15.6	15.7	16.3	
Communication.....	750.5	746.9	746.2	745.6	741.1	742.9	754.7	750.4	735.0	720.2	716.4	710.6	730.9	698.1	
Telephone communication.....	634.0	631.1	630.0	629.5	624.8	626.9	634.0	619.9	606.7	634.0	619.0	608.4	616.4	587.2	
Telegraph communication ³	22.9	22.8	23.0	23.0	23.1	23.0	23.1	23.1	22.8	22.7	22.5	22.4	22.8	22.2	
Radio and television broadcasting.....	91.4	90.9	91.1	91.0	91.1	90.9	91.3	91.2	90.2	88.7	88.8	87.7	89.7	86.8	
Electric, gas, and sanitary services.....	545.7	546.1	546.8	545.9	547.5	556.7	567.5	567.1	559.7	545.1	544.7	542.4	550.5	544.0	
Electric companies and systems.....	219.2	219.3	219.0	219.0	219.3	222.0	226.1	225.3	222.5	216.6	216.3	215.1	219.1	214.8	
Gas companies and systems.....	133.5	133.5	134.2	134.1	134.4	137.1	140.2	140.4	138.5	133.7	134.0	134.0	135.8	135.7	
Combined utility systems.....	155.8	156.0	156.5	156.3	156.8	160.0	162.9	163.1	161.0	157.9	157.7	157.3	158.6	158.1	
Water, steam, and sanitary systems.....	37.2	37.3	37.1	36.5	37.0	37.6	38.3	38.3	37.7	36.9	36.5	36.0	37.0	35.3	
Wholesale and retail trade:															
Wholesale trade.....	11,815	11,718	11,858	12,767	12,139	11,936	11,802	11,787	11,798	11,815	11,643	11,595	11,419	11,789	11,326
Motor vehicles and automotive equipment.....	2,947	2,947	2,961	3,009	2,992	2,982	2,960	2,984	2,977	2,945	2,875	2,864	2,855	2,929	2,818
Drugs, chemicals, and allied products.....	223.7	222.8	223.8	223.5	220.3	221.1	223.7	223.0	221.8	221.8	219.7	218.6	218.0	220.8	214.9
Dry goods and apparel.....	172.7	173.4	175.6	176.1	174.4	172.6	174.1	172.7	171.5	168.3	167.8	167.8	171.3	164.2	
Groceries and related products.....	124.6	124.2	123.4	124.0	122.8	122.5	122.1	120.7	120.9	118.9	117.7	118.6	120.4	114.2	
Electrical goods.....	436.3	442.0	461.2	460.7	465.2	452.4	454.6	468.6	467.1	443.8	436.8	436.5	462.5	449.0	
Hardware, plumbing, and heating goods.....	235.8	232.9	232.8	231.7	228.9	227.3	233.1	232.3	226.9	223.8	224.2	222.6	227.0	214.0	
Machinery, equipment, and supplies.....	133.6	133.9	134.7	135.1	135.6	134.7	136.4	135.6	134.7	132.2	131.9	131.3	133.3	128.5	
Miscellaneous wholesalers.....	538.8	544.4	543.6	539.7	536.7	537.2	542.9	541.1	531.4	519.6	517.7	512.3	527.8	490.6	
See footnotes at end of table.	1,003.3	1,002.6	1,019.6	1,013.4	1,009.7	1,005.1	1,011.9	1,009.2	996.9	977.7	976.4	972.1	994.1	956.2	

TABLE A-10. Production or nonsupervisory workers in nonagricultural establishments, by industry¹—Continued

Industry	1967			1966									Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
	[In thousands]														
Revised series; see box below.															
Wholesale and retail trade—Continued															
Retail trade.....	8,868	8,771	8,897	9,758	9,147	8,954	8,842	8,803	8,821	8,870	8,768	8,731	8,564	8,860	8,508
General merchandise stores.....	1,727.0	1,831.4	2,371.6	1,998.1	1,848.8	1,779.6	1,734.8	1,731.7	1,750.1	1,732.7	1,729.2	1,690.3	1,816.2	1,721.2	1,076.0
Department stores.....	1,090.3	1,160.0	1,534.1	1,270.3	1,165.0	1,113.2	1,084.6	1,087.5	1,100.8	1,089.4	1,083.6	1,061.3	1,145.5	1,076.0	1,076.0
Mail order houses.....	109.9	121.9	146.8	138.0	122.2	112.2	108.7	107.0	106.6	105.1	106.7	108.5	116.3	112.1	112.1
Limited price variety stores.....	289.5	303.7	392.1	330.3	309.9	301.3	287.1	283.7	289.3	292.9	296.8	287.2	303.4	293.4	293.4
Food stores.....	1,478.7	1,471.8	1,501.7	1,472.3	1,466.9	1,443.8	1,431.4	1,438.9	1,440.0	1,433.0	1,425.6	1,425.6	1,442.4	1,368.7	1,368.7
Grocery, meat, and vegetable stores.....	1,302.7	1,303.9	1,324.5	1,303.4	1,299.9	1,278.6	1,269.1	1,276.8	1,274.5	1,267.8	1,259.2	1,262.1	1,276.5	1,204.8	1,204.8
Apparel and accessories stores.....	576.2	601.5	729.9	620.3	598.5	586.6	567.0	567.7	585.7	579.6	596.0	559.1	592.8	575.0	575.0
Men's and boys' apparel stores.....	98.9	106.8	132.1	104.3	100.1	97.7	96.2	96.7	98.9	95.5	95.7	93.7	100.8	94.6	94.6
Women's ready-to-wear stores.....	206.7	215.0	261.3	226.6	221.4	213.6	211.7	209.2	215.9	216.0	215.3	208.1	217.8	213.7	213.7
Family clothing stores.....	97.6	102.0	128.8	101.6	95.9	94.6	90.6	93.2	94.8	90.6	91.1	88.8	96.0	95.4	95.4
Shoe stores.....	108.9	112.3	131.0	116.7	112.8	114.1	106.1	107.0	110.4	111.9	127.5	104.7	112.3	108.1	108.1
Furniture and appliance stores.....	380.5	381.0	395.8	385.6	379.6	375.5	375.3	375.1	373.6	370.3	369.4	369.8	375.8	363.6	363.6
Furniture and home furnishings.....	240.6	241.8	252.4	246.8	242.1	240.3	239.5	241.5	240.5	237.4	236.1	235.9	240.4	234.4	234.4
Eating and drinking places.....	1,860.0	1,848.9	1,886.0	1,893.2	1,912.0	1,918.0	1,932.4	1,934.8	1,940.2	1,930.4	1,869.4	1,819.2	1,880.9	1,806.7	1,806.7
Other retail trade.....	2,748.6	2,762.7	2,873.0	2,777.1	2,748.1	2,738.8	2,762.0	2,772.5	2,780.0	2,748.7	2,741.2	2,700.3	2,752.2	2,672.8	2,672.8
Building materials and hardware.....	438.1	441.6	459.5	461.4	467.7	473.0	486.7	492.3	490.9	476.3	477.7	461.6	471.2	467.1	467.1
Motor vehicle dealers.....	635.9	639.7	643.0	641.1	636.7	634.5	638.9	642.0	640.8	636.9	639.0	639.7	639.1	626.0	626.0
Other vehicle and accessory dealers.....	159.8	162.4	173.6	169.0	165.9	165.8	169.0	168.1	166.3	162.9	159.6	154.1	163.6	154.9	154.9
Drug stores.....	402.8	406.0	426.7	394.1	388.1	381.2	377.9	376.5	379.1	375.7	375.8	372.7	382.9	366.2	366.2
Fuel and ice dealers.....	102.2	103.1	102.3	98.9	95.0	90.1	88.9	88.8	89.7	91.6	95.2	100.0	95.7	95.9	95.9
Finance, insurance, and real estate⁴	2,494	2,474	2,458	2,476	2,472	2,473	2,485	2,522	2,526	2,493	2,454	2,441	2,431	2,244	2,425
Banking.....	697.7	693.8	696.1	694.1	691.6	692.8	701.9	698.3	685.1	671.9	671.3	669.1	683.6	662.6	662.6
Credit agencies other than banks.....	266.0	265.1	265.9	264.5	264.4	265.3	269.5	269.7	266.9	265.2	265.5	266.3	266.3	266.3	266.3
Savings and loan associations.....	74.9	75.9	75.1	74.8	75.5	75.4	77.4	78.4	77.5	77.6	78.8	78.8	77.3	79.7	79.7
Security dealers and exchanges.....	124.3	122.6	124.2	124.1	124.8	124.5	126.5	127.7	125.5	123.2	121.7	120.6	123.0	113.8	113.8
Insurance carriers.....	650.9	643.3	645.2	640.5	638.7	641.2	647.5	645.4	635.5	628.2	628.5	629.0	636.1	632.7	632.7
Life insurance.....	280.0	278.7	280.0	278.3	278.1	279.8	282.6	282.2	277.8	276.0	277.4	277.4	278.7	281.7	281.7
Accident and health insurance.....	61.6	59.1	58.5	57.4	56.4	55.4	55.5	54.4	52.1	49.9	49.0	48.3	52.6	46.5	46.5
Fire, marine, and casualty insurance.....	278.4	274.5	275.1	273.3	272.0	273.3	275.9	274.5	271.4	268.2	268.0	269.2	271.3	269.1	269.1
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels.....	520.9	512.9	515.7	526.7	545.9	573.0	610.5	612.9	585.7	556.5	541.9	524.4	552.2	541.8	541.8
Personal services:															
Laundries, cleaning and dyeing plants.....	490.7	491.5	496.5	499.8	502.9	499.7	508.2	512.0	511.5	499.7	494.3	489.0	498.8	490.3	490.3
Motion pictures:															
Motion picture filming and distribution.....	30.9	33.4	36.6	35.8	34.8	33.8	35.9	36.6	32.9	28.8	28.6	29.5	32.9	30.3	30.3

¹ For comparability of data with those published in issues prior to October 1966, 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.

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 revised series on employment, hours, and earnings, and labor turnover in non-agricultural establishments should not be compared with those published in issues prior to October 1966. (See footnote 1, table A-9, and "BLS Establishment Employment Estimates Revised to March 1965 Benchmark Levels" appearing in the September 1966 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 data for earlier periods are published in *Employment and Earnings Statistics for the United States, 1909-66* (BLS Bulletin 1312-4), which is available at depository libraries or which may be purchased from the Superintendent of Documents for \$4.50 a copy. For an individual industry, earlier data may be obtained upon request to the Bureau.

TABLE A-11. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted¹

[In thousands]

Revised series; see box, p. 90.

Industry division and group	1967			1966									
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.
Total	65,486	65,463	65,381	65,076	64,823	64,466	64,168	64,199	64,072	63,983	63,517	63,350	63,247
Mining	627	626	228	626	624	625	628	636	636	632	628	595	637
Contract construction	3,318	3,351	3,301	3,293	3,204	3,202	3,228	3,251	3,297	3,300	3,238	3,333	3,419
Manufacturing	19,353	19,388	19,468	19,445	19,415	19,312	19,204	19,262	19,128	19,167	19,002	18,923	18,840
Durable goods	11,386	11,398	11,445	11,439	11,424	11,387	11,322	11,324	11,210	11,220	11,122	11,065	11,007
Ordinance and accessories	283	281	276	269	269	265	262	260	257	257	253	249	245
Lumber and wood products, except furniture	620	613	620	605	607	607	609	621	622	628	623	633	642
Furniture and fixtures	456	459	460	465	463	460	459	462	456	458	456	451	451
Stone, clay, and glass products	638	638	642	638	636	633	633	637	643	641	643	647	649
Primary metal industries	1,311	1,321	1,341	1,343	1,351	1,351	1,341	1,351	1,338	1,333	1,315	1,307	1,300
Fabricated metal products	1,371	1,372	1,380	1,379	1,378	1,365	1,357	1,360	1,346	1,348	1,341	1,345	1,344
Machinery	1,935	1,935	1,941	1,933	1,917	1,912	1,903	1,901	1,888	1,865	1,846	1,827	1,818
Electrical equipment and supplies	1,958	1,962	1,964	1,959	1,959	1,962	1,941	1,948	1,903	1,904	1,877	1,860	1,824
Transportation equipment	1,925	1,927	1,927	1,958	1,960	1,951	1,945	1,910	1,888	1,915	1,901	1,887	1,881
Instruments and related products	451	449	446	444	439	439	432	431	430	428	424	418	415
Miscellaneous manufacturing industries	438	441	448	446	445	442	440	443	439	443	443	441	438
Nondurable goods	7,967	7,990	8,023	8,006	7,991	7,925	7,882	7,938	7,918	7,947	7,880	7,858	7,833
Food and kindred products	1,787	1,779	1,780	1,781	1,781	1,750	1,737	1,765	1,763	1,760	1,748	1,757	1,767
Tobacco manufactures	85	84	89	86	87	78	79	80	85	86	85	86	86
Textile mill products	940	942	951	951	950	950	952	957	955	957	952	950	948
Apparel and related products	1,376	1,397	1,415	1,409	1,406	1,403	1,390	1,395	1,388	1,424	1,412	1,396	1,386
Paper and allied products	685	686	683	683	682	676	670	679	674	665	664	662	662
Printing, publishing, and allied industries	1,065	1,060	1,056	1,049	1,044	1,039	1,035	1,035	1,031	1,026	1,018	1,017	1,009
Chemicals and allied products	977	981	981	976	974	969	965	968	963	961	945	937	936
Petroleum refining and related industries	180	182	182	183	183	182	182	184	186	183	183	182	181
Rubber and miscellaneous plastic products	527	530	533	534	529	523	517	520	518	515	508	506	500
Leather and leather products	345	349	353	354	355	355	355	357	350	361	364	363	358
Transportation and public utilities	4,220	4,225	4,230	4,196	4,195	4,165	4,168	4,105	4,122	4,143	4,132	4,114	4,109
Wholesale and retail trade	13,458	13,506	13,503	13,392	13,393	13,340	13,268	13,264	13,256	13,217	13,164	13,128	13,085
Wholesale trade	3,546	3,632	3,530	3,515	3,505	3,486	3,474	3,483	3,483	3,470	3,445	3,434	3,422
Retail trade	9,912	9,974	9,973	9,877	9,888	9,854	9,794	9,781	9,773	9,747	9,719	9,694	9,663
Finance, insurance, and real estate	3,157	3,142	3,129	3,121	3,110	3,102	3,100	3,100	3,095	3,090	3,076	3,068	3,064
Service and miscellaneous	9,971	9,915	9,869	9,821	9,778	9,712	9,649	9,647	9,609	9,549	9,515	9,484	9,463
Government	11,382	11,310	11,253	11,182	11,104	11,008	10,923	10,934	10,929	10,885	10,762	10,705	10,630
Federal	2,692	2,673	2,662	2,629	2,621	2,615	2,594	2,610	2,601	2,571	2,523	2,501	2,477
State and local	8,690	8,637	8,591	8,553	8,483	8,393	8,329	8,324	8,328	8,314	8,239	8,204	8,153

¹ For coverage of the series, see footnote 1, table A-9.² Preliminary.NOTE: The seasonal adjustment method used is described in *The BLS Seasonal Factor Method* (1966) which may be obtained from the Bureau on request.TABLE A-12. Production workers in manufacturing industries, by major industry group, seasonally adjusted¹

[In thousands]

Revised series; see box, p. 90.

Major industry group	1967			1966									
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.
Manufacturing	14,308	14,363	14,453	14,446	14,436	14,350	14,268	14,330	14,201	14,281	14,154	14,100	14,048
Durable goods	8,384	8,412	8,462	8,471	8,467	8,442	8,395	8,395	8,293	8,328	8,261	8,226	8,190
Ordinance and accessories	143	141	136	133	131	128	126	124	122	120	118	114	112
Lumber and wood products, except furniture	540	535	539	529	530	529	531	542	543	550	546	554	563
Furniture and fixtures	377	380	381	384	385	381	380	382	378	381	379	374	375
Stone, clay, and glass products	509	507	515	511	507	507	507	512	515	515	516	521	525
Primary metal industries	1,059	1,070	1,090	1,092	1,103	1,102	1,092	1,100	1,090	1,086	1,070	1,066	1,058
Fabricated metal products	1,064	1,069	1,074	1,075	1,074	1,062	1,055	1,060	1,043	1,048	1,046	1,049	1,047
Machinery	1,355	1,358	1,363	1,360	1,348	1,346	1,339	1,338	1,331	1,312	1,299	1,284	1,278
Electrical equipment and supplies	1,342	1,349	1,357	1,355	1,358	1,363	1,350	1,353	1,320	1,327	1,308	1,297	1,268
Transportation equipment	1,358	1,364	1,362	1,392	1,395	1,392	1,389	1,353	1,324	1,358	1,351	1,344	1,344
Instruments and related products	290	288	287	285	281	280	277	278	277	276	273	270	269
Miscellaneous manufacturing industries	347	351	358	355	355	352	349	353	350	355	355	353	351
Nondurable goods	5,924	5,951	5,991	5,975	5,969	5,908	5,873	5,935	5,908	5,953	5,893	5,874	5,858
Food and kindred products	1,191	1,182	1,183	1,184	1,186	1,156	1,145	1,170	1,165	1,166	1,154	1,163	1,174
Tobacco manufactures	72	72	77	74	74	66	67	68	73	74	73	74	74
Textile mill products	835	838	847	848	847	848	856	850	854	850	847	846	846
Apparel and related products	1,219	1,241	1,257	1,251	1,246	1,246	1,234	1,232	1,268	1,257	1,239	1,239	1,230
Paper and allied products	532	533	531	530	531	525	520	528	530	525	519	518	515
Printing, publishing, and allied industries	676	673	673	666	662	659	657	658	656	654	648	647	642
Chemicals and allied products	579	583	584	582	581	576	575	582	577	578	564	559	560
Petroleum refining and related industries	113	114	115	115	115	114	114	115	115	115	113	113	112
Rubber and miscellaneous plastic products	408	412	417	417	413	409	403	406	403	403	396	395	390
Leather and leather products	299	303	307	308	310	310	310	312	307	316	319	319	315

¹ For definition of production workers, see footnote 1, table A-10.² Preliminary.NOTE: The seasonal adjustment method used is described in *The BLS Seasonal Factor Method* (1966) which may be obtained from the Bureau on request.

TABLE A-13. Unemployment insurance and employment service program operations ¹

[All items except average benefit amounts are in thousands]

Item	1967		1966										
	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.
Employment service: ²													
New applications for work	853	966	721	794	819	801	869	896	1,314	906	806	850	852
Nonfarm placements	407	440	420	513	592	619	619	549	622	568	533	547	460
State unemployment insurance programs:													
Initial claims ^{3 4}	1,087	1,346	1,280	915	709	626	826	1,019	690	665	693	769	985
Insured unemployment ⁵ (average weekly volume) ⁶	1,582	1,558	1,254	903	753	755	928	947	793	862	1,044	1,301	1,590
Rate of insured unemployment ⁷	3.4	3.3	2.7	1.9	1.6	1.6	2.0	2.1	1.8	1.9	2.3	2.9	3.6
Weeks of unemployment compensated	5,398	5,615	3,971	2,960	2,476	2,817	3,639	3,022	3,087	3,385	4,098	5,852	5,653
Average weekly benefit amount for total unemployment	\$41.97	\$41.73	\$41.39	\$40.57	\$39.84	\$39.68	\$40.65	\$39.05	\$38.72	\$38.86	\$39.38	\$39.83	\$39.66
Total benefits paid	\$219,480	\$224,787	\$157,566	\$114,814	\$93,697	\$106,548	\$143,058	\$113,812	\$114,358	\$126,149	\$155,494	\$225,472	\$217,171
Unemployment compensation for ex-servicemen: ^{8 9}													
Initial claims ^{3 6}	15	19	17	15	13	12	16	17	14	12	13	17	18
Insured unemployment ⁶ (average weekly volume)	25	25	21	16	14	15	19	19	17	18	22	27	31
Weeks of unemployment compensated	93	96	75	59	51	63	81	63	72	76	92	121	120
Total benefits paid	\$3,878	\$3,963	\$2,973	\$2,450	\$2,117	\$2,561	\$3,204	\$2,443	\$2,872	\$2,936	\$3,558	\$4,620	\$4,572
Unemployment compensation for Federal civilian employees: ^{9 10}													
Initial claims ³	9	15	10	9	9	7	8	11	9	7	7	8	11
Insured unemployment ⁶ (average weekly volume)	24	23	20	17	16	16	18	19	18	18	21	26	29
Weeks of unemployment compensated	91	87	75	67	60	67	79	65	79	78	92	118	109
Total benefits paid	\$3,728	\$3,581	\$3,045	\$2,752	\$2,466	\$2,731	\$3,239	\$2,645	\$3,255	\$3,217	\$3,718	\$4,717	\$4,319
Railroad unemployment insurance:													
Applications ¹¹	6	11	7	6	6	7	8	18	25	42	6	5	4
Insured unemployment (average weekly volume)	24	25	19	18	16	16	15	16	15	18	23	26	28
Number of payments ¹²	53	48	40	38	34	36	35	31	54	77	53	69	54
Average amount of benefit payment ¹³	\$75.54	\$72.95	\$76.70	\$73.80	\$71.99	\$72.07	\$74.96	\$72.16	\$60.07	\$50.55	\$69.79	\$77.68	\$79.10
Total benefits paid ¹⁴	\$3,784	\$3,499	\$2,858	\$2,550	\$2,126	\$2,422	\$2,499	\$2,138	\$2,913	\$3,750	\$3,606	\$5,154	\$4,148
All programs: ¹⁵													
Insured unemployment ⁶	1,654	1,631	1,313	955	799	802	980	1,001	841	916	1,112	1,381	1,679

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.

¹³ The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.

¹⁴ Adjusted for recovery of overpayments and settlement of underpayments.

¹⁵ 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 group¹

[Per 100 employees]

Revised series; see box, p. 90.

Major industry group	1967		1966										Annual average		
	Feb. ²	Jan. ²	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1966	1965
Accessions: Total															
Manufacturing:															
Actual.....	3.6	4.3	2.9	3.9	5.1	6.1	6.4	5.1	6.7	5.1	4.6	4.9	4.2	5.0	4.3
Seasonally adjusted.....	4.2	4.6	4.5	4.9	5.1	5.0	5.1	4.6	5.3	5.1	4.8	5.2	4.9	---	---
Durable goods.....	3.4	4.1	2.7	3.8	4.8	5.9	6.2	4.5	6.5	4.9	4.6	4.9	4.2	4.8	4.1
Ordnance and accessories.....	2.6	3.6	2.2	3.6	4.5	4.3	4.2	3.8	4.8	3.6	3.6	3.7	3.4	3.8	2.9
Lumber and wood products, except furniture.....	5.3	6.6	3.7	4.5	5.9	6.9	7.0	6.4	10.2	8.6	8.8	7.3	5.9	6.8	6.0
Furniture and fixtures.....	4.5	5.3	3.4	5.6	7.4	8.5	8.9	6.8	7.8	6.8	6.3	6.5	5.6	6.6	5.5
Stone, clay, and glass products.....	3.7	3.6	2.3	3.1	3.9	4.5	5.0	4.6	6.7	5.3	5.5	5.7	3.8	4.5	4.0
Primary metal industries.....	2.6	3.2	2.3	2.8	3.3	3.8	4.4	3.0	5.6	3.8	3.4	3.9	3.5	3.7	2.9
Fabricated metal products.....	4.0	4.7	3.2	4.4	5.4	6.2	7.1	5.2	6.9	5.5	5.0	5.2	4.6	5.3	4.6
Machinery.....	3.0	3.5	2.6	3.2	3.9	4.2	4.4	3.8	5.7	3.9	3.6	3.8	3.5	3.9	3.3
Electrical equipment and supplies.....	3.1	3.8	2.6	3.7	5.1	5.5	5.9	4.3	6.2	4.6	4.3	4.7	4.2	4.7	3.9
Transportation equipment.....	3.2	4.0	2.5	3.8	5.1	8.4	9.0	4.5	6.2	4.8	4.2	5.4	4.3	5.3	4.7
Instruments and related products.....	3.4	3.5	2.4	3.0	3.9	4.2	4.3	4.1	5.9	3.9	3.4	3.8	3.5	3.8	3.2
Miscellaneous manufacturing industries.....	5.1	6.2	3.0	5.5	8.3	9.2	8.3	7.7	7.8	7.0	6.8	6.9	6.5	7.0	6.3
Nondurable goods.....	3.8	4.5	3.1	4.2	5.4	6.3	6.7	6.0	7.1	5.3	4.7	4.8	4.2	5.2	4.6
Food and kindred products.....	4.3	5.0	4.1	5.4	7.6	9.2	10.3	9.2	10.2	6.7	5.7	5.5	4.6	6.9	6.1
Tobacco manufactures.....	2.6	3.6	6.7	5.8	6.1	7.1	15.9	9.0	4.8	3.7	3.0	4.2	4.5	6.3	6.0
Textile mill products.....	4.3	4.7	2.9	4.2	5.2	5.9	6.3	5.3	6.3	5.5	5.5	5.3	4.4	5.1	4.3
Apparel and related products.....	5.0	6.3	3.4	4.9	5.8	6.7	7.5	7.4	7.0	6.8	5.6	5.8	5.8	6.1	5.8
Paper and allied products.....	2.8	3.4	2.5	3.4	4.4	4.8	4.4	3.9	6.8	4.3	3.7	3.8	3.2	4.0	3.2
Printing, publishing, and allied industries.....	3.2	3.7	2.7	3.3	4.1	4.9	4.4	3.7	5.5	3.8	3.4	3.5	3.2	3.8	3.2
Chemicals and allied products.....	2.4	2.4	1.8	2.2	2.7	3.0	2.8	2.6	5.1	3.1	2.8	3.4	2.6	2.9	2.4
Petroleum refining and related industries.....	1.5	1.5	1.1	1.4	1.9	2.0	2.0	2.2	4.5	2.3	2.3	1.9	1.5	2.1	1.8
Rubber and miscellaneous plastic products.....	3.9	4.6	3.2	4.9	6.0	6.9	7.1	5.9	7.3	5.4	4.9	5.3	4.4	5.5	4.4
Leather and leather products.....	4.6	7.0	4.1	5.3	6.2	6.6	7.3	7.5	7.4	6.5	5.5	6.0	6.1	6.3	5.4
Nonmanufacturing:															
Metal mining.....	2.9	4.6	3.0	2.8	3.0	3.0	3.6	3.2	6.4	3.9	3.4	2.9	2.9	3.5	3.2
Coal mining.....	1.5	2.2	1.4	1.7	2.0	1.8	2.2	1.6	1.8	1.7	1.7	1.7	1.4	1.7	1.7
Accessions: New hires															
Manufacturing:															
Actual.....	2.6	3.0	2.1	3.1	4.1	4.7	4.8	3.9	5.6	4.1	3.6	3.7	3.1	3.8	3.1
Seasonally adjusted.....	3.2	3.6	3.7	3.8	3.9	3.6	3.7	3.5	4.0	4.0	3.9	4.3	3.9	---	---
Durable goods.....	2.6	2.9	2.1	3.1	4.1	4.5	4.5	3.5	5.5	4.0	3.7	3.8	3.2	3.8	3.0
Ordnance and accessories.....	2.2	3.0	1.8	3.0	4.0	3.7	3.4	3.1	4.1	3.0	2.8	2.9	2.7	3.1	1.8
Lumber and wood products, except furniture.....	3.6	4.3	2.9	3.8	5.3	6.1	6.3	5.8	9.2	7.4	7.0	6.0	4.5	5.7	4.8
Furniture and fixtures.....	3.8	4.5	3.0	5.1	6.7	7.6	7.9	6.0	7.1	6.2	5.6	5.9	4.9	5.9	4.7
Stone, clay, and glass products.....	2.2	2.3	1.6	2.5	3.3	3.8	4.1	3.7	5.7	4.3	4.1	3.8	2.6	3.5	2.7
Primary metal industries.....	1.7	2.0	1.5	2.1	2.6	3.2	3.1	2.3	4.7	3.1	2.7	2.7	2.1	2.7	2.0
Fabricated metal products.....	3.1	3.5	2.5	3.7	4.6	5.4	5.4	4.0	5.9	4.6	4.1	4.2	3.6	4.3	3.5
Machinery.....	2.7	3.0	2.1	2.7	3.3	3.7	3.5	2.9	4.9	3.3	3.1	3.2	3.0	3.2	2.6
Electrical equipment and supplies.....	2.4	2.8	2.0	3.1	4.3	4.7	4.6	3.4	5.3	3.9	3.6	3.9	3.4	3.8	2.9
Transportation equipment.....	2.1	2.1	1.7	2.8	3.9	4.1	4.0	3.1	4.7	3.4	3.0	3.3	3.0	3.4	2.8
Instruments and related products.....	3.0	3.0	2.0	2.7	3.5	3.8	3.8	3.3	5.4	3.4	3.1	3.3	3.0	3.4	2.6
Miscellaneous manufacturing industries.....	3.7	4.0	2.5	4.9	7.5	8.2	7.2	5.4	6.3	5.4	5.2	5.0	4.3	5.5	4.5
Nondurable goods.....	2.8	3.2	2.3	3.2	4.2	5.0	5.2	4.4	5.7	4.1	3.6	3.6	3.0	3.9	3.2
Food and kindred products.....	2.8	3.4	2.8	3.9	5.5	7.0	7.9	7.0	7.6	4.8	3.8	3.4	2.8	4.9	4.1
Tobacco manufactures.....	2.2	2.6	3.2	4.5	4.3	4.8	10.0	4.0	3.2	2.3	1.8	2.0	1.8	3.7	3.3
Textile mill products.....	3.2	3.5	2.2	3.3	4.1	4.9	5.2	4.0	5.3	4.6	4.5	4.2	3.4	4.1	3.3
Apparel and related products.....	3.4	4.0	2.1	3.5	4.3	5.0	5.4	4.5	5.2	4.6	4.1	4.4	3.7	4.2	3.7
Paper and allied products.....	2.3	2.9	2.1	3.1	4.0	4.4	3.9	3.4	6.0	3.8	3.2	3.2	2.6	3.5	2.5
Printing, publishing, and allied industries.....	2.6	3.0	2.2	2.8	3.5	4.1	3.7	3.1	4.6	3.2	2.9	2.8	2.6	3.2	2.6
Chemicals and allied products.....	1.9	1.9	1.4	1.8	2.3	2.6	2.4	2.1	4.5	2.6	2.4	2.8	2.0	2.4	1.9
Petroleum refining and related industries.....	1.2	1.1	.9	1.2	1.7	1.8	1.7	2.0	3.8	1.9	1.7	1.5	1.2	1.7	1.4
Rubber and miscellaneous plastic products.....	3.0	3.5	2.6	4.1	5.3	6.1	5.7	4.4	6.4	4.6	4.1	4.3	3.5	4.6	3.4
Leather and leather products.....	3.3	4.8	3.1	4.1	4.8	.3	5.6	5.3	6.4	5.1	4.3	4.7	4.3	4.8	3.9
Nonmanufacturing:															
Metal mining.....	2.1	2.7	2.0	.0	2.4	2.5	2.7	2.7	5.2	2.6	2.1	2.0	2.0	2.5	2.2
Coal mining.....	1.1	1.2	1.0	1.1	1.3	1.2	1.4	1.1	1.1	1.1	1.0	1.1	.9	1.1	.9

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group¹—Continued

[Per 100 employees]

Revised series; see box, p. 90.

