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Unemployment and Its Measurement—A Symposium

New Measures of Employment and Unemployment

The Fourth Convention of the AFL-CIO

UNITED STATES DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS



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Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

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

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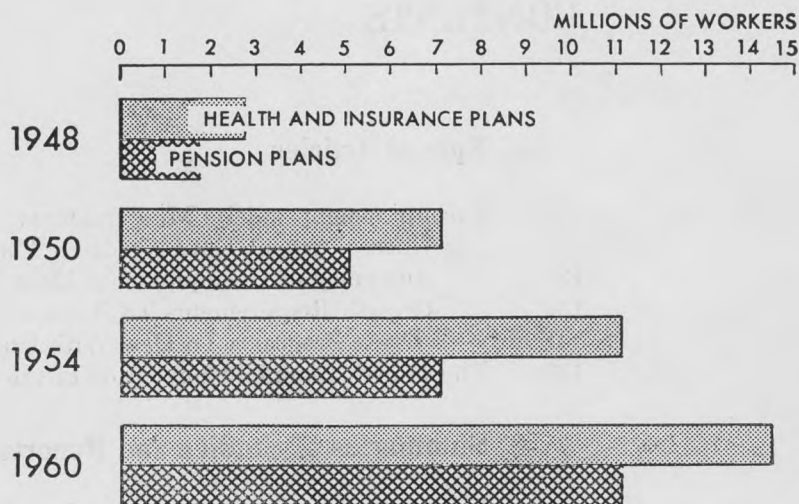
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Negotiated Welfare and Pension Plans

One of the outstanding postwar developments in industrial relations has been the striking growth of collectively bargained health, insurance, and pension plans. By 1960, negotiated health and insurance plans covered 14½ million workers, and pension plans 11 million, or 80 and 60 percent, respectively, of all workers covered by union contracts.



This chart is based on information from "Health, Insurance, and Pension Plan Coverage in Union Contracts," which is to be published in the March issue of the Review. That article will also show the industrial distribution of the workers covered and the extent to which workers represented by unions have such plans in various industry and union classifications.

The Labor Month in Review

WHEN THE PRESIDENT on January 17 signed Executive Order 10988, the way was opened for formal collective bargaining relations between the Nation's largest employer—the Federal Government—and most of its 2.5 million civilian employees.

A presidential task force, consisting of the Secretary of Labor as chairman, the chairman of the Civil Service Commission, the director of the Bureau of the Budget, the Postmaster General, the Secretary of Defense, and the Special Counsel to the President, made the recommendations which eventuated as the order.

THE ORDER DECLARES, as a policy of good government, that "orderly and constructive relationships be maintained between employee organizations and management officials." It then lays down principles and rules to guide those relationships and directs all officers and agencies of the executive branch to be governed accordingly. Some significant provisions of the order are outlined in the following paragraphs.

1. Employees have the right to join unions—or to refrain from joining—without risk of coercion or reprisal, and the right, once in a union, to participate in it as member or officer, "including presentation of its views to officials [and] the Congress . . ."

2. Recognition is denied unions which assert a right to strike against the Government (or to assist any such strike), advocate overthrow of the "constitutional form" of government, or practice racial, religious, or nationality discrimination.

3. Three forms of recognition are accorded unions. The informal type, in effect, acknowledges that the organization exists and can represent its members, although the agency need not consult it on personnel policy matters. Formal status can be acquired if the union has at least 10

percent "stable" membership in a given unit in which no other union has exclusive recognition; it speaks for its members only and is consulted on personnel policy; a prerequisite to formal recognition is the filing of officers' names, union constitution, and objectives. To obtain exclusive recognition, the organization must be selected by a majority of employees in a unit and cannot have within it managerial executives, nonclerical personnel employees, and certain supervisors; professional and nonprofessional employees may not combine in a unit unless the former agree; a written memorandum of agreement can be negotiated covering all in the unit, although budgetary matters, the mission of the agency, assignment of personnel, and the technology employed in performing work are specifically proscribed as negotiable matters; there are other protections of management's right to manage.

4. A form of "advisory" arbitration of grievances is permissible if both sides agree, but application of the recommendation is subject to approval of the agency head, and only interpretation of an agreement or application of agency policy can be thus arbitrated. (A similar form of quasi-arbitration has been practiced between the Department of Interior and unions representing employees of The Alaska Railroad.¹)

5. By July 1, 1962, agency heads must issue regulations to implement the order, including how to determine bargaining units and to conduct elections.

6. The Civil Service Commission and the Department of Labor are made jointly responsible for preparing proposed "standards of conduct" for unions and a proposed code of fair labor practices for employee-management relations in the Federal Service; the Commission is made responsible for management training in employee-management relations.

In summary, the order does two things: It guarantees certain rights of organization, consultation, and formal processing of grievances to an exceptionally large group of workers who by law are denied the strike weapon; it gives Federal employee unions some of the representation and

¹ See Edwin M. Fitch, "The Government and Bargaining on The Alaska Railroad," *Monthly Labor Review*, May 1961, pp. 459-462.

security safeguards (the union shop is a notable exception) sanctioned by the Taft-Hartley Act for unions bargaining with private industry. Secondly, it ensures by careful exclusions that there will be no impairment of the sovereignty of the State.

UPON SIGNING THE ORDER, President Kennedy emphasized that "the public interest remains the dominant consideration, administering Federal employee-management relations, and proper management responsibilities have been retained and strengthened . . . by this Executive order." He also expressed the belief that the order would "be a source of strength to the entire Federal Civil Service."

Secretary of Labor Arthur J. Goldberg, addressing the American Federation of Government Employees, noted that at times in the past the relationship between unions of Federal employees and Government agencies "was one of ill-disguised hostility." He predicted that "the voice of the organizations of Federal employees will increasingly be heard in the councils of our Government and throughout the land," and he urged that "it be the voice of responsibility."

John W. Macy, Jr., chairman of the Civil Service Commission, called the order "the start of a new era in personnel-management in Government."

The emulative effect that this Federal experiment at the Federal level might have on nearly 7 million State and local government employees could be as interesting a development to watch as the progress of events under the Executive order.

SIGNING OF THE ORDER does not portend organization of all Federal employees or the inclusion in one huge union of all Federal workers who wish to be organized. Unionization of Federal employees has been legally sanctioned since passage of the Lloyd-LaFollette Act of 1912, and there currently are more than 40 unions which compete for their membership. Some of the unions limit their membership exclusively to Federal workers, either on a craft or all-occupation basis; others have the bulk of their membership in private industries, but also organize craft-related Federal workers. Outside the Post Office Department, no union has organized a majority

of the employees in any of the largest agencies of the Government. It was estimated by the presidential task force that two-thirds of all Government workers do not hold union membership.

The Executive order is perforce restricted to those agencies which together form the executive branch of the Government, wherein most Federal employees work. Excluded are employees of the Congress (and agencies responsible to Congress such as the Government Printing Office) and of the Federal courts. Moreover, employees of the Federal Bureau of Investigation, the Central Intelligence Agency, and others with investigating, intelligence, or security functions are specifically barred.

FEDERAL CIVILIAN EMPLOYMENT in the executive branch embraces hundreds of occupations—from deep sea divers to astronomers, from mail clerks to ecologists. Work stations are located in just about every country. The methods of determining wages and salaries are so varied and so complicated as to preclude brief explanation.² About a million workers receive statutory salaries under the Classification Act of 1949. They are known as "classified" employees, and include the headquarters staff of the Post Office Department. Yet the "field service" of that Department, with about a half million workers, is paid under a schedule established by still another law. More than 650,000 "blue-collar" workers (laborers and craftsmen), principally in the Departments of the Army, Navy, and Air Force (which also employ thousands of classified workers), are paid on the basis of several wage board or prevailing rate plans, some of which involve direct negotiation with unions. And there are other methods involving smaller groups.

With the notable exception of the postal service and certain skilled crafts, unionism as yet has not been attractive to a sizable proportion of Government employees, particularly in the white-collar occupations. This has probably been due in part to the provisions for job tenure in the civil service as a whole and to such legally established benefits as generous vacation and sick leave, along with insurance and retirement benefits.

² See Toivo P. Kanninen, "Rate Setting by the Army-Air Force Wage Board," *Monthly Labor Review*, October 1958, pp. 1107-1112.

Unemployment and Its Measurement

EDITOR'S NOTE.—*The following four articles are excerpted from papers delivered before concurrent meetings of the American Economic Association, the American Statistical Association, and the Industrial Relations Research Association, in New York City, December 27–29, 1961. They have been selected as typical of more than a dozen dealing with a subject commanding special current interest. Minor word changes have been made to bridge elisions from the original text. A fifth article, on measurement, not based on one of the New York papers, will be found on page 167. A miscellany of papers read to sessions of the IRRA meeting will be excerpted in the March issue.*

Unemployment Data Needs for Planning and Evaluating Policy

STANLEY LEBERGOTT*

When To Act?

I now turn to some of the tough problems that lie in wait for the authorities when they try to assess where this economy of ours now is and where it is headed. Our requirements are rigorous: we may seek to change the economic trend. Let me give a specific example and a specific proposal.

On October 1, 1953, the Council of Economic Advisers and the Federal Reserve Board had before them the Current Population Survey report on the unemployment change from August to September 1953. That report showed the seasonally adjusted figures rising—but just barely rising. But what had taken place in the month just ending? Had the rise continued, worsened, or reversed itself?

A reasonably prudent authority will wait for at least another month's figure to confirm or deny the pattern of change. What this comes to is that 4 months after a possibly significant break in the economic tide, the Government first has a confirmatory figure on the net effect on unemployment of any policy action it has taken.

Until now the way out of this impasse has been to rely on the weekly unemployment compensation data to measure unemployment trends and to use a hodge-podge of carloadings, steel output, and auto production data for measuring employment. Neither will measure as comprehensively (nor as precisely) as the monthly Current Population Survey figures. Nor are they closely comparable with them. The unemployment insurance claims data are bent and shaped by administrative factors. After all, the system was not set up to grind out statistics: State regulations can vary on when a worker qualifies, when claims may be filed, when they are recorded. Workers may delay filing initial claims for their own reasons—and significant numbers do. Others exhaust their benefits and fall from the statistician's view just at the time when there is most urgency in the numbers. When Congress extends the benefit periods it complicates the numbers further. A dull history of attempts to adjust the claims data for greater interstate comparability, and the depressing difference in trend between continued claims and unemployment from the first to the third quarter of this year completes the catalog. Yet with all their limitations the claims data make a better showing at measuring unemployment than does the combination of steel, auto, and paperboard

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output at measuring changes in employment or even total output.