Major industry group	1967		1966											Annual average	
	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1966	1965
Separations: Total															
Manufacturing:															
Actual.....	3.9	4.5	4.2	4.3	4.8	6.6	5.8	5.3	4.4	4.3	4.3	4.1	3.6	4.6	4.1
Seasonally adjusted.....	4.7	4.6	4.4	4.5	4.5	5.1	4.8	5.0	4.9	4.7	4.7	4.6	4.4	4.4	4.1
Durable goods.....	3.9	4.4	3.9	4.0	4.5	6.1	5.5	5.4	4.2	4.1	3.9	3.8	3.5	4.4	3.8
Ordnance and accessories.....	2.3	2.6	1.6	2.1	2.8	4.0	3.1	3.0	2.5	2.7	2.7	2.4	2.1	2.6	2.5
Lumber and wood products, except furniture.....	5.4	6.4	6.5	7.5	7.5	9.4	8.6	6.6	6.7	7.0	7.1	7.3	5.4	7.2	6.1
Furniture and fixtures.....	5.4	6.2	4.9	5.7	6.8	8.3	8.4	6.4	6.0	6.1	6.2	6.1	5.2	6.3	5.1
Stone, clay, and glass products.....	4.2	5.2	4.8	4.5	4.7	6.8	5.9	4.5	4.2	4.2	4.1	3.7	3.7	4.6	3.9
Primary metal industries.....	2.9	3.5	2.9	3.1	3.6	5.6	4.3	3.6	2.8	2.9	2.6	2.6	2.3	3.2	3.0
Fabricated metal products.....	4.5	4.9	4.3	4.7	5.3	7.0	6.3	5.4	5.0	5.1	4.7	4.5	4.1	5.1	4.2
Machinery.....	2.8	3.1	2.5	2.6	3.2	5.1	4.5	3.8	3.3	3.2	3.3	3.1	2.6	3.4	2.8
Electrical equipment and supplies.....	3.9	4.2	3.2	3.4	4.0	5.8	4.5	4.0	3.8	3.6	3.4	3.5	3.0	3.8	3.1
Transportation equipment.....	4.4	5.1	3.7	3.6	4.3	5.3	6.4	9.8	4.8	4.1	3.9	3.8	4.2	4.8	4.3
Instruments and related products.....	2.7	2.9	2.4	2.5	3.6	4.9	3.7	3.3	3.0	2.8	2.9	2.8	2.5	3.1	2.7
Miscellaneous manufacturing industries.....	4.9	5.7	12.0	8.6	6.8	8.6	7.2	6.6	5.4	5.7	5.4	5.0	4.6	6.9	5.9
Nondurable goods.....	4.0	4.8	4.6	4.7	5.4	7.3	6.1	5.3	4.6	4.5	4.7	4.4	3.8	5.0	4.4
Food and kindred products.....	4.7	6.0	7.1	7.2	8.4	11.0	7.9	6.2	5.6	5.5	5.6	5.6	5.1	6.8	6.1
Tobacco manufactures.....	5.4	8.0	5.7	6.3	4.9	5.6	8.3	5.5	3.4	4.0	6.7	6.1	5.6	5.9	6.4
Textile mill products.....	4.7	5.2	4.2	4.8	5.3	6.7	6.5	5.5	4.7	5.0	5.0	4.7	3.9	5.1	4.1
Apparel and related products.....	5.0	5.7	5.5	5.4	5.8	7.2	7.2	7.9	6.0	5.9	6.6	5.6	4.5	6.1	5.8
Paper and allied products.....	2.9	3.5	3.0	3.5	4.1	6.6	5.1	3.5	3.6	3.4	3.5	3.3	2.9	3.8	3.1
Printing, publishing, and allied industries.....	3.0	3.5	3.0	3.0	3.5	5.1	4.6	3.3	3.5	3.1	3.2	2.9	2.8	3.4	3.1
Chemicals and allied products.....	2.0	2.4	2.0	2.0	2.5	4.6	3.0	2.2	2.6	2.6	2.4	2.3	1.8	2.5	2.2
Petroleum refining and related industries.....	1.4	2.0	1.8	1.9	2.1	3.9	2.6	2.1	2.0	1.8	1.9	1.6	1.5	2.1	1.9
Rubber and miscellaneous plastic products.....	4.6	5.3	4.2	4.5	5.5	7.2	6.2	5.7	4.8	4.8	4.7	4.6	4.0	5.0	4.2
Leather and leather products.....	5.7	6.2	6.3	5.1	5.9	8.4	7.8	8.1	5.7	5.6	6.3	6.2	5.1	6.4	5.3
Nonmanufacturing:															
Metal mining.....	2.8	3.8	3.3	3.4	4.0	6.0	3.8	3.7	2.9	3.1	3.2	3.2	2.4	3.5	3.1
Coal mining.....	1.7	2.4	1.4	1.6	1.8	1.9	1.5	2.5	1.3	1.8	2.2	1.8	1.5	1.8	1.9
Separations: Quits															
Manufacturing:															
Actual.....	1.8	2.1	1.7	2.1	2.8	4.5	3.6	2.5	2.5	2.5	2.5	2.3	1.8	2.6	1.9
Seasonally adjusted.....	2.4	2.5	2.7	2.7	2.6	2.6	2.5	2.5	2.5	2.5	2.7	2.7	2.4	2.4	1.7
Durable goods.....	1.7	1.9	1.5	2.0	2.6	4.2	3.4	2.3	2.3	2.3	2.3	2.2	1.7	2.4	1.7
Ordnance and accessories.....	1.2	1.2	.9	1.1	1.6	2.6	1.9	1.5	1.5	1.4	1.4	1.3	1.2	1.5	1.1
Lumber and wood products, except furniture.....	2.8	3.2	2.6	3.4	4.7	6.9	6.1	4.6	5.0	5.3	5.2	4.3	3.2	4.5	3.4
Furniture and fixtures.....	3.2	3.5	2.7	3.7	4.8	6.5	6.2	4.2	4.0	4.4	4.4	4.3	3.3	4.3	3.1
Stone, clay, and glass products.....	1.5	1.8	1.4	1.9	2.6	4.4	3.6	2.5	2.4	2.4	2.4	2.0	1.6	2.4	1.6
Primary metal industries.....	1.1	1.3	1.1	1.3	1.8	3.8	2.7	1.5	1.5	1.5	1.5	1.4	1.1	1.7	1.2
Fabricated metal products.....	2.1	2.3	1.8	2.4	3.0	4.8	4.0	2.6	2.7	2.7	2.8	2.5	2.0	2.8	1.9
Machinery.....	1.6	1.7	1.3	1.5	1.9	3.5	2.7	1.9	1.9	1.9	2.0	1.8	1.4	1.9	1.4
Electrical equipment and supplies.....	1.8	2.0	1.7	1.9	2.5	4.2	3.1	2.0	2.3	2.1	2.1	2.1	1.7	2.3	1.6
Transportation equipment.....	1.3	1.5	1.1	1.5	2.0	3.1	2.5	1.8	1.8	1.8	1.7	1.7	1.4	1.8	1.3
Instruments and related products.....	1.7	1.7	1.3	1.5	2.4	3.7	2.6	1.8	1.9	1.7	1.9	1.8	1.5	2.0	1.4
Miscellaneous manufacturing industries.....	2.4	2.7	2.6	3.9	4.6	6.5	4.9	3.3	3.2	3.4	3.2	3.1	2.5	3.6	2.6
Nondurable goods.....	2.0	2.4	1.9	2.4	3.1	5.0	4.0	2.8	2.7	2.7	2.7	2.4	2.0	2.8	2.1
Food and kindred products.....	2.0	2.5	2.2	2.9	3.9	6.7	4.7	3.1	3.0	2.8	2.7	2.4	2.0	3.2	2.4
Tobacco manufactures.....	1.7	1.8	1.6	1.7	2.3	3.4	2.8	1.7	1.4	1.7	1.7	1.7	1.4	1.9	1.5
Textile mill products.....	2.8	3.1	2.3	2.9	3.6	5.1	4.9	3.5	3.4	3.6	3.7	3.3	2.6	3.5	2.5
Apparel and related products.....	2.5	2.9	2.1	2.8	3.4	4.7	4.6	3.7	3.2	3.3	3.2	2.9	2.5	3.3	2.6
Paper and allied products.....	1.7	2.0	1.6	2.1	2.7	5.1	3.5	2.2	2.3	2.2	2.2	2.1	1.6	2.4	1.7
Printing, publishing, and allied industries.....	1.8	2.0	1.7	1.8	2.2	3.7	3.1	2.1	2.3	2.0	2.0	1.8	1.7	2.2	1.7
Chemicals and allied products.....	1.0	1.1	.9	1.0	1.4	3.3	2.1	1.1	1.3	1.3	1.3	1.2	.9	1.4	1.0
Petroleum refining and related industries.....	.6	.7	.6	.6	.9	2.3	1.4	.9	1.0	.9	.9	.7	.5	.9	.7
Rubber and miscellaneous plastic products.....	2.2	2.5	2.1	2.7	3.5	5.3	4.3	2.8	2.9	2.9	3.0	2.8	2.2	3.1	2.1
Leather and leather products.....	3.1	3.6	2.9	3.4	4.3	6.3	5.9	4.4	4.2	3.9	4.0	3.9	3.2	4.1	3.0
Nonmanufacturing:															
Metal mining.....	1.2	1.7	1.1	1.3	1.7	4.8	2.7	2.0	1.8	2.0	2.0	1.6	1.3	2.0	1.7
Coal mining.....	.7	.6	.6	.6	.8	1.1	.9	.9	.6	.7	.8	.8	.6	.7	.6

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group¹—Continued

[Per 100 employees]

Revised series; see box, p. 90.

Major industry group	1967		1966											Annual average	
	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1966	1965
	Separations: Layoffs														
Manufacturing:															
Actual.....	1.3	1.5	1.8	1.3	1.1	1.0	1.1	2.0	1.0	0.9	1.0	.7	1.0	1.2	1.4
Seasonally adjusted.....	1.5	1.4	1.5	1.1	1.0	1.1	1.0	1.7	1.3	1.1	1.2	.4	1.2		
Durable goods.....	1.3	1.5	1.5	1.1	.8	.8	1.1	2.2	.9	.8	.7	1.9	.9	1.1	1.2
Ordnance and accessories.....	.4	.5	.2	.4	.5	.4	.4	.6	.3	.5	.6	.6	.3	.4	.8
Lumber and wood products, except furniture.....	1.9	2.3	3.3	3.1	1.7	1.3	1.4	.9	.7	.6	.8	.4	1.3	1.6	1.7
Furniture and fixtures.....	1.3	1.5	1.2	1.0	.7	.5	.7	1.1	.9	.5	.6	1.0	.8	.8	1.0
Stone, clay, and glass products.....	1.9	2.6	2.7	1.8	1.1	1.1	1.0	1.1	.8	.9	.8	1.2	1.4	1.3	1.5
Primary metal industries.....	.9	1.0	1.0	.8	.7	.6	.5	1.1	.4	.4	.3	.4	.6	1.0	1.0
Fabricated metal products.....	1.5	1.6	1.5	1.3	1.1	1.0	1.0	1.7	1.3	1.3	1.0	1.1	1.1	1.2	1.4
Machinery.....	.4	.5	.5	.4	.4	.6	.8	1.0	.4	.4	.4	.4	.3	.5	.6
Electrical equipment and supplies.....	1.3	1.2	.7	.5	.4	.4	.3	1.0	.5	.4	.4	.4	.4	.5	.8
Transportation equipment.....	2.4	2.7	1.8	1.2	1.3	1.2	2.8	7.1	2.0	1.3	1.3	1.2	1.9	2.1	2.1
Instruments and related products.....	.4	.5	.4	.3	.4	.4	.3	.8	.3	.3	.4	.3	.3	.4	.6
Miscellaneous manufacturing industries.....	1.5	2.0	8.5	3.5	.8	.8	1.1	2.3	1.1	1.3	1.1	.9	1.3	2.1	2.3
Nondurable goods.....	1.2	1.6	2.1	1.6	1.5	1.4	1.3	1.7	1.1	1.1	1.3	1.3	1.1	1.4	1.6
Food and kindred products.....	2.0	2.7	4.2	3.5	3.6	3.3	2.3	2.3	1.9	2.1	2.2	2.5	2.4	2.8	2.9
Tobacco manufactures.....	2.9	5.4	3.4	3.9	1.7	1.5	4.8	3.2	1.4	1.7	4.5	3.8	3.8	3.4	4.4
Textile mill products.....	1.0	1.2	1.2	1.1	.8	.6	.6	1.1	.5	.4	.4	.5	.6	.7	.8
Apparel and related products.....	1.7	1.9	2.8	1.9	1.6	1.6	1.8	3.2	2.0	1.9	2.6	2.0	1.3	2.1	2.4
Paper and allied products.....	.5	.7	.7	.6	.4	.5	.5	.5	.4	.4	.5	.5	.5	.5	.8
Printing, publishing, and allied industries.....	.6	.8	.9	.6	.6	.7	.8	.6	.6	.6	.6	.6	.6	.7	.9
Chemicals and allied products.....	.5	.6	.7	.5	.5	.6	.3	.5	.7	.7	.5	.6	.4	.6	.7
Petroleum refining and related industries.....	.3	.7	.8	.7	.6	.9	.6	.6	.3	.4	.4	.5	.5	.6	.6
Rubber and miscellaneous plastic products.....	1.5	1.5	1.3	.7	.7	.6	.6	1.8	.7	.8	.7	.7	.8	.9	1.2
Leather and leather products.....	1.8	1.7	2.6	1.0	.8	1.1	.9	2.7	.7	.9	1.4	1.2	.9	1.3	1.5
Nonmanufacturing:															
Metal mining.....	.9	1.1	1.0	1.5	1.2	.2	.2	.8	.3	.3	.3	.9	.4	.7	.7
Coal mining.....	.5	.8	.5	.5	.3	.2	.2	1.2	.4	.7	1.1	.6	.6	.6	.9

¹ For comparability of data with those published in issues prior to October 1966, 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

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Mining.....	\$131.36	\$131.04	\$133.67	\$133.45	\$131.66	\$134.78	\$133.73	\$131.58	\$131.46	\$132.80	\$130.85	\$121.72	\$127.37	\$130.24	\$123.52
Metal mining.....	136.00	136.32	136.53	135.24	135.14	136.64	134.62	135.79	134.93	132.51	133.88	129.79	133.77	127.30	127.30
Iron ores.....	135.88	138.65	136.86	136.29	136.29	142.23	138.32	143.99	142.35	136.27	139.63	133.74	138.09	129.24	129.24
Copper ores.....	141.70	142.79	144.21	143.11	142.46	140.62	140.51	139.64	138.13	137.26	138.97	135.99	140.07	136.71	136.71
Coal mining.....	145.33	153.38	155.91	146.20	156.98	151.00	149.33	145.70	153.41	152.31	111.52	143.44	145.86	137.45	137.45
Bituminous.....	148.00	155.77	158.30	148.13	159.80	154.09	152.44	148.03	156.98	155.12	112.85	146.08	148.45	140.23	140.23
Crude petroleum and natural gas.....	125.88	127.08	124.49	124.53	123.68	123.68	121.84	123.70	121.70	121.84	122.41	121.69	122.26	116.18	116.18
Crude petroleum and natural gas fields.....	133.82	136.03	129.34	129.74	129.74	129.34	125.96	129.68	126.98	127.30	129.15	126.36	128.11	123.62	123.62
Oil and gas field services.....	120.10	120.25	120.96	120.89	118.86	118.86	118.46	119.26	118.28	117.75	117.13	118.09	118.36	110.31	110.31
Quarrying and nonmetallic mining.....	117.55	118.86	120.22	124.03	129.44	129.44	128.46	127.64	126.90	122.29	120.31	116.48	122.93	117.45	117.45
Crushed and broken stone.....	110.42	115.14	120.19	125.76	130.95	131.49	131.14	130.9	128.87	121.47	119.20	114.29	123.19	116.58	116.58
Contract construction.....	145.73	142.84	148.77	148.06	143.39	152.08	151.67	149.38	150.15	146.69	141.71	140.59	143.26	145.51	138.01
General building contractors.....	135.10	140.48	140.84	136.26	141.70	140.56	138.00	137.27	135.05	132.09	131.74	134.32	135.76	128.16	128.16
Heavy construction.....	138.16	142.16	141.29	138.16	155.55	156.09	152.34	154.07	150.45	137.07	137.94	139.47	145.14	137.90	137.90
Highway and street construction.....	127.14	131.14	130.54	131.58	154.86	157.04	153.47	155.46	151.64	134.06	135.05	133.95	143.30	136.45	136.45
Other heavy construction.....	146.30	150.08	150.82	145.51	156.91	155.04	151.44	152.21	148.42	140.76	141.05	143.42	147.17	139.60	139.60
Special trade contractors.....	149.67	156.77	155.72	151.20	157.96	157.88	155.70	156.59	153.38	150.88	148.15	150.26	152.44	144.99	144.99
Plumbing, heating, and air conditioning.....	161.93	165.75	164.97	158.76	165.85	166.21	163.90	163.12	161.09	160.27	156.21	157.12	160.63	152.08	152.08
Painting, paperhanging, and decorating.....	139.84	141.40	141.91	142.26	144.68	145.16	143.08	145.04	141.21	140.30	137.28	136.26	140.66	134.97	134.97
Electrical work.....	180.39	185.02	185.65	178.89	185.26	183.46	180.45	180.12	177.45	177.00	173.57	174.60	178.62	169.89	169.89
Masonry, plastering, stone, and tile work.....	128.03	139.10	140.90	135.38	144.79	142.90	143.72	144.63	140.65	139.15	138.98	142.00	139.78	133.56	133.56
Roofing and sheet metal work.....	116.92	125.54	126.21	121.84	132.46	129.17	128.16	129.23	123.90	118.61	117.57	123.20	124.18	117.65	117.65
Average weekly hours															
Mining.....	41.7	41.6	42.3	42.5	42.2	43.2	43.0	43.1	43.4	42.9	41.4	42.6	42.7	42.3	42.3
Metal mining.....	42.2	42.6	42.4	42.0	42.1	42.7	42.2	42.7	42.7	42.2	42.5	41.6	42.2	41.6	41.6
Iron ores.....	42.2	42.4	41.6	41.3	41.3	43.1	42.3	43.5	43.4	41.8	42.7	40.9	42.1	41.9	41.9
Copper ores.....	43.6	43.8	44.1	43.9	43.7	43.4	43.1	43.5	43.3	43.3	43.7	42.9	43.5	43.4	43.4
Coal mining.....	39.6	40.9	41.8	39.3	42.2	40.7	40.8	-----	41.8	41.5	32.8	41.1	40.3	39.9	39.9
Bituminous.....	40.0	41.1	42.1	39.5	42.5	41.2	41.2	-----	42.2	41.7	32.9	41.5	40.6	40.2	40.2
Crude petroleum and natural gas.....	42.1	42.5	42.2	42.5	42.5	42.5	42.6	43.1	42.7	42.6	42.8	43.0	42.6	42.4	42.4
Crude petroleum and natural gas fields.....	40.8	41.6	40.8	40.8	40.8	40.8	40.5	41.3	40.7	40.8	41.0	40.5	40.8	40.8	40.8
Oil and gas field services.....	43.2	43.1	43.2	43.8	43.7	43.7	44.2	44.5	44.3	44.1	44.2	44.9	44.0	43.6	43.6
Quarrying and nonmetallic mining.....	42.9	43.7	44.2	45.1	46.9	46.9	47.2	47.1	47.0	45.8	45.4	44.8	45.7	45.7	45.7
Crushed and broken stone.....	43.3	44.8	45.7	47.1	48.5	48.7	49.3	49.4	49.0	46.9	46.2	45.9	47.2	47.2	47.2
Contract construction.....	36.8	35.8	37.1	37.2	36.3	38.5	38.3	38.4	39.0	38.3	37.0	36.9	37.7	37.6	37.4
General building contractors.....	35.0	36.3	36.3	35.3	36.9	36.7	36.8	37.1	36.6	35.7	35.8	36.8	36.3	36.1	36.1
Heavy construction.....	38.7	39.6	39.8	38.7	42.5	42.3	42.2	43.4	42.5	39.5	40.1	40.9	41.0	40.8	40.8
Highway and street construction.....	39.0	39.5	39.8	38.7	43.5	43.5	43.6	44.8	43.7	39.9	40.8	41.6	41.9	41.6	41.6
Other heavy construction.....	38.5	39.6	39.9	38.7	41.4	40.8	40.6	41.7	41.0	39.1	39.4	40.4	40.1	40.0	40.0
Special trade contractors.....	35.3	36.8	36.9	36.0	37.7	37.5	37.7	38.1	37.5	36.8	36.4	37.1	37.0	36.8	36.8
Plumbing, heating, and air conditioning.....	38.1	39.0	39.0	37.8	39.3	39.2	39.4	39.4	39.1	38.9	38.1	38.7	38.8	38.6	38.6
Painting, paperhanging, and decorating.....	34.7	35.0	35.3	35.3	35.9	36.2	36.5	37.0	36.3	35.7	35.2	35.3	35.7	35.8	35.8
Electrical work.....	38.3	39.2	39.5	37.9	39.5	39.2	39.4	39.5	39.0	38.9	38.4	38.8	39.0	38.7	38.7
Masonry, plastering, stone, and tile work.....	31.0	33.6	34.2	33.1	35.4	34.6	35.4	35.8	34.9	34.7	34.4	35.5	34.6	34.6	34.6
Roofing and sheet metal work.....	31.6	33.3	33.3	33.2	35.8	35.1	35.6	36.2	35.2	33.6	33.4	35.0	34.4	34.5	34.5
Average hourly earnings															
Mining.....	\$3.15	\$3.15	\$3.16	\$3.14	\$3.12	\$3.12	\$3.11	\$3.06	\$3.05	\$3.06	\$3.05	\$2.94	\$2.99	\$3.05	\$2.92
Metal mining.....	3.20	3.20	3.22	3.22	3.21	3.20	3.19	3.18	3.16	3.14	3.15	3.12	3.17	3.06	3.06
Iron ores.....	3.22	3.27	3.29	3.30	3.30	3.30	3.27	3.31	3.28	3.26	3.27	3.27	3.28	3.16	3.16
Copper ores.....	3.25	3.26	3.27	3.26	3.26	3.24	3.26	3.21	3.19	3.17	3.18	3.17	3.22	3.15	3.15
Coal mining.....	3.67	3.75	3.73	3.72	3.72	3.71	3.66	-----	3.67	3.67	3.40	3.49	3.61	3.45	3.45
Bituminous.....	3.70	3.79	3.76	3.75	3.76	3.74	3.70	-----	3.72	3.72	3.43	3.52	3.65	3.49	3.49
Crude petroleum and natural gas.....	2.99	2.99	2.95	2.93	2.91	2.91	2.86	2.87	2.85	2.86	2.86	2.82	2.87	2.74	2.74
Crude petroleum and natural gas fields.....	3.28	3.27	3.17	3.18	3.18	3.17	3.11	3.14	3.12	3.12	3.15	3.12	3.14	3.03	3.03
Oil and gas field services.....	2.78	2.79	2.80	2.76	2.72	2.72	2.68	2.68	2.67	2.67	2.65	2.63	2.69	2.53	2.53
Quarrying and nonmetallic mining.....	2.74	2.72	2.72	2.75	2.76	2.76	2.73	2.71	2.70	2.67	2.65	2.60	2.69	2.57	2.57
Crushed and broken stone.....	2.55	2.57	2.63	2.67	2.70	2.70	2.66	2.65	2.63	2.59	2.58	2.49	2.61	2.47	2.47
Contract construction.....	3.96	3.99	4.01	3.98	3.95	3.95	3.96	3.89	3.85	3.83	3.83	3.81	3.80	3.87	3.69
General building contractors.....	3.86	3.87	3.88	3.86	3.84	3.83	3.75	3.70	3.69	3.70	3.68	3.65	3.74	3.55	3.55
Heavy construction.....	3.57	3.59	3.55	3.57	3.66	3.69	3.61	3.55	3.54	3.47	3.44	3.41	3.54	3.38	3.38
Highway and street construction.....	3.26	3.32	3.28	3.40	3.56	3.61	3.52	3.47	3.47	3.36	3.31	3.22	3.42	3.28	3.28
Other heavy construction.....	3.80	3.79	3.78	3.76	3.79	3.80	3.73	3.65	3.62	3.60	3.58	3.55	3.67	3.49	3.49
Special trade contractors.....	4.24	4.26	4.22	4.20	4.19	4.21	4.13	4.11	4.09	4.10	4.07	4.05	4.12	3.94	3.94
Plumbing, heating, and air conditioning.....	4.25	4.25	4.23	4.20	4.22	4.24	4.16	4.14	4.12	4.12	4.10	4.06	4.14	3.94	3.94
Painting, paperhanging, and decorating.....	4.03	4.04	4.02	4.03	4.03	4.01	3.92	3.92	3.89	3.93	3.90	3.86	3.94	3.77	3.77
Electrical work.....	4.71	4.72	4.70	4.72	4.69	4.68	4.58	4.56	4.55	4.55	4.52	4.50	4.58	4.39	4.39
Masonry, plastering, stone, and tile work.....	4.13	4.14	4.12	4.09	4.09	4.13	4.06	4.04	4.03	4.01	4.04	4.00	4.04	3.86	3.86
Roofing and sheet metal work.....	3.70	3.77	3.79	3.67	3.70	3.68	3.60	3.57	3.52	3.53	3.52	3.52	3.61	3.41	

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Manufacturing.....	\$112.44	\$111.48	\$113.42	\$114.40	\$113.99	\$113.85	\$113.71	\$111.78	\$111.11	\$112.74	\$112.05	\$111.24	\$110.95	\$111.92	\$107.53
Durable goods.....	121.36	120.47	122.43	124.20	123.77	124.07	123.94	120.54	119.81	121.82	121.82	121.54	120.69	121.67	117.18
Nondurable goods.....	100.08	99.18	99.40	100.25	100.10	99.94	99.54	99.23	99.14	99.23	98.33	96.96	96.88	98.49	94.64
Ordnance and accessories.....	137.15	136.18	137.80	138.78	137.92	136.63	136.95	134.82	133.88	134.20	134.51	133.46	132.82	135.36	131.57
Ammunition, except for small arms.....	136.86	135.79	136.95	136.95	136.45	135.55	135.88	135.88	134.23	134.31	136.03	134.55	134.64	136.12	136.08
Sighting and fire control equipment.....	137.70	137.70	139.43	135.46	133.35	121.60	128.96	125.66	127.62	133.65	131.55	130.42	134.51	130.83	127.08
Other ordnance and accessories.....	137.58	135.99	138.03	143.28	141.48	141.48	139.02	133.72	133.90	134.98	132.44	132.00	129.03	135.25	121.93
Lumber and wood products, except furniture.....	92.73	91.64	91.37	90.97	92.00	94.83	94.83	94.07	93.66	93.94	94.66	92.48	88.91	92.62	88.54
Sawmills and planing mills.....	87.96	85.63	85.14	84.14	84.77	86.67	87.26	87.72	86.90	86.92	86.94	85.48	82.62	85.46	82.01
Millwork, plywood, and related products.....	102.41	99.94	98.98	99.06	97.60	100.12	100.61	100.12	99.63	100.91	102.61	100.08	97.88	99.29	96.93
Wooden containers.....	77.36	75.83	75.67	76.59	76.04	75.44	76.78	76.91	75.95	76.91	77.71	76.31	73.80	75.95	72.75
Miscellaneous wood products.....	88.32	86.83	86.88	88.37	88.78	88.58	88.38	87.77	87.12	87.56	88.19	87.35	87.14	87.34	84.67
Furniture and fixtures.....	90.80	89.50	90.63	93.79	92.74	93.86	93.21	93.26	89.13	91.96	90.67	88.75	90.06	91.08	87.98
Household furniture.....	85.14	83.28	84.35	87.76	87.13	88.19	87.14	87.15	82.61	85.70	84.87	83.84	84.87	85.49	83.21
Office furniture.....	110.92	114.01	115.88	114.65	115.01	114.58	115.02	110.50	112.41	111.02	107.78	108.54	111.89	111.89	104.06
Partitions; office and store fixtures.....	112.87	114.95	117.04	114.81	117.74	118.83	119.63	115.93	119.54	116.60	113.58	113.02	115.92	112.86	112.86
Other furniture and fixtures.....	98.29	96.29	95.75	100.44	98.94	100.91	101.48	99.36	97.75	98.41	97.02	94.58	94.43	97.25	92.18
Average weekly hours															
Manufacturing.....	40.3	40.1	40.8	41.3	41.3	41.4	41.5	41.4	41.0	41.6	41.5	41.2	41.4	41.3	41.2
Durable goods.....	41.0	40.7	41.5	42.1	42.1	42.2	42.3	42.0	41.6	42.3	42.3	42.2	42.2	42.1	42.0
Nondurable goods.....	39.4	39.2	39.6	40.1	40.2	40.3	40.3	40.5	40.3	40.5	40.3	39.9	40.2	40.2	40.1
Ordnance and accessories.....	42.2	41.9	42.4	42.7	42.7	42.3	42.4	42.0	42.1	42.2	42.3	42.1	41.9	42.3	41.9
Ammunition, except for small arms.....	41.6	41.4	41.5	41.5	41.6	41.2	41.3	41.3	41.3	41.2	41.6	41.4	41.3	41.5	42.0
Sighting and fire control equipment.....	42.5	42.9	42.2	42.2	39.1	41.6	40.8	41.3	41.3	42.7	42.3	41.8	42.7	41.8	40.6
Other ordnance and accessories.....	43.4	42.9	44.1	45.2	45.2	45.2	44.7	43.7	43.9	44.4	44.0	44.0	43.3	44.2	41.9
Lumber and wood products, except furniture.....	39.8	39.5	39.9	39.9	40.0	40.7	40.7	40.9	40.9	41.2	41.7	41.1	40.6	40.8	40.8
Sawmills and planing mills.....	39.8	39.1	39.6	39.5	39.8	40.5	40.4	40.8	40.8	41.0	41.4	40.9	40.5	40.5	40.6
Millwork, plywood, and related products.....	40.8	40.3	40.4	40.6	40.0	40.7	40.9	41.2	41.0	41.7	42.4	41.7	41.3	41.2	41.6
Wooden containers.....	40.5	39.7	40.9	41.4	41.1	41.0	41.5	41.8	41.5	41.8	42.7	41.7	41.0	41.5	41.1
Miscellaneous wood products.....	40.7	40.2	40.6	41.1	41.1	41.2	41.3	41.4	40.9	41.3	41.6	41.4	41.3	41.2	41.3
Furniture and fixtures.....	40.0	39.6	40.1	41.5	41.4	41.9	41.8	42.2	40.7	41.8	41.4	40.9	41.5	41.4	41.5
Household furniture.....	39.6	39.1	39.6	41.2	41.1	41.6	41.3	41.7	40.1	41.4	41.0	40.7	41.4	41.1	41.4
Office furniture.....	41.7	42.7	43.4	43.1	43.4	43.4	43.9	42.5	43.4	43.2	42.6	42.9	43.2	42.3	42.3
Partitions; office and store fixtures.....	40.6	41.2	41.8	41.3	42.2	42.9	43.5	41.7	43.0	42.4	41.3	41.4	42.0	41.8	41.8
Other furniture and fixtures.....	41.3	40.8	40.4	42.2	42.1	42.4	43.0	43.2	42.5	42.6	42.0	41.3	41.6	42.1	41.9
Average hourly earnings															
Manufacturing.....	\$2.79	\$2.78	\$2.78	\$2.77	\$2.76	\$2.75	\$2.74	\$2.70	\$2.71	\$2.71	\$2.70	\$2.70	\$2.68	\$2.71	\$2.61
Durable goods.....	2.96	2.96	2.95	2.95	2.94	2.94	2.93	2.87	2.88	2.88	2.88	2.88	2.86	2.89	2.79
Nondurable goods.....	2.54	2.53	2.51	2.50	2.49	2.48	2.47	2.45	2.46	2.45	2.44	2.43	2.41	2.45	2.36
Ordnance and accessories.....	3.25	3.25	3.25	3.25	3.23	3.23	3.23	3.21	3.18	3.18	3.18	3.17	3.17	3.20	3.14
Ammunition, except for small arms.....	3.29	3.28	3.30	3.30	3.28	3.29	3.29	3.29	3.25	3.26	3.27	3.25	3.26	3.28	3.24
Sighting and fire control equipment.....	3.24	3.24	3.25	3.21	3.16	3.11	3.10	3.08	3.09	3.13	3.11	3.12	3.15	3.13	3.13
Other ordnance and accessories.....	3.17	3.17	3.13	3.17	3.13	3.13	3.11	3.06	3.05	3.04	3.01	3.00	2.98	3.06	2.91
Lumber and wood products, except furniture.....	2.33	2.32	2.29	2.28	2.30	2.33	2.33	2.30	2.29	2.28	2.27	2.25	2.19	2.27	2.17
Sawmills and planing mills.....	2.21	2.19	2.15	2.13	2.13	2.14	2.16	2.15	2.13	2.12	2.10	2.09	2.04	2.11	2.02
Millwork, plywood, and related products.....	2.51	2.48	2.45	2.44	2.44	2.46	2.46	2.43	2.43	2.42	2.42	2.40	2.37	2.41	2.33
Wooden containers.....	1.91	1.91	1.85	1.85	1.85	1.84	1.85	1.84	1.83	1.84	1.82	1.83	1.80	1.83	1.77
Miscellaneous wood products.....	2.17	2.16	2.14	2.15	2.16	2.15	2.14	2.12	2.13	2.12	2.12	2.11	2.11	2.12	2.05
Furniture and fixtures.....	2.27	2.26	2.26	2.26	2.24	2.24	2.23	2.21	2.19	2.20	2.19	2.17	2.17	2.20	2.12
Household furniture.....	2.15	2.13	2.13	2.13	2.12	2.12	2.11	2.09	2.06	2.07	2.07	2.06	2.05	2.08	2.01
Office furniture.....	2.66	2.67	2.67	2.66	2.65	2.65	2.62	2.60	2.60	2.59	2.57	2.53	2.53	2.59	2.46
Partitions; office and store fixtures.....	2.78	2.79	2.80	2.78	2.79	2.77	2.75	2.78	2.78	2.78	2.75	2.75	2.73	2.76	2.70
Other furniture and fixtures.....	2.38	2.36	2.37	2.38	2.35	2.38	2.36	2.30	2.30	2.31	2.31	2.29	2.27	2.31	2.20