Is there a Mount Palomar telescope for the economist in this fix? I believe there is. It requires only a technical change in the conduct of the Current Population Survey, at modest additional cost, to give us weekly figures on employment, unemployment, and labor force as well as a monthly report. That survey now interviews 35,000 families in 1 week each month. It would instead interview subsamples of that total every week. Such a change would, of course, improve even the monthly figure: we are surely better off with an average of activity in every week in the month to indicate November activity than our present measure of activity in this single week. And when the survey week includes a holiday—as November 11—the existing procedure tends to report an unreal October–November decline and a consequent unreal November–December upturn.

But brush aside these advantages. A strong sufficient reason still exists—the change would give us overall employment, unemployment, and labor force measures four times as frequently each month.

The chief objection to this proposal has not been concerned with the technical survey problems. These can be managed if we only keep clearly in mind that the policymaker does *not* require weekly the kind of abundant detail and precision that he now gets monthly.¹ The major objection some analysts offer is that the random component during short periods of economic change is much greater than the cyclical component and hence the inferences that could be drawn from a measure with higher sampling error are not likely to be useful. Perhaps the best way of evaluating this objection is to consider the survey as an economic thermometer. Would a physician prefer a report on his patient's temperature taken once a day at high noon by a Nobel prize winner or a nurse's report for every hour of the day? The analogy is not wholly unfair. The policymaker is now given a report that unemployment fell mildly last month—or more accurately from 1 week in September to 1 week in October. How much can he make of this single figure on change, even with its low sampling error and high information content? Suppose instead he had the eight weekly figures for this period, six of them indicating declines in unemployment. Would he not have a much solidier basis for decision, or even euphoria?

Such a sharp contrast would not often happen. But since the ever-present question is, Has the trend slackened or accelerated? A significant advance in information would be provided during many an anxious period. Remember that the Chairman of the Board could still pool the weekly figures into a single monthly figure such as he has now and ignore changes in the past 2 weeks! His monthly average would still be better than the present sample of conditions in a single week of each month.²

How Effective Has Policy Been?

A more frequent reliable indicator of unemployment and employment trends is essential. But to analyze the basic economic forces, we require a good deal more than a chromium plated indicator. Assume that the monetary and fiscal authorities have recommended policies. Assume that these have been adopted with huzzas. Will the course of events prove them right or wrong? Our present measures only tell us the net changes of employment and unemployment. By looking at the net changes, the administration may move to lay on extra forces—but a look at the gross changes would tell them to hold their hand. Suppose a speedup in defense orders, or a change in the income tax exemption, had significantly cut the rate at which factory workers were becoming unemployed. This change *could* be masked in our unemployment figures by an offsetting rise in unemployment: farming might have declined seasonally or women entered the labor market to supplement family incomes cut by unemployment increases some months back. The seasonal adjustment will account for only part of these forces—even if the technicians could agree that there is only one pure method of adjustment for the current month's figures, even if seasonals did not change through time, and even if we possessed a unique method of adjusting for the auto model year changeover.

¹ Treat the weekly measures as indicators, per se, pooled to give a monthly comprehensive set of figures. The three added weekly enumerations could then be distributed nonrandomly to reduce costs. The bias that would arise—only for the weekly figures—from incomplete reporting for areas with small enumerating loads would be unimportant for weekly indications of change in total unemployment, employment, and labor force.

² Moreover, we ought not forget that breaking the 35,000 monthly sample into a sample of say 8,500 families each week would give us a weekly survey half as great as the monthly sample we were relying on until a few years ago.

Because women constitute so large a share of our labor force and because an increasing number of elderly persons could return to the labor force in case of need, a significant net rise in unemployment could be reported even as factory workers were being put back to work. True, one could use the BLS employment data and detail on the composition of the unemployed to get at part of this problem right now. But anyone who has seen the BLS employment figures go up while the comparable Census components went down would hardly maintain that we now can conduct a very rigorous analysis.

I suggest, as a guide to the perplexed, a mild extension of the Current Population Survey to give us a table for the sources and uses of labor force as we now have a table for sources and uses of corporate funds. Among those unemployed this month it would distinguish (a) those who *last* month had factory jobs, (b) those who had been in other nonfarm work, (c) those not in the labor force, and (d) those unemployed last month as well. Of those with factory employment *this* month, it would distinguish how many *last* month (a) had been unemployed, (b) had not been in the labor force, and (c) had been in other work. We could then tell more readily whether the unemployed were moving into factory jobs or other work as a result of policy actions (plus a vigorous run of good luck!). If a hard core of unemployed were being left despite an upturn, this would be promptly evidenced by the rate at which the table reported employment gains drawing from those not in the labor force.

Measuring Mobility

For testing the basic labor market situation we need one additional set of data. Labor mobility in our market economy is the way by which an improved allocation of labor resources is achieved. But we have no current data whatever on the mobility of labor. I am thinking here particularly of the long duration unemployed. At what rate do workers in declining towns move to other work? At what rate are those in declining occupations, industries, plants moving into other ones? Do we tend to assume "too little" mobility takes place

because we don't know how many disemployed workers do in fact move? Specifically, I suggest that for those who report unemployment of over 15 weeks in the Current Survey we should, at intervals, get reports on their subsequent mobility status—Did they move? Did they seek work in another county? Did they find work?—and classify our findings at least into those under and over, say, age 40. If experience proves the results to be useful, we might later incur the more substantial costs of a sample sufficient to pour forth data classified by occupation, industry, and detailed age.

Naturally such figures could have only limited meaning unless they were matched against some standard of mobility. Most simple would be a measure for, say, the employee labor force as a whole, indicating what proportion moved over the corresponding period, what number did not move but changed jobs, and how many did neither. In time, of course, the long duration mobility data will provide their own reference frame as we become able to compare its behavior during today's recession with the last one, during tomorrow's upturn with the prior one. Because of the zeal that demographers have lavished on this subject, we are annually presented with a report on past mobility and present employment status. For economic analysis we need just the reverse—a measure of the extent to which unemployment leads to labor mobility.

I must admit to a further motive in suggesting this continuity study of the long duration unemployed. Other surveys that ask housewives when they last bought crunchies, when they spent money on house repairs, when a family member was last in the hospital, discover that the answers telescope the true time period or elongate it. What about *these* reports of 10, 15, 24 months of unemployment? Was the true duration shorter? or perhaps even longer? By continuing to secure reports for all families who have reported unemployment of over 15 weeks from the time they first report this in the survey (1) until the persons concerned find work or (2) until they had been in the survey a year, we could strengthen the validity of the duration reports on this very critical group.

Adequacy of Unemployment Data for Government Uses

EWAN CLAGUE*

THE 79TH CONGRESS [in the Employment Act of 1946] did not limit national concern to certain types of workseekers; for example, those in need, or primary wage earners in a family, or persons between 20 and 65 years of age, or persons seeking jobs for which they are entirely qualified, or persons seeking jobs with some specified degree of desperation. Recent critics of our unemployment figures, who insist that we should be limiting our measures to one or another of these categories are, whether they know it or not, attacking the present full-employment objective. I would not deny that some of these more limited measures would be useful and interesting—and, in fact, we are trying to see if we can provide them—but I do not believe they would meet present public policy needs.

The statistics serve a most important purpose in providing information on the incidence of unemployment and on the size and composition of the groups for whom the problem is serious and persistent. It is through these data that we know about the number of long-term unemployed for whom the unemployment insurance system does not provide. The high unemployment rates of young people and Negroes, of unskilled and semiskilled workers, and the rising numbers in these categories, have signaled the need for some sort of training and retraining programs.

Because the household data relate to the entire labor force—not restricted to insured workers, or workers on payrolls, or those covered by social security—they are useful in providing total man-hour data for productivity measures. They also form the basis for long-term projections of the labor force and for short-term forecasts of total employment, given certain assumptions about changes in gross national product and productivity.

The unemployment rate, particularly the seasonally adjusted unemployment rate, has been given enormous importance by members of the press and others. To warrant the attention it gets, it should be made more reliable—by enlarging the sample, sharpening the concepts

and interview procedures, and improving other survey procedures. These would require very large expenditures of funds for research, testing, sample expansion, and operation of the survey at an expanded level. There is some question in my mind as to whether such an expenditure would be worthwhile for the *sole* purpose of improving a global unemployment rate. What we really need is more perception about the behavior of certain components of the total.

What we do need, I believe, is the greater detail that a larger sample would provide for better cross-section analysis at a point in time and for studies in depth. In our 5-year program of statistical goals, we have proposed doubling the sample once a year in order to give greater occupational, industrial, and geographical detail on the impact of unemployment.

This fiscal year, we are conducting a longitudinal study by interviewing in depth a sample of persons who have been unemployed during 1961. We hope to obtain enough information about their work experience during the past 5 years to determine their attachment to the labor force and to their employer, their susceptibility to unemployment, and the types of job shifts they have had to make since the prosperity year 1957. We want to find out how many are primary wage earners. We shall look also into family responsibilities and family resources in order to throw some light on this question of need—realizing, of course, that a real evaluation of need involves an interview not by a Census Bureau employee but by a social worker.

This year we are also taking another reading on the extent of job mobility in the labor force, comparable to a study made in 1955. This should tell us, first, whether the American labor force has become more or less mobile, and second, how much unemployment is associated with job shifting.

* * * * *

We recently calculated that if the unemployment rate for November 1961 were based only on experienced workers aged 18 to 64, excluding all married women and single persons under 20, it would be 1 percentage point less than the total

*Commissioner of Labor Statistics, U.S. Department of Labor.

rate, that is, 4.6 percent instead of 5.6 percent. We are planning to give more publicity to these breakdowns.

Perhaps it would be possible to shed a little more light on the picture if we could determine whether persons reported as looking for work (a) had lost a job or (b) were returning to the labor force. (We already publish information on those entering the labor force for the first time.) You cannot assume that the labor force reentrants are second-class citizens and not worthy of concern, since their reason for looking for a job might be the unemployment of a relative, or the need for income to cover other family emergencies or even to share in the American dream of a higher standard of living. Nevertheless, such information would help to distinguish disemployment from other reasons for jobseeking, a refinement that might improve the data for policy planning as well as for economic analysis.

I do not want to give the impression that we are concerned only with providing information that can be used to minimize the unemployment problem. We know from our own data and observations of interviewers that even in families where there is an employed person, and the unemployed worker is a supplementary earner, there may be extreme poverty. A measure of family income is really needed to evaluate the severity of unemployment—and fortunately, the Census Bureau has just recently added a question on total family income, to be asked when the household is introduced into the sample for the first time. This will be a rather crude measure, but it can be used in tabulations to give a rough classification of the economic status of the family of the unemployed worker. We know from the annual income surveys of the Census Bureau that unemployed workers average about half the income of employed

workers, but we don't know the family total nor do we have the information on a current basis.

I should like to note that we are concerned about whether the simple question asked each month, "Was this person looking for work?" is uncovering all the workers who, according to our concept, are classified as unemployed. If there is a problem here, it would probably be most serious in chronically depressed areas, where "looking for work" has become a fruitless waste of time and money. We hope to do an experimental study in one depressed area next spring to test the present procedures and to check the relationship between the unemployment insurance statistics and the household survey data.

Other gaps in our information—such as comparable labor force statistics for local labor market areas and States or, as some of our customers are requesting, weekly unemployment figures—perhaps should also be filled. But considerations of cost prevent me from giving them high priority at this time.

As we can see, these proposed new studies approach, although somewhat obliquely, the central question, Why are 4 million members of the labor force without jobs? Perhaps too much attention has been given to rather unrewarding attempts to quantify the impact of seasonal, cyclical, or structural forces in the unemployment total. What we need to know is not why they lost their jobs, but why they cannot find other jobs. And for this answer, we need to start toward the goal of matching our already pretty comprehensive data on the supply side with information about the demand side. It has taken us 21 years to come this far in our knowledge of the labor force. With electronic devices, perhaps we can quantify and qualify and locate demand in less than two decades.

. . . the appalling apprenticeship system in Britain, . . . means that skilled labor needed in any area is trained only to suit the needs of the industries already located in that area, and . . . often makes it impossible for men above the age of adolescence to move from one skilled trade to another.

—"The Most Acute Case," *The Economist*, November 25, 1961, p. 733.

Growth Requirements To Reduce Unemployment

RICHARD C. WILCOCK and WALTER H. FRANKE*

IF THE ECONOMY were successful in achieving a 4-percent unemployment rate by the fourth quarter of 1962 or the first quarter of 1963, previous experience would suggest a decline in long-term unemployment from the third quarter 1961 level of about 1.6 million persons to as little as 600,000 persons, or about 0.8 percent of the labor force. What are the estimated growth requirements to achieve unemployment levels of that magnitude?

Assuming, first, that the current economic expansion will repeat the patterns of the 1949-50 and 1954-55 recoveries, a growth rate of 2.2 percent per quarter from the third quarter of 1961 would be required to reduce the unemployment rate to 4 percent by the fourth quarter of 1962 [or a rise in the gross national product from an annual rate of \$453.0 billion to \$506.2 billion, in 1954 dollars]. The required growth rate would be 2.1 percent to attain this goal by the first quarter of 1963 [when the annual rate of gross national product would need to be \$513.6 billion, in 1954 dollars]. The projections assume a conservative increase in the labor force participation rate [from 56.9 percent to 57.5 percent in the fourth quarter of 1962 and 57.7 percent in the first quarter of 1963], no increase in average hours of work or in the size of the Armed Forces, and the same relationship between growth in gross national product and employment as obtained in the 1949-50 and 1954-55 recoveries.

Either of these growth rates would seem to be reasonably attainable. They are less than the growth in gross national product during each of the three previous postwar recovery periods.¹ Two questions, however, can be raised as to whether the projections are not overly optimistic.

First, will increases in real gross national product produce a volume of new jobs comparable with those created in the first two postwar recoveries? If we assume that the current recovery will be more similar to the 1958-59 recovery than to the two earlier ones, the quarterly rates of growth in gross national product required to reach a 4-percent rate of unemployment in the fourth quarter of 1962 or the first quarter of 1963 are 2.7 percent and 2.6 percent, respectively. And if

we further assume an increase in average hours of work of 1 hour, which seems reasonable in view of earlier recovery experiences, the growth rates in gross national product are 3.7 and 3.4 percent.

The required growth rates under these three different conditions (first, repetition of the 1949-50 and 1954-55 pattern, second, the 1958-59 pattern, and third, the 1958-59 pattern with a 1-hour rise in the workweek) from the first quarter of 1961—the takeoff period for the current recovery in gross national product—to the first quarter of 1963 are 1.6, 2.0, and 3.3 percent per quarter, respectively.

While it is not certain which conditions are most likely to obtain in the coming months, it would be our guess that an average growth rate of at least 2.5 to 3.0 percent per quarter will be necessary in the next five or six quarters to reduce unemployment to a 4-percent level. Of our previous postwar recoveries, only that in 1949-50 fell within this range of rates. And that recovery was assisted by the stimulus of a limited war.

Second, can the projected growth rates be sustained long enough to reduce the unemployment rate to 4 percent? If we compare the required growth rates under the three assumptions for the 2-year period from the first quarter of 1961 with the growth rates of comparable 2-year periods in the past, we find that only in the 1949-50 recovery and prosperity did the growth rate exceed any of the estimated current growth requirements.² Expansion in output in the last two recoveries was less than the requirement under even the most optimistic assumptions.

Our analysis suggests that it is quite unlikely that we will approach an unemployment rate of 4 percent in the next five or six quarters, unless the economy receives more of a stimulus than is yet apparent. The most difficult task is likely to be that of sustaining the recovery beyond the second or third quarter of 1962. Should the recovery level off after the second quarter of 1962, unemployment will probably not fall below 5.0 to 5.5 percent during the "prosperity" period.³

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¹ Comparable quarter rates of growth in the earlier recovery periods were as follows: 4th quarter 1949 to 4th quarter 1950: 3.2 percent; 3d quarter 1954 to 3d quarter 1955: 2.4 percent; 2d quarter 1958 to 2d quarter 1959: 2.4 percent.

² Quarterly rates of growth over 2 years in previous recoveries were 2.1 percent (4th quarter 1949 to 4th quarter 1951), 1.3 percent (3d quarter 1954 to 3d quarter 1956), and 1.4 percent (2d quarter 1958 to 2d quarter 1960).

³ This estimate assumes a growth rate of about 2.4 percent per quarter and no increase in average hours of work to the 2d quarter of 1962.

Action Programs To Deal With Unemployment

VICTOR R. FUCHS*

THE POINT is often made that the rate of growth of the economy was adequate from 1950 to 1955 but was too slow in the second half of the decade, resulting in a large increase in unemployment. The fact is that the economy created more new jobs between 1955 and 1960 than it did between 1950 and 1955. Unemployment grew at the same time because the increase in the labor force was much greater in the second half of the decade than in the first half.

During the next decade, the rate of increase in the labor force will be even more rapid than it was from 1955 to 1960. In order to keep unemployment under four million in 1965, it will be necessary to create as many new jobs between 1960 and 1965 as were created in the 10 years 1950-60. This is obviously a big order.

Clarence Long has argued that there is no connection between changes in the labor force and unemployment. He cites figures going back to 1900 to support this position.¹ But Long's analysis ignores the role formerly played by immigration in creating changes in the labor force. Kuznets, Abramovitz, and Easterlin have all suggested that immigration movements are best explained as a *response* to changes in the demand for labor in the United States. If we accept this, most of Long's data are beside the point. It seems to me that the rapid increase in the labor force that we will experience in the coming years does provide special cause for concern.

The task will be complicated by the dangers of inflation and of balance of payments difficulties. These dangers are likely to place strict limits on our ability to deal with unemployment solely from the demand side. Demand will be important; there is no doubt about that. But my own set of action recommendations tends to stress the supply side.

1. *Training and retraining.* We urgently need a large-scale training and retraining program which would include provision for basic education as well as technical and vocational skills. Ideally, this program should mark the beginning of wide-

spread recognition that education must be a continuing process. In a world of rapid technological change, retraining and retreading will be the usual and the expected—not limited to emergencies—and will be as important for those with employment as for the man without a job. Neil Chamberlain has recently suggested that workers be permitted to accumulate years of potential educational benefits, just as they now accumulate potential unemployment benefits and retirement rights.² He argues that as an alternative to earlier retirement, workers should use these benefits in years of meaningful education spread throughout their working lives. This idea seems worthy of serious study and experimentation.

2. *Aid to education.* The strengthening of formal public education is essential if the labor force is to be in a position to take advantage of retraining and new employment opportunities decades after they leave school. In order to avoid unemployment in the future, a sharp reduction in the number of high school dropouts should be a major goal.

3. *Reform and revitalization of vocational education.* This is too large and complex a subject to expand upon in this paper. Many changes are needed. One of the innovations I would like to see is a vast chain of technical schools throughout the Nation, open to youths and adults and reaching down into the high schools and junior high schools, to provide guidance, prestige, and inspiration in fields that require manual as well as mental skills. What more fitting way would there be to celebrate the centennial of the land grant colleges than for the Federal Government to launch, in cooperation with the States, a new type of technical institute to meet the growing demands of our own economy and those of the underdeveloped nations!

4. *Special youth employment opportunities.* It is a harsh fact of life that many youths do not derive full benefit from formal education programs and drop out of school. Still others stay through high school graduation only to find that they have

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¹ "Labor Force and Unemployment in the 1960's," in *Employment and Unemployment, The Problem of the 1960's* (Washington, Chamber of Commerce of the United States, 1961).

² "Automation and Labor Relations," Reed College 50th Anniversary Conference, Portland, Oreg., November 17, 1961.

no special qualifications for employment. The great tragedy is that their lack of qualifications prevents them from getting what they most desperately need—work experience and on-the-job training. Special programs should be created to permit them to obtain this experience. These programs will require substantial cooperation from employers and organized labor.

5. *Expansion and improvement of the U.S. Employment Service.* This must be more than a nominal change or an exhortation to do better. More resources are needed to obtain and disseminate information on job opportunities, and there should be a dramatic reorientation of the image projected by the Service to business and the public. I am not urging a public relations gloss, but an effective communications program to inform when basic changes have been made.