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Stone, clay, and glass products.....	\$114.54	\$112.19	\$113.71	\$115.23	\$115.79	\$116.47	\$116.05	\$115.75	\$113.82	\$115.60	\$114.63	\$114.09	\$112.83	\$114.24	\$110.04
Flat glass.....		149.87	152.64	155.06	160.60	159.87	153.99	152.44	141.60	151.01	152.34	155.86	154.51	153.36	149.60
Glass and glassware, pressed or blown.....	116.62	112.31	113.99	114.68	114.12	111.38	111.38	110.30	109.76	111.79	111.79	109.34	111.92	111.52	106.25
Cement, hydraulic.....	127.84	127.98	130.79	131.65	138.22	132.39	133.76	132.61	134.82	131.87	132.19	132.51	130.94	132.61	124.42
Structural clay products.....	98.58	96.07	95.68	96.48	97.20	98.16	97.99	98.12	97.94	97.94	97.29	98.00	96.28	97.00	94.02
Pottery and related products.....		100.35	101.52	102.14	102.36	100.15	100.44	98.50	95.94	99.00	98.95	98.80	97.91	98.85	95.12
Concrete, gypsum, and plaster products.....	114.75	111.51	112.44	114.48	116.42	121.38	121.76	122.94	120.87	120.87	118.10	116.95	113.62	117.21	113.08
Other stone and mineral products.....	113.68	112.96	115.36	116.76	116.20	118.86	117.32	115.79	114.68	116.47	116.60	115.63	114.24	115.64	110.62
Primary metal industries.....	135.22	134.97	138.36	137.28	138.69	139.02	140.77	138.09	136.86	139.50	139.07	138.74	136.83	138.09	133.88
Blast furnace and basic steel products.....	141.86	141.20	144.43	140.45	143.37	144.84	147.80	145.85	147.03	147.68	146.97	146.56	143.56	144.73	140.90
Iron and steel foundries.....	124.73	124.73	129.20	131.63	130.42	130.90	129.73	126.69	121.13	128.01	127.58	128.90	128.60	128.14	125.72
Nonferrous smelting and refining.....	131.55	130.21	132.60	132.18	132.91	132.91	132.71	130.62	130.09	128.83	129.32	126.96	129.98	124.44	
Nonferrous rolling, drawing, and extruding.....	133.11	133.65	136.66	138.35	138.97	136.47	138.22	135.83	133.55	137.20	136.14	134.90	134.20	136.27	130.07
Nonferrous foundries.....	117.56	118.44	120.60	123.06	122.22	121.67	123.26	118.02	114.80	119.29	118.86	118.16	117.59	119.43	113.55
Miscellaneous primary metal industries.....	147.98	147.35	150.23	152.06	154.70	153.12	153.91	146.89	141.86	147.74	149.64	146.03	149.80	149.82	143.09
Average weekly hours															
Stone, clay, and glass products.....	41.2	40.5	41.2	41.6	41.8	42.2	42.2	42.4	42.0	42.5	42.3	42.1	42.1	42.0	42.0
Flat glass.....		41.4	42.4	42.6	44.0	43.8	43.5	42.7	40.0	42.3	42.2	42.7	42.8	42.6	42.5
Glass and glassware, pressed or blown.....	41.5	40.4	41.3	41.4	41.2	40.8	40.8	40.7	40.5	41.1	41.1	40.2	41.3	41.0	40.4
Cement, hydraulic.....	40.2	40.5	41.0	41.4	42.4	41.5	41.8	41.7	42.0	41.6	41.7	41.8	41.7	41.7	41.2
Structural clay products.....	40.4	39.7	39.7	40.2	40.5	40.9	41.0	41.4	41.5	41.5	41.4	41.7	41.5	41.1	41.6
Pottery and related products.....		39.2	39.5	39.9	40.3	39.9	39.7	39.4	39.0	39.6	39.9	40.0	39.8	39.7	39.8
Concrete, gypsum, and plaster products.....	42.5	41.3	41.8	42.4	42.8	44.3	44.6	45.2	45.1	45.1	44.4	44.3	43.7	43.9	44.0
Other stone and mineral products.....	40.6	40.2	41.2	41.7	41.5	42.3	41.9	41.8	41.7	42.2	42.4	42.2	42.0	41.9	41.9
Primary metal industries.....	41.1	40.9	41.8	41.6	41.9	42.0	42.4	42.1	41.6	42.4	42.4	42.3	42.1	42.1	42.1
Blast furnace and basic steel products.....	40.3	40.0	40.8	39.9	40.5	40.8	41.4	41.2	41.3	41.6	41.4	41.4	40.9	41.0	41.2
Iron and steel foundries.....	41.3	41.3	42.5	43.3	42.9	43.2	43.1	42.8	41.2	43.1	43.1	43.4	43.3	43.0	43.5
Nonferrous smelting and refining.....	42.3	41.6	42.5	42.5	42.6	42.6	42.4	42.0	42.1	42.1	42.1	42.4	41.9	42.2	41.9
Nonferrous rolling, drawing, and extruding.....	42.8	42.7	43.8	44.2	44.4	43.6	44.3	44.1	43.5	44.4	44.2	43.8	44.0	44.1	43.5
Nonferrous foundries.....	40.4	40.7	41.3	42.0	42.0	42.1	42.8	42.0	41.0	42.3	42.3	42.2	42.3	42.2	41.9
Miscellaneous primary metal industries.....	42.4	42.1	42.8	43.2	43.7	43.5	43.6	42.7	41.6	43.2	43.5	42.7	43.8	43.3	43.1
Average hourly earnings															
Stone, clay, and glass products.....	\$2.78	\$2.77	\$2.76	\$2.77	\$2.77	\$2.76	\$2.75	\$2.73	\$2.71	\$2.72	\$2.71	\$2.71	\$2.68	\$2.72	\$2.62
Flat glass.....		3.62	3.60	3.64	3.65	3.65	3.54	3.57	3.54	3.57	3.61	3.65	3.61	3.60	3.52
Glass and glassware, pressed or blown.....	2.81	2.78	2.76	2.77	2.77	2.73	2.73	2.71	2.71	2.72	2.72	2.72	2.71	2.72	2.63
Cement, hydraulic.....	3.18	3.16	3.19	3.18	3.26	3.19	3.20	3.18	3.21	3.17	3.17	3.17	3.14	3.18	3.02
Structural clay products.....	2.44	2.42	2.41	2.40	2.40	2.40	2.39	2.37	2.36	2.36	2.35	2.35	2.32	2.36	2.26
Pottery and related products.....		2.56	2.57	2.56	2.54	2.51	2.53	2.50	2.46	2.50	2.48	2.47	2.46	2.49	2.39
Concrete, gypsum, and plaster products.....	2.70	2.70	2.69	2.70	2.72	2.74	2.73	2.72	2.68	2.68	2.66	2.64	2.60	2.67	2.57
Other stone and mineral products.....	2.80	2.81	2.80	2.80	2.80	2.81	2.80	2.77	2.75	2.76	2.75	2.74	2.72	2.76	2.64
Primary metal industries.....	3.29	3.30	3.31	3.30	3.31	3.31	3.32	3.28	3.29	3.29	3.28	3.28	3.25	3.28	3.18
Blast furnace and basic steel products.....	3.52	3.53	3.54	3.52	3.54	3.55	3.57	3.54	3.56	3.55	3.55	3.54	3.51	3.53	3.42
Iron and steel foundries.....	3.02	3.02	3.04	3.04	3.04	3.03	3.01	2.96	2.94	2.97	2.96	2.97	2.97	2.98	2.89
Nonferrous smelting and refining.....	3.11	3.13	3.12	3.11	3.12	3.12	3.13	3.11	3.09	3.06	3.06	3.05	3.03	3.08	2.97
Nonferrous rolling, drawing, and extruding.....	3.11	3.13	3.12	3.13	3.13	3.13	3.12	3.08	3.07	3.09	3.08	3.08	3.05	3.09	2.99
Nonferrous foundries.....	2.91	2.91	2.92	2.93	2.91	2.89	2.88	2.81	2.80	2.82	2.81	2.80	2.78	2.83	2.71
Miscellaneous primary metal industries.....	3.49	3.50	3.51	3.52	3.54	3.52	3.53	3.44	3.41	3.42	3.44	3.42	3.42	3.46	3.32

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1966												Annual average		
	1967			1966									1966	1965	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.			Mar.
Manufacturing—Continued	Average weekly earnings														
Durable goods—Continued	Average weekly earnings														
Fabricated metal products.....	\$120.72	\$120.13	\$122.47	\$124.53	\$123.09	\$124.26	\$124.84	\$121.26	\$119.42	\$121.70	\$121.84	\$119.99	\$119.85	\$121.69	\$116.20
Metal cans.....	142.86	137.12	137.85	139.40	136.92	136.73	143.66	148.40	151.52	142.68	142.03	138.14	135.36	140.40	137.49
Cutlery, hand tools, and general hardware.....	115.06	114.33	116.18	116.62	116.20	116.06	116.34	113.15	109.76	113.15	114.81	113.85	113.98	114.13	111.22
Heating equipment and plumbing fixtures.....	108.31	107.48	108.74	111.35	110.95	113.30	114.40	112.06	106.13	110.70	110.70	108.40	108.00	110.16	105.06
Fabricated structural metal products.....	122.01	121.84	123.31	125.83	123.09	123.54	123.83	121.11	118.56	121.13	120.27	117.73	117.03	120.41	114.26
Screw machine products, bolts, etc.....	128.77	129.65	131.26	133.18	132.44	130.79	130.92	125.24	121.67	128.25	128.25	126.66	128.37	128.13	120.73
Metal stampings.....	124.49	126.27	130.83	133.34	134.78	137.34	138.85	131.70	129.74	131.58	133.36	132.75	131.89	133.18	128.60
Coating, engraving, and allied services.....	108.50	106.78	107.79	108.94	107.49	108.10	110.59	108.29	105.73	107.19	106.85	105.00	105.84	106.85	100.43
Miscellaneous fabricated wire products.....	108.67	107.87	110.68	112.71	112.98	112.44	113.10	110.20	110.04	111.25	111.51	108.58	108.26	110.46	104.92
Miscellaneous fabricated metal products.....	120.22	117.50	120.80	120.25	119.42	120.56	121.13	118.58	117.03	120.56	120.56	117.88	117.87	118.72	113.42
Machinery.....	136.83	135.45	137.03	138.60	136.87	136.34	136.53	133.55	131.89	135.83	134.03	134.95	134.90	134.90	127.58
Engines and turbines.....	148.26	145.09	143.45	155.31	144.33	138.69	143.81	143.72	141.53	142.76	146.06	144.86	141.57	142.95	133.44
Farm machinery and equipment.....	137.38	136.83	132.70	128.30	130.29	131.57	127.31	124.85	130.82	131.63	131.94	133.06	130.31	121.72	131.72
Construction and related machinery.....	131.57	131.15	131.35	134.08	135.45	135.14	135.33	132.99	132.25	134.85	133.67	132.50	133.42	133.18	126.39
Metalworking machinery and equipment.....	156.52	155.72	157.08	156.71	154.90	152.97	153.05	148.46	149.70	155.04	156.37	153.45	153.64	153.25	144.37
Special industry machinery.....	128.60	127.12	129.65	132.61	129.65	128.92	129.80	126.14	122.41	127.74	126.28	124.55	125.24	126.72	120.22
General industrial machinery.....	132.60	131.24	136.16	138.92	136.66	137.46	138.40	135.39	131.46	135.69	134.64	132.24	132.54	134.77	126.56
Office, computing and accounting machines.....		128.85	131.33	133.42	131.75	132.06	131.02	127.80	129.36	131.44	130.59	128.94	132.13	131.33	127.20
Service industry machines.....	116.44	114.45	114.86	118.98	118.85	118.14	115.64	115.37	114.12	117.74	115.23	115.79	115.92	116.06	112.19
Miscellaneous machinery.....	131.40	131.10	133.20	132.91	137.76	132.02	130.83	127.16	124.85	128.32	128.32	127.30	127.87	128.91	120.93
	Average weekly hours														
Fabricated metal products.....	41.2	41.0	41.8	42.5	42.3	42.7	42.9	42.4	41.9	42.7	42.6	42.1	42.2	42.4	42.1
Metal cans.....	42.9	41.3	41.9	42.5	42.0	42.2	43.8	44.7	45.5	43.9	43.7	42.9	42.3	43.2	43.1
Cutlery, hand tools, and general hardware.....	40.8	40.4	41.2	41.5	41.5	41.6	41.7	41.6	40.5	41.6	41.9	41.4	41.6	41.5	41.5
Heating equipment and plumbing fixtures.....	39.1	38.8	39.4	40.2	40.2	41.2	41.3	41.2	39.9	41.0	40.7	40.0	40.0	40.5	40.1
Fabricated structural metal products.....	41.5	41.3	41.8	42.8	42.3	42.6	42.7	42.2	41.6	42.5	42.2	41.6	41.5	42.1	41.7
Screw machine products, bolts, etc.....	43.8	44.1	44.8	45.3	45.2	45.1	45.3	44.1	43.3	45.0	45.0	44.6	45.2	44.8	43.9
Metal stampings.....	39.9	40.6	41.8	42.6	43.2	43.6	43.8	42.9	42.4	43.0	43.3	43.1	43.1	43.1	43.3
Coating, engraving, and allied services.....	41.1	40.6	41.3	41.9	41.5	41.9	42.7	42.3	41.3	42.2	41.9	41.5	42.0	41.9	41.5
Miscellaneous fabricated wire products.....	40.7	40.4	41.3	41.9	42.0	41.8	42.2	41.9	42.0	42.3	42.4	41.6	41.8	42.0	41.8
Miscellaneous fabricated metal products.....	41.6	40.8	41.8	41.9	41.9	42.3	42.5	42.2	41.5	42.6	42.6	42.1	42.4	42.1	41.7
Machinery.....	43.3	43.0	43.5	44.0	43.7	43.7	43.9	43.5	43.1	44.1	44.1	43.8	44.1	43.8	43.1
Engines and turbines.....	43.1	42.3	42.2	44.5	42.7	41.4	42.8	42.9	42.5	43.0	43.6	43.5	42.9	42.8	41.7
Farm machinery and equipment.....	42.5	42.4	42.1	41.6	40.6	41.1	41.9	41.2	40.8	42.2	42.6	42.7	43.2	41.9	41.4
Construction and related machinery.....	41.9	41.9	42.1	42.7	43.0	42.9	43.1	42.9	42.8	43.5	43.4	43.3	43.6	43.1	42.7
Metalworking machinery and equipment.....	45.9	45.8	46.2	46.5	46.1	45.8	46.1	45.4	45.5	46.7	47.1	46.5	46.7	46.3	45.4
Special industry machinery.....	43.3	42.8	43.8	44.8	44.1	44.0	44.3	43.8	42.8	44.2	44.0	43.7	44.1	44.0	43.4
General industrial machinery.....	42.5	42.2	43.5	44.1	43.8	44.2	44.5	44.1	43.1	44.2	44.0	43.5	43.6	43.9	42.9
Office, computing and accounting machines.....		41.7	42.5	42.9	42.5	42.6	42.4	41.9	42.0	42.4	42.4	42.0	42.9	42.5	42.4
Service industry machines.....	41.0	40.3	40.3	41.6	41.7	41.6	41.3	41.5	41.2	42.2	41.6	41.8	42.0	41.6	41.4
Miscellaneous machinery.....	43.8	43.7	44.4	44.6	44.7	44.6	44.5	44.0	43.5	44.4	44.4	44.2	44.4	44.3	43.5
	Average hourly earnings														
Fabricated metal products.....	\$2.93	\$2.93	\$2.93	\$2.93	\$2.91	\$2.91	\$2.91	\$2.86	\$2.85	\$2.85	\$2.86	\$2.85	\$2.84	\$2.87	\$2.76
Metal cans.....	3.33	3.32	3.29	3.28	3.26	3.24	3.28	3.32	3.33	3.25	3.25	3.22	3.20	3.25	3.19
Cutlery, hand tools, and general hardware.....	2.82	2.83	2.82	2.81	2.80	2.79	2.79	2.72	2.71	2.72	2.74	2.75	2.74	2.75	2.68
Heating equipment and plumbing fixtures.....	2.77	2.77	2.76	2.77	2.76	2.75	2.77	2.72	2.66	2.70	2.72	2.71	2.70	2.72	2.62
Fabricated structural metal products.....	2.94	2.95	2.95	2.94	2.91	2.90	2.90	2.87	2.85	2.85	2.83	2.82	2.86	2.86	2.74
Screw machine products, bolts, etc.....	2.94	2.94	2.93	2.94	2.93	2.90	2.89	2.84	2.81	2.85	2.85	2.84	2.84	2.86	2.75
Metal stampings.....	3.12	3.11	3.13	3.13	3.12	3.15	3.17	3.07	3.06	3.06	3.08	3.08	3.08	3.09	2.97
Coating, engraving, and allied services.....	2.64	2.63	2.61	2.60	2.59	2.58	2.59	2.56	2.56	2.54	2.55	2.53	2.52	2.55	2.42
Miscellaneous fabricated wire products.....	2.67	2.67	2.68	2.69	2.69	2.69	2.68	2.63	2.62	2.63	2.63	2.61	2.59	2.63	2.51
Miscellaneous fabricated metal products.....	2.89	2.88	2.89	2.87	2.85	2.85	2.85	2.81	2.82	2.83	2.83	2.80	2.78	2.82	2.72
Machinery.....	3.16	3.15	3.15	3.15	3.13	3.12	3.11	3.07	3.06	3.08	3.08	3.06	3.06	3.08	2.96
Engines and turbines.....	3.44	3.43	3.40	3.49	3.38	3.35	3.36	3.35	3.33	3.32	3.35	3.33	3.30	3.34	3.20
Farm machinery and equipment.....	3.24	3.25	3.19	3.16	3.17	3.17	3.14	3.09	3.06	3.10	3.09	3.09	3.08	3.11	2.94
Construction and related machinery.....	3.14	3.13	3.12	3.14	3.15	3.15	3.14	3.10	3.09	3.10	3.08	3.06	3.06	3.09	2.96
Metalworking machinery and equipment.....	3.41	3.40	3.40	3.37	3.36	3.34	3.32	3.27	3.29	3.32	3.32	3.30	3.29	3.31	3.18
Special industry machinery.....	2.97	2.97	2.96	2.96	2.94	2.93	2.93	2.88	2.86	2.89	2.87	2.85	2.84	2.88	2.77
General industrial machinery.....	3.12	3.11	3.13	3.15	3.12	3.11	3.11	3.07	3.05	3.07	3.06	3.04	3.04	3.07	2.95
Office, computing and accounting machines.....		3.09	3.09	3.11	3.10	3.10	3.09	3.05	3.08	3.10	3.08	3.07	3.08	3.09	3.00
Service industry machines.....	2.84	2.84	2.85	2.86	2.85	2.84	2.80	2.78	2.77	2.79	2.77	2.77	2.76	2.79	2.71
Miscellaneous machinery.....	3.00	3.00	3.00	2.98	2.97	2.96	2.94	2.89	2.87	2.89	2.89	2.88	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

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Electrical equipment and supplies.....	\$108.40	\$107.46	\$109.21	\$110.42	\$109.74	\$109.86	\$110.12	\$107.68	\$106.11	\$108.62	\$108.62	\$107.68	\$107.53	\$108.77	\$105.78
Electric distribution equipment.....	119.94	118.40	118.71	123.40	120.27	117.32	119.99	115.64	117.46	117.73	116.05	113.98	115.50	117.04	113.02
Electrical industrial apparatus.....	117.01	115.34	118.01	118.86	117.18	117.60	119.57	117.74	118.15	117.17	118.13	117.73	118.28	117.87	113.28
Household appliances.....	115.82	115.34	115.63	117.38	121.01	119.94	122.51	119.42	116.28	118.28	119.97	118.69	114.24	118.82	114.54
Electric lighting and wiring equipment.....	100.10	103.97	104.70	103.79	103.73	103.82	101.93	99.20	101.59	101.84	101.09	101.43	101.43	102.00	99.14
Radio and TV receiving sets.....	89.68	89.62	91.87	93.20	94.30	98.41	94.07	93.96	91.57	91.87	89.17	91.80	92.50	93.20	91.31
Communication equipment.....	123.00	123.60	124.15	125.21	122.60	122.18	122.22	118.37	117.33	119.81	120.51	118.82	120.25	120.93	116.47
Electronic components and accessories.....	91.26	90.17	91.64	92.46	91.60	92.00	91.66	91.03	89.27	93.02	92.21	91.35	91.80	91.71	88.88
Miscellaneous electrical equipment and supplies.....	115.74	115.64	121.58	125.40	127.02	124.62	122.43	115.14	114.34	117.79	117.79	118.03	117.50	120.30	115.36
Transportation equipment.....	136.15	136.21	141.44	144.93	145.52	146.63	144.84	139.35	137.94	140.25	139.07	141.47	140.06	141.86	137.71
Motor vehicles and equipment.....	133.86	135.98	143.50	150.73	151.71	154.43	151.87	142.27	140.42	143.40	141.54	149.02	144.57	147.23	147.63
Aircraft and parts.....	143.99	142.30	143.90	144.14	145.92	144.05	143.52	144.09	142.23	143.22	143.44	139.43	141.48	142.89	131.88
Ship and boat building and repairing.....	130.17	128.63	134.37	136.63	131.02	134.18	129.60	129.34	130.29	132.40	128.75	128.65	130.10	130.82	121.50
Railroad equipment.....	137.42	141.66	142.27	141.80	141.04	141.04	136.15	135.74	136.68	133.32	137.94	138.20	132.44	137.09	129.44
Other transportation equipment.....	94.50	92.69	94.53	94.62	97.20	99.14	97.27	93.30	96.87	96.96	95.20	95.20	95.12	92.69	
Average weekly hours															
Electrical equipment and supplies.....	40.0	39.8	40.6	41.2	41.1	41.3	41.4	41.1	40.5	41.3	41.3	41.1	41.2	41.2	41.0
Electric distribution equipment.....	41.5	41.4	41.8	42.7	42.2	41.9	42.7	41.9	42.1	42.5	42.2	41.6	42.0	42.1	41.4
Electrical industrial apparatus.....	41.2	40.9	41.7	42.3	42.0	42.0	42.4	42.2	42.5	42.3	42.8	42.5	42.7	42.4	41.8
Household appliances.....	39.8	39.5	39.6	40.2	41.3	41.5	42.1	41.9	40.8	41.5	41.8	41.5	40.8	41.4	41.2
Electric lighting and wiring equipment.....	38.8	38.8	40.3	40.9	40.7	41.0	41.2	41.1	40.0	40.8	40.9	40.6	40.9	40.8	40.8
Radio and TV receiving sets.....	38.0	38.3	39.6	40.0	40.3	41.7	40.2	40.5	39.3	39.6	38.6	39.4	39.7	40.0	39.7
Communication equipment.....	41.0	41.2	41.8	42.3	41.7	41.7	42.0	41.1	40.6	41.6	41.7	41.4	41.9	41.7	41.3
Electronic components and accessories.....	39.0	38.7	39.5	40.2	40.0	40.0	40.2	40.1	39.5	40.8	40.8	40.6	40.8	40.4	40.4
Miscellaneous electrical equipment and supplies.....	39.5	39.2	40.8	41.8	42.2	42.1	41.5	40.4	39.7	40.9	40.9	40.7	40.8	41.2	41.2
Transportation equipment.....	40.4	40.3	41.6	42.5	42.8	43.0	42.6	42.1	41.8	42.5	42.4	43.0	42.7	42.6	42.9
Motor vehicles and equipment.....	38.8	39.3	41.0	42.7	43.1	43.5	42.9	41.6	41.3	42.3	42.0	43.7	42.9	42.8	44.2
Aircraft and parts.....	42.6	42.1	42.7	42.9	43.3	43.0	43.1	43.4	43.1	43.4	43.6	42.9	43.4	43.3	42.0
Ship and boat building and repairing.....	40.3	39.7	41.6	42.3	41.2	41.8	40.5	40.8	41.1	41.9	41.4	41.5	41.7	41.4	40.5
Railroad equipment.....	40.3	41.3	41.0	41.1	41.0	41.0	40.4	40.4	40.8	40.4	41.3	41.5	40.5	40.8	40.2
Other transportation equipment.....	37.8	38.3	38.9	39.1	39.1	40.0	40.8	40.7	39.2	40.7	40.4	40.0	40.0	39.8	40.3
Average hourly earnings															
Electrical equipment and supplies.....	\$2.71	\$2.70	\$2.69	\$2.68	\$2.67	\$2.66	\$2.66	\$2.62	\$2.62	\$2.63	\$2.62	\$2.61	\$2.61	\$2.64	\$2.58
Electric distribution equipment.....	2.89	2.86	2.84	2.89	2.85	2.80	2.81	2.79	2.77	2.75	2.74	2.75	2.73	2.78	2.73
Electrical industrial apparatus.....	2.84	2.82	2.83	2.81	2.79	2.80	2.82	2.78	2.77	2.76	2.77	2.77	2.76	2.78	2.71
Household appliances.....	2.91	2.92	2.92	2.92	2.93	2.89	2.91	2.85	2.85	2.87	2.86	2.80	2.84	2.87	2.78
Electric lighting and wiring equipment.....	2.58	2.58	2.56	2.55	2.53	2.53	2.52	2.48	2.49	2.49	2.49	2.48	2.47	2.50	2.43
Radio and TV receiving sets.....	2.36	2.34	2.32	2.33	2.34	2.36	2.34	2.33	2.32	2.31	2.33	2.33	2.33	2.33	2.30
Communication equipment.....	3.00	3.00	2.97	2.96	2.94	2.93	2.91	2.89	2.88	2.89	2.87	2.87	2.88	2.90	2.82
Electronic components and accessories.....	2.34	2.33	2.32	2.30	2.29	2.30	2.28	2.26	2.28	2.26	2.25	2.25	2.25	2.27	2.20
Miscellaneous electrical equipment and supplies.....	2.93	2.95	2.98	3.00	3.01	2.96	2.95	2.88	2.88	2.88	2.90	2.88	2.90	2.92	2.80
Transportation equipment.....	3.37	3.38	3.40	3.41	3.40	3.41	3.40	3.30	3.30	3.28	3.29	3.28	3.28	3.33	3.21
Motor vehicles and equipment.....	3.45	3.46	3.50	3.53	3.52	3.55	3.54	3.40	3.39	3.37	3.41	3.37	3.38	3.44	3.34
Aircraft and parts.....	3.38	3.38	3.37	3.36	3.37	3.35	3.33	3.30	3.30	3.29	3.25	3.26	3.26	3.30	3.14
Ship and boat building and repairing.....	3.23	3.24	3.23	3.23	3.18	3.21	3.20	3.17	3.16	3.11	3.10	3.12	3.13	3.16	3.00
Railroad equipment.....	3.41	3.43	3.43	3.45	3.44	3.44	3.37	3.35	3.30	3.34	3.33	3.27	3.28	3.36	3.22
Other transportation equipment.....	2.50	2.42	2.42	2.42	2.42	2.43	2.43	2.38	2.38	2.40	2.38	2.38	2.35	2.39	2.30

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967				1966									Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Instruments and related products.....	\$113.71	\$112.61	\$114.13	\$115.78	\$114.66	\$114.93	\$114.78	\$112.17	\$111.90	\$113.94	\$113.79	\$112.71	\$113.10	\$113.40	\$108.47
Engineering and scientific instruments.....		132.60	132.44	136.22	133.49	133.18	133.06	128.59	131.89	131.82	131.40	130.28	133.18	132.44	125.33
Mechanical measuring and control devices.....	112.88	109.73	115.23	116.62	115.92	116.20	115.08	112.74	112.19	115.60	115.75	114.63	114.48	114.93	108.62
Optical and ophthalmic goods.....	101.85	102.21	103.32	105.08	103.91	102.26	103.83	101.26	101.92	102.66	102.48	97.68	101.88	101.92	98.65
Ophthalmic goods.....		92.43	92.57	93.61	94.19	92.57	94.07	91.58	93.25	93.30	92.48	88.44	92.06	92.21	89.40
Surgical, medical, and dental equipment.....	95.04	96.40	95.60	96.87	96.46	96.12	95.71	93.50	91.94	95.30	94.89	93.38	93.89	94.42	90.23
Photographic equipment and supplies.....		135.68	135.04	135.84	133.73	136.78	136.03	132.25	131.58	133.67	133.90	134.29	131.63	133.67	127.84
Watches and clocks.....		90.46	92.06	92.11	91.69	91.65	92.48	92.70	91.35	91.17	89.91	90.50	91.62	91.39	87.85
Miscellaneous manufacturing industries.....	91.49	90.40	91.87	91.20	90.45	90.09	89.20	88.22	86.24	88.62	88.62	87.74	89.28	88.80	85.39
Jewelry, silverware, and plated ware.....	102.68	99.18	103.38	108.03	109.48	108.63	105.42	102.51	95.35	100.94	100.28	100.04	100.19	102.26	95.53
Toys, amusement, and sporting goods.....		81.79	82.32	79.17	79.60	79.60	78.41	79.00	77.60	78.80	78.40	78.40	79.59	78.80	76.44
Pens, pencils, office and art materials.....		87.58	88.31	90.17	90.45	89.38	88.07	86.43	84.02	87.48	86.05	84.42	85.44	86.65	82.82
Costume jewelry, buttons, and notions.....		81.15	82.26	81.74	79.54	80.98	81.18	80.00	78.56	82.42	81.20	79.37	81.81	80.78	77.62
Other manufacturing industries.....	96.97	95.94	97.68	97.84	97.84	97.28	96.40	95.04	93.62	95.04	95.75	94.56	95.47	95.68	92.46
Musical instruments and parts.....		99.15	101.34	104.16	104.75	103.42	99.39	99.63	97.28	100.45	99.39	98.42	99.53	100.53	97.75
Average weekly hours															
Instruments and related products.....	41.2	40.8	41.5	42.1	42.0	42.1	42.2	41.7	41.6	42.2	42.3	41.9	42.2	42.0	41.4
Engineering and scientific instruments.....		42.5	43.0	43.8	43.2	43.1	43.2	42.3	43.1	42.8	42.8	42.3	43.1	43.0	41.5
Mechanical measuring and control devices.....	40.9	39.9	41.6	42.1	42.0	42.1	42.0	41.6	41.4	42.5	42.4	42.3	42.4	42.1	41.3
Optical and ophthalmic goods.....	40.1	40.4	41.0	41.7	41.4	41.4	41.7	41.5	41.6	41.9	42.0	40.7	42.1	41.6	41.8
Ophthalmic goods.....		39.5	39.9	40.7	40.6	40.6	40.9	40.7	40.9	41.1	41.1	40.2	41.1	40.8	41.2
Surgical, medical, and dental equipment.....	39.6	40.0	40.0	40.7	40.7	40.9	40.9	40.3	39.8	40.9	40.9	40.6	41.0	40.7	40.1
Photographic equipment and supplies.....		42.4	42.6	43.4	43.0	43.7	43.6	42.8	43.0	43.4	43.9	43.6	43.3	43.4	42.9
Watches and clocks.....		39.5	40.2	40.4	41.3	41.1	41.1	41.2	40.6	40.7	40.5	40.4	40.9	40.8	40.3
Miscellaneous manufacturing industries.....	39.1	38.8	39.6	40.0	40.2	40.4	40.0	40.1	39.2	40.1	40.1	39.7	40.4	40.0	39.9
Jewelry, silverware, and plated ware.....	39.8	39.2	40.7	42.2	42.6	42.6	42.0	41.5	39.4	41.2	41.1	41.0	41.4	41.4	41.0
Toys, amusement, and sporting goods.....		38.4	39.2	39.0	40.0	40.0	39.4	39.7	38.8	39.4	39.2	39.2	39.4	39.4	39.2
Pens, pencils, office and art materials.....		39.1	39.6	40.8	41.3	41.0	40.4	40.2	38.9	40.5	40.4	40.2	40.3	40.3	40.4
Costume jewelry, buttons, and notions.....		38.1	38.8	39.3	38.8	39.5	39.6	39.8	38.7	40.4	40.2	39.1	40.3	39.6	39.6
Other manufacturing industries.....	39.1	39.0	39.7	40.1	40.1	40.2	40.0	40.1	39.5	40.1	40.4	39.9	40.8	40.2	40.2
Musical instruments and parts.....		39.5	40.7	42.0	41.9	41.7	40.9	41.0	40.2	41.0	40.9	40.5	41.3	41.2	40.9
Average hourly earnings															
Instruments and related products.....	\$2.76	\$2.76	\$2.75	\$2.75	\$2.73	\$2.73	\$2.72	\$2.69	\$2.69	\$2.70	\$2.69	\$2.69	\$2.68	\$2.70	\$2.62
Engineering and scientific instruments.....		3.12	3.08	3.11	3.09	3.09	3.08	3.04	3.06	3.08	3.07	3.08	3.09	3.08	3.02
Mechanical measuring and control devices.....	2.76	2.75	2.77	2.77	2.76	2.76	2.74	2.71	2.71	2.72	2.73	2.71	2.70	2.73	2.63
Optical and ophthalmic goods.....	2.54	2.53	2.52	2.52	2.51	2.47	2.49	2.44	2.45	2.45	2.44	2.40	2.42	2.45	2.36
Ophthalmic goods.....		2.34	2.32	2.30	2.32	2.28	2.30	2.25	2.28	2.27	2.25	2.20	2.24	2.26	2.17
Surgical, medical, and dental equipment.....	2.40	2.41	2.39	2.38	2.37	2.35	2.34	2.32	2.31	2.33	2.32	2.30	2.29	2.32	2.25
Photographic equipment and supplies.....		3.20	3.17	3.13	3.11	3.13	3.12	3.09	3.06	3.08	3.05	3.08	3.04	3.08	2.98
Watches and clocks.....		2.29	2.29	2.28	2.22	2.23	2.25	2.25	2.25	2.24	2.22	2.24	2.24	2.24	2.18
Miscellaneous manufacturing industries.....	2.34	2.33	2.32	2.28	2.25	2.23	2.23	2.20	2.20	2.21	2.21	2.21	2.21	2.22	2.14
Jewelry, silverware, and plated ware.....	2.58	2.53	2.54	2.56	2.57	2.55	2.51	2.47	2.42	2.45	2.44	2.44	2.42	2.47	2.33
Toys, amusement, and sporting goods.....		2.13	2.10	2.03	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	2.02	2.00	1.95
Pens, pencils, office and art materials.....		2.24	2.23	2.21	2.19	2.18	2.18	2.15	2.16	2.16	2.13	2.10	2.12	2.15	2.05
Costume jewelry, buttons, and notions.....		2.13	2.12	2.08	2.05	2.05	2.05	2.01	2.03	2.04	2.02	2.03	2.03	2.04	1.96
Other manufacturing industries.....	2.48	2.46	2.46	2.44	2.44	2.42	2.41	2.37	2.37	2.37	2.37	2.37	2.34	2.38	2.30
Musical instruments and parts.....		2.51	2.49	2.48	2.50	2.48	2.43	2.43	2.42	2.45	2.43	2.43	2.41	2.44	2.39