6. *Worker relocation assistance.* The efficient location of industry requires continuous adaptation to changes in technology, tastes, and the availability of natural resources. This is not, however, an argument for *laissez faire*. We can and should consider ways of assisting affected workers and their families to relocate. We must also help communities deal with the problems raised by large-scale migration.

7. *Reduction of racial barriers.* One of our greatest challenges and opportunities is to press forward as strenuously as possible for the removal of racial barriers in order that Negroes and other minorities can become as fully productive and as fully employed as their fellow citizens. Jacob Mincer's recent studies of on-the-job training suggest that discrimination in employment may be greater and more harmful to the Negro than is discrimination in formal education.³

8. *Stimulation of the rate of technological innovation and diffusion.* This is one area where the government can stimulate demand without the dangers that attend the usual demand stimulants.

By supporting basic research, and by a vigorous program for the dissemination of technological and organizational discoveries, it may be possible to increase the rate of growth of business and provide a naturally buoyant demand.

Although the above recommendations stress the supply side of the problem, demand is certainly very important. The oft-heard argument that the problems of retraining and relocation could be handled more easily under conditions of strong aggregate demand is undoubtedly true. I am simply suggesting that insufficient attention has been paid to the converse, which is equally valid. It would be much easier to apply a policy of strong aggregate demand if the labor force were more mobile, if the economy were geared to accept and expedite retraining and relocation, and if other limitations on supply were reduced. Under these circumstances, there would be less likelihood of inflationary pressures developing short of full employment, and fear of inflation is one of the major obstacles to curing unemployment.

Economists have been both proficient and prolific in pointing out the inherent difficulties in pursuing full employment and price stability simultaneously. This has been useful, but if we go no further, the critical label, "the dismal science," will be justified. It seems to me that certain action programs will reduce unemployment without upsetting price stability. Many of the measures that I am now urging for an attack on unemployment have been advocated in the past to counter inflation. I conclude with the suggestion that our two opponents, inflation and unemployment, are actually Siamese twins. If we aim our punches carefully, we may floor them both at the same time.

³ "On the Job Training: Costs, Returns, and Some Implications," Universities—National Bureau Exploratory Conference on Capital Investment in Human Beings, New York City, December 1-2, 1961.

The Fourth Biennial Convention of the AFL-CIO

JOSEPH W. BLOCH*

A THREAT of deep internal conflict faced the Fourth Biennial Convention of the American Federation of Labor and Congress of Industrial Organizations, meeting in Bal Harbour, Fla., on December 7, 1961. By December 13, when the convention ended, an atmosphere of harmony prevailed.

Six years after the merger, the Federation returned to the problems only partially resolved at the 1955 merger convention—raiding, jurisdictional disputes between craft and industrial unions, and instances of racial discrimination in the ranks of the labor movement. The Executive Council fashioned elaborate procedures for settling internal disputes and for adjusting complaints of discrimination which the delegates appeared generally to accept with enthusiasm, tinged perhaps with relief.

The remedies, if successful, may be expected to preserve the Federation but not necessarily restore youth and vitality. Since the merger, the Federation's size has declined through expulsion, and the labor movement as a whole has failed to keep pace with the growing and changing labor force. These facts were impressed upon the delegates. On the other hand, there was relatively little talk of a "big-business, antilabor conspiracy," which had dominated the 1959 convention, and no internal problem of the magnitude of the Teamster expulsion, to which the major part of the 1957 convention had been devoted.

As in prior conventions, a large number of resolutions were acted upon, ranging over domestic and foreign affairs, State and Federal legislation

and agencies, collective bargaining problems, and organizational matters. Some of the highlights are discussed in this article.

Internal Disputes

The new constitutional amendment establishing procedures for the settlement of jurisdictional disputes between affiliated unions capped a 2½-year effort on the part of the AFL-CIO Executive Council to find a solution acceptable to all parties, particularly the Industrial Union Department and the Building and Construction Trades Department. A special committee, with Machinists' President A. J. Hayes as chairman, was appointed in August 1959¹ to recommend procedures for quick and binding settlement of disputes involving raiding, the IUD-BCTD agreement (Miami, 1958),² boycotts, organizing ethics, and contracting-out provisions in collective bargaining agreements. Upon the recommendation of this committee, the 1959 AFL-CIO convention adopted a resolution directing the Executive Council, through the special committee, to develop a dispute-settlement plan embodying final and binding arbitration as the terminal point. The Executive Council was further directed, upon its approval of a plan, to call a special convention to consider the necessary constitutional amendments.

No plan was approved and no special convention was called. The seriousness with which the IUD and its president, Walter P. Reuther, viewed this failure was emphasized at length at its November 1961 convention, along with the Department's current assessment of the problems of jurisdiction. "The IUD has long understood that the entire question of jurisdictional disputes involves both workers and the jobs they perform. There can be no real division of the problem of jurisdictional conflict, since a union 'raiding' another affiliate by seeking to take over representation rights is just as guilty of violating the nonaggression principle as a union that leaves another affiliate's bargaining rights unmolested, but seeks to steal the work performed by employees in this bargaining unit."³

*Of the Division of Wages and Industrial Relations, Bureau of Labor Statistics.

¹ See *Monthly Labor Review*, October 1959, p. 1139.

² See *Monthly Labor Review*, April 1958, p. 421.

³ Walter P. Reuther, *Report to the Industrial Union Department, AFL-CIO*, Washington, 1961, p. 18.

The IUD drafted a resolution to be submitted to the AFL-CIO convention setting forth the principles of "nonaggression," final and binding arbitration, and enforcement procedures, including recourse to the courts and suspension. The resolution directed appropriate constitutional action before the convention adjourned. The BCTD, at its own convention, promptly rejected this proposal.

Out of materials, circumstances, and backgrounds which appeared to guarantee only discord and disunity, AFL-CIO President George Meany, the Executive Council, and a squad of lawyers fashioned a dispute-settlement procedure. It was presented to the convention bearing, by dint of Mr. Meany's persistence, unanimous approval. With only the International Typographical Union opposing, the delegates quickly approved the constitutional amendment.

The value of unanimity in this area was obvious, but its price to the major protagonists was reflected in the scope of the amendment and the procedures established. As in the earlier no-raiding pacts and as previously set forth in the AFL-CIO constitution, each affiliate is obligated to respect the "established collective bargaining relationships," of other affiliates. In addition, each affiliate is called upon to respect "established work relationships," defined as "any work of the kind which the members of an organization have customarily performed at a particular plant or work site, whether their employer is the plant operator, a contractor, or other employer." Organizing circulars or charges designed to bring another affiliate into public disrespect are banned. As in prior proposals, the general work or trade jurisdiction of any affiliate is not within the scope of the settlements or determinations reached under this amendment. The boycott is not specifically mentioned.

The procedure for settling disputes (i.e., charges brought by one affiliate against another) includes several possible steps, to function under procedural rules to be established by the president of the Federation:

1. Upon receipt of a complaint, the president shall designate a mediator or mediators from a panel composed of persons from within the labor movement. If a voluntary settlement is not reached within 14 days after the appointment of a mediator, the dispute goes to arbitration.

2. An impartial umpire, selected in rotation from a panel, hears the case and makes a determination within a time limit specified by the president.

3. An appeal from the arbitrator's decision may be taken to a subcommittee of the Executive Council. The subcommittee may disallow the appeal, in which case the arbitrator's decision is binding, or it may refer the appeal to the Executive Council, thereby staying the decision.

4. A majority of all of the members of the Executive Council may set aside or alter the arbitrator's decision. The decision of the Executive Council is final. (No appeal to the convention is provided for.)

The persons to be involved in this procedure were identified the day after the convention. The mediation panel was to consist of all 29 members of the Executive Council, plus some 30 national or international union presidents to be selected. David L. Cole, arbitrator under the prior no-raiding agreement which was to expire at the end of 1961, was designated as an impartial umpire. The subcommittee receiving appeals was to consist of Mr. Meany, Joseph A. Beirne, president of the Communications Workers of America, and James A. Suffridge, president of the Retail Clerks International Association. Alternates were also designated. (The Executive Council is identified in the final paragraph of this article.)

Compliance with the decisions reached under the procedure, if not voluntary, is to be achieved through a variety of sanctions, beginning with throwing the weight of Federation influence against the offending union and ending with the exercise of the maximum authority vested with the Executive Council under the constitution, as follows:

1. The noncomplying affiliate shall not be entitled to file any complaint or appear in a complaining capacity in any proceeding under this article until such non-compliance is remedied or excused as provided in Section 16;

2. The Federation shall, upon request, supply every appropriate assistance and aid to any organization resisting the action determined to be in violation of this article;

3. The Federation shall appropriately publicize the fact that the affiliate is not in compliance with the constitution;

4. No affiliate shall support or render assistance to the action determined to be in violation of this article.

In addition, the Executive Council is authorized, in its discretion, to—

1. Deny to such an affiliate the use of any or all of the services or facilities of the Federation;
2. Deny to such an affiliate any protection under any of the provisions or policy determinations of the Federation;
3. Apply any other authority vested in the Executive Council under this constitution.

Means by which rights may be restored upon compliance are set forth in the amendment. Resort to court or other legal proceedings either in settlement of a dispute or in enforcement, a procedure which had been proposed by the IUD, was specifically banned. The amendment takes effect on January 1, 1962, and, except for its compliance features, is not applicable to formal complaints made, but not yet processed, under the previous no-raiding clause of the constitution.

Following the surprisingly quick acceptance by the delegates (rollcall ballots had been distributed), a sense of accomplishment and high hopes that the device had been found which (given the will and spirit of cooperation) would keep the Federation from being pulled apart by internal disputes unmistakably permeated the convention. The only discordant notes were a warning by the International Typographical Union that it would not be bound by any decision affecting its jurisdiction, which Mr. Meany bluntly waved aside, and an unscheduled, angry exchange between delegates from the Steelworkers and the Sheet Metal Workers on the dispute-ridden Carrier Corp. situation.

Civil Rights in the AFL-CIO

As in the case of internal disputes, the possibility of convention discord over methods of dealing with such discrimination practices as exist among AFL-CIO affiliates gave way to cooperative action. Unlike the 1959 convention, at which President Meany and A. Philip Randolph, president of the Brotherhood of Sleeping Car Porters, engaged in heated arguments, the 1961 convention ended on a note of harmony if not complete agreement. The convention approved a resolution described by President Meany as "the most comprehensive resolution [on civil rights] ever presented to any convention that I have attended," and by Federation Vice President Randolph as "the best resolution on civil rights that the AFL-CIO has yet adopted," although "the sanctions are not strong enough for me." A burning fuse in the form of a report to the convention reproducing a

long memorandum on civil rights in the AFL-CIO from Mr. Randolph to the Executive Council, dated June 14, 1961, and the reply by a subcommittee of the Executive Council, dated October 12, 1961, was extinguished when the report was withdrawn (i.e., "deposited" with the Executive Council) and debate avoided, by common consent.

The civil rights resolution reaffirmed the traditional opposition of the AFL-CIO to all forms of discrimination based on race, creed, color, or national origin, in the labor movement and in employment, housing, education, and elsewhere. The new element was provision for a strengthened compliance machinery in the Federation, which, although not specifically provided with the ultimate sanctions sought by Mr. Randolph, appears to substitute a relentless spotlight on the offending affiliate. "In order to strengthen the procedure for the compliance with AFL-CIO civil rights policy by our affiliates, we ask the Executive Council to direct the AFL-CIO Civil Rights Committee, in addition to acting on complaints received from aggrieved individuals, to initiate complaints on the committee's own motion, on the basis of prima facie evidence that discrimination is being practiced."

All complaints of discrimination are to be processed in accordance with the following procedure (summarized):

1. First processing by the AFL-CIO Department of Civil Rights to ascertain the facts.
2. Valid complaints to be referred to the affiliate for action, and at the same time, to the Subcommittee on Compliance of the Civil Rights Committee for whatever assistance might be rendered.
3. If no progress is indicated, the subcommittee chairman will attempt to arrange a meeting with the affiliate to effect voluntary compliance.
4. Failing agreement, the subcommittee may call a hearing, affording the affiliate an opportunity to state its views and to outline the steps it will take to bring about compliance within a period of time to be specified by the subcommittee.
5. If the affiliate still remains in violation, the subcommittee will report the case to the full committee, which, in turn, refers the case to the Executive Council along with its recommendations for appropriate action.
6. The Executive Council may designate an ad hoc subcommittee to either adjust the complaint or, if necessary, recommend to the Executive Council appropriate action for effecting compliance.

As part of this agreement, the Civil Rights Committee is to be reorganized and the Civil

Rights Department strengthened. AFL-CIO Secretary-Treasurer William F. Schnitzler was later designated by President Meany as committee chairman.

Reaffiliation of Teamsters

With officials of the Teamsters union in Miami Beach making no secret of their desire to return to the Federation, the AFL-CIO convention laid out the constitutional road by which reaffiliation of the union expelled in 1957 might someday be effectuated. This was the same road traveled by the International Longshoremen's Association in its return to good standing.

The Executive Council is instructed, if, as, and when any of these [expelled] unions make proper application for reaffiliation with the AFL-CIO, to give consideration to such application in the light of the existing rules of the Federation and the facts concerning the current situation within such union, and to proceed with such reaffiliation under conditions that will fully protect the rights of all affiliates under the AFL-CIO constitution and assure the complete observance by such union of all of the provisions of the AFL-CIO constitution and the rules, laws, standards, and policies of the Federation.

President Meany, in the chair, plainly did not invite discussion of the Teamster case. Several delegates, however, rose to speak, not against the resolution itself (to which no one registered a dissent), but either to restate their opposition to expulsion or to protest against the coldness to present Teamster leaders demonstrated by President Meany on many prior occasions. No one rose to say a word in defense of the expelled Bakery and Confectionery Workers and the Laundry, Cleaning and Dye House Workers. A dubious significance attends this exchange—this was the only resolution of this convention (and probably of earlier conventions) adopted twice unanimously, once before and once after discussion.

Organizing the Unorganized

Coming up early in the proceedings, while the conflicts brought to the convention were still stewing, the convention's handling of the traditional call to organize the unorganized appeared to be less than enthusiastic, and no bold new plans were unveiled. It was acknowledged that the

promise of the 1955 merger remained unfulfilled; on the contrary, during the 6-year interval the labor movement as a whole had barely held its own in terms of membership and union membership as a percentage of the organizable labor force had declined. The resolution and the speeches were sober in tone, stressing the forces at work making organizing more difficult and yet more imperative—the changing composition of the labor force (increasing numbers of white-collar workers and decreasing numbers of manual workers), the impact of technological change on existing centers of organization, and organizational rivalries and disputes which wasted money and resources.

The resolution adopted by the convention reaffirmed the AFL-CIO position that “the major unfinished business of the American Labor Movement is to organize the unorganized.” Affiliated organizations were encouraged to give more attention in their publications to organizing work and to devote more staff time and meeting time to organizing. The AFL-CIO was instructed to arrange conferences “among top leadership of unions normally organizing in the same industries, fields, classes, or crafts” to determine the type of campaign and the type of assistance to be provided by other affiliated unions and the AFL-CIO. Also lending more authority to the Federation, although not precisely defined, was the final clause of the resolution: “that the AFL-CIO renew its efforts to resolve the organizing jurisdictional problem⁴ and see that adequate funds are made available to pursue the organizing tasks still before the labor movement, with particular attention being given to assisting unions responsible for organizing the larger sections of unorganized workers.”

AFL-CIO officers were also called upon to renew “efforts for badly needed legislative relief in the labor-management relations area.” In another resolution relating to the Landrum-Griffin and Taft-Hartley acts, the nature of the legislative relief was outlined, leading to the following conclusion: “The Congress should review the Landrum-Griffin and Taft-Hartley acts and the experience which has been accumulated in their administration and interpretation, with a view to

⁴ The internal disputes machinery does not apply to organizing rivalries.

correcting the numerous unfair, unworkable, or unnecessary provisions of these acts."

In a later action, the AFL-CIO constitution was amended to provide for a Committee on Organization, equal in status to other committees, charged with developing "programs and policies to assure a more effective and adequate effort in meeting the challenge of organizing the unorganized and shall report such programs and policies to the Executive Council for its consideration."

Economic Issues

As in previous conventions, a host of resolutions dealing with economic issues at the Government and collective bargaining levels were adopted. Most of these, as in the past, restated AFL-CIO year-round or traditional positions and beliefs for the approval of the convention, which is inevitably routine; these resolutions find their way to appropriate Government and legislative agencies, their significance perhaps undiminished by the lack of delegate or newspaper attention. A few, however, are held up for special attention by AFL-CIO officers, or by the press, or by both. This year, the resolutions calling for higher wages and shorter hours received the spotlight of attention, possibly because of steel contract negotiations scheduled for 1962 or because of an apparent difference between the Federation's position and the statements of President John F. Kennedy and Secretary of Labor Arthur J. Goldberg.

The resolution on collective bargaining, largely similar to the one presented to the 1959 convention and marking no break with the past, stated that "in the period ahead, AFL-CIO affiliated unions will press for wage advances as a vital means of increasing inadequate consumer purchasing power." (The 1959 resolution, it might be noted, referred to "substantial" wage increases.) Vice President Reuther emphasized this position in a supporting speech to the convention, and warned the delegates of pressure for a "wage freeze" that they will encounter at the bargaining table.

The resolution on reduction of hours of work called upon affiliates "to give the highest priority

to the search for and negotiation of ways to reduce hours of work to assure adequate job opportunities now and in the future." Among the methods noted were reduction of the standard workweek, extension of paid vacations and holidays, early retirement, partial retirement, sabbatical leave, and control of overtime. Congress was urged "to devote immediate attention to the legislation necessary to provide adjustments in the standard workweek without loss of pay consistent with the economic needs of the Nation and the national objective of a full-employment economy" (a 35-hour workweek was specified in a 1959 resolution) and to give favorable consideration to the proposal, offered earlier in the year by Mr. Reuther, for "flexible adjustment of the standard workweek based on levels of unemployment and utilization of the labor force."

Had the AFL-CIO substantially changed its previous stand on wages and hours at this convention, news would have indeed been made; on the other hand, having restated its past position, slightly altered, the task of convincing employers or the Congress still remains as before. This was also true of two other resolutions of potential significance, both new. One, introduced by the Industrial Union Department, urged the establishment of a Federal system for reinsuring private pension funds, in the manner of the Federal Deposit Insurance Corporation; the other virtually condemned all current industrial engineering practices of management and urged more training for union representatives "faced with management's misuse of industrial engineering techniques."⁵

Other Matters

Although continuing to support a liberal international trade policy, the Federation's terms seemed to be somewhat stiffer in 1961 than in previous conventions. The resolution on international trade contained this summary of the Federation's position:

The AFL-CIO calls upon the Congress to enact a new tariff and trade law in 1962 which would provide a maximum opportunity for expansion of trade and which would provide effective measures for easing the impact of increased imports, actual or anticipated, resulting from tariff reductions, through trade adjustment assistance and

⁵ In a rare instance of a resolution being changed on a motion from the floor, the word "misuse" was substituted for the word "use" in the original resolutions. However, since the tone of the resolution as a whole seemed to characterize management's current use of industrial engineering techniques as "misuse," it did not seem to make much difference which word was used.

other effective measures. Adequate assistance or relief for those adversely affected by imports is essential if the American labor movement is to continue its support for a liberal trade policy.

The new Food and Beverage Trades Department was given official status by the necessary constitutional amendment. The constitution was also amended to raise the per capita tax paid by affiliates from 5 cents to 7 cents per month.

President Kennedy and Secretary of Labor Goldberg addressed the convention. Among other speakers were Mrs. Eleanor Roosevelt, Rev. Martin Luther King, Jr., and several fraternal delegates from labor movements in other countries.

All Federation officers were reelected by acclamation. They are: President George Meany, Secretary-Treasurer William F. Schnitzler, and the following vice presidents and members of the Executive Council: Walter P. Reuther, George M. Harrison, Harry C. Bates, William C. Birthright, James B. Carey, William C. Doherty, David Dubinsky, David J. McDonald, Emil Rieve, William L. McFetridge, Joseph Curran, Maurice A. Hutcheson, A. J. Hayes, Joseph D. Kennan, L. S. Buckmaster, Jacob S. Potofsky, A. Philip Randolph, Richard F. Walsh, Lee W. Minton, Joseph A. Beirne, James A. Suffridge, O. A. Knight, Paul L. Phillips, Peter T. Schoemann, Lawrence M. Raftery, and William A. Calvin.