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
<i>Nondurable goods</i>															
Food and kindred products.....	\$106.78	\$104.92	\$106.08	\$106.14	\$104.90	\$104.06	\$104.92	\$103.34	\$105.59	\$104.24	\$103.89	\$102.21	\$101.66	\$103.82	\$99.87
Meat products.....	113.81	111.84	116.75	116.89	115.35	113.28	114.78	108.79	109.74	109.86	108.53	106.27	105.73	110.56	107.27
Dairy products.....	111.04	111.30	110.88	110.99	111.14	110.30	110.93	109.23	109.74	109.86	108.53	106.27	105.73	109.13	105.08
Canned and preserved food, except meats.....		82.89	82.82	81.87	79.93	82.39	86.93	86.71	82.58	80.89	84.50	83.11	81.09	82.95	78.60
Grain mill products.....		119.68	122.30	123.12	122.94	124.47	124.55	118.42	120.38	118.22	114.04	113.36	114.40	118.61	113.40
Bakery products.....	104.67	104.54	103.10	104.01	104.54	105.99	106.11	106.08	106.71	106.34	104.23	102.66	101.75	104.38	101.40
Sugar.....		115.53	110.55	111.02	110.50	101.12	119.23	121.54	127.75	121.84	120.41	117.42	119.39	114.48	110.33
Confectionery and related products.....		89.38	88.18	87.45	87.60	88.44	89.06	89.06	87.86	87.91	87.02	84.75	85.97	86.94	83.53
Beverages.....	121.30	118.80	117.49	122.36	121.29	119.66	118.73	119.97	130.23	121.67	117.33	117.74	115.37	119.19	114.09
Miscellaneous food and kindred products.....	105.42	103.50	103.74	105.35	104.92	104.25	104.55	102.41	101.50	102.24	101.64	99.84	99.30	102.37	98.79
Tobacco manufactures.....	87.52	82.08	83.16	88.29	81.24	81.93	83.41	82.68	87.23	88.55	86.94	86.49	84.64	84.97	79.21
Cigarettes.....		98.19	103.95	112.47	100.77	105.72	106.23	106.11	104.72	106.92	103.45	105.57	102.80	105.45	97.27
Cigars.....		65.15	64.98	68.02	68.24	66.41	64.25	64.61	63.71	65.12	66.33	65.28	66.15	65.84	63.95
Textile mill products.....	80.80	80.40	81.61	82.20	83.21	83.20	83.38	83.36	81.76	84.35	81.45	79.90	81.22	82.12	78.17
Cotton broad woven fabrics.....	84.44	85.04	86.28	87.29	87.29	86.46	87.06	86.23	85.63	89.85	83.38	82.64	84.15	85.54	80.28
Silk and synthetic broad woven fabrics.....	82.82	82.62	83.84	84.84	87.11	86.70	87.31	89.35	89.35	87.87	87.71	85.14	86.68	87.03	83.90
Weaving and finishing broad woollens.....	86.94	86.73	87.57	87.78	85.68	86.53	87.78	88.60	88.39	90.90	89.76	87.03	87.23	87.54	83.69
Narrow fabrics and small wares.....	78.01	77.82	80.15	81.84	81.16	82.15	81.90	81.25	80.48	81.64	79.27	78.47	79.52	80.26	75.99
Knitting.....	72.38	71.80	70.68	70.88	72.58	73.71	72.93	74.24	70.27	72.31	72.31	68.63	70.59	71.60	68.29
Finishing textiles, except wool and knit.....	92.00	90.91	90.27	93.31	92.66	92.66	91.59	90.74	89.03	94.17	91.54	91.54	91.94	91.58	85.85
Floor covering.....	84.44	79.18	81.61	84.02	86.88	86.25	86.05	85.43	80.39	83.18	80.93	80.15	81.41	83.36	81.51
Yarn and thread.....	72.54	71.97	74.37	75.48	77.42	78.17	79.05	79.00	78.07	78.94	76.68	76.50	76.79	77.59	73.70
Miscellaneous textile goods.....	91.24	90.17	93.44	93.24	96.10	96.11	95.90	93.95	92.65	95.25	94.61	91.59	92.02	93.95	88.20
Average weekly hours															
Food and kindred products.....	40.6	40.2	40.8	41.3	41.3	41.3	41.8	41.5	41.9	41.2	40.9	40.4	40.5	41.2	41.1
Meat products.....	40.5	39.8	41.4	42.2	42.1	41.8	42.2	40.9	41.1	41.3	40.8	40.1	39.6	41.1	41.1
Dairy products.....	41.9	42.0	42.0	42.2	42.1	42.1	42.5	43.6	43.6	42.9	42.1	42.0	41.9	42.3	42.2
Canned and preserved food, except meats.....		38.2	38.7	38.8	38.8	39.8	41.2	40.9	39.7	37.8	39.3	38.3	38.8	39.5	39.3
Grain mill products.....		44.0	44.8	45.1	45.2	46.1	46.3	45.2	46.3	46.0	44.2	43.6	44.0	45.1	45.0
Bakery products.....	39.8	39.9	39.5	39.7	39.9	40.3	40.5	40.8	41.2	40.9	40.4	40.1	39.9	40.3	40.4
Sugar.....		39.7	40.2	43.2	45.1	39.5	41.4	42.2	43.6	42.9	42.1	41.2	43.1	42.4	42.6
Confectionery and related products.....		39.9	39.9	40.3	40.0	40.2	40.3	40.3	39.0	39.6	39.2	38.7	39.8	39.7	39.4
Beverages.....	40.3	40.0	40.1	41.2	40.7	40.7	40.8	41.8	44.6	42.1	40.6	40.6	40.2	41.1	40.6
Miscellaneous food and kindred products.....	42.0	41.4	42.0	43.0	43.0	42.9	42.5	41.8	41.6	41.9	42.0	41.6	41.9	42.3	42.4
Tobacco manufactures.....	37.4	36.0	37.8	40.5	38.5	39.2	40.1	38.1	37.6	38.5	38.3	38.1	38.3	38.8	37.9
Cigarettes.....		36.1	38.5	41.5	37.6	39.3	39.2	39.3	38.5	39.6	38.6	39.1	38.5	39.2	37.7
Cigars.....		35.6	35.9	38.0	37.7	37.1	36.5	36.3	36.2	37.0	37.9	37.3	37.8	37.2	37.4
Textile mill products.....	40.2	40.0	40.6	41.1	41.4	41.6	41.9	42.1	41.5	42.6	42.2	41.4	42.3	41.9	41.8
Cotton broad woven fabrics.....	41.8	42.1	42.5	43.0	43.0	42.8	43.1	42.9	42.6	44.7	43.2	42.6	43.6	43.2	42.7
Silk and synthetic broad woven fabrics.....	40.8	40.7	41.3	42.0	42.7	42.5	42.8	43.8	43.8	43.5	44.3	43.0	44.0	43.3	43.7
Weaving and finishing broad woollens.....	41.4	41.3	41.7	42.0	40.8	41.4	42.0	42.8	42.7	43.7	44.0	43.3	43.4	42.7	42.7
Narrow fabrics and small wares.....	39.4	39.5	41.1	41.5	41.2	41.7	42.0	42.1	41.7	42.3	41.5	41.3	42.3	41.8	41.3
Knitting.....	37.5	37.2	37.2	37.7	38.4	39.0	39.0	39.7	38.4	39.3	39.3	37.5	39.0	38.7	38.8
Finishing textiles, except wool and knit.....	42.2	41.7	41.6	43.0	42.7	42.9	42.8	42.6	41.8	43.8	43.8	43.8	44.2	43.2	42.5
Floor covering.....		39.2	40.4	41.8	42.8	42.7	42.6	42.5	40.6	41.8	41.5	41.1	42.4	42.1	42.9
Yarn and thread.....	39.0	38.9	40.2	40.8	41.4	41.8	42.5	42.7	42.2	42.9	42.6	42.5	42.9	42.4	42.6
Miscellaneous textile goods.....	41.1	40.8	41.9	42.0	42.9	43.1	43.2	42.9	42.5	43.1	43.5	42.6	43.0	42.9	42.2
Average hourly earnings															
Food and kindred products.....	\$2.63	\$2.61	\$2.60	\$2.57	\$2.54	\$2.52	\$2.51	\$2.49	\$2.52	\$2.53	\$2.54	\$2.53	\$2.51	\$2.52	\$2.43
Meat products.....	2.81	2.81	2.82	2.77	2.74	2.71	2.72	2.66	2.67	2.66	2.65	2.65	2.67	2.69	2.61
Dairy products.....	2.65	2.65	2.64	2.63	2.64	2.62	2.61	2.57	2.59	2.58	2.57	2.56	2.56	2.58	2.49
Canned and preserved food, except meats.....		2.17	2.14	2.11	2.06	2.07	2.11	2.12	2.08	2.14	2.15	2.17	2.09	2.10	2.00
Grain mill products.....		2.72	2.73	2.73	2.72	2.70	2.69	2.62	2.60	2.57	2.58	2.60	2.60	2.63	2.52
Bakery products.....	2.63	2.62	2.61	2.62	2.62	2.63	2.62	2.60	2.59	2.60	2.58	2.56	2.55	2.59	2.51
Sugar.....		2.91	2.75	2.67	2.45	2.56	2.88	2.88	2.93	2.84	2.86	2.85	2.77	2.70	2.59
Confectionery and related products.....		2.24	2.21	2.17	2.19	2.20	2.21	2.21	2.24	2.22	2.22	2.19	2.16	2.19	2.12
Beverages.....	3.01	2.97	2.93	2.97	2.98	2.94	2.91	2.87	2.92	2.89	2.89	2.90	2.87	2.90	2.81
Miscellaneous food and kindred products.....	2.51	2.50	2.47	2.45	2.44	2.43	2.46	2.45	2.44	2.44	2.42	2.40	2.37	2.42	2.33
Tobacco manufactures.....	2.34	2.28	2.20	2.18	2.11	2.09	2.08	2.17	2.32	2.30	2.27	2.27	2.21	2.19	2.09
Cigarettes.....		2.72	2.70	2.71	2.68	2.69	2.71	2.70	2.72	2.70	2.68	2.70	2.67	2.69	2.58
Cigars.....		1.83	1.81	1.79	1.81	1.79	1.77	1.77	1.76	1.76	1.75	1.75	1.75	1.77	1.71
Textile mill products.....	2.01	2.01	2.01	2.00	2.01	2.00	1.99	1.98	1.97	1.98	1.93	1.93	1.92	1.96	1.87
Cotton broad woven fabrics.....	2.02	2.02	2.03	2.03	2.03	2.02	2.02	2.01	2.01	2.01	1.93	1.94	1.93	1.98	1.88
Silk and synthetic broad woven fabrics.....	2.03	2.03	2.03	2.02	2.04	2.04	2.04	2.04	2.04	2.02	1.98	1.98	1.97	2.01	1.92
Weaving and finishing broad woollens.....	2.10	2.10	2.10	2.09	2.10	2.09	2.09	2.07	2.07	2.08	2.04	2.01	2.01	2.05	1.96
Narrow fabrics and smallwares.....	1.98	1.97	1.95	1.96	1.97	1.97	1.95	1.93	1.93	1.93	1.91	1.90	1.88	1.92	1.84
Knitting.....	1.93	1.93	1.90	1.88	1.89	1.89	1.87	1.87	1.83	1.84	1.84	1.83	1.81	1.85	1.76
Finishing textiles, except wool and knit.....	2.18	2.18	2.17	2.17	2.17	2.16	2.14	2.13	2.13	2.15	2.09	2.09	2.08	2.12	2.02
Floor covering.....		2.02	2.02	2.01	2.03	2.02	2.02	2.01	1.98	1.99	1.95	1.95	1.92	1.98	1.90
Yarn and thread.....	1.86	1.85	1.85	1.85	1.87	1.87	1.86	1.85	1.85	1.84	1.80	1.80	1.79	1.83	1.73
Miscellaneous textile goods.....	2.22	2.21													

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967			1966								Annual average			
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
	Average weekly earnings														
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	\$71.60	\$71.04	\$70.40	\$69.87	\$70.25	\$70.64	\$67.83	\$70.11	\$67.88	\$68.63	\$68.26	\$67.51	\$69.37	\$68.80	\$66.61
Men's and boys' suits and coats.....	85.47	85.33	88.09	87.78	86.94	87.17	84.83	87.19	85.03	85.86	85.69	83.54	85.25	85.79	81.86
Men's and boys' furnishings.....	62.28	63.15	61.42	61.34	60.64	59.84	59.36	60.10	58.56	59.78	58.30	57.67	59.09	59.15	57.90
Women's, misses', and juniors' outerwear.....	75.65	74.21	72.42	71.36	71.44	72.21	68.67	73.56	71.90	71.34	71.34	71.34	73.63	71.14	68.68
Women's and children's undergarments.....	65.88	64.80	63.71	63.53	65.98	66.12	64.18	63.92	61.99	62.53	62.59	61.39	63.07	63.10	60.19
Hats, caps, and millinery.....	75.54	74.01	72.27	70.81	72.69	67.86	75.38	71.28	70.30	67.71	66.40	74.03	71.18	70.08	67.78
Girls' and children's outerwear.....	64.05	65.32	64.62	62.66	62.48	62.48	59.86	63.86	63.86	64.01	63.15	62.47	64.01	62.99	60.79
Fur goods and miscellaneous apparel.....	74.67	73.85	75.24	76.80	76.80	77.46	72.04	74.23	73.43	74.54	74.17	71.54	71.57	73.60	70.81
Miscellaneous fabricated textile products.....	78.07	75.28	76.70	78.17	78.95	80.96	76.58	76.23	69.92	74.10	74.30	73.71	74.11	75.06	73.73
Paper and allied products.....	119.71	118.44	119.84	120.81	121.37	121.37	121.92	120.77	120.50	120.18	119.03	117.50	117.34	119.35	114.22
Paper and pulp.....	136.89	136.75	137.20	138.12	139.05	138.43	138.29	137.39	137.56	135.45	134.25	132.76	131.72	135.30	128.16
Paperboard.....	140.40	137.15	138.08	138.57	140.43	139.05	138.91	138.12	139.38	138.78	139.54	141.22	136.96	138.62	132.14
Converted paper and paperboard products.....	105.47	104.30	105.66	105.84	105.84	104.75	105.75	104.23	103.91	104.66	103.57	102.34	102.41	103.91	99.42
Paperboard containers and boxes.....	106.71	104.75	107.07	109.65	109.91	110.68	111.89	109.82	108.54	110.08	108.89	106.01	107.35	108.38	104.23
Printing, publishing and allied industries.....	125.00	123.33	123.59	125.51	124.87	125.51	125.12	122.85	121.83	122.54	122.22	120.82	121.06	122.61	118.12
Newspaper publishing and printing.....	126.70	124.93	124.24	131.32	129.17	127.73	127.39	125.17	124.17	125.58	125.24	122.40	119.95	124.87	119.85
Periodical publishing and printing.....	129.03	128.90	131.14	133.39	136.04	139.03	132.93	132.76	129.44	125.58	124.74	126.00	129.92	125.83	125.83
Books.....	113.71	115.09	114.54	115.08	115.93	117.04	115.78	114.11	117.43	116.84	112.59	114.36	114.53	110.68	110.68
Commercial printing.....	129.17	126.75	127.26	128.08	127.76	129.52	129.04	127.20	126.25	125.37	125.45	124.03	125.77	126.17	120.96
Bookbinding and related industries.....	96.61	93.86	95.73	96.08	95.94	96.29	94.92	93.60	92.19	93.65	95.01	94.14	94.95	94.38	91.57
Other publishing and printing industries.....	127.71	128.37	128.58	126.36	124.94	125.71	126.81	124.16	123.00	122.43	122.88	123.13	125.05	124.16	120.90
Average weekly hours															
Apparel and related products.....	35.8	35.7	36.1	36.2	36.4	36.6	35.7	36.9	36.3	36.7	36.5	36.1	36.9	36.4	36.4
Men's and boys' suits and coats.....	37.0	37.1	38.3	38.5	38.3	38.4	37.7	39.1	38.3	38.5	38.6	37.8	38.4	38.3	37.9
Men's and boys' furnishings.....	36.0	36.5	37.0	37.4	37.2	37.4	37.1	37.8	37.3	37.6	36.9	36.5	37.4	37.2	37.6
Women's, misses', and juniors' outerwear.....	34.7	34.2	34.0	33.5	33.7	33.9	32.7	34.7	34.4	34.8	34.8	34.8	35.4	34.2	34.0
Women's and children's undergarments.....	36.0	35.8	36.2	36.3	37.7	38.0	37.1	37.6	36.9	37.0	36.6	35.9	37.1	36.9	36.7
Hats, caps, and millinery.....	35.0	35.8	36.1	36.5	36.5	36.9	34.8	37.5	36.0	37.0	36.6	35.7	37.2	36.5	36.5
Girls' and children's outerwear.....	35.0	35.5	36.1	35.4	35.7	35.7	34.4	36.7	36.7	37.0	36.5	35.9	37.0	36.2	36.4
Fur goods and miscellaneous apparel.....	37.9	36.9	36.2	36.7	37.1	37.6	36.2	37.3	36.9	36.9	36.9	36.5	36.7	36.8	36.5
Miscellaneous fabricated textile products.....	37.9	36.9	37.6	38.7	38.7	39.3	38.1	38.5	36.8	38.0	38.1	37.8	38.4	38.1	38.4
Paper and allied products.....	42.6	42.3	42.8	43.3	43.5	43.5	43.7	43.6	43.5	43.7	43.6	43.2	43.3	43.4	43.1
Paper and pulp.....	44.3	44.4	44.4	44.7	45.0	44.8	44.9	44.9	45.1	45.0	44.9	44.7	44.5	44.8	44.5
Paperboard.....	45.0	44.1	44.4	44.7	45.3	45.0	45.1	44.7	45.4	45.5	45.9	46.3	45.5	45.3	45.1
Converted paper and paperboard products.....	41.2	40.9	41.6	42.0	42.0	41.9	42.3	42.2	41.9	42.2	42.1	41.6	41.8	41.9	41.6
Paperboard containers and boxes.....	41.2	40.6	41.5	42.5	42.6	42.9	43.2	42.9	42.4	43.0	42.7	41.9	42.6	42.5	42.2
Printing, publishing and allied industries.....	38.7	38.3	38.5	39.1	38.9	39.1	39.1	39.0	38.8	38.9	38.8	38.6	38.8	38.8	38.6
Newspaper publishing and printing.....	36.2	35.9	35.7	37.2	36.8	36.6	36.5	36.6	36.2	36.4	36.3	36.0	35.7	36.3	36.1
Periodical publishing and printing.....	39.1	39.3	39.5	40.3	41.1	41.5	40.9	40.6	40.2	39.3	39.6	40.0	40.1	40.2	40.2
Books.....	41.2	41.4	41.2	41.1	41.7	41.8	42.1	41.8	42.7	42.8	41.7	42.2	41.8	41.3	41.3
Commercial printing.....	39.5	39.0	39.4	39.9	39.8	40.1	40.2	40.0	39.7	39.8	39.7	39.5	39.8	39.8	39.4
Bookbinding and related industries.....	38.8	38.0	38.6	38.9	39.0	39.3	38.9	39.0	38.9	38.7	39.1	38.9	39.4	39.0	38.8
Other publishing and printing industries.....	38.7	38.9	39.2	39.0	38.8	38.8	38.9	38.8	38.8	38.5	38.4	38.6	39.2	38.8	39.0
Average hourly earnings															
Apparel and related products.....	\$2.00	\$1.99	\$1.95	\$1.93	\$1.93	\$1.90	\$1.90	\$1.90	\$1.87	\$1.87	\$1.87	\$1.87	\$1.88	\$1.89	\$1.83
Men's and boys' suits and coats.....	2.31	2.30	2.30	2.28	2.27	2.27	2.25	2.23	2.22	2.23	2.22	2.21	2.22	2.24	2.16
Men's and boys' furnishings.....	1.73	1.73	1.66	1.64	1.63	1.60	1.60	1.59	1.57	1.59	1.58	1.58	1.58	1.59	1.54
Women's, misses', and juniors' outerwear.....	2.18	2.17	2.13	2.13	2.12	2.13	2.10	2.12	2.09	2.05	2.05	2.05	2.08	2.08	2.02
Women's and children's undergarments.....	1.83	1.81	1.76	1.75	1.75	1.74	1.73	1.70	1.68	1.69	1.71	1.71	1.70	1.71	1.64
Hats, caps, and millinery.....	2.11	2.05	1.98	1.94	1.97	1.95	2.01	1.98	1.90	1.85	1.86	1.99	1.95	1.92	1.92
Girls' and children's outerwear.....	1.83	1.84	1.79	1.77	1.75	1.75	1.74	1.74	1.74	1.73	1.73	1.74	1.73	1.74	1.67
Fur goods and miscellaneous apparel.....	2.08	2.04	2.05	2.07	2.06	1.99	1.99	1.99	2.02	2.01	1.96	1.95	2.00	1.94	1.94
Miscellaneous fabricated textile products.....	2.06	2.04	2.04	2.02	2.04	2.06	2.01	1.98	1.90	1.95	1.95	1.95	1.93	1.97	1.92
Paper and allied products.....	2.81	2.80	2.80	2.79	2.79	2.79	2.79	2.77	2.77	2.75	2.73	2.72	2.71	2.75	2.65
Paper and pulp.....	3.09	3.08	3.09	3.09	3.09	3.09	3.08	3.06	3.05	3.01	2.99	2.97	2.96	3.02	2.88
Paperboard.....	3.12	3.11	3.11	3.10	3.10	3.09	3.08	3.09	3.07	3.05	3.04	3.05	3.01	3.06	2.93
Converted paper and paperboard products.....	2.56	2.55	2.54	2.52	2.52	2.50	2.50	2.47	2.48	2.48	2.46	2.46	2.45	2.48	2.39
Paperboard containers and boxes.....	2.59	2.58	2.58	2.58	2.58	2.58	2.59	2.56	2.56	2.56	2.55	2.53	2.52	2.55	2.47
Printing, publishing and allied industries.....	3.23	3.22	3.21	3.21	3.21	3.21	3.20	3.15	3.14	3.15	3.15	3.13	3.12	3.16	3.06
Newspaper publishing and printing.....	3.50	3.48	3.48	3.53	3.51	3.49	3.49	3.42	3.43	3.45	3.45	3.40	3.36	3.44	3.32
Periodical publishing and printing.....	3.30	3.28	3.28	3.32	3.31	3.31	3.35	3.25	3.27	3.22	3.22	3.15	3.15	3.24	3.13
Books.....	2.76	2.78	2.78	2.80	2.78	2.80	2.75	2.73	2.75	2.73	2.70	2.71	2.74	2.68	2.68
Commercial printing.....	3.27	3.25	3.23	3.21	3.21	3.23	3.21	3.18	3.18	3.15	3.16	3.14	3.16	3.17	3.07
Bookbinding and related industries.....	2.49	2.47	2.48	2.47	2.46	2.45	2.44	2.40	2.37	2.42	2.43	2.42	2.41	2.42	2.36
Other publishing and printing industries.....	3.30	3.30	3.28	3.24	3.22	3.24	3.26	3.20	3.17	3.18	3.20	3.19	3.19	3.20	3.10

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued
Revised series; see box, 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Manufacturing—Continued															
Nondurable goods—Continued															
Chemicals and allied products.....	\$126.77	\$125.55	\$126.16	\$127.98	\$128.29	\$127.56	\$127.14	\$125.70	\$126.00	\$125.76	\$124.49	\$124.66	\$122.64	\$125.46	\$121.09
Industrial chemicals.....	141.62	140.19	141.20	143.65	145.43	143.99	142.04	140.53	141.53	140.77	139.26	139.26	137.76	140.44	136.08
Plastics materials and synthetics.....	125.10	123.49	123.37	126.78	126.05	125.88	125.33	125.50	126.52	125.97	124.98	125.99	122.09	125.08	120.70
Drugs.....	117.38	118.24	117.14	117.01	116.18	115.77	114.24	111.23	110.68	111.78	111.93	111.66	111.25	113.02	106.90
Soap, cleaners, and toilet goods.....	123.52	122.10	122.70	120.83	122.06	122.06	122.77	122.93	121.42	121.93	118.12	117.29	116.62	119.94	113.15
Paints, varnishes, and allied products.....	117.79	116.24	116.81	117.83	117.99	117.83	119.83	118.58	118.01	119.99	120.70	118.72	115.65	117.59	113.15
Agricultural chemicals.....	110.32	105.22	107.32	105.90	104.23	106.27	105.15	103.39	104.23	102.48	105.94	107.88	106.48	104.84	100.69
Other chemical products.....	121.95	120.25	120.30	124.20	122.89	122.64	123.97	121.51	120.38	121.55	119.00	118.43	115.62	120.38	116.90
Petroleum refining and related industries.....	149.46	146.50	144.90	145.67	146.70	145.43	146.80	142.72	147.06	145.95	145.61	145.69	141.62	144.58	138.42
Petroleum refining.....	157.03	154.29	151.94	152.82	154.34	150.12	152.04	148.57	153.91	152.40	154.15	154.21	149.58	151.56	145.05
Other petroleum and coal products.....	119.14	115.18	116.05	118.02	119.71	128.29	130.87	123.48	125.27	124.37	116.42	115.87	111.87	120.22	115.90
Rubber and miscellaneous plastic products.....	111.65	108.95	111.51	112.71	112.98	113.52	114.21	111.04	110.27	111.30	111.57	110.62	110.46	111.72	109.62
Tires and inner tubes.....	160.08	154.40	161.62	165.10	165.17	166.66	165.99	163.02	162.94	161.55	163.44	162.79	159.56	163.39	158.06
Other rubber products.....	107.04	105.46	108.09	109.67	110.20	110.20	110.72	106.91	104.34	107.33	106.24	105.06	105.57	107.74	103.82
Miscellaneous plastic products.....	94.37	93.03	93.96	93.89	93.94	94.81	95.04	93.11	92.21	93.38	93.56	93.11	93.60	93.75	92.35
Leather and leather products.....	75.81	76.30	77.79	76.82	76.03	74.68	74.09	75.85	74.49	76.05	74.88	73.33	73.92	74.88	71.82
Leather tanning and finishing.....	102.68	101.39	102.66	104.19	103.83	103.53	101.45	100.19	100.19	102.66	103.16	102.09	101.93	101.75	97.99
Footwear, except rubber.....	72.60	73.85	75.08	73.92	72.39	70.88	71.25	73.32	72.71	73.88	71.62	69.94	71.05	71.81	68.80
Other leather products.....	74.77	74.20	75.24	75.25	76.05	75.66	72.18	73.71	70.88	72.77	72.96	71.63	72.77	73.34	70.49
Handbags and personal leather goods.....	-----	71.18	71.05	69.19	72.20	71.82	66.22	70.49	68.63	68.60	68.63	67.89	69.91	69.38	67.86
Average weekly hours															
Chemicals and allied products.....	41.7	41.3	41.5	42.1	42.2	42.1	42.1	41.9	42.0	42.2	42.2	42.4	42.0	42.1	41.9
Industrial chemicals.....	41.9	41.6	41.9	42.5	42.9	42.6	42.4	42.2	42.5	42.4	42.2	42.2	42.0	42.3	42.0
Plastics materials and synthetics.....	41.7	41.3	41.4	42.4	42.3	42.1	42.2	42.4	42.6	42.7	42.8	43.0	42.1	42.4	42.5
Drugs.....	40.9	41.2	41.1	41.2	41.2	41.2	40.8	40.3	40.1	40.5	40.7	40.9	40.9	40.8	40.8
Soap, cleaners, and toilet goods.....	40.9	40.7	40.9	41.1	41.8	41.8	41.9	42.1	41.3	41.9	41.3	41.3	41.5	41.5	40.9
Paints, varnishes, and allied products.....	40.9	40.5	40.7	41.2	41.4	41.2	41.9	41.9	41.7	42.4	42.5	42.1	41.6	41.7	41.6
Agricultural chemicals.....	45.4	42.6	43.1	42.7	42.2	43.2	42.4	42.2	42.2	42.7	44.7	46.5	45.7	43.5	43.4
Other chemical products.....	41.2	40.9	41.2	42.1	41.8	42.0	42.6	41.9	41.8	42.5	41.9	41.7	41.0	41.8	41.9
Petroleum refining and related industries.....	42.1	41.5	41.4	42.1	42.4	42.4	42.8	42.1	43.0	42.8	42.7	42.6	41.9	42.4	42.2
Petroleum refining.....	42.1	41.7	41.4	42.1	42.4	41.7	42.0	41.5	42.4	42.1	42.7	42.6	41.9	42.1	41.8
Other petroleum and coal products.....	42.1	40.7	41.3	42.0	42.6	44.7	45.6	44.1	44.9	44.9	42.8	42.6	41.9	43.4	43.9
Rubber and miscellaneous plastic products.....	41.2	40.5	41.3	41.9	42.0	42.2	42.3	41.9	41.3	42.0	42.1	41.9	42.0	42.0	42.0
Tires and inner tubes.....	43.5	42.3	43.8	44.5	44.4	44.8	44.5	44.3	43.8	43.9	44.9	44.6	44.2	44.4	44.4
Other rubber products.....	40.7	40.1	41.1	41.7	41.9	41.9	42.1	41.6	40.6	41.6	41.5	41.2	41.4	41.6	41.2
Miscellaneous plastic products.....	40.5	40.1	40.5	41.0	41.2	41.4	41.5	41.2	40.8	41.5	41.4	41.2	41.6	41.3	41.6
Leather and leather products.....	36.8	37.4	38.7	38.8	38.4	38.1	37.8	39.1	39.0	39.2	38.6	37.8	38.5	38.6	38.2
Leather tanning and finishing.....	39.8	39.3	40.1	40.7	40.4	40.6	40.1	40.4	40.4	40.9	41.1	41.0	41.1	40.7	41.0
Footwear, except rubber.....	36.3	37.3	38.7	38.7	37.9	37.5	37.7	39.0	39.3	39.3	38.3	37.4	38.2	38.4	37.8
Other leather products.....	37.2	37.1	38.0	38.2	39.0	38.8	37.4	39.0	37.7	38.5	38.4	37.9	38.5	38.4	38.1
Handbags and personal leather goods.....	-----	36.5	37.2	37.0	38.0	37.8	35.6	38.1	37.3	37.9	37.5	37.1	38.2	37.5	37.7
Average hourly earnings															
Chemicals and allied products.....	\$3.04	\$3.04	\$3.04	\$3.04	\$3.04	\$3.03	\$3.02	\$3.00	\$3.00	\$2.98	\$2.95	\$2.94	\$2.92	\$2.98	\$2.89
Industrial chemicals.....	3.38	3.37	3.37	3.38	3.39	3.38	3.35	3.33	3.33	3.32	3.30	3.30	3.28	3.32	3.24
Plastics materials and synthetics.....	3.00	2.99	2.98	2.99	2.98	2.99	2.97	2.96	2.97	2.95	2.92	2.93	2.90	2.95	2.84
Drugs.....	2.87	2.87	2.85	2.84	2.82	2.81	2.80	2.76	2.76	2.76	2.75	2.73	2.72	2.77	2.62
Soap, cleaners, and toilet goods.....	3.02	3.00	3.00	2.94	2.92	2.92	2.93	2.92	2.94	2.91	2.86	2.84	2.81	2.89	2.78
Paints, varnishes, and allied products.....	2.88	2.87	2.87	2.86	2.85	2.86	2.86	2.83	2.83	2.84	2.82	2.82	2.78	2.82	2.72
Agricultural chemicals.....	2.43	2.47	2.49	2.48	2.47	2.46	2.48	2.45	2.47	2.40	2.37	2.32	2.32	2.41	2.32
Other chemical products.....	2.96	2.94	2.92	2.95	2.94	2.92	2.91	2.90	2.88	2.86	2.84	2.84	2.82	2.88	2.79
Petroleum refining and related industries.....	3.55	3.53	3.50	3.46	3.46	3.43	3.43	3.39	3.42	3.41	3.41	3.42	3.38	3.41	3.28
Petroleum refining.....	3.73	3.70	3.67	3.63	3.64	3.60	3.62	3.58	3.63	3.62	3.61	3.62	3.57	3.60	3.47
Other petroleum and coal products.....	2.83	2.83	2.81	2.81	2.81	2.87	2.87	2.80	2.79	2.77	2.72	2.72	2.67	2.77	2.64
Rubber and miscellaneous plastic products.....	2.71	2.69	2.70	2.69	2.69	2.69	2.70	2.65	2.67	2.65	2.65	2.64	2.63	2.66	2.61
Tires and inner tubes.....	3.68	3.65	3.69	3.71	3.72	3.72	3.73	3.68	3.72	3.68	3.64	3.65	3.61	3.68	3.56
Other rubber products.....	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.57	2.57	2.58	2.56	2.55	2.55	2.59	2.52
Miscellaneous plastic products.....	2.33	2.32	2.32	2.29	2.28	2.29	2.29	2.26	2.26	2.25	2.26	2.26	2.25	2.27	2.22
Leather and leather products.....	2.06	2.04	2.01	1.98	1.98	1.96	1.96	1.94	1.91	1.94	1.94	1.94	1.92	1.94	1.88
Leather tanning and finishing.....	2.58	2.58	2.56	2.56	2.57	2.55	2.53	2.48	2.48	2.51	2.51	2.49	2.48	2.50	2.39
Footwear, except rubber.....	2.00	1.98	1.94	1.91	1.91	1.89	1.89	1.88	1.85	1.88	1.87	1.87	1.86	1.87	1.82
Other leather products.....	2.01	2.00	1.98	1.97	1.95	1.95	1.93	1.89	1.88	1.89	1.90	1.89	1.89	1.91	1.85
Handbags and personal leather goods.....	-----	1.95	1.91	1.87	1.90	1.90	1.86	1.85	1.84	1.81	1.83	1.83	1.83	1.85	1.80