There is no general agreement on what constitutes a "craft" or "skilled trade." However, there is some agreement concerning the criteria to be applied to determine whether or not a particular occupation can be considered a craft. Definitions formulated by the Bureau of the Census, the Bureau of Employment Security, and the National Labor Relations Board emphasize several common traits in identifying a craft occupation. Thus, a craft involves a high degree of manual dexterity, the exercise of considerable independent judgment in carrying out prescribed operations, responsibility for a valuable product and equipment, and extensive preliminary training which may be incorporated in a formal apprenticeship program.

—Arnold R. Weber, Craft Representation in Industrial Unions (14th annual meeting of the Industrial Relations Research Association, New York City, December 28-29, 1961).

Summaries of Studies and Reports

Labor-Management Policy Committee Report on Automation

EDITOR'S NOTE.—*The following excerpts are from a report to the President from the Advisory Committee on Labor-Management Policy.¹ The Committee was created by Executive order on February 16, 1961, and its report of January 11, 1962, deals with the benefits and problems incident to automation and other technological advances.*

THREE CENTRAL PROPOSITIONS have emerged in the Committee's consideration of the significance and impact of automation and other technological advances.

First, automation and technological progress are essential to the general welfare, the economic strength, and the defense of the Nation. Second, this progress can and must be achieved without the sacrifice of human values and without inequitable cost in terms of individual interests. Third, the achievement of maximum technological development with adequate safeguards against economic injury to individuals depends upon a combination of private and governmental action, consonant with the principles of the free society.

Our purpose, then, is to seek that course of action which will encourage essential progress in the form of automation and technological change, while meeting at the same time the social consequences such change creates. We reject the too common assumption that continuing unemployment is an inherent cost of automation.

We believe, rather, that a combination of energetic and responsible private and public action will permit the advancement of automation and technological change without the sacrifice of human values, and that such combined efforts can cope satisfactorily with the total unemployment problem—including whatever part of it may

arise from the displacements which result inevitably from the introduction of new devices and processes.

Committee Recommendations

We recommend that serious consideration be given the following measures:

1. Adoption by the government and others of policies which will promote a high rate of economic growth and fuller utilization of resources. A much higher rate of growth is essential and is the best device for reducing unemployment to tolerable levels. We will include in our forthcoming report on economic growth suggestions in this area.

2. Acceptance by government agencies of the responsibility for collecting, collating, and disseminating information with respect to present and future job opportunities and requirements in a rapidly changing society.

3. Cooperation between government and private organizations in the field of education in improving and supporting educational facilities to the end that:

- (a) New entrants to the labor force will be better qualified to meet the occupational demands of the future;

¹ The members of the Committee and their affiliations are as follows:

Public Members. Arthur J. Goldberg (ex officio), Secretary of Labor, and Luther H. Hodges (ex officio), Secretary of Commerce (chairmen for 1-year alternating periods); Arthur F. Burns, president, National Bureau of Economic Research; David L. Cole, attorney; Clark Kerr, president, University of California; Ralph E. McGill, publisher, Atlanta Constitution; George W. Taylor, professor of labor relations, University of Pennsylvania.

Management Members. Elliot V. Bell, chairman of the executive committee, McGraw-Hill Publishing Co., Inc.; Joseph L. Block, chairman, board of directors, Inland Steel Co.; Henry Ford II, chairman, board of directors, Ford Motor Co.; John M. Franklin, chairman, board of directors, United States Lines Co.; J. Spencer Love, chairman and president, Burlington Industries, Inc.; Richard S. Reynolds, Jr., president, Reynolds Metals Co.; Thomas J. Watson, Jr., president, International Business Machines Corp.

Labor Members. David Dubinsky, president, International Ladies' Garment Workers' Union; George M. Harrison, president, Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees; Joseph D. Keenan, secretary, International Brotherhood of Electrical Workers; Thomas Kennedy, president, United Mine Workers of America; David J. McDonald, president, United Steelworkers of America; George Meany, president, American Federation of Labor and Congress of Industrial Organizations; Walter P. Reuther, president, International Union, United Automobile, Aircraft and Agricultural Implement Workers of America.

(b) The dropout rate at grade and high school levels will be reduced;

(c) Better vocational, technical, and guidance programs will be available;

(d) Rural and depressed areas, where surplus workers reside, will be better served;

(e) Financial support will be available for deserving and needy students; and

(f) There will be a general upgrading in the quality of our education.

4. Acceptance by management of responsibility for taking measures, to the maximum extent practicable, for lessening the impact of technological change, including:

(a) Adequate lead time;

(b) Open reporting to the employees involved;

(c) Cooperation with representatives of the employees to meet the problems involved;

(d) Cooperation with public employment services;

(e) The timing of changes, to the extent possible, so that potential unemployment will be cushioned by expected expansion of operations and normal attrition in the work force (through separations resulting from retirement, quits, and so forth).

5. Support from both public and private organizations for retraining of workers who have been and will be displaced.

(a) Private employers and unions faced with automation or technological changes should make every reasonable effort to enable workers who are being displaced, and who need to be retrained, to qualify for new jobs available with the same employer and to enjoy a means of support while so engaged.

(b) Where it is not possible for the employer to reabsorb displaced workers, appropriately safeguarded public support in the form of subsistence payments should be available to industrial and agricultural workers who qualify for and engage in retraining.

(c) Unemployment compensation laws should be liberalized to permit and to encourage retraining.

6. Support from both public and private sources, with due consideration to the circumstances of the enterprise involved, for the displaced worker who is seeking new employment.

(a) The duration, coverage, and amount of unemployment compensation, where inadequate, should be increased and made subject to realistic uniform minimum requirements under the Federal-State system.

(b) Employer supplementation of public unemployment compensation should be accomplished through severance pay, supplemental unemployment benefits, and similar measures.

(c) Attention should be given to provision for the special case of the worker who is displaced during the period when he is approaching retirement. This may appropriately include consideration of provision for early retirement, through private arrangements or social security measures; but alternative possibilities of more constructive temporary uses of such services warrant exploration.

7. Support from both private and public sources to the end that a worker's job equities and security may be protected without impairment of his mobility. This will warrant consideration, taking into account relevant cost factors, of such measures as—

(a) Financial aid in the transfer of employees to other plants in a multiplant system, and protection of existing rights for individuals so transferred.

(b) The use of public funds in order to give financial aid in the transfer of unemployed workers from one area to another where the result will be to provide continuing employment.

(c) The improvement of public and private protection of pension rights.

(d) The recognition by unions, individual employees, and employers of the necessity of adapting seniority and other rules in order to facilitate mobility of workers, while providing protection for the equities of employees. The Committee notes particularly the need for further study and exploration of this vital area.

8. Vast additional improvement of the public employment service so that it can effectively place, counsel, and relocate workers both locally and across State lines. We note with approval the start which has been made in this direction.

9. Vigorous and unremitting efforts by all segments of the population—including government, employers, unions, and employees—to

eliminate discrimination in employment because of race, creed, age, or sex.

10. There are pressing national needs to be met, and an abundance of manpower available to meet these needs. This matching of manpower and national needs, which is part of the vital context of the automation and technological advance problem, will obviously be affected by various broader governmental policies. Reserving fuller consideration of this area for our economic growth report, we nevertheless note here that—

(a) When technological changes or other factors develop particular pockets of unemployment, this becomes an additional reason for the undertaking, particularly at the State and local levels but with Federal assistance where this is necessary, of public development projects for which there is need independent of the employment need itself.

(b) Every effort should be made to maintain on an up-to-date and ready-to-go basis a schedule of needed public development projects, particularly those which could be started most quickly and which would be of short or controllable duration, so that the initiation of such projects can in the future be advanced, and the flow of projects already under way can be speeded up, if the manpower situation warrants this.

(c) If the operation of the economy, including the effect of automation and technological change, creates or leaves an intolerable manpower surplus,

² Mr. Meany, Mr. Dubinsky, Mr. Reuther, Mr. Keenan, and Mr. Harrison are of the view that this paragraph should read as follows:

The need for goods and services must not be left unfilled, particularly in a time of international crisis. At the same time, high unemployment is intolerable. In the light of our current responsibilities to meet world conditions, and in view of our unmet needs at home, we consider the development of programs directed at the achievement of maximum output and full employment as most significant at the present time. However, if unemployment is not reduced substantially in the near future, we will have to resort to a general shortening of the work period through collective bargaining and by law. In connection with such a development, consideration would necessarily be given to the extent to which purchasing power could be maintained along with a reduced work period. A reduction in the basic work period has historically been one means of sharing fruits of technological progress.

³ Mr. McDonald, Mr. Reuther, and Mr. Keenan comment as follows:

We agree that, in the light of the considerations stated, the most desirable solution now to the problem of unemployment is the development of programs which will achieve full employment at 40 hours per week. Saying that this is the most desirable solution is not, however, the same thing as saying that we have in fact achieved that solution or that we will in fact achieve it in the near future. And only the fact of full employment—not a statement of its desirability—can properly serve as the premise for the statement that the necessity for shortening the work period will only develop “in the future.” If we fail, as we have so far failed, to achieve the most desirable solution we will have to move more quickly than we are now moving in the direction of shortening the work period.

consideration should be given to monetary and fiscal measures—including the possibility of appropriate tax reductions—which would give promise of helping alleviate this situation.

(d) Governmental action along the lines suggested here, stimulated in part by the need to meet unemployment situations, would obviously have to take account of other considerations, including particularly the maintenance of national economic stability and security. We simply assert, however, the coordinate importance of stability and growth.

11. The need for goods and services must not be left unfilled, particularly in a time of international crisis. At the same time, high unemployment is intolerable. In the light of our current responsibilities to meet world conditions, and in view of our unmet needs at home, we consider the development of programs directed at the achievement of full employment as being more significant at the present time than the consideration of a general reduction in the hours of work. A reduction in the basic work period has, however, historically been one means of sharing the fruits of technological progress, and there may well develop in the future the necessity and the desirability of shortening the work period, either through collective bargaining or by law or by both methods. In connection with such a development, consideration would necessarily be given to the extent to which purchasing power could be maintained along with a reduced work period.^{2 3}

We affirm our conviction that the infinite promise of automation and technological advance can be realized without loss or cost of human values. America can enjoy the fruits of higher productivity without having to accept, as the inevitable result, serious social consequences growing out of the displacement of workers.

The recommendations made here suggest our view of a broader pattern of possible courses of action which would necessarily have to be adapted to particular circumstances, but which permit the constructive and responsible uses of technology and automation. We see no barriers—except misunderstanding, timidity, and false fear—to the accomplishment of this purpose by a coordination of private and public programs wholly consonant with the essential concepts of the free society.

We assert the necessity of automation and technological development to the maintenance of American standards of living and to the fulfillment of this country's role of leadership in freedom's fight for survival. We assert equally the obligation and the capacity of Americans—as individuals and as a group—to use these new instruments and methods to enrich the lives of *all* of us.

We see no reason for alarm if out of a greater sense of common purpose we can achieve the good will and the determination to act together.

Dissent by Arthur F. Burns

I find parts of this report highly constructive, particularly the recommendations designed (a) to achieve efficient and yet humane management of technological changes, (b) to improve the functioning of the labor market, and (c) to extend the coverage and otherwise strengthen the unemployment insurance system. Nevertheless, I am troubled by the report as a whole, and I consider it a dubious guide to economic policy.

The reasons for my dissent are as follows:

1. The report fails to identify or to analyze or to assess the quantitative importance of the different causes of unemployment. Nevertheless, it conveys the impression that technological advances are a major, if not the major, cause of recent unemployment. I know of no evidence to support this view, and I deplore anything that adds to the greatly exaggerated fears that many people have of what is loosely called automation.

2. The report suffers from a failure to link its proposed remedies to the causes of unemployment. Thus the report does not mention seasonal unemployment or ways of dealing with it. It does not mention the loss of exports by some industries or the policies needed for coping with this source of unemployment. It does not distinguish cyclical unemployment from other types or indicate how public policy for dealing with recessions should be improved. On the other hand, the report puts heavy emphasis on public works and seems to suggest that this kind of governmental spending is a good remedy for unemployment regardless of its cause. Unhappily, public works are poorly suited for dealing with mild recessions or with local pockets of chronic unemployment.

3. Most recommendations of the report are couched in such vague language that they may mean much or little, depending on how they are interpreted. But if experience is any guide, neither the vagueness of language nor the surrounding qualifications will prevent articulate groups of our society from claiming the authority of this Committee for programs that could prove damaging to our economy. If all or most of the recommendations were implemented fairly promptly and on a liberal scale, both employer costs of production and governmental outlays would rise substantially. The report passes over lightly the question of how such increases would affect business profits or the Federal budget or the general price level. I find this question very troublesome at the present time. The deterioration of profit margins during the past decade is already a serious obstacle to achieving a high rate of economic growth. The protracted rise of the price level has already put severe pressure on our balance of international payments. This year's projected rise of Federal cash outlays already exceeds the increase of any peacetime year in our history and, the international situation being what it is, military expenditures may soon need to be still larger. In view of these facts, unless great caution is exercised in pursuing programs that raise costs of production or public outlays, we may find that economic growth is curbed, that confidence in the dollar is weakened, and that our international political position is undermined.

4. Apart from these dangers, the report fails to analyze how its recommendations would affect the volume of unemployment itself. The report seems to call not only for liberalizing the unemployment insurance system, but also for extending private supplements to unemployment insurance, for providing public subsistence payments to workers who undergo retraining, for lowering the age at which displaced workers can qualify for social security, and for using public funds to aid unemployed workers in moving to areas where jobs can be found. I deem it a duty to point out that if all these measures were adopted in quick order and on a substantial scale, some individuals who now are outside the labor force will see an advantage in entering it, while there will be others who, having quit or lost their jobs,

will be tempted to take more time in settling on new ones. In other words, unless great care and caution are exercised in implementing the Committee's recommendations, the end result may well be the social misfortune of permanently higher unemployment.

5. In large part, the shortcomings of the report are traceable to the pessimistic assumption on which it seems to proceed—namely, that there is a serious possibility that our Nation's economic progress will prove insufficient to provide jobs for all those who are able and eager to work. I have greater faith in our Nation's future. A tremendous expansion of prosperity lies within our power. The degree to which we attain it will mainly depend, first, on how much work people care to do, second, on how productive they wish to be, third, on how earnestly we pursue public policies to stimulate new, creative, and more efficient economic activities by business enterprises. If the report had started from this broad but fundamental premise, it would have dealt more constructively with the economic and human problem of unemployment.

Dissent by Henry Ford II

I share wholeheartedly the concern over unemployment expressed in this report, and I applaud this Committee's desire both to speed industrial progress and to spread its human benefits more widely. Few things are as costly to our Nation, or as crushing to the human spirit, as lack of work for those who are willing and able to work. Because I hold these views so strongly, I feel compelled to state my belief that this report does not really get to the heart of the matter.

Its major premise is the assumption that automation and technological advance are in and of themselves significant causes of unemployment—an assumption that neither history nor an analysis of current unemployment supports. Technological advance has been with us for many generations. But, popular beliefs to the contrary, technological advance has not been accelerating.

Moreover, the factual evidence strongly indicates that, while automation displaces some individuals from the jobs they have held, its overall effect is to increase income and expand job opportunities. History teaches us that, by and large,

workers displaced by technological advance have moved rapidly into other employment, ultimately to better paying jobs. This is why we have had rising personal incomes rather than mass unemployment as new technology has come into use and productivity has increased.

As Solomon Fabricant has recently pointed out (in his introduction to John W. Kendrick's *Productivity Trends in the United States*):

Better-than-average increases in output were usually accompanied by better-than-average increases in employment of workers and tangible capital, despite the more rapid rise in productivity. Correspondingly, less-than-average increases in productivity were usually accompanied by less-than-average increases (or even decreases) in output and in the use of labor and capital resources. . . . No one concerned with the rise and fall of industries, or—to single out a currently discussed problem—with the effects of "automation" on employment, may ignore these basic facts.

When the economy is prosperous, displaced workers quickly find new employment. This is illustrated by the movement of workers off farms and into industrial employment when times are good, and the slowdown in this movement when times are bad.

The Committee has recognized that the general problem of unemployment is the key problem, but its recommendations are concerned mainly with the important but secondary matters of retraining and mobility. A good employment service and unemployment compensation facilitate the transfer from one job to another, but these measures, even if accompanied by massive retraining, relief, and other social programs, will scarcely make a dent in unemployment when economic conditions are poor. If, therefore, we would help persons displaced by technological advance, we must focus our attention not on relief or even training—though these, properly conceived and administered, will help—but on creating new jobs for people who seek them and can perform in them.

When wages rise faster than productivity in the economy, costs will rise and then either prices will go up or profits will come down—or both will happen. If profits come down, then incentive to save and to invest savings in new, job-creating plants, enterprises, and industries must suffer. Moreover, unless inflationary measures are taken

to support the higher wage, cost, and price levels, demand will not be adequate to maintain production and employment. And, when the integrity of the dollar is at stake, inflationary measures cannot be taken without calamitous results.

We must find ways consistent with a free economy to keep wages and other costs from causing either unemployment or inflation.

I regret that the report does not make this focal problem the primary target of its comments and recommendations. For, when we have found and placed in operation those policies and practices that can keep costs from rising and forcing us into either unemployment or inflation, we will have done much more than could be accomplished by all other measures combined.

The recommendations in this report are concerned mainly with ways of preventing and relieving technological displacement. I personally endorse many of them and the company with which I am associated has long followed practices similar to many of those recommended in the report. Nevertheless, I have the following general reservations about the character of the recommendations:

First, they cannot solve the problem of mass unemployment because they are directed primarily at helping people to find jobs—not at the basic need for more jobs.

Second, the massive program of public and private actions called for may have unexpected consequences that the Committee has not been able to evaluate. Indeed, I believe that the knowledge and experience necessary to evaluate this sweeping program do not now exist, and that it is, therefore, inappropriate and unwise for this Committee to place its stamp of approval upon such a program. For example, greatly expanded Federal assistance could very well destroy incentives that stimulate private economic activity and generate individual initiative.

Third, the endorsement of comprehensive, economywide programs in very general terms diverts attention from and complicates the search for carefully selected measures to meet particular

problems. For example, I believe that the main result of a large-scale, nationwide program to retrain the unemployed might be to impede the development of useful local programs carefully tailored to existing job opportunities and the needs and abilities of individuals.

In addition to these general reservations, I have misgivings about some of the specific recommendations. With respect to unemployment compensation, I believe that duration, coverage, and amount of benefits must be increased where they are inadequate. In addition, safeguards to protect against abuses should be strengthened. I do not endorse Federal standards, but believe the States should continue with responsibility for fitting their particular systems to their own conditions and needs.

I agree that in the main the recommendations for improving our school systems are good. In many areas and localities, however, the most urgent need is not more money but greater public concern with what is taught in our schools.

Arbitrarily shortening the workweek in order to decrease unemployment would be a confession of defeat. Not only a poor remedy, it is also a harmful one; for it would retard the growth needed for the safety and welfare of our Nation at this point in its history. We can and should look forward to normal increases in our leisure time, but they must come as our growing economy can afford them and not as expedient solutions to unemployment problems.

In summary, I find some things in this report of which I approve, and much of which I disapprove. Its goal of making certain that high employment accompany technological improvement and increasing efficiency has my full support. However, I believe that the general direction of its recommendations is not well calculated to achieve this goal. I believe, too, that the report's basic assumption concerning the relationship between technological advance and unemployment is in error. Therefore, I feel it necessary to say, with reluctance, that I cannot concur in the report.

Workmen's Compensation Laws and Employment of the Handicapped

DESPITE significant achievements in the rehabilitation and job placement of persons with serious physical impairments, many employers are still reluctant to hire handicapped workers. One reason frequently advanced is the fear of increased workmen's compensation costs, should a subsequent injury result in a serious compounded disability. To find the extent of this fear and whether it is justified, the Bureau of Labor Standards undertook a special study¹ in 1960. It consisted of a questionnaire survey of manufacturing employers in six States, supplemented by several other surveys and an analysis of certain features of State workmen's compensation laws.

One of the major findings of the questionnaire survey was that nearly three-fifths of the employers were unwilling to hire workers with certain physical impairments. Of the six types of disabilities listed on the questionnaire, the employers showed least reluctance to hire persons with eye disabilities, limb or other orthopedic disabilities, and heart or circulation ailments, and the greatest reluctance to hire persons with epilepsy, dust diseases or other lung ailments, and back ailments.