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³				\$137.22	\$137.90	\$132.99	\$135.96	\$136.34	\$134.11	\$137.54	\$135.83	\$132.75	\$135.12	\$135.65	\$130.80
Local and interurban passenger transit:															
Local and suburban transportation	\$113.57	\$112.88	\$113.28	\$114.75	\$115.56	\$112.83	113.63	114.59	113.52	113.52	111.83	109.36	112.52	108.20	
Intercity and rural bus lines	139.83	143.76	142.02	143.99	141.37	149.57	158.84	148.50	141.24	142.46	143.60	131.77	143.74	133.72	
Motor freight transportation and storage	134.60	132.80	137.82	136.43	138.14	138.78	136.63	136.42	137.06	133.14	131.36	131.88	135.15	130.48	
Public warehousing	96.80	96.80	98.71	97.76	96.64	98.16	98.29	98.33	95.92	95.04	92.43	92.59	95.99	93.09	
Pipeline transportation	156.59	161.66	154.34	152.31	152.25	152.77	148.37	150.38	148.96	151.00	153.18	150.75	151.29	145.85	
Communication	120.10	118.01	120.40	122.54	119.54	119.43	117.62	119.19	118.44	116.47	116.29	116.47	118.55	114.62	
Telephone communication	114.62	112.97	115.31	117.03	114.24	114.11	112.33	114.12	113.15	111.63	111.08	111.63	113.27	109.08	
Telegraph communication ⁴	131.07	128.35	128.53	127.62	130.16	131.94	131.37	131.07	131.50	127.17	124.99	124.26	128.01	122.55	
Radio and television broadcasting	154.81	152.05	154.41	158.36	154.77	152.82	149.27	152.05	150.86	148.13	148.92	148.45	151.24	147.63	
Electric, gas, and sanitary services	141.52	139.18	140.11	140.53	141.20	137.86	136.54	139.35	134.72	135.14	133.99	133.25	136.95	131.24	
Electric companies and systems	142.76	141.17	142.20	142.96	142.12	139.93	139.61	143.90	137.78	137.78	136.29	136.29	139.70	133.31	
Gas companies and systems	127.80	130.19	128.33	129.90	131.36	128.03	124.64	124.64	122.72	124.14	122.61	121.99	125.77	120.83	
Combined utility systems	156.98	150.75	154.28	152.52	154.40	149.82	148.93	152.70	147.33	147.03	146.26	144.89	149.70	143.79	
Water, steam, and sanitary systems	113.83	112.06	111.79	112.89	111.79	111.24	109.74	112.17	108.39	108.53	110.00	107.83	110.42	105.41	
Average weekly hours															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³				43.7	44.2	42.9	44.0	44.7	43.4	44.8	44.1	43.1	44.3	43.9	43.6
Local and interurban passenger transit:															
Local and suburban transportation	41.6	41.5	41.8	42.5	42.8	42.1	42.4	42.6	43.0	43.0	42.2	41.9	42.3	42.1	
Intercity and rural bus lines	42.5	43.3	43.3	43.9	43.1	45.6	47.7	45.0	44.0	44.8	45.3	42.1	44.5	43.7	
Motor freight transportation and storage	41.8	41.5	42.8	42.5	42.9	43.1	43.1	42.9	43.1	42.0	41.7	42.0	42.5	40.3	
Public warehousing	40.0	40.5	41.3	41.6	41.3	40.9	41.3	40.8	39.8	39.6	39.0	39.4	40.5	41.2	
Pipeline transportation	41.1	42.1	41.6	41.6	40.6	41.4	41.1	41.2	40.7	40.7	41.4	41.3	41.0	41.2	
Communication	39.9	39.6	40.0	41.5	40.8	40.9	40.7	41.1	40.7	40.3	40.1	40.3	40.6	40.5	
Telephone communication	39.8	39.5	39.9	41.5	40.8	40.9	40.7	41.2	40.7	40.3	40.1	40.3	40.6	40.4	
Telegraph communication ⁴	43.4	42.5	42.7	42.4	43.1	43.4	43.5	43.4	43.4	43.7	43.1	42.7	43.1	43.0	
Radio and television broadcasting	39.9	39.7	39.9	40.5	40.2	39.9	39.7	39.7	39.7	39.5	39.5	39.8	39.8	39.9	
Electric, gas, and sanitary services	41.5	41.3	41.7	41.7	41.9	41.4	41.5	42.1	41.2	41.2	41.1	41.0	41.5	41.4	
Electric companies and systems	41.5	41.4	41.7	41.8	41.8	41.4	41.8	42.7	41.5	41.5	41.3	41.3	41.7	41.4	
Gas companies and systems	40.7	41.2	41.0	41.5	41.7	41.3	41.0	41.0	40.5	40.7	40.6	40.8	41.1	41.1	
Combined utility systems	42.2	41.3	42.5	41.9	42.3	41.5	41.6	42.3	41.5	41.3	41.2	40.7	41.7	41.8	
Water, steam, and sanitary systems	40.8	40.6	40.8	41.2	41.1	41.2	41.1	41.7	40.9	40.8	41.2	41.0	41.2	41.5	
Average hourly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ³				\$3.14	\$3.12	\$3.10	\$3.09	\$3.05	\$3.09	\$3.07	\$3.08	\$3.08	\$3.05	\$3.09	\$3.00
Local and interurban passenger transit:															
Local and suburban transportation	\$2.73	\$2.72	\$2.71	\$2.70	\$2.70	\$2.68	2.68	2.69	2.64	2.64	2.65	2.61	2.66	2.57	
Intercity and rural bus lines	3.29	3.32	3.28	3.28	3.28	3.28	3.33	3.30	3.21	3.18	3.17	3.13	3.23	3.06	
Motor freight transportation and storage	3.22	3.20	3.22	3.21	3.22	3.22	3.17	3.18	3.18	3.17	3.15	3.14	3.18	3.07	
Public warehousing	2.42	2.39	2.39	2.35	2.34	2.40	2.38	2.41	2.41	2.40	2.37	2.35	2.37	2.31	
Pipeline transportation	3.81	3.84	3.71	3.67	3.75	3.69	3.61	3.65	3.66	3.71	3.70	3.65	3.69	3.54	
Communication	3.01	2.98	3.01	2.96	2.93	2.92	2.89	2.90	2.91	2.89	2.77	2.77	2.79	2.70	
Telephone communication	2.88	2.86	2.89	2.82	2.80	2.79	2.76	2.77	2.78	2.77	2.77	2.77	2.79	2.70	
Telegraph communication ⁴	3.02	3.02	3.01	3.01	3.02	3.04	3.02	3.02	3.03	2.91	2.90	2.91	2.97	2.85	
Radio and television broadcasting	3.88	3.83	3.87	3.91	3.85	3.83	3.76	3.83	3.80	3.75	3.77	3.73	3.80	3.70	
Electric, gas, and sanitary services	3.41	3.37	3.36	3.37	3.37	3.33	3.29	3.31	3.27	3.28	3.26	3.25	3.30	3.17	
Electric companies and systems	3.44	3.41	3.41	3.42	3.40	3.38	3.34	3.37	3.32	3.32	3.30	3.30	3.35	3.22	
Gas companies and systems	3.14	3.16	3.13	3.13	3.15	3.10	3.04	3.04	3.03	3.05	3.02	2.99	3.06	2.94	
Combined utility systems	3.72	3.65	3.63	3.64	3.65	3.61	3.58	3.61	3.55	3.56	3.55	3.56	3.59	3.44	
Water, steam, and sanitary systems	2.79	2.76	2.74	2.74	2.72	2.70	2.67	2.69	2.65	2.66	2.67	2.63	2.68	2.54	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
	Average weekly earnings														
Wholesale and retail trade.....	\$80.81	\$80.22	\$80.30	\$80.14	\$79.79	\$79.86	\$79.92	\$80.73	\$80.94	\$79.45	\$78.60	\$78.23	\$77.86	\$79.02	\$76.53
Wholesale trade.....	114.74	113.65	114.09	114.52	112.87	112.74	111.93	111.38	112.20	110.70	111.10	110.43	109.48	111.11	106.49
Motor vehicles and automotive equipment.....	105.06	105.16	106.17	105.41	105.41	106.26	103.42	105.58	104.08	103.83	103.42	103.07	104.08	104.08	100.14
Drugs, chemicals, and allied products.....	117.81	117.89	117.27	115.60	115.49	115.66	113.08	114.33	113.36	114.29	113.88	112.00	114.17	109.08	103.19
Dry goods and apparel.....	110.58	109.53	109.16	109.15	110.78	108.95	109.16	107.82	106.96	107.54	105.75	105.08	107.26	103.19	96.76
Groceries and related products.....	105.32	105.26	104.14	103.79	103.07	103.89	103.66	105.75	101.34	100.85	99.54	99.23	101.84	96.76	122.84
Electrical goods.....	130.42	132.98	136.95	126.65	128.87	127.97	123.65	123.45	125.24	127.15	126.85	125.85	126.98	122.84	101.91
Hardware, plumbing, and heating goods.....	108.27	108.68	108.81	108.00	108.95	108.12	106.90	106.34	106.86	106.34	106.49	105.67	107.30	101.91	115.23
Machinery, equipment, and supplies.....	123.93	123.83	125.56	125.05	124.84	122.18	123.49	123.37	121.66	120.83	120.01	117.96	121.66	115.23	107.20
Miscellaneous wholesalers.....	112.92	113.08	113.65	112.40	111.60	111.35	110.83	111.10	110.83	110.68	110.28	109.07	110.95	107.20	66.61
Retail trade.....	69.30	69.30	69.15	68.64	68.87	69.09	70.11	70.48	69.14	67.64	67.47	67.12	68.57	66.61	58.81
General merchandise stores.....	61.18	61.05	62.24	60.26	61.01	61.38	62.24	62.93	61.49	59.88	59.73	59.40	60.94	58.81	62.98
Department stores.....	64.20	64.92	64.70	63.36	64.94	65.54	66.50	67.18	65.52	63.83	63.69	62.98	64.55	62.98	71.00
Mail order houses.....	72.94	69.42	83.83	73.08	70.04	71.25	71.66	71.55	71.96	70.64	68.61	68.94	71.51	71.00	44.10
Limited price variety stores.....	47.70	46.35	48.77	47.12	46.66	46.66	48.00	47.23	46.03	44.54	44.97	44.82	46.19	44.10	57.46
Food stores.....	71.94	71.94	71.81	72.59	71.81	72.76	74.84	75.05	73.49	70.81	70.26	70.26	72.21	70.32	57.46
Grocery, meat, and vegetable stores.....	73.14	73.15	72.81	73.48	72.70	74.00	75.90	76.33	74.74	71.81	71.26	71.26	73.22	71.69	57.46
Apparel and accessories stores.....	59.84	60.54	61.15	58.24	58.97	59.01	59.84	60.52	58.92	58.03	58.18	56.90	58.89	57.46	69.84
Men's and boys' apparel stores.....	72.48	75.15	73.78	72.12	71.69	71.48	73.64	74.78	73.44	70.90	69.65	68.56	71.96	69.84	51.46
Women's ready-to-wear stores.....	54.52	54.89	55.61	52.95	52.97	52.98	52.63	54.26	52.81	52.49	52.33	51.19	52.81	51.46	56.45
Family clothing stores.....	57.46	57.41	59.27	57.32	58.86	57.32	59.99	60.12	57.67	57.38	57.55	57.23	58.38	56.45	58.09
Shoe stores.....	58.22	58.72	60.03	56.36	58.02	60.41	60.52	59.88	57.66	56.36	59.67	55.67	58.09	56.45	
Average weekly hours															
Wholesale and retail trade.....	36.4	36.3	36.5	37.1	36.6	36.8	37.0	37.9	38.0	37.3	36.9	36.9	36.9	37.1	37.7
Wholesale trade.....	40.4	40.3	40.6	40.9	40.6	40.7	40.7	40.8	41.1	40.7	40.7	40.6	40.7	40.7	40.8
Motor vehicles and automotive equipment.....	41.2	41.4	41.8	41.5	41.5	42.0	41.7	42.4	41.8	41.7	41.7	41.9	41.8	41.9	41.9
Drugs, chemicals, and allied products.....	39.8	40.1	40.3	40.0	40.1	40.3	40.1	40.4	40.2	40.1	40.1	40.0	40.2	40.4	40.4
Dry goods and apparel.....	38.0	37.9	38.3	37.9	38.2	37.7	38.3	38.1	38.2	38.0	37.5	37.8	37.9	37.8	41.0
Groceries and related products.....	40.2	40.8	41.0	40.7	40.9	40.9	41.3	42.3	40.7	40.5	40.3	40.5	40.9	41.0	42.8
Electrical goods.....	42.9	43.6	44.9	42.5	43.1	42.8	42.2	42.0	42.6	43.1	43.0	43.1	42.9	42.8	40.6
Hardware, plumbing, and heating goods.....	40.4	40.4	40.6	40.6	40.5	40.8	40.8	40.9	41.1	40.9	40.8	40.8	40.8	40.6	41.3
Machinery, equipment, and supplies.....	40.5	40.6	40.9	41.0	41.2	41.0	41.3	41.4	41.1	41.1	41.1	41.1	41.1	41.3	
Miscellaneous wholesalers.....	39.9	40.1	40.3	40.0	40.0	40.2	40.3	40.4	40.3	40.1	40.1	40.1	40.2	40.3	
Retail trade.....	35.0	35.1	35.9	35.2	35.5	35.8	36.9	36.9	36.2	35.6	35.7	35.7	35.9	36.6	
General merchandise stores.....	32.0	32.3	34.2	32.4	32.8	33.0	34.2	34.2	33.6	32.9	33.0	33.0	33.3	33.8	
Department stores.....	32.1	32.3	33.7	32.0	32.8	33.1	34.1	34.1	33.6	32.9	33.0	32.8	33.1	33.5	
Mail order houses.....	34.9	33.7	41.5	36.0	34.5	35.1	35.3	34.9	35.1	34.8	33.8	34.3	35.4	36.6	
Limited price variety stores.....	30.0	30.1	32.3	31.0	30.7	30.7	32.0	31.7	31.1	30.3	30.8	30.7	31.0	31.5	
Food stores.....	32.7	33.0	33.4	33.3	33.4	34.0	35.3	35.4	34.5	33.4	33.3	33.3	33.9	34.3	
Grocery, meat, and vegetable stores.....	32.8	33.1	33.4	33.4	33.5	34.1	35.3	35.5	34.6	33.4	33.3	33.3	33.9	34.3	
Apparel and accessories stores.....	32.0	32.2	33.6	32.0	32.4	32.6	34.0	34.0	33.1	32.6	32.5	32.7	32.9	33.6	
Men's and boys' apparel stores.....	33.4	33.7	35.3	33.7	34.3	34.7	36.1	36.3	36.0	35.1	35.0	34.8	35.1	36.0	
Women's ready-to-wear stores.....	31.7	32.1	33.5	31.9	32.1	32.5	33.1	33.7	32.8	32.4	32.5	32.4	32.6	33.2	
Family clothing stores.....	31.4	31.2	33.3	32.2	32.6	32.2	33.7	33.4	32.4	32.6	32.7	32.7	32.8	33.4	
Shoe stores.....	31.3	31.4	32.1	30.3	30.7	31.3	34.0	32.9	31.0	30.3	30.6	31.1	31.4	32.0	
Average hourly earnings															
Wholesale and retail trade.....	\$2.22	\$2.21	\$2.20	\$2.16	\$2.18	\$2.17	\$2.16	\$2.13	\$2.13	\$2.13	\$2.12	\$2.11	\$2.13	\$2.03	\$2.03
Wholesale trade.....	2.84	2.82	2.81	2.80	2.78	2.77	2.75	2.73	2.73	2.72	2.73	2.72	2.69	2.61	
Motor vehicles and automotive equipment.....	2.55	2.54	2.54	2.54	2.54	2.53	2.48	2.49	2.49	2.49	2.49	2.48	2.46	2.49	
Drugs, chemicals, and allied products.....	2.96	2.94	2.91	2.89	2.88	2.87	2.82	2.83	2.82	2.85	2.84	2.80	2.84	2.70	
Dry goods and apparel.....	2.91	2.89	2.85	2.88	2.90	2.89	2.85	2.83	2.80	2.83	2.82	2.78	2.83	2.73	
Groceries and related products.....	2.62	2.58	2.54	2.55	2.52	2.54	2.51	2.50	2.49	2.49	2.47	2.45	2.49	2.36	
Electrical goods.....	3.04	3.05	3.05	2.98	2.99	2.99	2.93	2.94	2.94	2.95	2.95	2.92	2.96	2.87	
Hardware, plumbing, and heating goods.....	2.68	2.69	2.68	2.66	2.69	2.65	2.62	2.60	2.60	2.60	2.61	2.59	2.63	2.51	
Machinery, equipment, and supplies.....	3.06	3.05	3.07	3.05	3.03	2.98	2.99	2.98	2.96	2.94	2.92	2.87	2.96	2.79	
Miscellaneous wholesalers.....	2.83	2.82	2.82	2.81	2.79	2.77	2.75	2.75	2.75	2.76	2.75	2.72	2.76	2.66	
Retail trade.....	1.98	1.97	1.94	1.95	1.94	1.93	1.90	1.91	1.91	1.90	1.89	1.88	1.91	1.82	
General merchandise stores.....	1.90	1.89	1.82	1.86	1.86	1.86	1.82	1.84	1.83	1.82	1.81	1.80	1.83	1.74	
Department stores.....	2.00	2.01	1.92	1.98	1.98	1.98	1.95	1.97	1.95	1.94	1.93	1.92	1.95	1.88	
Mail order houses.....	2.09	2.06	2.02	2.03	2.03	2.02	2.03	2.05	2.05	2.03	2.03	2.01	2.02	1.94	
Limited price variety stores.....	1.59	1.54	1.51	1.52	1.52	1.52	1.49	1.49	1.48	1.47	1.46	1.46	1.49	1.40	
Food stores.....	2.20	2.18	2.15	2.18	2.15	2.17	2.14	2.12	2.13	2.12	2.11	2.11	2.13	2.05	
Grocery, meat, and vegetable stores.....	2.23	2.21	2.18	2.20	2.17	2.17	2.15	2.15	2.16	2.15	2.14	2.14	2.16	2.09	
Apparel and accessories stores.....	2.87	2.85	2.82	2.82	2.82	2.82	2.81	2.78	2.78	2.78	2.79	2.79	2.79	2.71	
Men's and boys' apparel stores.....	2.17	2.18	2.09	2.14	2.09	2.06	2.04	2.06	2.04	2.02	1.99	1.97	2.05	1.94	
Women's ready-to-wear stores.....	1.72	1.71	1.66	1.66	1.65	1.63	1.59	1.61	1.61	1.62	1.61	1.58	1.62	1.55	
Family clothing stores.....	1.83	1.84	1.78	1.78	1.80	1.78	1.78	1.80	1.78	1.76	1.76	1.75	1.78	1.69	
Shoe stores.....	1.86	1.87	1.87	1.86	1.89	1.93	1.78	1.82	1.86	1.86	1.95	1.79	1.85	1.77	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967				1966								Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Wholesale and retail trade—Continued															
Retail trade—Continued															
Furniture and appliance stores.....	\$89.92	\$91.33	\$95.28	\$91.65	\$91.34	\$91.64	\$91.37	\$91.77	\$89.89	\$88.59	\$87.81	\$88.09	\$90.23	\$88.18	
Furniture and home furnishings.....	89.24	89.63	93.60	90.32	90.39	90.46	91.20	90.12	89.89	88.65	87.47	87.30	89.67	86.98	
Eating and drinking places ⁵	48.33	48.62	48.72	47.95	47.91	48.00	48.93	48.79	47.40	46.51	46.31	46.31	47.60	45.76	
Other retail trade.....	85.67	86.33	86.62	86.37	86.80	85.81	86.90	87.53	86.46	84.99	85.01	84.00	85.63	83.44	
Building materials and hardware.....	91.80	92.10	92.77	92.32	93.41	93.21	93.28	93.51	92.64	90.91	90.49	88.81	91.54	88.41	
Motor vehicle dealers.....	106.17	107.70	109.74	110.33	109.91	106.50	108.97	110.77	110.25	108.46	108.28	107.50	108.54	105.32	
Other vehicle and accessory dealers.....	91.36	90.48	90.05	90.29	90.48	89.20	91.54	92.82	89.38	88.54	87.03	86.76	89.38	85.89	
Drug stores.....	62.75	62.60	63.83	62.68	63.39	63.46	64.60	65.15	63.50	61.70	61.72	61.20	62.95	61.60	
Fuel and ice dealers.....	111.36	107.00	105.65	104.73	102.61	99.25	97.29	98.33	97.11	98.18	98.41	99.54	100.86	96.05	
Finance, insurance, and real estate ⁶	95.09	94.98	94.23	93.62	93.00	93.25	92.01	92.13	92.75	91.88	92.63	92.50	91.76	92.50	
Banking.....	85.19	85.04	83.78	82.73	82.81	82.14	82.21	82.43	81.18	82.21	82.21	81.84	82.21	79.24	
Credit agencies other than banks.....	88.36	89.44	87.00	86.02	86.71	85.27	85.96	86.41	84.75	86.56	86.18	85.28	85.96	84.29	
Savings and loan associations.....	89.28	91.96	87.08	86.85	87.32	86.25	87.05	89.07	85.38	86.81	86.54	85.56	87.05	84.67	
Security dealers and exchanges.....	140.25	137.63	132.47	131.73	131.72	133.20	132.82	135.42	139.13	149.71	148.93	145.16	138.38	127.43	
Insurance carriers.....	102.67	100.74	101.08	100.81	100.44	99.70	99.32	99.80	99.06	98.69	98.85	98.85	99.32	95.86	
Life insurance.....	103.49	100.44	101.02	100.56	100.56	99.82	99.82	99.65	98.92	98.64	98.19	98.92	99.55	95.63	
Accident and health insurance.....	90.27	89.89	90.13	90.27	88.93	90.27	89.65	88.91	89.17	88.56	88.43	88.32	89.04	85.38	
Fire, marine, and casualty insurance.....	104.71	103.57	103.47	103.19	102.71	101.52	101.41	101.90	101.41	100.93	100.81	100.70	101.68	97.92	
Average weekly hours															
Wholesale and retail trade—Continued															
Retail trade—Continued															
Furniture and appliance stores.....	38.1	38.7	39.7	39.0	39.2	39.5	39.9	39.9	39.6	39.2	39.2	39.5	39.4	39.9	
Furniture and home furnishings.....	38.3	38.8	40.0	39.1	39.3	39.5	40.0	39.7	39.6	39.4	39.4	39.5	39.5	39.9	
Eating and drinking places ⁵	33.1	33.3	33.6	33.3	33.5	33.8	35.2	35.1	34.1	33.7	33.8	33.8	34.0	35.2	
Other retail trade.....	39.3	39.6	40.1	39.8	40.0	40.1	40.8	40.9	40.4	39.9	40.1	40.0	40.2	40.9	
Building materials and hardware.....	40.8	41.3	41.6	41.4	41.7	41.8	42.4	42.7	42.3	41.7	41.7	41.5	41.8	42.1	
Motor vehicle dealers.....	42.3	42.4	42.7	42.6	42.6	42.6	42.9	43.1	42.9	42.7	42.8	43.0	42.9	43.7	
Other vehicle and accessory dealers.....	43.3	43.5	43.5	43.2	43.5	43.3	43.8	44.2	43.6	43.4	43.3	43.6	43.6	43.6	
Drug stores.....	33.2	33.3	34.5	33.7	33.9	34.3	35.3	35.6	34.7	33.9	34.1	34.0	34.4	35.4	
Fuel and ice dealers.....	43.5	42.8	42.6	42.4	42.4	41.7	41.4	42.2	41.5	41.6	41.7	42.0	42.2	42.5	
Finance, insurance, and real estate ⁶	37.0	37.1	37.1	37.3	37.2	37.3	37.1	37.3	37.4	37.2	37.2	37.3	37.3	37.2	
Banking.....	37.2	37.3	37.4	37.1	37.3	37.0	37.2	37.3	36.9	37.2	37.2	37.2	37.2	37.2	
Credit agencies other than banks.....	37.6	37.9	37.5	37.4	37.7	37.4	37.7	37.9	37.5	37.8	37.8	37.9	37.7	37.8	
Savings and loan associations.....	37.2	38.0	36.9	36.8	37.0	36.7	37.2	37.9	36.8	37.1	37.3	37.2	37.2	37.3	
Security dealers and exchanges.....	37.5	36.8	36.9	36.9	37.0	37.0	37.1	37.1	37.5	37.9	37.8	38.0	37.3	37.7	
Insurance carriers.....	37.2	36.9	37.3	37.2	37.2	37.2	37.2	37.1	37.1	37.1	37.3	37.3	37.2	37.3	
Life insurance.....	36.7	36.0	36.6	36.7	36.7	36.7	36.7	36.5	36.5	36.4	36.5	36.5	36.6	36.5	
Accident and health insurance.....	37.3	37.3	37.4	37.3	36.9	37.3	37.2	37.2	37.0	36.9	37.0	36.8	37.1	36.8	
Fire, marine, and casualty insurance.....	37.8	37.8	37.9	37.8	37.9	37.6	37.7	37.6	37.7	37.8	37.9	38.0	37.8	38.1	
Average hourly earnings															
Wholesale and retail trade—Continued															
Retail trade—Continued															
Furniture and appliance stores.....	\$2.36	\$2.36	\$2.40	\$2.35	\$2.33	\$2.32	\$2.29	\$2.30	\$2.27	\$2.26	\$2.24	\$2.23	\$2.29	\$2.21	
Furniture and home furnishings.....	2.33	2.31	2.34	2.31	2.30	2.29	2.28	2.27	2.27	2.25	2.22	2.21	2.27	2.18	
Eating and drinking places ⁵	1.46	1.46	1.45	1.44	1.43	1.42	1.39	1.39	1.39	1.38	1.37	1.37	1.40	1.30	
Other retail trade.....	2.18	2.18	2.16	2.17	2.17	2.14	2.13	2.14	2.14	2.13	2.12	2.10	2.13	2.04	
Building materials and hardware.....	2.25	2.23	2.23	2.23	2.24	2.23	2.20	2.19	2.19	2.18	2.17	2.14	2.19	2.10	
Motor vehicle dealers.....	2.51	2.54	2.57	2.59	2.58	2.50	2.54	2.57	2.57	2.54	2.53	2.50	2.53	2.41	
Other vehicle and accessory dealers.....	2.11	2.08	2.07	2.09	2.08	2.06	2.09	2.10	2.05	2.04	2.01	1.99	2.05	1.97	
Drug stores.....	1.89	1.88	1.85	1.86	1.87	1.85	1.83	1.83	1.83	1.82	1.81	1.80	1.83	1.74	
Fuel and ice dealers.....	2.56	2.50	2.48	2.47	2.42	2.38	2.35	2.33	2.34	2.36	2.36	2.37	2.39	2.26	
Finance, insurance, and real estate ⁶	2.57	2.56	2.54	2.51	2.50	2.48	2.47	2.48	2.47	2.49	2.48	2.46	2.48	2.39	
Banking.....	2.29	2.28	2.24	2.23	2.22	2.22	2.21	2.21	2.20	2.21	2.21	2.20	2.21	2.13	
Credit agencies other than banks.....	2.35	2.36	2.32	2.30	2.30	2.28	2.28	2.28	2.26	2.29	2.28	2.25	2.28	2.23	
Savings and loan associations.....	2.40	2.42	2.36	2.36	2.36	2.35	2.34	2.35	2.32	2.34	2.32	2.30	2.34	2.27	
Security dealers and exchanges.....	3.74	3.74	3.59	3.57	3.56	3.60	3.58	3.65	3.71	3.95	3.94	3.82	3.71	3.38	
Insurance carriers.....	2.76	2.73	2.71	2.71	2.70	2.68	2.67	2.69	2.67	2.66	2.65	2.65	2.67	2.57	
Life insurance.....	2.82	2.79	2.76	2.74	2.74	2.72	2.72	2.73	2.71	2.71	2.69	2.71	2.72	2.62	
Accident and health insurance.....	2.42	2.41	2.41	2.42	2.41	2.42	2.41	2.39	2.41	2.40	2.39	2.40	2.40	2.32	
Fire, marine, and casualty insurance.....	2.77	2.74	2.73	2.73	2.71	2.70	2.69	2.71	2.69	2.67	2.66	2.65	2.69	2.57	

See footnotes at end of table.

TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 90.

Industry	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Average weekly earnings															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ³		\$55.63	\$55.05	\$55.35	\$54.83	\$55.06	\$53.73	\$53.58	\$53.72	\$52.68	\$52.97	\$52.36	\$52.13	\$53.34	\$51.17
Personal services:															
Laundries, cleaning and dyeing plants.....		62.19	62.79	62.87	61.99	62.65	61.88	60.74	61.76	62.15	61.44	60.04	59.82	61.12	58.98
Motion pictures:															
Motion picture filming and distributing.....		159.88	162.47	166.96	159.42	164.55	159.29	162.51	165.68	160.19	148.71	147.66	146.07	157.77	148.08
Average weekly hours															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ³		36.6	36.7	36.9	36.8	37.2	36.8	38.0	38.1	37.1	37.3	37.4	37.5	37.3	37.9
Personal services:															
Laundries, cleaning and dyeing plants.....		36.8	37.6	38.1	37.8	38.2	38.2	38.2	38.6	38.6	38.4	38.0	38.1	38.2	38.8
Motion pictures:															
Motion picture filming and distributing.....		41.1	42.2	42.7	41.3	42.3	41.7	42.1	42.7	41.5	40.3	39.8	39.8	41.3	39.7
Average hourly earnings															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ³		\$1.52	\$1.50	\$1.50	\$1.49	\$1.48	\$1.46	\$1.41	\$1.41	\$1.42	\$1.42	\$1.40	\$1.39	\$1.43	\$1.35
Personal services:															
Laundries, cleaning and dyeing plants.....		1.69	1.67	1.65	1.64	1.64	1.62	1.59	1.60	1.61	1.60	1.58	1.57	1.60	1.52
Motion pictures:															
Motion picture filming and distributing.....		3.89	3.85	3.91	3.86	3.89	3.82	3.86	3.88	3.86	3.69	3.71	3.67	3.82	3.73

¹ For comparability of data with those published in issues prior to October 1966, 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. Average weekly hours, seasonally adjusted, of production workers in selected industries¹

Revised series; see box, p. 90.

Industry division and group	1967			1966									
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.
Mining.....	4.22	4.21	4.26	42.5	42.5	42.6	42.9	42.4	43.2	42.9	42.6	41.7	43.2
Contract construction.....	3.76	3.75	3.84	38.8	37.1	37.3	37.7	36.9	37.8	37.4	36.1	37.2	38.5
Manufacturing.....	4.04	4.03	4.10	40.9	41.3	41.3	41.5	41.4	41.0	41.3	41.5	41.5	41.5
Durable goods.....	4.11	4.09	4.18	41.7	42.1	42.2	42.3	42.1	41.8	42.0	42.2	42.3	42.3
Ordinance and accessories.....	4.23	4.19	4.21	42.1	42.7	42.2	42.5	42.1	42.7	42.1	42.4	42.2	42.0
Lumber and wood products, except furniture.....	4.03	4.03	4.03	40.2	40.4	40.4	40.3	40.3	40.6	40.5	41.4	41.3	41.1
Furniture and fixtures.....	4.04	4.00	4.08	40.5	41.1	41.2	41.2	41.6	41.0	41.8	42.0	41.6	41.9
Stone, clay, and glass products.....	4.19	4.15	4.21	42.4	41.7	41.8	41.9	41.8	41.5	41.9	41.8	42.1	42.8
Primary metal industries.....	4.09	4.08	4.18	41.5	42.5	42.7	42.5	42.4	42.7	42.2	42.3	42.4	42.4
Fabricated metal products.....	4.14	4.13	4.23	42.2	42.2	42.7	42.5	42.4	42.2	42.1	42.2	42.4	42.4
Machinery.....	4.32	4.29	4.36	43.6	44.0	43.9	44.3	43.8	43.3	43.8	43.8	43.7	44.0
Electrical equipment and supplies.....	4.01	3.99	4.08	40.6	40.9	41.1	41.3	41.2	40.9	41.2	41.3	41.4	41.3
Transportation equipment.....	4.06	4.07	4.17	41.5	42.0	42.4	42.9	43.2	42.1	42.3	42.2	43.4	42.9
Instruments and related products.....	4.14	4.09	4.17	41.8	41.7	42.0	42.2	41.7	41.7	42.0	42.4	42.0	42.4
Miscellaneous manufacturing industries.....	3.90	3.88	4.00	39.7	40.0	40.0	39.9	40.0	39.7	40.1	40.3	40.0	40.3
Nondurable goods.....	3.96	3.95	4.00	39.9	40.2	40.2	40.2	40.2	40.1	40.3	40.3	40.3	40.4
Food and kindred products.....	4.12	4.09	4.12	41.0	41.1	41.0	41.2	41.1	41.3	41.0	40.9	41.1	41.1
Tobacco manufactures.....	3.85	3.75	3.86	39.2	38.5	37.7	38.7	37.8	37.9	38.0	38.5	39.2	39.4
Textile mill products.....	4.03	4.00	4.10	40.8	41.0	41.3	42.1	42.0	41.7	42.2	42.2	41.9	42.4
Apparel and related products.....	3.54	3.56	3.67	36.5	36.5	36.7	36.6	36.3	36.2	36.5	36.5	36.4	36.5
Paper and allied products.....	4.28	4.27	4.32	43.0	43.6	43.1	43.4	43.3	43.4	43.4	43.7	43.7	43.5
Printing, publishing, and allied industries.....	3.86	3.85	3.89	38.6	39.0	39.0	38.9	38.9	39.0	39.0	38.7	38.9	38.7
Chemicals and allied products.....	4.17	4.15	4.18	42.0	42.2	42.0	42.0	42.0	42.0	42.0	41.9	42.3	42.0
Petroleum refining and related industries.....	4.28	4.25	4.18	42.4	42.6	42.4	41.8	41.9	42.4	42.5	42.5	42.6	42.6
Rubber and miscellaneous plastic products.....	4.14	4.07	4.14	41.4	41.0	42.1	42.0	41.8	41.5	41.7	42.1	42.4	42.2
Leather and leather products.....	3.68	3.70	3.84	38.0	38.8	38.8	38.3	38.6	38.3	38.7	39.0	39.0	38.5
Wholesale and retail trade.....	3.66	3.66	3.68	36.8	36.9	36.9	37.0	37.3	37.3	37.2	37.0	37.1	37.1
Wholesale trade.....	4.05	4.05	4.08	40.6	40.6	40.7	40.7	40.8	40.9	40.6	40.7	40.7	40.8
Retail trade.....	3.53	3.53	3.54	35.6	35.6	35.7	35.8	36.1	36.1	36.0	35.9	35.9	36.0

¹ For employees covered, see footnote 1, table A-10.² Preliminary.NOTE: The seasonal adjustment method used is described in *The BLS Seasonal Factor Method* (1966) which may be obtained from the Bureau on request.TABLE C-3. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group¹

Revised series; see box, p. 90.

Major industry group	1967			1966									Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing.....	\$2.68	\$2.68	\$2.67	\$2.65	\$2.63	\$2.62	\$2.61	\$2.57	\$2.59	\$2.58	\$2.58	\$2.58	\$2.56	\$2.59	\$2.50
Durable goods.....	2.84	2.84	2.83	2.82	2.80	2.79	2.78	2.73	2.74	2.74	2.74	2.74	2.72	2.75	2.67
Ordinance and accessories.....		3.10	3.10	3.10	3.07	3.08	3.07	3.06	3.04	3.04	3.05	3.04	3.05	3.06	3.03
Lumber and wood products, except furniture.....		2.23	2.20	2.19	2.20	2.22	2.22	2.19	2.18	2.17	2.16	2.13	2.09	2.16	2.08
Furniture and fixtures.....		2.19	2.18	2.16	2.14	2.13	2.12	2.11	2.10	2.10	2.10	2.09	2.07	2.11	2.03
Stone, clay, and glass products.....		2.66	2.65	2.64	2.64	2.62	2.61	2.59	2.57	2.57	2.57	2.57	2.55	2.58	2.49
Primary metal industries.....		3.17	3.16	3.15	3.16	3.15	3.15	3.13	3.15	3.14	3.13	3.13	3.11	3.13	3.04
Fabricated metal products.....		2.80	2.80	2.78	2.76	2.75	2.75	2.71	2.71	2.70	2.71	2.71	2.70	2.72	2.63
Machinery.....		2.98	2.98	2.96	2.95	2.94	2.92	2.89	2.89	2.89	2.89	2.88	2.87	2.90	2.81
Electrical equipment and supplies.....		2.62	2.60	2.58	2.57	2.55	2.54	2.52	2.52	2.52	2.52	2.52	2.51	2.53	2.49
Transportation equipment.....		3.25	3.26	3.25	3.22	3.22	3.21	3.13	3.13	3.13	3.12	3.11	3.11	3.16	3.04
Instruments and related products.....		2.66	2.65	2.63	2.62	2.60	2.60	2.58	2.58	2.59	2.57	2.58	2.57	2.59	2.52
Miscellaneous manufacturing industries.....		2.26	2.24	2.20	2.16	2.14	2.14	2.12	2.14	2.14	2.13	2.14	2.13	2.14	2.07
Nondurable goods.....	2.45	2.44	2.42	2.40	2.39	2.37	2.36	2.34	2.35	2.34	2.34	2.33	2.32	2.35	2.27
Food and kindred products.....		2.50	2.48	2.45	2.42	2.40	2.39	2.37	2.39	2.41	2.42	2.43	2.41	2.40	2.33
Tobacco manufactures.....		2.26	2.17	2.13	2.08	2.05	2.04	2.12	2.27	2.26	2.24	2.24	2.18	2.15	2.06
Textile mill products.....		1.93	1.92	1.91	1.91	1.90	1.89	1.88	1.88	1.88	1.83	1.83	1.82	1.86	1.78
Apparel and related products.....		1.96	1.91	1.90	1.89	1.88	1.86	1.85	1.84	1.83	1.83	1.83	1.84	1.85	1.80
Paper and allied products.....		2.65	2.65	2.63	2.63	2.62	2.61	2.60	2.60	2.58	2.57	2.57	2.55	2.59	2.50
Printing, publishing, and allied industries.....				(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Chemicals and allied products.....		2.94	2.94	2.93	2.92	2.91	2.90	2.88	2.89	2.87	2.84	2.82	2.81	2.87	2.79
Petroleum refining and related industries.....		3.41	3.38	3.34	3.33	3.30	3.29	3.27	3.28	3.28	3.27	3.30	3.28	3.29	3.18
Rubber and miscellaneous plastic products.....		2.58	2.58	2.56	2.55	2.55	2.55	2.52	2.55	2.52	2.52	2.52	2.51	2.53	2.49
Leather and leather products.....		1.99	1.95	1.93	1.93	1.91	1.91	1.88	1.86	1.88	1.88	1.89	1.87	1.89	1.84

¹ For comparability of data with those published in issues prior to October 1966, 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-4. Average weekly overtime hours of production workers in manufacturing, by industry¹
 Revised series; see box, p. 90.

Industry	1967			1966									Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing.....	3.2	3.2	3.4	3.7	3.9	4.1	4.2	4.0	3.8	4.0	4.0	3.9	3.9	3.9	3.6
Durable goods.....	3.4	3.4	3.7	4.1	4.2	4.5	4.6	4.3	4.1	4.4	4.4	4.3	4.2	4.3	3.9
Nondurable goods.....	3.0	2.9	3.0	3.3	3.4	3.6	3.7	3.5	3.5	3.5	3.4	3.3	3.3	3.4	3.2
<i>Durable goods</i>															
Ordnance and accessories.....		4.0	4.0	4.3	4.3	4.1	4.2	4.1	3.7	3.9	3.7	3.6	3.4	3.9	3.0
Ammunition, except for small arms.....		3.5	3.3	3.4	3.3	3.3	3.5	3.5	3.0	3.1	3.1	3.0	2.9	3.3	3.1
Sighting and fire control equipment.....		4.6	4.5	3.0	3.9	2.2	3.4	3.0	3.4	4.1	3.6	3.5	3.4	3.4	1.6
Other ordnance and accessories.....		5.0	5.4	6.3	6.3	6.2	6.0	5.6	5.4	5.6	5.0	5.2	4.5	5.4	2.9
Lumber and wood products, except furniture.....		3.2	3.3	3.3	3.4	3.9	4.0	4.1	4.1	4.2	4.4	4.3	4.0	4.0	3.8
Sawmills and planing mills.....		3.2	3.3	3.3	3.3	3.9	3.9	4.1	4.1	4.3	4.5	4.4	4.0	4.0	3.7
Millwork, plywood, and related products.....		3.2	3.0	3.2	3.3	3.7	3.8	3.9	3.9	4.2	4.7	4.4	4.1	3.9	4.0
Wooden containers.....		3.1	3.6	3.8	3.7	3.7	4.0	4.6	4.5	4.4	4.7	4.2	3.4	4.0	3.5
Miscellaneous wood products.....		3.3	3.5	3.5	3.8	4.0	4.2	4.1	4.0	3.9	3.9	3.9	3.8	3.9	3.6
Furniture and fixtures.....		2.6	2.8	3.8	3.8	4.3	4.3	4.2	3.3	4.0	3.8	3.4	3.7	3.8	3.6
Household furniture.....		2.4	2.6	3.6	3.7	4.1	4.0	3.9	2.9	3.7	3.6	3.3	3.6	3.6	3.6
Office furniture.....		4.0	4.4	5.1	4.9	5.0	4.9	5.2	4.7	4.7	4.6	4.5	4.3	4.7	3.5
Partitions; office and store fixtures.....		2.7	2.7	3.6	3.5	4.7	5.5	5.4	4.1	4.9	4.3	3.6	4.0	4.2	3.7
Other furniture and fixtures.....		3.2	3.2	4.2	4.2	4.5	5.1	5.0	4.6	4.5	4.1	3.4	3.4	4.1	3.7
Stone, clay, and glass products.....		3.4	3.5	3.8	4.3	4.6	4.7	4.8	4.7	4.9	4.8	4.6	4.5	4.5	4.2
Flat glass.....		3.3	3.8	3.7	5.9	4.8	3.8	4.0	4.2	3.6	4.1	4.8	4.4	4.3	4.1
Glass and glassware, pressed or blown.....		3.5	3.5	4.0	4.1	4.0	4.1	4.1	4.1	4.6	4.5	4.0	4.4	4.2	4.0
Cement, hydraulic.....		2.1	2.3	2.3	3.0	2.8	3.0	3.0	3.3	2.7	2.8	2.7	2.7	2.8	2.2
Structural clay products.....		2.6	2.6	2.8	3.4	3.7	3.7	3.7	3.9	4.0	3.9	3.8	3.6	3.6	3.6
Pottery and related products.....		2.2	2.3	2.6	3.1	2.8	3.0	2.7	2.0	2.6	2.2	2.5	2.3	2.5	2.2
Concrete, gypsum, and plaster products.....		5.0	4.6	4.9	5.3	6.6	7.0	7.3	7.2	7.1	7.0	6.8	6.3	6.4	6.2
Other stone and mineral products.....		2.9	3.1	3.7	3.8	4.3	4.2	4.2	4.0	4.4	4.3	4.3	4.0	4.1	3.5
Primary metal industries.....		3.4	3.7	3.8	4.0	4.2	4.5	4.1	3.9	4.2	4.0	4.1	4.0	4.0	3.8
Blast furnace and basic steel products.....		2.1	2.4	2.1	2.4	2.8	3.3	3.0	3.1	2.9	2.8	2.8	2.4	2.6	2.8
Iron and steel foundries.....		4.3	4.9	5.4	5.4	5.4	5.3	5.1	4.5	5.4	5.1	5.6	5.6	5.3	5.5
Nonferrous smelting and refining.....		4.0	4.1	4.0	4.2	4.4	4.3	4.2	3.8	4.0	3.8	3.9	3.6	3.9	3.5
Nonferrous rolling, drawing, and extruding.....		5.3	5.4	5.8	6.2	6.3	6.3	6.0	5.5	6.5	6.2	5.9	5.9	6.0	5.0
Nonferrous foundries.....		3.5	4.2	4.7	4.8	4.8	5.2	4.4	3.7	4.7	4.5	4.6	4.5	4.6	3.9
Miscellaneous primary metal industries.....		5.2	5.4	5.5	6.5	6.5	6.5	5.4	4.8	5.7	6.0	5.4	6.1	5.9	5.2
Fabricated metal products.....		3.7	3.9	4.3	4.6	4.8	5.0	4.7	4.3	4.6	4.6	4.3	4.3	4.5	4.0
Metal cans.....		3.4	3.2	3.1	3.7	3.6	5.1	5.6	6.9	4.6	4.8	4.4	3.8	4.4	4.5
Cutlery, handtools, and general hardware.....		3.2	3.2	3.4	3.5	3.6	3.8	3.5	3.1	3.6	3.7	3.6	3.4	3.5	3.4
Heating equipment and plumbing fixtures.....		1.9	2.1	2.6	2.6	3.3	3.2	3.0	2.3	3.1	3.0	2.6	2.4	2.7	2.3
Fabricated structural metal products.....		3.5	3.8	4.5	4.4	4.5	4.7	4.4	4.1	4.3	4.1	3.6	3.5	4.1	3.6
Screw machine products, bolts, etc.....		6.4	6.7	7.2	7.2	7.2	7.3	6.5	5.9	7.0	6.9	6.7	6.8	6.9	5.4
Metal stampings.....		3.5	3.9	4.4	5.4	5.8	6.0	5.4	5.1	5.1	5.3	5.3	5.3	5.3	5.2
Coating, engraving, and allied services.....		4.0	4.4	4.9	4.7	5.0	5.7	5.1	4.4	5.0	5.1	4.8	4.8	4.9	4.3
Miscellaneous fabricated wire products.....		3.6	3.9	4.0	4.5	4.5	4.5	4.4	4.4	4.5	4.6	4.0	4.1	4.3	3.8
Miscellaneous fabricated metal products.....		3.4	3.7	3.9	4.0	4.2	4.4	4.3	3.8	4.9	4.6	4.0	4.3	4.2	3.4
Machinery.....		5.0	5.2	5.6	5.4	5.6	5.7	5.4	5.2	5.8	5.8	5.6	5.7	5.5	4.6
Engines and turbines.....		5.2	4.5	6.8	4.9	4.9	5.8	6.0	5.8	5.7	6.0	5.8	5.4	5.5	4.1
Farm machinery and equipment.....		4.5	4.2	3.6	3.1	3.7	4.0	3.4	3.2	3.7	4.2	4.4	4.3	3.8	2.9
Construction and related machinery.....		3.6	3.6	4.1	4.7	4.9	4.9	4.9	5.2	5.3	5.3	5.1	5.1	4.9	4.2
Metalworking machinery and equipment.....		7.5	7.7	7.9	7.6	7.5	7.6	7.1	7.4	8.2	8.3	8.0	8.2	7.8	6.7
Special industry machinery.....		5.2	5.4	6.0	5.8	5.7	6.1	5.4	4.7	5.8	5.5	5.3	5.6	5.6	4.8
General industrial machinery.....		4.6	5.1	5.6	5.4	5.8	6.0	5.6	5.0	5.8	5.7	5.1	5.1	5.5	4.4
Office, computing, and accounting machines.....		3.1	3.6	3.9	3.8	4.1	3.9	3.5	3.2	4.0	4.0	3.7	4.2	4.0	3.4
Service industry machines.....		2.5	2.5	3.4	3.5	3.5	3.3	3.7	3.4	3.7	3.3	3.3	3.5	3.4	2.9
Miscellaneous machinery.....		6.2	6.4	6.3	6.5	6.6	6.6	6.3	5.9	6.3	6.3	6.3	6.4	6.3	5.4
Electrical equipment and supplies.....		2.5	2.8	3.3	3.3	3.5	3.6	3.2	3.2	3.4	3.4	3.3	3.3	3.3	2.8
Electric distribution equipment.....		3.5	3.5	4.2	3.9	3.8	4.4	3.7	3.9	4.1	3.9	3.5	3.7	3.8	2.9
Electrical industrial apparatus.....		3.5	3.7	4.0	4.0	4.2	4.7	4.3	4.3	4.5	4.7	4.5	4.4	4.3	3.5
Household appliances.....		2.0	1.9	2.5	3.3	3.7	4.1	3.8	3.6	3.6	3.8	3.6	2.9	3.5	3.0
Electric lighting and wiring equipment.....		2.3	2.7	2.9	3.1	3.4	3.3	3.2	2.8	3.1	3.1	2.8	2.8	3.0	2.7
Radio and TV receiving sets.....		1.0	1.8	2.7	3.0	3.7	3.3	2.9	2.7	2.5	1.9	2.4	2.3	2.7	2.4
Communication equipment.....		3.0	3.2	3.7	3.3	3.4	3.6	2.9	2.7	3.2	3.4	3.0	3.3	3.3	2.7
Electronic components and accessories.....		2.1	2.6	2.9	2.7	2.7	2.9	2.7	2.9	3.3	3.4	3.3	3.3	3.0	2.4
Miscellaneous electrical equipment and supplies.....		2.0	3.0	3.8	4.1	3.8	3.5	3.1	2.5	2.8	3.0	2.9	2.9	3.3	3.2
Transportation equipment.....		3.1	3.5	4.2	4.8	5.2	4.9	4.8	4.5	4.4	4.4	5.1	4.7	4.7	4.8
Motor vehicles and equipment.....		2.2	2.9	4.1	5.0	5.9	5.2	5.0	4.4	4.2	4.1	5.8	4.7	4.9	6.2
Aircraft and parts.....		4.2	4.4	4.5	5.1	4.9	5.1	5.2	5.0	5.1	5.2	4.6	5.1	5.0	3.3
Ship and boat building and repairing.....		3.4	3.9	4.2	4.0	4.5	3.7	3.9	4.1	4.2	4.0	4.2	4.4	4.1	3.4
Railroad equipment.....		3.4	3.7	3.7	3.4	3.2	3.0	3.5	3.9	3.1	3.6	3.7	3.0	3.3	2.6
Other transportation equipment.....		1.5	1.6	1.9	2.1	2.8	3.4	3.1	2.6	3.2	3.3	2.9	2.8	2.7	2.9
Instruments and related products.....		3.0	3.2	3.7	3.7	4.0	4.0	3.5	3.4	3.8	3.8	3.5	3.6	3.7	3.0
Engineering and scientific instruments.....		4.0	4.1	4.7	4.3	4.7	4.5	3.9	4.0	4.5	4.5	3.7	4.0	4.2	3.4
Mechanical measuring and control devices.....		2.6	3.4	4.1	4.1	4.4	4.4	3.8	3.9	4.1	4.3	4.0	3.8	4.1	2.9
Optical and ophthalmic goods.....		2.8	2.8	3.0	3.0	3.3	3.5	3.1	3.0	3.3	3.2	2.2	3.3	3.1	2.7
Ophthalmic goods.....		2.2	2.1	2.4	2.6	2.8	2.9	2.5	2.8	2.8	2.8	2.1	2.9	2.7	2.4
Surgical, medical, and dental equipment.....		2.4	2.5	2.5	2.7	2.8	2.9	2.7	2.6	2.8	2.9	2.6	2.7	2.7	2.1
Photographic equipment and supplies.....		4.1	4.0	4.4	4.5	5.1	5.1	4.1	3.9	4.6	4.8	4.9	4.7	4.6	4.0
Watches and clocks.....		2.2	2.5	2.8	2.8	2.9	2.8	2.6	2.3	2.4	2.4	2.5	2.8	2.6	2.4

See footnotes at end of table.

TABLE C-4. Average weekly overtime hours of production workers in manufacturing, by industry¹—Continued

Revised series; see box, p. 90.

Industry	1967			1966									Annual average		
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Miscellaneous manufacturing industries.....	2.4	2.5	2.9	3.1	3.4	3.3	3.1	2.3	2.8	2.9	2.8	3.1	2.9	2.7	2.7
Jewelry, silverware, and plated ware.....	2.7	3.4	4.8	4.9	5.3	4.9	4.6	2.2	4.2	4.1	4.1	4.3	4.3	3.6	3.6
Toys, amusement and sporting goods.....	2.5	2.3	2.4	2.8	3.2	3.3	3.1	2.3	2.3	2.6	2.6	2.7	2.7	2.6	2.6
Pens, pencils, office and art materials.....	2.2	2.2	3.1	3.2	2.8	2.7	2.4	2.0	2.8	2.2	2.0	2.4	2.5	2.3	2.3
Costume jewelry, buttons, and notions.....	2.4	2.4	2.7	2.8	3.1	2.9	2.9	2.2	3.4	3.0	2.6	3.0	2.9	2.4	2.4
Other manufacturing industries.....	2.3	2.5	2.7	2.9	3.2	3.2	2.9	2.3	2.7	2.9	2.8	3.1	2.9	2.7	2.7
Musical instruments and parts.....	2.2	2.3	3.6	3.9	3.7	3.5	2.9	2.3	3.1	3.2	2.8	3.2	3.2	3.0	3.0
<i>Nondurable goods</i>															
Food and kindred products.....	3.6	3.8	4.0	4.0	4.2	4.4	4.0	4.7	4.2	3.8	3.4	3.4	4.0	3.8	3.8
Meat products.....	3.7	4.8	5.1	5.1	4.8	5.1	4.2	4.5	4.3	3.9	3.5	3.4	4.3	4.2	4.2
Dairy products.....	3.7	3.4	3.7	3.5	3.6	4.0	3.9	4.6	4.3	3.7	3.5	3.3	3.7	3.6	3.6
Canned and preserved food, except meats.....	2.8	2.9	2.9	2.9	3.2	3.5	3.4	3.6	3.1	3.1	2.8	2.7	3.1	2.9	2.9
Grain mill products.....	5.9	6.9	6.6	6.6	7.7	8.5	7.0	7.9	7.3	6.4	5.6	5.6	6.8	6.6	6.6
Bakery products.....	3.2	2.9	3.2	3.3	3.7	3.8	3.8	4.3	3.9	3.5	3.3	3.1	3.5	3.3	3.3
Sugar.....	2.6	3.0	3.0	3.8	3.8	4.4	4.0	4.8	4.0	3.7	3.5	4.6	3.9	3.9	3.9
Confectionery and related products.....	2.8	2.6	3.2	3.1	3.1	3.1	2.9	2.3	2.5	2.3	1.9	2.6	2.7	2.4	2.4
Beverages.....	3.1	3.1	3.5	3.6	3.8	4.0	4.2	6.7	4.4	3.5	3.6	3.1	3.9	3.3	3.3
Miscellaneous food and kindred products.....	4.3	4.2	4.7	4.9	4.8	5.0	4.2	4.4	4.2	4.2	3.8	3.9	4.4	4.3	4.3
Tobacco manufactures.....	.9	1.1	1.9	1.2	1.4	1.5	1.7	1.7	1.5	1.2	1.3	1.0	1.4	1.1	1.1
Cigarettes.....	1.0	1.1	2.2	1.2	1.7	1.8	2.2	2.5	1.9	1.2	1.6	.9	1.7	.8	.8
Cigars.....	.8	.6	1.0	1.2	1.1	.9	1.2	.8	1.0	1.3	1.1	1.1	1.1	1.3	1.3
Textile mill products.....	3.3	3.5	3.8	4.2	4.2	4.4	4.4	4.4	4.6	4.6	4.5	4.6	4.4	4.2	4.2
Cotton broad woven fabrics.....	4.6	4.6	5.0	5.3	5.0	5.2	5.1	5.5	5.3	5.3	5.3	5.5	5.3	4.8	4.8
Silk and synthetic broad woven fabrics.....	3.3	3.5	3.9	4.5	4.3	4.7	5.2	5.6	4.9	6.0	5.5	5.7	5.0	5.3	5.3
Weaving and finishing broad wools.....	3.6	4.0	3.9	3.9	3.9	4.3	4.3	5.0	5.2	5.5	5.3	5.1	4.7	4.4	4.4
Narrow fabrics and smallwares.....	2.9	3.5	3.9	4.1	4.1	4.3	3.9	3.7	4.4	4.0	3.9	4.4	4.1	3.6	3.6
Knitting.....	1.8	1.8	1.9	2.3	2.5	2.7	3.1	2.6	2.8	2.8	2.2	2.5	2.5	2.5	2.5
Finishing textiles, except wool and knit.....	4.6	4.4	5.1	5.2	5.1	4.9	4.8	4.5	5.9	5.6	5.7	5.8	5.3	4.6	4.6
Floor covering.....	2.8	3.5	4.3	5.0	5.3	5.4	4.9	3.5	4.5	4.1	4.2	4.4	4.5	5.1	5.1
Yarn and thread.....	2.7	3.3	3.5	4.0	4.4	5.0	4.9	4.7	5.1	5.0	5.2	5.2	4.8	4.7	4.7
Miscellaneous textile goods.....	3.6	4.2	4.2	4.9	5.2	5.2	4.7	4.2	5.1	5.2	5.0	4.8	4.8	4.3	4.3
Apparel and related products.....	1.2	1.3	1.4	1.5	1.7	1.5	1.7	1.3	1.5	1.5	1.4	1.6	1.5	1.4	1.4
Men's and boys' suits and coats.....	1.4	1.6	1.5	1.7	2.0	1.7	1.8	1.3	1.7	1.7	1.4	1.6	1.6	1.5	1.5
Men's and boys' furnishings.....	1.0	1.1	1.1	1.3	1.4	1.3	1.5	1.1	1.4	1.3	1.2	1.3	1.3	1.2	1.2
Women's, misses', juniors' outerwear.....	1.3	1.3	1.2	1.3	1.3	1.2	1.4	1.3	1.5	1.5	1.4	1.8	1.4	1.3	1.3
Women's and children's undergarments.....	1.1	1.1	1.3	1.9	2.2	1.9	1.9	1.5	1.5	1.5	1.3	1.7	1.6	1.4	1.4
Hats, caps, and millinery.....	1.5	1.5	1.1	1.2	1.3	1.2	1.7	1.3	1.3	1.0	1.0	1.9	1.4	1.4	1.4
Girls' and children's outerwear.....	1.3	1.3	1.2	1.4	1.4	1.5	1.8	1.7	1.9	1.6	1.4	1.6	1.6	1.4	1.4
Fur goods and miscellaneous apparel.....	.9	1.0	1.5	1.8	2.1	1.5	1.6	1.1	1.6	1.6	1.2	1.3	1.5	1.4	1.4
Miscellaneous fabricated textile products.....	1.4	1.5	2.2	2.5	3.0	2.4	2.4	1.6	1.9	1.9	1.9	2.0	2.1	2.1	2.1
Paper and allied products.....	4.9	5.0	5.2	5.5	5.7	5.8	5.6	5.5	5.7	5.6	5.3	5.3	5.4	5.0	5.0
Paper and pulp.....	6.3	6.0	6.1	6.3	6.6	6.5	6.4	6.3	6.5	6.7	6.2	6.2	6.3	6.0	6.0
Paperboard.....	7.0	7.0	7.0	7.5	7.2	7.4	7.4	7.6	7.7	7.8	8.2	7.5	7.5	7.0	7.0
Converted paper and paperboard products.....	3.7	3.9	3.9	4.3	4.3	4.5	4.3	4.3	4.3	3.9	3.7	3.9	4.1	3.5	3.5
Paperboard containers and boxes.....	3.7	4.0	4.6	5.0	5.5	5.7	5.0	4.9	5.2	5.0	4.5	4.8	4.9	4.5	4.5
Printing, publishing, and allied industries.....	3.1	3.1	3.7	3.6	3.9	4.0	3.7	3.4	3.5	3.5	3.3	3.5	3.5	3.1	3.1
Newspaper publishing and printing.....	2.1	2.0	3.4	3.2	3.1	3.0	2.7	2.6	3.0	3.0	2.6	2.3	2.7	2.4	2.4
Periodical publishing and printing.....	3.6	3.6	3.3	4.4	5.6	5.8	4.6	3.9	3.3	3.4	3.7	4.1	3.8	3.8	3.8
Books.....	4.3	4.5	4.4	4.1	4.8	5.2	4.4	4.9	5.4	5.4	5.1	5.1	4.9	4.2	4.2
Commercial printing.....	3.4	3.5	4.0	3.9	4.3	4.4	4.1	3.8	3.7	3.8	3.6	3.9	3.8	3.4	3.4
Bookbinding and related industries.....	2.3	2.7	2.6	2.7	3.2	3.3	3.1	2.8	2.8	3.0	2.8	3.0	2.8	2.5	2.5
Other publishing and printing industries.....	3.5	3.3	3.5	3.5	3.6	3.9	3.5	3.2	3.0	2.6	2.9	3.6	3.3	3.1	3.1
Chemicals and allied products.....	2.9	2.9	3.1	3.3	3.5	3.5	3.4	3.3	3.4	3.4	3.7	3.3	3.3	3.0	3.0
Industrial chemicals.....	2.9	3.2	3.4	3.7	3.7	3.5	3.4	3.5	3.4	3.2	3.4	3.2	3.4	3.0	3.0
Plastics materials and synthetics.....	2.4	2.3	2.9	3.0	3.2	3.2	3.5	3.5	3.4	3.3	3.6	3.0	3.2	2.9	2.9
Drugs.....	2.6	3.2	3.1	2.8	2.9	3.1	2.6	2.3	2.5	2.8	2.8	2.9	2.8	2.6	2.6
Soap, cleaners, and toilet goods.....	2.9	2.7	2.8	3.6	3.9	3.9	3.8	3.2	3.4	2.9	3.0	3.1	3.3	2.5	2.5
Paints, varnishes, and allied products.....	2.2	2.1	2.4	2.7	2.9	3.4	3.3	3.0	3.7	3.8	3.4	2.7	3.0	2.7	2.7
Agricultural chemicals.....	4.9	4.7	4.2	3.9	4.6	4.2	3.7	3.8	4.3	6.5	8.9	7.3	5.2	4.9	4.9
Other chemical products.....	2.7	2.8	3.3	3.3	3.6	3.8	3.3	3.3	3.6	3.4	3.1	2.7	3.3	3.0	3.0
Petroleum refining and related industries.....	3.0	2.7	3.0	3.3	3.3	3.7	3.1	3.7	3.6	3.5	3.4	2.6	3.2	2.8	2.8
Petroleum refining.....	2.8	2.5	2.6	2.9	2.3	2.6	2.2	2.7	2.6	3.1	3.0	2.3	2.5	2.1	2.1
Other petroleum and coal products.....	3.6	3.7	4.4	4.9	6.7	7.4	5.8	6.8	6.7	5.0	4.6	3.9	5.4	5.5	5.5
Rubber, miscellaneous plastic products.....	3.4	3.9	4.2	4.5	4.7	4.7	4.3	3.9	4.3	4.4	4.2	4.3	4.4	4.1	4.1
Tires and inner tubes.....	4.6	6.1	6.6	6.4	6.4	6.1	5.7	5.8	5.4	6.5	6.6	5.8	6.2	6.1	6.1
Other rubber products.....	2.9	3.3	3.6	4.1	4.2	4.4	4.0	3.3	3.8	3.7	3.5	3.6	3.8	3.3	3.3
Miscellaneous plastic products.....	3.3	3.3	3.6	4.0	4.4	4.5	4.0	3.5	4.2	4.1	3.9	4.2	4.0	4.0	4.0
Leather and leather products.....	1.7	2.0	2.1	2.1	2.1	2.0	2.2	2.2	2.3	2.1	1.9	2.1	2.1	1.8	1.8
Leather tanning and finishing.....	3.1	3.0	3.6	3.5	3.5	3.4	3.3	3.4	3.8	4.0	3.5	3.5	3.5	3.3	3.3
Footwear, except rubber.....	1.6	2.0	1.9	1.6	1.6	1.7	2.0	2.1	2.1	1.9	1.6	1.9	1.9	1.6	1.6
Other leather products.....	1.6	1.7	2.1	2.8	2.8	2.5	2.5	1.8	2.3	2.1	2.1	2.2	2.3	2.0	2.0
Handbags and personal leather goods.....	1.7	1.6	1.7	2.9	2.8	2.2	2.7	1.8	2.0	2.0	1.9	2.5	2.2	1.9	1.9

¹ For comparability of data with those published in issues prior to October 1966, 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-5. Indexes of aggregate weekly man-hours and payrolls in industrial and construction activities¹

[1957-59=100]

Revised series; see box, p. 90.

Activity	1967			1966										Annual average	
	Mar. ²	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Man-hours															
Total.....	198.8	108.7	111.7	115.6	117.1	119.6	120.0	119.6	117.2	118.8	114.6	112.2	111.5	115.3	109.1
Mining.....	77.7	77.4	79.5	81.9	81.5	84.1	84.7	86.5	85.9	86.9	83.7	74.3	81.5	82.7	82.9
Contract construction.....	96.0	91.6	98.2	106.7	111.2	123.6	126.1	131.4	132.4	126.1	112.4	107.4	102.5	114.2	110.2
Manufacturing.....	113.9	113.4	115.8	119.0	119.0	120.6	120.7	119.1	116.0	119.1	116.5	114.9	114.6	111.7	110.2
Durable goods.....	120.2	119.7	122.7	125.9	126.6	127.2	126.9	123.2	121.5	125.8	123.6	122.1	120.9	123.5	114.1
Ordnance and accessories.....	169.0	166.3	165.0	162.3	159.3	154.0	150.9	145.2	142.5	141.5	139.3	134.4	132.0	143.4	113.1
Lumber and wood products, except furniture.....	90.7	89.2	90.6	91.9	95.0	98.1	100.2	104.1	103.7	105.6	102.0	98.9	96.4	98.9	97.5
Furniture and fixtures.....	120.1	119.5	121.5	128.9	129.6	130.7	130.0	131.6	122.5	128.1	124.3	122.0	123.7	126.2	119.0
Stone, clay, and glass products.....	102.7	99.5	102.4	106.3	109.5	111.7	113.5	115.4	114.5	115.2	112.8	110.9	108.0	110.6	108.1
Primary metal industries.....	110.7	110.8	114.2	113.6	114.7	115.3	117.7	117.3	116.3	119.2	116.5	115.8	113.5	115.2	112.9
Fabricated metal products.....	122.4	122.6	125.9	129.7	130.0	130.1	130.2	127.2	122.7	128.2	126.2	124.3	123.4	126.3	117.2
Machinery.....	139.5	138.2	139.9	141.0	137.6	137.3	138.0	135.9	134.5	137.9	136.3	134.3	134.2	135.8	123.0
Electrical equipment and supplies.....	143.1	143.5	148.5	152.3	152.7	153.9	152.1	148.6	141.9	146.7	143.3	141.5	139.4	145.8	125.6
Transportation equipment.....	111.0	111.8	115.7	122.0	122.6	122.2	119.4	103.0	109.3	116.5	116.4	117.2	116.3	116.2	106.8
Instruments and related products.....	129.9	127.7	129.8	131.9	130.6	130.4	129.3	127.7	125.5	128.2	125.6	122.9	123.6	126.5	112.3
Miscellaneous manufacturing industries.....	106.3	104.9	106.5	113.6	123.6	124.7	121.5	120.1	109.9	117.3	114.8	111.5	111.0	114.9	109.8
Nondurable goods.....	105.7	105.2	106.8	109.9	111.2	112.0	112.6	113.7	108.9	110.4	107.3	105.6	106.5	109.0	105.2
Food and kindred products.....	88.6	87.4	90.2	95.4	98.9	101.7	106.3	106.1	99.5	94.0	88.6	86.9	87.1	95.0	94.0
Tobacco manufactures.....	74.0	76.1	87.6	98.3	92.8	98.3	100.4	87.7	70.8	73.4	72.1	73.9	77.2	84.4	86.2
Textile mill products.....	98.5	98.0	100.1	102.7	104.2	105.0	105.8	107.2	103.4	108.4	106.0	103.4	105.2	104.9	101.5
Apparel and related products.....	116.0	116.9	116.7	118.2	120.2	121.3	117.7	122.5	114.2	121.1	118.8	116.2	120.6	118.4	115.0
Paper and allied products.....	114.4	113.6	114.9	117.6	118.5	117.3	117.5	118.4	117.2	118.2	114.7	113.4	112.7	115.7	109.8
Printing, publishing, and allied industries.....	119.8	117.9	117.7	120.4	119.1	119.2	118.7	118.0	116.4	116.7	115.1	114.3	114.2	116.3	110.2
Chemicals and allied products.....	116.7	114.9	115.2	116.7	117.1	116.6	116.9	117.9	116.8	117.9	116.0	116.1	113.4	115.6	110.1
Petroleum refining and related industries.....	77.1	76.1	75.9	78.5	80.0	80.3	82.2	82.2	83.9	82.6	80.2	78.7	76.3	79.7	78.3
Rubber and miscellaneous plastic products.....	147.0	146.0	151.0	154.7	154.9	153.9	152.1	149.7	143.6	147.9	145.8	143.8	143.2	147.9	135.4
Leather and leather products.....	90.4	93.2	96.4	98.4	98.0	96.7	96.7	102.4	97.7	102.1	98.6	96.2	99.3	108.9	96.3
Payrolls															
Mining.....	98.1	97.6	100.9	103.1	102.0	105.2	105.6	105.4	105.2	106.5	102.5	87.4	97.7	101.3	97.0
Contract construction.....	134.7	129.4	139.5	150.3	155.7	173.0	173.2	177.0	180.3	171.1	152.6	145.1	137.9	156.7	144.3
Manufacturing.....	150.3	149.3	152.1	155.8	156.4	156.9	156.9	156.7	148.6	152.5	149.0	146.8	145.3	150.4	136.3

¹ For comparability of data with those published in issues prior to October 1966, see footnote 1, table A-9. For mining and manufacturing, data refer to production and related

workers for and contract construction, to construction workers, as defined in footnote 1, table A-10. ² Preliminary.

TABLE C-6. Gross and spendable average weekly earnings of production workers in manufacturing¹
[In current and 1957-59 dollars]¹

Revised series; see box, p. 90.

Item	1967			1966										Annual average	
	Feb. ²	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	1966	1965
<i>Manufacturing</i>															
Gross average weekly earnings:															
Current dollars.....	\$111.48	\$113.42	\$114.40	\$113.99	\$113.85	\$113.71	\$111.78	\$111.11	\$112.74	\$112.05	\$111.24	\$110.95	\$110.27	\$111.92	\$107.53
1957-59 dollars.....	97.11	98.88	99.74	99.47	99.43	99.66	98.22	98.07	99.86	99.51	98.88	99.06	98.81	98.96	97.84
Spendable average weekly earnings:															
Worker with no dependents:															
Current dollars.....	90.69	92.16	93.13	92.82	92.72	92.61	91.14	90.63	91.87	91.35	90.73	90.51	90.00	91.25	89.08
1957-59 dollars.....	79.00	80.35	81.19	80.99	80.98	81.17	80.09	79.99	81.37	81.13	80.65	80.81	80.65	80.68	81.06
Worker with 3 dependents:															
Current dollars.....	98.54	100.08	101.09	100.76	100.65	100.54	99.00	98.47	99.77	99.22	98.57	98.34	97.80	99.11	96.78
1957-59 dollars.....	85.84	87.25	88.13	87.92	87.90	88.12	86.99	86.91	88.37	88.12	87.62	87.80	87.63	87.63	88.06

¹ For comparability of data with those published in issues prior to October 1966, 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.

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		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
All items	115.0	114.8	114.7	114.7	114.6	114.5	114.1	113.8	113.3	112.9	112.6	112.5	112.0	113.1	109.9
All items (1947-49=100)	141.1	140.9	140.7	140.7	140.6	140.5	140.0	139.6	139.0	138.5	138.2	138.0	137.4	138.8	134.8
Food	114.2	114.2	114.7	114.8	114.8	115.6	115.6	115.8	114.3	113.9	113.5	114.0	113.9	114.2	108.8
Food at home	111.5	111.7	112.3	112.6	112.8	113.8	114.0	114.4	112.7	112.3	112.0	112.7	112.6	112.6	107.2
Cereals and bakery products	118.6	118.5	118.8	118.8	118.6	118.3	118.4	117.3	114.8	114.7	114.3	114.1	113.6	115.8	111.2
Meats, poultry, and fish	110.0	110.7	110.3	110.9	111.8	113.8	114.8	114.5	114.3	114.2	113.9	115.6	116.9	114.1	105.1
Dairy products	115.7	116.1	116.4	116.5	116.7	117.1	116.0	114.8	111.0	109.6	109.3	108.9	108.1	111.8	105.0
Fruits and vegetables	115.2	114.2	115.3	114.3	114.9	115.3	116.6	122.3	121.5	121.7	119.2	119.8	117.4	117.6	115.2
Other foods at home ²	102.3	102.5	104.9	105.7	104.8	106.0	105.3	104.9	102.1	101.3	102.8	103.6	103.7	103.9	101.8
Food away from home	127.7	127.4	127.0	126.3	125.7	125.2	124.6	124.0	123.5	122.8	122.2	121.6	121.2	123.2	117.8
Housing	113.3	113.3	113.1	113.0	112.6	112.2	111.8	111.5	111.3	111.1	110.7	110.3	109.6	111.1	108.5
Shelter ³	116.6	116.8	116.5	116.4	115.8	115.5	115.0	114.6	114.4	114.1	113.5	113.0	112.3	114.1	110.6
Rent	111.8	111.7	111.4	111.3	111.2	111.0	110.7	110.6	110.3	110.2	110.2	110.1	109.9	110.4	108.9
Homeownership ⁴	118.6	118.9	118.7	118.6	117.8	117.4	116.8	116.4	116.2	115.8	115.0	114.3	113.5	115.7	111.4
Fuel and utilities ⁵	108.7	108.7	108.6	108.4	108.3	108.1	108.0	107.9	107.9	108.0	108.2	108.3	108.6	107.7	107.2
Fuel oil and coal ⁶	111.1	111.1	110.5	110.2	108.9	108.3	107.4	107.0	107.0	107.0	108.0	108.5	108.9	108.3	105.6
Gas and electricity	108.3	108.3	108.3	107.9	108.1	108.0	108.1	108.2	108.1	108.1	108.2	108.3	108.2	108.1	107.8
Household furnishings and operation ⁷	107.3	107.0	106.7	106.7	106.5	106.1	105.7	105.2	105.1	104.8	104.6	104.4	104.0	105.0	103.1
Apparel and upkeep ⁸	112.6	111.9	111.3	112.3	112.0	111.5	110.7	109.2	109.2	109.4	109.3	108.7	108.2	109.6	106.8
Men's and boys'	112.7	111.8	111.6	112.6	112.4	111.5	111.2	109.9	109.6	110.1	109.9	109.6	109.0	110.3	107.4
Women's and girls'	108.2	107.3	106.4	108.1	107.8	107.5	106.3	103.8	104.6	104.7	105.0	104.2	103.9	105.1	103.1
Footwear	124.2	123.4	122.9	122.9	122.8	122.2	121.3	120.4	119.8	119.8	119.0	118.1	116.9	119.6	112.9
Transportation	114.2	113.8	113.4	113.8	114.5	114.3	113.3	113.5	113.5	112.2	112.0	112.0	111.4	112.7	111.1
Private	112.2	111.8	111.4	111.7	112.6	112.3	111.3	111.6	111.5	110.7	110.5	110.5	109.9	111.0	109.7
Public	130.5	130.0	129.8	129.8	129.6	129.6	129.5	129.2	129.1	122.8	122.1	122.1	122.1	125.8	121.4
Health and recreation	122.2	121.8	121.4	121.0	120.8	120.4	119.9	119.5	119.1	118.7	118.4	118.1	117.6	119.0	115.6
Medical care	134.6	133.6	132.9	131.9	131.3	130.4	129.4	128.4	127.7	127.0	126.3	125.8	125.3	127.7	122.3
Personal care	114.4	114.1	113.8	113.7	113.4	113.3	113.0	112.7	112.5	112.2	112.0	111.6	111.0	112.2	109.9
Reading and recreation	118.9	118.6	118.5	118.4	118.3	118.0	117.5	117.4	117.2	117.0	116.8	116.8	116.6	117.1	115.2
Other goods and services ⁹	116.4	116.3	116.2	115.9	116.0	115.9	115.7	115.5	115.3	114.9	114.7	114.3	113.8	114.9	111.4
Special groups:															
All items less shelter	114.6	114.3	114.2	114.3	114.4	114.3	113.9	113.6	113.1	112.6	112.4	112.4	111.9	112.9	109.6
All items less food	115.4	115.2	114.8	114.9	114.8	114.4	113.8	113.4	113.2	112.8	112.5	112.2	111.6	113.0	110.4
Commodities ¹⁰	110.0	109.9	109.9	110.1	110.2	110.3	110.0	109.8	109.3	109.0	108.8	108.8	108.4	109.2	106.4
Nondurables ¹¹	112.9	112.7	112.7	113.0	112.9	113.1	112.9	112.5	111.8	111.5	111.3	111.4	111.1	111.8	107.9
Durables ^{10,12}	102.9	102.8	102.7	103.1	103.5	103.5	102.7	103.0	103.0	102.6	102.5	102.3	102.0	102.7	102.6
Services ^{10,13,14}	126.3	125.9	125.5	125.2	124.7	124.1	123.5	123.0	122.6	122.0	121.5	121.1	120.1	122.3	117.8
Commodities less food ¹⁰	107.8	107.6	107.3	107.7	107.8	107.6	107.0	106.6	106.7	106.4	106.3	106.0	105.6	106.5	105.1
Nondurables less food	111.8	111.5	111.0	111.4	111.3	110.9	110.5	109.6	109.7	109.5	109.3	109.0	108.6	109.7	107.2
Apparel commodities	111.5	110.7	110.1	111.2	110.9	110.4	109.7	107.9	108.1	108.3	108.3	107.6	107.1	108.5	105.8
Apparel commodities less footwear	109.0	108.2	107.6	108.8	108.6	108.1	107.4	105.5	105.8	106.0	106.1	105.6	105.2	106.3	104.4
Nondurables less food and apparel	112.0	111.9	111.6	111.6	111.5	111.2	111.0	110.5	110.6	110.1	110.0	109.8	109.4	110.3	108.0
New cars	97.2	97.3	97.6	98.6	99.3	98.4	94.4	95.8	96.7	96.8	97.0	97.4	97.1	97.2	99.0
Used cars	115.9	114.0	113.0	114.2	119.3	120.8	120.1	122.1	120.3	118.2	117.5	117.4	115.4	117.8	120.8
Household durables ¹⁴	97.8	97.7	97.6	97.7	97.6	97.4	97.3	97.0	96.9	96.7	96.5	96.4	96.2	96.8	96.9
Household furnishings	100.3	100.0	99.7	100.0	99.9	99.5	99.3	98.9	98.8	98.6	98.5	98.3	98.0	98.8	97.9
Services less rent ^{10,15}	129.5	129.2	128.8	128.3	127.7	127.1	126.5	125.9	125.5	124.8	124.1	123.6	122.5	125.0	120.0
Household services less rent ¹⁰	125.6	125.5	125.1	124.9	124.2	123.5	123.0	122.4	122.1	121.7	120.9	120.2	118.5	121.5	117.0
Transportation services	127.4	127.2	126.9	126.5	126.1	125.9	125.5	125.3	125.0	123.2	123.0	123.0	122.6	124.3	119.3
Medical care services	142.9	141.6	140.6	139.4	138.6	137.4	136.2	134.7	133.9	133.0	132.1	131.4	130.8	133.9	127.1
Other services ^{10,16}	129.7	129.4	129.1	128.9	128.5	128.2	127.5	127.1	126.7	126.4	125.9	125.5	125.0	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 has been 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 Also includes hotel and motel room rates not shown separately.

⁴ Includes home purchase, mortgage interest, taxes, insurance, and maintenance and repairs.

⁵ Also includes telephone, water, and sewerage service not shown separately.

⁶ Called "Solid and petroleum fuels" prior to 1964.

⁷ Includes housefurnishings and housekeeping supplies and services.

⁸ Includes dry cleaning and laundry of apparel, infants' wear, sewing materials, jewelry, and miscellaneous apparel, not shown separately.

⁹ Includes tobacco, alcoholic beverages, and funeral, legal, and bank service charges.

¹⁰ Recalculated group—indexes prior to January 1964 have been recomputed.

¹¹ 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.

¹² 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.

¹³ Excludes home purchase costs which were classified under this heading prior to 1964.

¹⁴ 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.

¹⁵ Called "Durables less cars" prior to 1964. Does not include auto parts, durable toys, and sports equipment.

¹⁶ 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									
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.
Food.....	114.3	114.0	114.9	115.3	115.3	115.8	115.3	115.5	113.2	114.0	114.0	114.3	114.2
Food at home.....	111.6	111.4	112.5	113.1	113.4	114.0	113.7	113.9	111.3	112.4	112.6	113.2	112.9
Meats, poultry, and fish.....	110.4	110.4	110.4	111.3	111.5	112.8	112.4	112.9	114.1	115.9	116.0	117.1	117.7
Dairy products.....	115.6	115.9	115.8	115.9	116.1	116.5	115.8	114.9	111.6	110.7	110.2	109.4	108.0
Fruits and vegetables.....	114.7	114.4	118.5	117.6	119.6	120.9	121.0	121.4	113.9	115.8	115.3	117.7	117.4
Other foods at home.....	102.8	102.3	104.4	104.9	104.1	104.5	103.8	105.1	102.9	102.9	104.0	104.5	104.4
Fuel and utilities ³	108.4	108.7	108.2	108.0	108.1	108.0	108.2	108.4	108.4	108.4	108.5	108.2	106.3
Fuel oil and coal ⁴	109.4	108.9	108.3	108.3	108.3	108.5	108.8	109.2	109.3	109.2	109.5	107.7	106.9
Apparel and upkeep ⁵	112.9	112.3	111.9	111.7	111.3	110.8	110.5	109.6	109.6	109.5	109.4	108.8	108.5
Men's and boys'.....	113.2	112.2	111.9	111.9	111.7	111.1	111.0	110.2	109.9	110.2	109.9	109.7	109.4
Women's and girls'.....	108.6	107.9	107.5	107.1	107.5	106.3	105.8	104.5	105.1	105.0	105.4	104.5	104.4
Footwear.....	124.3	123.5	123.0	122.5	122.3	122.0	121.3	120.6	120.2	119.9	119.0	118.1	117.0
Transportation.....	114.5	114.3	113.2	113.3	114.0	114.1	113.5	113.5	113.4	112.3	112.0	112.3	111.8
Private.....	112.7	112.2	111.3	111.4	112.0	112.0	111.5	111.6	111.4	110.8	110.5	110.8	110.5
Special groups:													
Commodities ⁶	110.1	110.0	110.1	110.1	110.1	110.2	109.9	109.8	109.1	108.9	109.0	109.0	108.6
Nondurables.....	113.0	112.7	112.9	113.1	112.9	113.0	112.8	112.4	111.4	111.5	111.6	111.6	111.4
Durables ^{6,7}	103.0	103.0	102.7	102.9	103.1	103.3	102.9	103.2	103.1	102.6	102.5	102.3	102.1
Commodities less food ⁶	108.0	107.9	107.4	107.4	107.4	107.3	107.0	106.9	106.8	106.5	106.4	106.0	105.7
Nondurables less food.....	112.0	111.8	111.1	111.1	111.0	110.6	110.3	109.8	109.9	109.6	109.4	109.1	108.8
Apparel commodities.....	111.9	111.3	110.8	110.5	110.0	109.5	109.5	108.4	108.3	108.4	108.4	107.8	107.4
Apparel commodities less footwear.....	109.4	108.9	108.4	108.0	107.6	107.2	107.1	106.0	106.1	106.2	106.3	105.9	105.6
New cars.....	97.1	96.9	96.9	97.5	97.4	97.9	96.2	97.1	97.9	97.4	97.4	97.4	96.9
Used cars.....	117.9	117.2	115.1	114.0	118.0	119.6	118.7	120.8	118.6	116.8	117.6	118.2	117.6
Housefurnishings.....	100.2	100.2	100.0	100.0	99.8	99.5	99.3	99.2	98.9	98.4	98.4	98.0	97.8

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 1966 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 BLS Seasonal 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 available upon request.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 workers¹

[1957-59=100 unless otherwise specified]

Area ²	1967				1966									Annual average		1947-49=100
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965	Mar. 1967
	All items															
U.S. city average ³	115.0	114.8	114.7	114.7	114.6	114.5	114.1	113.8	113.3	112.9	112.6	112.5	112.0	113.1	109.9	141.1
Atlanta, Ga.	114.0	(4)	(4)	113.3	(4)	(4)	112.8	(4)	(4)	111.1	(4)	(4)	110.3	111.5	108.1	141.1
Baltimore, Md.	114.8	(4)	(4)	114.5	(4)	(4)	114.3	(4)	(4)	113.4	(4)	(4)	112.5	113.4	109.6	142.5
Boston, Mass.	(4)	(4)	118.6	(4)	(4)	118.5	(4)	(4)	117.1	(4)	(4)	116.8	(4)	117.0	113.2	(4)
Buffalo, N.Y. (Nov. 1963=100)	(4)	108.5	(4)	(4)	108.0	(4)	(4)	107.7	(4)	(4)	106.6	(4)	(4)	107.0	103.5	(4)
Chicago, Ill.—Northwestern Ind.	112.3	112.2	111.8	112.2	111.9	112.0	111.9	111.4	110.5	110.6	110.2	109.9	109.9	110.7	107.6	141.6
Cincinnati, Ohio—Kentucky	111.6	(4)	(4)	111.2	(4)	(4)	111.7	(4)	(4)	110.2	(4)	(4)	109.1	110.3	107.2	135.8
Cleveland, Ohio	(4)	111.5	(4)	(4)	110.9	(4)	(4)	110.2	(4)	(4)	109.7	(4)	(4)	109.7	106.9	(4)
Dallas, Tex. (Nov. 1963=100)	(4)	107.0	(4)	(4)	106.5	(4)	(4)	105.6	(4)	(4)	104.6	(4)	(4)	105.0	101.4	(4)
Detroit, Mich.	114.3	113.5	113.3	113.3	112.7	112.6	112.1	111.9	111.3	111.2	110.6	110.2	109.6	111.1	106.4	140.9
Honolulu, Hawaii (Dec. 1963=100)	108.7	(4)	(4)	106.6	(4)	(4)	105.6	(4)	(4)	104.6	(4)	(4)	104.4	105.1	102.1	(4)
Houston, Tex.	(4)	(4)	113.0	(4)	(4)	112.4	(4)	(4)	111.6	(4)	(4)	110.9	(4)	111.5	108.5	(4)
Kansas City, Mo.—Kansas	117.9	(4)	(4)	117.3	(4)	(4)	117.1	(4)	(4)	116.5	(4)	(4)	115.3	116.3	113.3	145.8
Los Angeles-Long Beach, Calif.	115.4	115.7	115.8	116.3	116.3	115.9	115.7	114.6	115.0	114.5	114.2	114.3	113.7	114.7	112.5	143.9
Milwaukee, Wis.	(4)	111.4	(4)	(4)	111.6	(4)	(4)	111.5	(4)	(4)	110.1	(4)	(4)	110.6	108.2	(4)
Minneapolis-St. Paul, Minn.	(4)	(4)	113.4	(4)	(4)	113.4	(4)	(4)	112.0	(4)	(4)	111.8	(4)	112.2	106.5	(4)
New York, N.Y.—Northeastern N.J.	118.2	118.0	115.0	117.6	117.7	117.8	117.3	116.7	116.3	115.3	115.2	115.2	114.8	116.0	112.2	142.4
Philadelphia, Pa.—N.J.	115.5	115.3	115.0	115.3	115.0	115.0	114.7	114.5	113.7	113.4	113.1	113.2	112.7	113.7	110.6	141.8
Pittsburgh, Pa.	(4)	(4)	114.0	(4)	(4)	114.1	(4)	(4)	112.8	(4)	(4)	113.0	(4)	113.0	110.2	(4)
Portland, Ore.—Wash. ⁴	(4)	(4)	117.1	(4)	(4)	116.6	(4)	(4)	115.5	(4)	(4)	114.7	(4)	115.3	111.8	(4)
St. Louis, Mo.—Ill.	115.5	(4)	(4)	114.9	(4)	(4)	114.7	(4)	(4)	113.6	(4)	(4)	112.1	113.5	109.9	143.3
San Diego, Calif. (Feb. 1965=100)	(4)	103.7	(4)	(4)	103.5	(4)	(4)	102.0	(4)	(4)	101.6	(4)	(4)	102.1	100.1	(4)
San Francisco-Oakland, Calif.	117.1	(4)	(4)	117.2	(4)	(4)	116.4	(4)	(4)	115.2	(4)	(4)	114.9	115.6	112.7	148.6
Scranton, Pa. ⁵	(4)	116.2	(4)	(4)	116.2	(4)	(4)	115.5	(4)	(4)	114.1	(4)	(4)	114.9	111.0	(4)
Seattle, Wash.	(4)	115.9	(4)	(4)	115.6	(4)	(4)	114.5	(4)	(4)	113.7	(4)	(4)	114.1	111.0	(4)
Washington, D.C.—Md.—Va.	(4)	115.1	(4)	(4)	114.6	(4)	(4)	114.0	(4)	(4)	112.8	(4)	(4)	113.3	109.6	(4)
	Food															
U.S. city average ³	114.2	114.2	114.7	114.8	114.8	115.6	115.6	115.8	114.3	113.9	113.5	114.0	113.9	114.2	108.8	-----
Atlanta, Ga.	113.6	113.5	114.1	113.8	114.0	114.7	114.2	114.0	112.5	112.4	112.0	112.8	112.4	112.9	107.4	-----
Baltimore, Md.	114.9	115.2	115.3	116.0	115.9	116.7	117.9	117.4	116.2	115.9	115.3	116.3	115.5	115.9	109.3	-----
Boston, Mass.	118.4	118.2	119.0	118.8	118.5	119.3	119.3	118.9	117.0	115.7	115.3	116.6	116.0	117.0	112.5	-----
Buffalo, N.Y. (Nov. 1963=100)	109.4	109.3	109.7	109.3	109.7	109.7	109.9	110.5	108.8	108.5	108.0	109.2	108.0	108.8	104.1	-----
Chicago, Ill.—Northwestern Ind.	114.1	114.7	114.1	114.7	114.7	115.4	116.3	116.8	114.1	114.3	113.6	114.2	115.1	114.6	108.8	-----
Cincinnati, Ohio—Kentucky	111.4	111.2	111.5	111.7	112.4	113.6	113.4	113.9	112.1	111.6	110.7	111.2	110.9	111.8	106.2	-----
Cleveland, Ohio	110.3	110.0	110.9	111.5	111.8	112.1	112.4	113.1	111.1	111.1	110.0	110.3	110.1	110.9	104.8	-----
Dallas, Tex. (Nov. 1963=100)	108.9	109.8	110.5	110.9	111.0	111.0	111.1	111.6	110.1	109.4	109.4	110.2	109.0	110.0	103.9	-----
Detroit, Mich.	113.2	112.7	113.0	113.1	113.0	113.5	113.7	114.4	112.8	112.0	111.5	111.6	111.3	112.2	105.0	-----
Honolulu, Hawaii (Dec. 1963=100)	108.3	107.7	108.1	108.0	108.7	108.4	107.3	106.6	106.5	106.6	106.2	106.6	106.7	107.0	103.5	-----
Houston, Tex.	115.7	116.0	116.6	116.9	116.6	117.0	117.0	117.0	115.8	114.4	114.1	114.8	114.3	115.4	109.2	-----
Kansas City, Mo.—Kansas	116.6	117.2	118.0	117.8	117.5	118.7	119.0	118.1	117.1	116.9	116.0	116.5	116.7	117.2	111.3	-----
Los Angeles-Long Beach, Calif.	112.5	112.8	113.7	114.0	113.7	114.2	113.7	113.8	112.8	112.4	113.0	113.5	113.4	113.3	110.7	-----
Milwaukee, Wis.	-----	112.8	-----	-----	114.3	-----	-----	116.2	-----	-----	113.5	-----	-----	114.0	107.7	-----
Minneapolis-St. Paul, Minn.	112.5	112.5	113.0	112.9	112.6	114.2	113.4	113.3	112.3	111.6	111.7	112.4	112.7	112.4	107.1	-----
New York, N.Y.—Northeastern N.J.	114.9	115.0	115.5	115.3	115.7	116.5	116.3	116.4	115.1	114.5	114.4	115.0	115.1	115.1	109.8	-----
Philadelphia, Pa.—N.J.	113.1	113.6	113.7	114.0	113.5	114.5	114.5	114.9	113.2	112.9	112.5	113.4	112.8	113.1	107.2	-----
Pittsburgh, Pa.	109.7	110.2	111.3	111.2	111.4	112.8	112.8	112.8	111.6	111.4	111.5	112.8	111.9	111.8	107.5	-----
Portland, Ore.—Wash. ⁴	-----	116.0	115.7	115.6	116.0	115.6	116.1	115.6	114.7	115.5	114.7	114.0	113.4	114.7	109.6	-----
St. Louis, Mo.—Ill.	118.1	118.5	119.3	119.2	118.6	119.7	119.4	119.8	118.1	117.2	117.0	117.1	116.7	117.8	111.5	-----
San Diego, Calif. (Feb. 1965=100)	-----	105.9	-----	-----	106.6	-----	-----	106.8	-----	-----	106.3	-----	-----	106.5	102.7	-----
San Francisco-Oakland, Calif.	113.2	113.3	114.4	114.4	115.1	115.0	114.7	114.2	113.6	113.6	113.9	114.7	114.6	114.2	110.2	-----
Scranton, Pa. ⁵	-----	112.1	112.6	113.1	113.2	113.8	113.7	113.7	112.6	112.5	112.1	113.1	112.8	112.8	107.7	-----
Seattle, Wash.	113.3	113.5	114.0	114.3	114.7	115.1	115.2	114.9	114.1	114.3	114.4	114.0	113.7	114.1	110.3	-----
Washington, D.C.—Md.—Va.	115.3	114.7	114.7	114.7	113.5	115.1	115.6	115.8	114.3	114.1	113.6	114.2	113.8	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 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 3 months on a rotating cycle for other areas.

⁵ Old series.

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		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
	All commodities	105.7	106.0	106.2	105.9	105.9	106.2	106.8	106.8	106.4	105.7	105.6	105.5	105.4	105.9
Farm products and processed foods and feeds	104.6	105.7	107.0	106.7	107.1	108.8	111.5	111.3	109.9	107.7	107.9	108.7	109.4	108.9	102.1
Farm products	99.6	101.0	102.6	101.8	102.5	104.4	108.7	108.1	107.8	104.2	104.5	106.4	106.8	105.6	98.4
Fresh and dried fruits and vegetables	98.4	104.5	101.8	101.3	104.2	97.9	110.4	97.7	107.0	99.7	103.3	111.0	98.4	102.5	101.8
Grains	99.9	95.8	100.7	101.5	98.0	98.9	104.6	105.6	103.1	94.9	93.6	91.2	90.8	97.3	89.6
Livestock	97.4	99.5	101.4	97.9	98.4	106.5	109.2	112.0	108.7	110.1	111.5	114.7	97.4	110.0	100.5
Live poultry	90.8	97.1	88.1	77.2	85.1	83.1	87.5	89.8	94.2	95.6	101.3	95.1	100.9	91.4	87.2
Plant and animal fibers	70.3	70.2	70.8	71.0	70.9	71.4	71.7	72.3	90.5	90.3	90.7	89.9	89.7	82.3	91.1
Fluid milk	119.0	122.9	123.4	124.0	124.4	125.8	125.4	124.1	119.3	112.6	111.0	111.9	112.7	117.6	103.5
Eggs	90.8	84.0	100.0	109.0	121.8	114.7	128.0	108.6	98.5	90.9	86.9	101.8	118.5	107.9	93.5
Hay, hayseeds, and oilseeds	120.5	120.3	123.5	124.5	122.9	121.5	126.3	139.2	135.2	122.6	120.2	116.9	115.6	122.9	112.9
Other farm products	95.5	100.5	99.6	100.5	98.7	100.8	102.3	102.5	101.3	101.1	101.4	102.5	102.1	101.5	97.6
Processed foods and feeds	110.9	111.7	112.8	112.8	118.0	118.7	118.9	118.9	115.5	115.7	113.8	112.0	111.5	112.4	106.7
Cereal and bakery products	117.5	117.3	117.6	118.0	118.7	118.7	118.9	118.9	115.5	114.0	113.0	112.6	112.2	115.4	109.0
Meats, poultry, and fish	101.7	104.3	105.4	104.4	104.2	108.1	112.2	111.1	110.0	109.9	110.9	110.9	113.3	110.2	101.0
Dairy products	120.7	121.2	121.8	122.3	122.6	124.5	124.2	124.0	119.8	116.5	114.9	114.8	115.0	118.5	108.5
Processed fruits and vegetables	104.2	104.3	105.9	105.8	105.9	105.7	103.7	102.3	104.5	104.9	105.4	104.8	104.8	104.8	102.1
Sugar and confectionery	112.5	112.6	113.0	112.6	112.1	111.6	111.4	110.9	109.8	109.4	109.3	109.3	109.7	110.5	109.0
Beverages and beverage materials	105.6	105.9	105.8	105.8	105.6	105.6	105.6	106.3	106.3	106.1	105.7	105.7	105.7	105.8	105.7
Animal fats and oils	89.6	92.0	94.9	97.5	105.6	108.9	115.9	120.9	106.3	105.8	107.7	115.2	121.8	113.1	113.4
Crude vegetable oils	94.2	94.1	94.1	98.1	99.2	100.1	112.4	127.5	113.0	105.6	105.6	108.7	104.3	107.2	100.9
Refined vegetable oils	96.9	96.7	98.0	101.2	102.2	97.0	107.6	118.4	109.8	104.7	108.5	111.3	112.0	108.7	97.0
Vegetable oil end products	101.8	103.5	106.3	106.3	106.8	108.2	110.4	108.7	103.8	101.9	101.9	102.5	103.0	104.6	101.2
Miscellaneous processed foods	124.8	125.9	132.1	132.0	114.6	115.1	114.2	114.1	114.4	112.5	113.1	114.0	114.4	114.0	113.6
Manufactured animal feeds	106.3	106.5	106.5	106.3	106.3	106.4	106.6	106.6	106.2	105.8	105.7	105.3	105.2	105.8	102.9
All commodities except farm products	101.3	101.8	102.5	102.7	103.0	103.3	103.1	103.3	103.0	102.8	102.6	102.3	101.8	102.5	100.2
Industrial commodities	101.8	102.0	102.0	101.8	102.5	102.2	102.2	102.4	102.4	102.2	102.2	102.2	102.1	102.1	101.8
Textile products and apparel	101.3	101.8	102.5	102.7	103.0	103.3	103.1	103.3	103.0	102.8	102.6	102.3	101.8	102.5	100.2
Wool products	104.0	104.7	104.7	104.8	105.1	105.6	106.1	106.6	106.7	106.5	106.4	106.3	106.0	106.0	104.3
Manmade fiber textile products	86.9	87.1	87.1	86.9	87.7	88.1	88.6	89.6	90.1	90.0	89.9	90.5	90.8	89.5	95.0
Silk yarns	164.1	164.1	166.1	163.2	161.1	161.1	158.6	156.7	152.1	143.8	140.9	151.6	151.4	153.6	134.3
Apparel	106.0	105.9	105.7	105.4	105.5	105.3	105.1	105.2	105.0	104.8	104.9	104.7	104.7	105.0	103.7
Textile housefurnishings	105.1	105.3	105.3	105.3	105.2	105.2	105.1	104.3	104.3	104.1	104.1	104.0	103.6	104.4	103.1
Miscellaneous textile products	120.8	121.0	120.5	119.7	119.1	118.8	120.3	121.2	123.3	124.1	124.7	125.1	126.3	122.6	123.0
Hides, skins, leather, and related products	117.0	118.0	117.9	117.3	117.5	118.7	119.9	121.2	122.7	122.9	122.8	120.6	118.7	119.7	109.2
Hides and skins	99.6	107.8	110.1	109.2	114.3	120.8	134.2	141.2	156.4	161.0	163.0	148.8	147.8	140.8	111.2
Leather	114.6	116.3	116.9	116.2	114.1	117.5	121.8	124.9	126.0	126.6	125.1	122.4	123.3	121.1	108.1
Footwear	121.7	121.6	120.9	120.3	120.1	120.1	119.1	119.1	119.0	118.9	118.9	118.2	115.4	118.2	110.7
Other leather and related products	114.4	114.6	114.5	114.2	115.1	115.6	115.1	116.0	116.6	115.7	115.4	114.4	112.5	114.4	106.1
Fuels and related products, and power	103.7	103.4	102.6	102.4	102.7	102.6	102.2	102.0	101.4	101.5	100.4	100.0	99.9	101.3	98.9
Coal	102.2	102.3	102.3	102.4	101.9	100.6	99.6	98.5	97.6	97.2	96.9	94.9	97.5	98.6	96.5
Coke	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	109.4	107.3	107.3	107.3	109.8	107.3
Gas fuels (Jan. 1958=100)	134.6	134.5	134.6	132.0	130.6	130.7	129.2	128.9	128.3	128.5	128.3	129.2	128.2	129.3	124.1
Electric power (Jan. 1958=100)	100.0	100.6	100.6	100.3	100.3	100.3	100.3	100.3	100.3	100.2	100.2	100.3	100.4	100.3	100.8
Crude petroleum	98.3	98.2	98.2	98.1	98.1	98.1	97.7	97.7	97.5	97.4	97.2	97.0	97.0	97.5	96.8
Petroleum products, refined	102.4	101.9	100.3	100.2	101.3	101.3	101.0	100.7	99.9	100.2	98.4	97.7	97.2	99.5	95.9
Chemicals and allied products	98.5	98.5	98.4	98.2	98.0	97.9	98.0	97.9	97.9	97.6	97.7	97.6	97.6	97.8	97.4
Industrial chemicals	90.8	90.8	90.6	90.6	90.4	90.6	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	95.0
Prepared paint	108.8	108.7	108.7	108.5	107.8	107.3	106.8	106.8	106.8	106.8	106.2	106.2	105.9	106.8	105.4
Paint materials	90.8	90.8	90.6	90.6	90.4	90.2	90.3	90.5	90.4	89.9	90.2	90.4	89.8	90.1	89.8
Drugs and pharmaceuticals	94.4	94.2	94.7	94.7	95.0	95.0	94.8	94.7	94.5	94.3	94.1	94.1	94.4	94.5	94.4
Fats and oils, inedible	81.5	89.1	92.3	95.1	91.6	94.5	103.8	105.5	105.3	101.6	102.5	104.0	106.4	102.8	112.7
Agricultural chemicals and chemical products	105.9	105.4	104.2	103.1	103.3	102.8	102.2	101.9	102.6	102.9	103.6	103.3	102.8	102.8	101.8
Plastic resins and materials	90.3	90.5	90.3	90.2	90.2	90.2	89.9	89.1	88.4	88.4	88.4	88.4	88.4	89.0	88.4
Other chemicals and allied products	107.8	107.6	107.4	107.0	106.9	106.9	106.8	106.8	106.5	106.2	106.3	106.4	106.5	106.6	105.3
Rubber and rubber products	95.9	95.8	95.6	95.0	95.0	94.6	94.7	95.1	95.1	95.4	95.4	95.4	94.3	94.8	92.9
Crude rubber	86.5	87.1	87.6	87.6	87.9	87.4	87.9	88.8	89.0	89.5	90.0	90.0	91.2	89.2	90.0
Tires and tubes	94.9	94.9	94.9	93.9	93.9	93.4	93.4	93.9	93.9	94.4	94.4	94.4	91.1	93.3	90.0
Miscellaneous rubber products	100.9	100.4	99.7	99.3	99.2	98.9	99.0	99.0	99.0	98.9	98.7	98.7	98.7	98.8	97.1
Lumber and wood products	103.6	103.6	102.6	102.5	103.0	104.8	105.9	106.2	106.6	107.7	109.6	108.4	105.6	105.6	101.1
Lumber	106.0	105.4	104.5	104.5	105.6	108.0	109.5	110.2	110.5	112.0	113.2	110.8	107.2	108.5	101.9
Millwork	111.2	111.1	110.3	110.3	110.3	110.8	110.9	110.9	110.9	110.7	110.6	110.4	109.6	110.0	107.7
Plywood	87.7	89.2	87.3	87.4	86.9	88.1	89.2	90.0	91.5	92.2	100.3	102.4	97.7	92.8	92.3
Other wood products (Dec. 1966=100)	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		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
Industrial Commodities—Continued															
Pulp, paper, and allied products.....	103.6	103.3	103.1	103.0	103.0	103.1	103.1	103.2	103.2	103.0	102.7	102.3	101.8	102.6	99.9
Pulp, paper, and products, excluding building paper and board.....	104.0	103.7	103.5	103.4	103.4	103.5	103.6	103.6	103.6	103.4	103.1	102.7	102.2	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.....	79.7	83.2	83.9	90.5	92.7	98.8	102.9	106.7	113.2	112.7	112.0	110.3	108.7	105.0	99.4
Paper.....	108.5	108.5	108.5	108.5	108.5	108.4	108.4	108.4	108.2	108.0	107.1	106.0	105.4	107.3	104.1
Paperboard.....	97.3	97.3	97.3	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.1	97.0	97.1	96.4
Converted paper and paperboard products.....	104.7	104.0	103.7	103.2	103.1	103.0	103.0	102.8	102.7	102.4	102.2	102.2	101.6	102.3	99.3
Building paper and board.....	92.3	92.4	92.4	92.7	93.1	93.0	92.7	92.8	92.7	92.4	92.4	92.4	92.5	92.6	92.7
Metals and metal products.....	109.4	109.6	109.4	109.0	109.0	108.6	108.4	108.5	108.8	108.7	108.4	108.2	108.0	108.3	105.7
Iron and steel.....	103.3	103.2	103.0	102.9	102.8	102.5	102.5	102.7	102.2	102.0	101.8	102.0	102.3	103.0	101.4
Nonferrous metals.....	121.1	122.3	121.8	120.5	121.0	120.3	119.9	120.4	122.9	123.2	122.5	122.1	120.8	120.9	115.2
Metal containers.....	111.5	111.5	111.5	110.2	110.2	110.1	110.1	110.1	110.1	110.1	110.1	110.0	109.8	110.0	107.6
Hardware.....	112.4	112.0	111.9	111.9	111.5	110.9	110.3	110.1	109.8	109.8	109.6	108.4	108.3	109.6	106.0
Plumbing fixtures and brass fittings.....	110.5	110.5	110.5	110.5	110.5	110.6	110.6	110.0	110.0	108.5	107.9	107.1	105.7	108.4	103.1
Heating equipment.....	92.2	92.3	92.6	93.4	93.4	93.3	92.9	92.5	92.9	92.5	92.1	92.1	91.8	92.5	91.7
Fabricated structural metal products.....	104.8	104.8	104.8	104.9	104.8	104.6	104.4	104.2	104.2	104.1	103.8	103.7	103.1	103.9	101.2
Miscellaneous metal products.....	113.7	113.6	113.6	113.2	113.1	112.7	112.4	112.3	111.2	111.2	110.9	110.9	110.9	111.6	109.4
Machinery and equipment.....	111.5	111.2	111.1	110.7	110.2	109.4	108.9	108.5	108.3	108.1	107.8	107.2	106.9	108.2	105.0
Agricultural machinery and equipment.....	121.9	121.7	121.5	120.8	120.4	118.5	118.2	118.3	118.5	118.4	118.2	118.1	118.0	118.5	115.1
Construction machinery and equipment.....	121.5	121.4	121.3	121.0	120.6	118.9	118.4	118.9	118.9	118.9	118.9	118.5	117.9	118.9	115.3
Metalworking machinery and equipment.....	122.6	122.2	121.9	121.8	121.5	121.1	120.5	119.5	119.0	119.0	118.0	116.8	116.7	118.8	113.6
General purpose machinery and equipment.....	113.0	113.0	112.8	112.4	112.2	111.8	111.1	110.6	110.0	109.8	109.3	108.5	107.3	109.7	105.1
Special industry machinery and equipment (Jan. 1961=100).....	115.4	115.1	114.8	114.3	114.1	113.9	113.2	112.9	112.2	111.8	110.8	110.0	109.9	111.8	108.0
Electrical machinery and equipment.....	102.2	101.8	101.9	101.5	100.7	99.5	99.2	99.1	99.0	98.8	98.4	98.2	98.2	99.0	96.8
Miscellaneous machinery.....	108.8	108.7	108.5	108.1	107.8	107.4	106.8	106.6	106.5	106.0	105.9	135.7	105.8	106.5	105.2
Furniture and household durables.....	100.6	100.4	100.4	100.4	100.3	99.7	92.2	99.1	99.0	98.9	98.9	98.6	98.4	99.1	98.0
Household furniture.....	112.4	112.0	111.9	111.8	111.5	110.3	109.8	109.4	109.1	108.9	108.9	108.3	107.2	109.1	106.2
Commercial furniture.....	109.3	109.3	108.7	108.7	108.0	107.3	106.0	105.8	105.8	105.3	105.3	104.1	104.1	105.7	103.7
Floor coverings.....	93.8	93.9	94.1	96.2	96.6	96.6	96.6	96.6	96.8	97.1	97.5	97.5	97.5	97.0	97.7
Household appliances.....	89.8	89.7	89.6	89.2	89.2	88.9	88.7	88.8	89.1	89.4	89.4	89.3	89.1	89.1	89.2
Home electronic equipment.....	83.3	83.5	83.6	83.8	83.8	83.8	83.3	83.1	83.5	83.5	83.5	83.5	83.5	83.6	85.2
Other household durable goods.....	115.2	114.8	114.8	114.0	113.8	113.6	112.6	112.1	112.1	110.4	110.4	110.3	110.3	111.6	108.9
Nonmetallic mineral products.....	103.8	103.7	103.6	103.3	103.3	103.2	103.0	102.7	102.7	102.5	102.4	102.3	102.1	102.6	101.7
Flat glass.....	103.3	103.3	103.3	103.3	103.3	102.1	100.6	99.7	100.3	100.2	100.2	99.5	99.2	100.7	100.9
Concrete ingredients.....	105.8	105.6	105.8	104.3	104.2	104.3	103.9	103.8	103.7	103.6	103.7	103.8	103.8	103.9	103.2
Concrete products.....	104.5	104.4	103.9	103.9	103.5	103.5	103.6	103.3	103.1	103.0	102.7	102.7	102.2	103.0	101.5
Structural clay products excluding refractories.....	109.3	109.3	109.3	109.1	109.3	108.8	108.7	108.7	108.5	108.4	108.1	108.1	108.0	108.4	106.6
Refractories.....	104.9	104.8	104.8	104.2	104.2	104.2	103.9	103.9	103.9	103.9	103.9	103.3	103.0	103.7	103.0
Asphalt roofing.....	94.8	94.8	95.7	95.7	97.6	97.6	97.6	97.6	97.6	94.4	94.4	94.8	94.8	96.0	92.8
Gypsum products.....	102.3	103.5	103.5	103.5	103.5	102.7	102.7	102.7	102.7	102.7	102.2	101.4	101.4	102.4	104.0
Glass containers.....	101.0	101.0	101.0	101.1	101.1	101.1	99.2	99.2	99.2	99.2	99.2	99.2	99.9	99.9	98.1
Other nonmetallic minerals.....	101.8	101.1	101.1	101.3	101.3	102.0	101.8	101.8	101.7	101.2	101.7	101.8	102.1	101.7	101.3
Transportation equipment ³															
Motor vehicles and equipment.....	101.6	101.6	101.6	101.7	101.7	101.7	100.1	100.5	100.7	100.7	100.9	100.2	100.3	100.8	100.7
Railroad equipment (Jan. 1961=100).....	102.7	102.7	102.7	102.7	101.0	101.0	101.0	101.0	101.0	101.0	101.0	101.0	101.0	101.2	100.9
Miscellaneous products.....	107.7	108.0	107.9	107.5	107.4	107.2	107.1	107.1	107.1	106.9	106.8	106.7	106.5	106.8	104.8
Toys, sporting goods, small arms, ammunition.....	104.0	105.3	105.2	104.8	104.8	105.0	104.8	104.9	104.5	103.7	103.7	103.7	103.3	104.1	102.7
Tobacco products.....	110.3	110.3	110.3	110.3	110.2	110.3	110.3	110.3	110.3	110.3	110.3	110.2	109.8	109.6	106.2
Notions.....	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	101.8	100.8	99.8	99.8	100.5	99.1
Photographic equipment and supplies.....	110.1	110.3	110.1	109.9	109.8	108.4	108.4	108.6	108.8	108.7	108.7	108.7	109.1	108.9	109.2
Other miscellaneous products.....	107.3	107.2	107.2	106.1	106.0	105.6	105.5	105.5	105.4	105.1	105.0	104.9	104.8	105.3	103.8

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.

TABLE D-5. Indexes of wholesale prices for special commodity groupings¹[1957-59=100, unless otherwise specified]²

Commodity group	1967			1966										Annual average	
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
All commodities—less farm products.....	106.3	106.5	106.5	106.3	106.3	106.4	106.6	106.6	106.2	105.8	105.7	105.3	105.2	105.8	102.9
All foods.....	107.3	108.5	109.5	109.8	110.6	111.3	114.0	112.4	110.9	109.0	109.1	110.2	110.9	110.7	104.5
Processed foods.....	108.8	109.9	110.6	110.6	110.7	112.4	113.8	113.8	111.7	110.6	110.5	110.6	111.5	111.5	105.1
Textile products, excluding hard and bast fiber products.....	97.0	97.3	97.5	97.5	98.0	98.4	98.6	99.0	99.1	98.8	98.7	98.8	98.6	98.5	99.1
Hosiery.....	91.6	91.6	91.4	91.4	91.4	91.4	91.2	91.2	91.5	92.2	92.2	92.8	92.8	92.0	93.5
Underwear and nightwear.....	107.7	107.5	107.5	107.1	107.1	106.8	106.8	106.8	106.8	107.2	107.2	106.4	106.4	106.8	104.6
Refined petroleum products.....	102.4	101.9	100.3	100.2	101.3	101.3	101.0	100.7	99.9	100.2	98.4	97.7	97.2	99.5	95.9
East Coast, refined.....	101.6	101.6	99.9	99.9	98.1	98.1	98.1	96.4	96.4	96.3	96.3	96.3	98.2	97.5	95.3
Mid-Continent, refined.....	103.0	100.9	98.7	97.9	99.5	98.6	100.2	100.2	100.2	100.2	97.1	97.7	93.7	98.6	97.6
Gulf Coast, refined.....	104.1	104.1	102.5	102.5	105.1	105.1	104.9	104.5	102.4	104.1	100.7	100.2	98.6	102.2	95.1
Pacific Coast, refined.....	95.6	95.6	94.8	94.8	94.4	96.4	90.4	90.4	90.4	87.8	89.4	89.4	89.4	90.7	90.6
Midwest, refined (Jan. 1961=100).....	94.7	93.4	92.7	92.7	92.7	92.0	93.3	93.3	93.3	93.3	92.0	89.0	93.3	92.7	91.7
Pharmaceutical preparations.....	96.4	96.3	96.9	97.1	97.5	97.3	97.2	97.0	96.8	96.6	96.2	96.2	96.5	96.8	96.5
Lumber and wood products excluding millwork and other wood products ³	101.9	102.0	100.7	100.8	101.6	103.7	105.1	105.8	106.4	107.7	110.3	109.0	105.1	105.1	99.8
Special metals and metal products ⁴	107.7	107.9	107.8	107.5	107.5	107.2	106.6	106.8	107.0	106.9	106.8	106.5	106.3	106.7	104.7
Machinery and motive products.....	108.4	108.3	108.2	108.0	107.7	107.1	106.3	106.2	106.0	105.9	105.8	105.2	105.0	106.0	103.7
Machinery and equipment, except electrical.....	117.2	117.0	116.8	116.4	116.1	115.5	114.9	114.5	114.1	113.9	113.5	112.8	112.4	114.0	110.1
Agricultural machinery, including tractors.....	123.8	123.7	123.4	122.7	122.4	120.2	119.9	120.0	120.2	120.1	120.1	119.9	120.0	120.3	116.6
Metalworking machinery.....	129.2	128.4	128.1	128.2	127.8	127.2	126.4	125.2	124.4	124.5	122.8	121.1	120.9	124.1	117.4
Total tractors.....	123.1	123.1	123.0	122.7	122.3	120.7	120.3	120.0	120.0	120.0	120.0	119.6	119.4	120.2	116.8
Industrial valves.....	122.7	122.7	122.4	122.1	121.9	121.0	118.8	118.4	117.4	116.7	115.7	114.2	110.5	116.3	105.7
Industrial fittings.....	101.7	101.7	101.7	99.1	99.1	100.5	100.5	99.1	94.8	93.9	93.9	92.9	92.9	95.9	90.8
Abrasive grinding wheels.....	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.1	93.3	93.3	93.3	93.3	93.9	94.2
Construction materials.....	104.5	104.4	104.1	104.0	104.0	104.3	104.3	104.5	104.6	104.8	105.1	104.3	103.2	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.

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	
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1966	1965
All commodities.....	105.7	106.0	106.2	105.9	105.9	106.2	106.8	106.8	106.4	105.7	105.6	105.5	105.4	105.9	102.5
<i>Stage of processing</i>															
Crude materials for further processing.....	99.7	100.8	³ 101.9	100.8	101.1	103.6	106.1	107.4	107.8	105.6	105.7	106.3	106.9	105.3	98.9
Crude foodstuffs and feedstuffs.....	101.3	102.7	³ 104.2	102.3	102.5	106.2	109.9	111.2	109.1	106.0	106.5	107.5	108.3	107.2	98.3
Crude nonfood materials except fuel.....	95.7	96.5	³ 97.0	97.4	97.6	98.2	98.9	100.2	105.7	105.1	104.5	104.6	104.6	101.9	99.8
Crude nonfood materials, except fuel, for manufacturing.....	94.9	95.8	³ 96.3	96.8	97.0	97.7	98.5	100.0	106.1	105.4	104.7	104.7	104.8	101.8	99.5
Crude nonfood materials, except fuel, for construction.....	105.0	104.7	³ 104.7	104.3	104.3	104.3	103.9	103.8	103.7	103.6	103.7	103.9	103.8	103.9	103.2
Crude fuel.....	109.4	109.3	³ 109.4	³ 109.7	108.9	108.1	107.0	106.2	105.5	105.3	105.0	104.0	105.2	106.4	103.3
Crude fuel for manufacturing.....	109.3	109.2	³ 109.3	³ 109.6	108.9	108.1	107.0	106.2	105.5	105.3	105.0	103.9	105.1	106.3	103.2
Crude fuel for nonmanufacturing.....	109.6	109.6	³ 109.7	³ 109.9	109.1	108.3	107.2	106.4	105.6	105.5	105.2	104.2	105.5	106.6	103.5
Intermediate materials, supplies, and components.....	105.5	105.5	³ 105.6	105.4	105.3	105.3	105.6	105.8	105.4	104.9	104.8	104.3	103.9	104.8	102.2
Intermediate materials and components for manufacturing.....	104.6	104.8	104.7	104.5	104.4	104.3	104.6	104.8	104.4	104.1	104.1	103.7	103.4	104.0	102.0
Intermediate materials for food manufacturing.....	108.7	109.0	³ 110.1	110.9	111.2	111.6	113.6	114.8	111.9	110.0	108.8	110.1	110.8	111.3	106.6
Intermediate materials for nondurable manufacturing.....	99.1	99.3	99.3	99.2	99.2	99.5	99.8	100.1	100.2	100.0	99.7	99.4	99.2	99.5	98.7
Intermediate materials for durable manufacturing.....	107.7	107.9	107.6	107.1	107.0	106.8	106.8	106.9	106.6	106.7	106.8	106.6	106.1	106.6	104.6
Components for manufacturing.....	107.9	107.6	³ 107.5	107.1	106.6	105.9	105.5	105.4	105.1	105.0	104.8	104.1	103.3	104.9	101.3
Materials and components for construction.....	104.8	104.7	104.4	104.3	104.3	104.5	104.6	104.6	104.5	104.5	104.8	104.3	103.4	104.1	101.4
Processed fuels and lubricants.....	102.7	102.5	³ 102.3	³ 101.9	102.5	102.6	102.1	102.1	101.7	101.8	100.7	100.3	99.8	101.4	99.5
Processed fuels and lubricants for manufacturing.....	103.7	103.7	³ 103.6	³ 103.2	103.4	103.5	103.1	103.1	102.8	102.8	101.9	101.7	101.2	102.5	101.0
Processed fuels and lubricants for nonmanufacturing.....	101.1	100.6	³ 100.3	99.8	100.8	100.9	100.5	100.4	99.9	100.2	98.7	97.9	97.4	99.4	97.1
Containers.....	106.4	106.0	³ 105.9	105.3	105.2	105.1	104.9	104.9	105.1	105.1	105.1	105.1	104.8	104.9	102.1
Supplies.....	111.8	111.6	³ 112.9	112.6	111.6	111.5	112.8	113.3	112.7	110.0	109.5	108.3	108.0	110.7	106.0
Supplies for manufacturing.....	110.1	109.7	³ 109.5	109.2	109.5	109.5	109.7	109.5	109.6	109.2	108.9	108.3	108.0	108.9	106.1
Supplies for nonmanufacturing.....	111.7	111.7	³ 113.6	113.3	111.8	111.6	113.4	114.1	113.3	109.7	109.2	107.6	107.4	110.7	105.4
Manufactured animal feeds.....	117.8	118.8	³ 124.9	124.8	121.2	120.9	125.0	126.3	125.0	116.9	116.0	112.4	112.7	119.5	109.7
Other supplies.....	105.3	104.8	104.5	104.2	104.0	103.9	104.3	104.6	104.1	103.4	103.0	102.8	102.3	103.4	100.9
Finished goods (goods to users, including raw foods and fuels).....	107.2	107.6	107.7	107.6	107.8	107.8	108.1	107.5	107.0	106.4	106.2	106.3	106.4	106.9	103.6
Consumer finished goods.....	106.0	106.5	³ 106.6	106.6	107.0	107.2	107.8	107.1	106.4	105.7	105.6	105.9	106.1	106.4	102.8
Consumer foods.....	107.9	109.3	³ 110.3	110.5	111.3	112.2	114.5	112.8	111.2	109.5	109.6	110.7	111.5	111.2	104.5
Consumer crude foods.....	100.5	103.1	³ 106.0	108.0	112.7	108.1	116.6	105.3	106.0	99.3	99.9	107.8	107.6	106.5	100.2
Consumer processed foods.....	109.2	110.4	³ 111.0	110.9	111.0	112.8	114.2	114.0	112.0	111.1	111.1	111.2	112.1	112.0	105.2
Consumer other nondurable goods.....	106.4	106.3	105.8	105.5	105.7	105.5	105.4	105.2	105.0	104.9	104.5	104.3	104.1	104.8	102.8
Consumer durable goods.....	101.3	101.3	³ 101.3	101.3	101.2	100.9	100.0	100.1	100.2	100.1	100.2	99.8	99.7	100.2	99.6
Producer finished goods.....	110.7	110.6	³ 110.5	110.2	109.8	109.1	108.4	108.3	108.1	107.9	107.6	107.0	106.8	108.0	105.4
Producer finished goods for manufacturing.....	114.5	114.3	³ 114.0	113.7	113.4	112.7	112.0	111.7	111.4	111.2	110.8	110.0	109.8	111.3	108.0
Producer finished goods for nonmanufacturing.....	107.0	106.9	³ 106.8	106.6	106.1	105.4	104.8	104.7	104.7	104.6	104.4	103.8	103.7	104.6	102.9
<i>Durability of product</i>															
Total durable goods.....	107.6	107.6	107.4	107.1	106.9	106.6	106.2	106.2	106.2	106.2	106.1	105.7	105.3	106.0	103.7
Total nondurable goods.....	104.2	104.7	³ 105.2	104.9	105.1	105.8	107.1	107.0	106.4	105.2	105.0	105.1	105.3	105.6	101.5
Total manufactures.....	106.3	106.4	³ 106.4	106.2	106.2	106.3	106.4	106.4	106.0	105.6	105.5	105.1	105.0	105.7	102.8
Durable manufactures.....	107.7	107.7	107.5	107.2	107.0	106.7	106.3	106.3	106.1	106.1	106.1	105.6	105.1	106.0	103.7
Nondurable manufactures.....	104.8	105.1	³ 105.3	105.2	105.3	105.8	106.5	106.5	105.8	105.1	104.8	104.6	104.7	105.3	101.9
Total raw or slightly processed goods.....	102.5	103.6	³ 104.7	104.0	104.7	106.0	108.4	108.2	108.2	105.8	105.8	107.0	107.3	106.5	100.7
Durable raw or slightly processed goods.....	102.0	103.4	104.1	103.9	106.3	105.6	104.4	105.0	112.4	112.4	110.1	113.9	114.7	109.0	104.7
Nondurable raw or slightly processed goods.....	102.4	103.6	³ 104.7	104.1	104.6	106.0	108.7	108.4	108.0	105.4	105.6	106.6	106.9	106.4	100.5

¹ See footnote 1, table D-4.² See footnote 2, table D-4.³ Revised.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*, 1957 (BLS Bulletin 1235, 1958).

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
1935-39 (average).....	2,862	-----	1,130,000	-----	16,900,000	0.27
1947-49 (average).....	3,573	-----	2,380,000	-----	39,700,000	.46
1945.....	4,750	-----	3,470,000	-----	38,000,000	.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	-----	16,500,000	.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
1964: January.....	211	375	53,300	91,400	898,000	.09
February.....	233	375	80,600	116,000	1,040,000	.11
March.....	241	399	79,300	123,000	816,000	.08
April.....	364	529	140,000	187,000	1,170,000	.11
May.....	442	651	192,000	249,000	2,400,000	.24
June.....	376	586	124,000	222,000	1,900,000	.18
July.....	416	639	126,000	195,000	1,740,000	.15
August.....	306	556	73,100	133,000	1,200,000	.12
September.....	336	574	374,000	432,000	2,390,000	.23
October.....	346	584	214,000	549,000	6,590,000	.61
November.....	238	469	141,000	274,000	1,730,000	.17
December.....	146	346	42,000	149,000	1,060,000	.10
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	180,000	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	140,000	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 ²	205	335	101,000	127,000	1,000,000	.09
February ²	240	380	107,000	142,000	865,000	.09
March ²	310	450	198,000	236,000	1,350,000	.11
April ²	350	500	228,000	379,000	2,450,000	.23
May ²	480	640	208,000	294,000	2,870,000	.26
June ²	430	660	150,000	243,000	1,950,000	.17
July ²	420	660	235,000	299,000	2,980,000	.28
August ²	440	700	108,000	331,000	3,420,000	.28
September ²	380	620	117,000	221,000	1,950,000	.17
October ²	390	630	193,000	260,000	2,290,000	.20
November ²	320	550	114,000	221,000	2,170,000	.19
December ²	150	360	32,700	148,000	1,810,000	.16
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

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.

New Publications Available

For Sale

Order sale publications from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Send check or money order, payable to the Superintendent of Documents. Currency sent at sender's risk. Copies may also be purchased from any of the Bureau's regional offices. (See inside front cover for the addresses of these offices.)

BLS Bulletin 1521: Industry Wage Survey, Communications, 1965. 16 pp. 20 cents.

Area Wage Surveys:

(Metropolitan Areas)

- 1530-13: Cleveland, Ohio, September 1966. 38 pp. 30 cents.
- 1530-21: Waterloo, Iowa, November 1966. 30 pp. 25 cents.
- 1530-22: Seattle-Everett, Wash., October 1966. 22 pp. 25 cents.
- 1530-24: San Diego, Calif., November 1966. 31 pp. 25 cents.
- 1530-25: Dallas, Tex., November 1966. 35 pp. 30 cents.
- 1530-26: Kansas City, Mo.-Kans., November 1966. 22 pp. 25 cents.
- 1530-27: St. Louis, Mo.-Ill., October 1966. 35 pp. 30 cents.
- 1530-28: Fort Worth, Tex., November 1966. 34 pp. 30 cents.
- 1530-29: Youngstown-Warren, Ohio, November 1966. 22 pp. 25 cents.
- 1530-30: Baltimore, Md., November 1966. 35 pp. 30 cents.
- 1530-31: Miami, Fla., December 1966. 22 pp. 25 cents.
- 1530-32: Denver, Colo., December 1966. 22 pp. 25 cents.

BLS Bulletin 1540: Industry Wage Survey, Synthetic Fibers, February-April 1966. 32 pp. 30 cents.

BLS Report No. 303: Labor Law and Practice in India. 97 pp. 50 cents.

For Limited Free Distribution

Single copies of the reports listed below are furnished without cost as long as supplies permit. Write to Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212, or to any of the Bureau's regional offices. (See inside front cover for the addresses of these offices.)

Earnings and Supplementary Benefits in Hospitals:

- Atlanta, Ga., July 1966. 9 pp.
- Cincinnati, Ohio-Ky.-Ind., July 1966.
- Minneapolis-St. Paul, Minn., July 1966. 9 pp.

UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON, D.C. 20402

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE

OFFICIAL BUSINESS