Less than one-tenth of the manufacturers, however, gave fear of increased workmen's compensation costs as the principal reason for their position. Other factors, such as "work too heavy or dangerous" and "too many operations required," were mentioned much more frequently. Whatever the reason given, many employers, especially in small firms, mistakenly thought that hiring handicapped workers would increase their workmen's compensation premiums. Concern over costs was also evident in the replies of a substantial number who said they would hire the handicapped if they were assured that their workmen's compensation liability would be limited to the part of the worker's disability that might result from a subsequent injury. Even in States with broad-coverage subsequent injury funds, some employers gave such a reply, perhaps because they either did not understand the law or believed that it gave them inadequate

protection owing to limitations on its operation.

The Questionnaire Survey

Scope and Method. The questionnaire, *Employer Reaction on Employment of Qualified Persons with Physical Impairments*, was mailed to 2,946 manufacturing employers in six States. The States were selected partly on the basis of geographical distribution and industrial diversity, but primarily on the basis of the type of provision, if any, for a subsequent injury fund in their workmen's compensation law. Two of the States (Florida and Missouri) have broad-coverage subsequent injury fund provisions which apply to any previous permanent disability; two (Colorado and Illinois) have narrow-coverage provisions, limited to workers who have previously suffered the loss, or loss of use, of a member of the body; and the other two (Louisiana and Virginia) do not have subsequent injury funds.

A sample of manufacturing employers in these States was selected to represent eight size groups,² approximately in accordance with the actual distribution of manufacturing plants in the respective States. While the responses are believed to represent the attitudes of manufacturing employers in general, a survey among employers in other industries such as the retail or service trades might have produced different results.

Replies were received from 1,221 (41.4 percent) of the employers.³ These data were combined for the various size groups by weighting the reports from each establishment in proportion to the probability of its selection.

For purposes of the survey, physical impairment was defined as "any permanent condition due to previous accident or disease or any congenital condition which is or is likely to be a hindrance or obstacle to employment." Thus the physically handicapped, as considered in the study, included orthopedics, cardiacs, epileptics, silicotics, and persons with serious visual defects.

Findings of the Survey. Physically impaired employees constituted 4.7 percent of all employees of the reporting plants. Only 1.8 percent had been physically impaired when first employed. It thus appears that over three-fifths of the handicapped workers in these plants incurred their impairments after they were hired. Such reemployment of their

¹ This article summarizes Bureau of Labor Standards Bull. 234, *Workmen's Compensation and the Physically Handicapped Worker* (1961).

² The groups ranged in size from firms with fewer than 10 employees to those with more than 1,000.

³ Since resources did not permit a followup of nonrespondents, no test could be made for potential nonresponse bias.

own job-injured workers appeared to be more widely practiced among the employers with more than 500 workers than among smaller plants.

The extent of the fear of increased workmen's compensation costs as a bar to hiring the handicapped is shown by an analysis of the answers to two questions. One of these questions was: Would your company employ a qualified person with any of the six specified disabilities? To this, 57 percent answered "no" and 20 percent, "yes" (the remaining employers either answered "don't know" or did not reply). The employers showed considerably more willingness to hire qualified applicants with a limb or eye loss than those with any of the other listed disabilities. The average of affirmative answers with respect to hiring the former was 36 percent. Heart and circulatory ailments came next in five of the six States, with an average of 24 percent favorable responses, followed closely by "other orthopedic disability," with 22 percent. On the other hand, back ailments (17 percent), dust diseases or other lung ailments (15 percent), and epilepsy (9 percent) ranked below the average for all disabilities combined in each of the six States.

Among those who cited reasons for their unwillingness to employ handicapped persons, less than 10 percent specifically indicated fear of risking an increase in their workmen's compensation costs. The major reasons offered by the responding employers were that the work was too dangerous or too strenuous, or both, or required too many physical operations. For instance, 62 percent of the employers in Florida mentioned one or more of the latter reasons but only 7 percent mentioned fear of increased workmen's compensation costs. Among other reasons cited were unsuitability of other work or plant conditions, plant policy, seniority provisions, availability of able-bodied applicants, and too rigid physical examinations.

Some of those who said the work was too heavy or too dangerous may have been concerned also about increased workmen's compensation costs. Evidence of this concern is revealed by the responses to the second question, directed only to those who said they were unwilling to hire the handicapped: "If the workmen's compensation law applicable to your operations carried a provision making you liable only for the payment of compensation for that percentage of disability caused by your employment, would you hire

him?" Of such employers, 23 percent answered "yes" and 23 percent said "no" (34 percent said "don't know" and 20 percent failed to answer). In other words, nearly one-fourth of the employers who were unwilling to hire persons with certain impairments stated that they would be willing to do so if their workmen's compensation liability in subsequent injury cases were limited. On the other hand, just as many said they would still be unwilling to hire handicapped workers and an even larger group of employers were in doubt whether they would do so.

Nevertheless, it is significant that the two States (Colorado and Illinois) with narrow-coverage subsequent injury fund provisions accounted for the two highest percentages of "yes" answers; the two intermediate percentages were in the two States (Louisiana and Virginia) with no such special fund, and the two lowest in the States (Missouri and Florida) that have broad-coverage funds. It is easy to understand the interest of employers in the States with narrow-coverage subsequent injury funds or no funds in an amendment to their workmen's compensation law which would limit their liability in second injury cases. On the other hand, why should 14 percent of the manufacturing employers in Florida and 19 percent of those in Missouri—States already having broad-coverage funds—indicate that such a provision would make them willing to hire handicapped persons? The most likely explanation is that they are either unaware of or do not understand the protection offered by the subsequent injury fund and other provisions of the laws.

This lack of information and understanding about the law is shown in the replies to a question whether the firms carried workmen's compensation insurance, and if so, whether they were subject to experience rating. (Under experience rating, the employer's premium is based on his own loss experience.) A surprisingly high percentage of employers in the smallest size group, those with fewer than 10 employees, indicated that their workmen's compensation insurance premium rates were subject to experience rating. The percentage ranged from 46.2 percent in Virginia to 77.7 percent in Missouri. Actually, only rarely would such small employers be eligible for experience rating, and then only in extrahazardous occupations.

Analysis of the responses revealed no single, consistent pattern, either by type of workmen's

compensation law (or subsequent injury fund provision) or by size of establishment. Other factors appear to be more important; for example, effectiveness of rehabilitation programs; efforts at selective placement by the Employment Service; publicity given to subsequent injury fund provisions; reports of court decisions in cases involving handicapped workers, allegedly unfavorable to employers; and relative activity of Governors' Committees on Employment of the Physically Handicapped.

Supplemental Surveys

As another part of the special study conducted by the Bureau of Labor Standards in 1960, the President's Committee on Employment of the Physically Handicapped agreed to cooperate in several studies of employer attitudes and experience. One of these involved a followup of an earlier study conducted by the President's Committee through affiliated Governor's Committees.⁴ That survey had indicated that more than 80 percent of the reports from the Governor's Committees cited fear by employers that workmen's compensation rates would go up if handicapped were hired, as one reason for their reluctance to hire handicapped workers. It added, however, that in States like New York and Wisconsin, which have broad-coverage subsequent injury fund provisions, there was less concern over compensation rates.

The 1960 followup on this study showed that employers' attitudes for the most part had changed very little. Several States, however, no longer cited the fear of increased workmen's compensation costs as a chief deterrent. Moreover, they specifically referred to the effectiveness of many informational media through which the President's Committee has emphasized the selective placement of physically impaired employables on the basis of their abilities rather than their disabilities.

Other surveys were conducted, in cooperation with the President's Committee in 1960, among employers specializing in employment of handicapped workers, employer members of the Presi-

dent's Committee, associations of insurance agents, Goodwill Industries, the Veterans Administration, and the Veterans Employment Service. These supplemental surveys emphasized the lack of information on the part of many respondents regarding the many interrelated factors involved in determining the relative costs under the various State workmen's compensation laws, particularly the methods by which insurance premium rates are determined. The surveys also point to the need for more extensive specialized services in local public employment service offices, aimed at the selective placement into suitable jobs of handicapped applicants.

Workmen's Compensation Costs

Premium Rates. The Bureau of Labor Standards also analyzed the State workmen's compensation system, the method of determining insurance premium rates, and the subsequent injury fund provisions in State workmen's compensation laws. This analysis emphasized that about 75 percent of all employers in the country do not qualify for experience rating and therefore pay according to the basic (or manual) rate. Nor is the basic premium rate adjusted for such factors as the number of handicapped employees or the physical condition or age of employees, so the rate could not rise because employers hired handicapped workers or because the handicapped workers on the payroll became further disabled.

If an employer's total annual premium exceeds a specified amount (ranging from \$50 to \$1,600 in the various States), it must be based upon one or another of several experience-rating plans. Under these plans, the determination of rates gives greater weight to the frequency of accidents than to their severity. Previous studies⁵ have indicated that the frequency of accidents is no greater among handicapped workers than among the nonhandicapped. Moreover, even under experience rating, the determination of premium rates is related to the hazards of the industry and the actual accident experience of the individual company, not to the type of persons employed.

Subsequent-Injury Funds. One eventuality involving the physically impaired could affect the workmen's compensation costs of an employer subject to experience rating, especially retrospec-

⁴ *Employer Resistance To Hiring The Handicapped, A Survey Summary Based on Replies From 37 States and Territories* (Washington, D.C., 1956).

⁵ See "Impaired Workers in Industry," *Monthly Labor Review*, October 1944, pp. 677-683; *The Performance of Physically Impaired Workers in Manufacturing Industries*, BLS Bull. 923, 1948.

tive rating,⁶ or those of a self-insurer. This is the possibility that a given injury might cause a substantially greater degree of disability for a worker who already has one impairment than for a worker not previously disabled. Nearly all States have amended their workmen's compensation statutes to make special provision for dealing with this problem. The solution which has found most general acceptance, as being fair to employers and employees alike, is the establishment (in all but four States) of second or subsequent injury funds within the workmen's compensation system. These funds limit the employer's liability to the compensation payable for the subsequent injury considered by itself and pay the employee the difference between that amount and what he would have received for his resulting condition if there had been no prior disability.

The effectiveness of the subsequent injury fund provisions in encouraging the employment of handicapped workers has been materially reduced in most States by various limitations. The majority of States restrict coverage to cases where the prior disability was the loss of a member (leg, foot, arm, hand) or an eye. Even where the coverage of prior disabilities is broader, the fund provisions of some States are inoperative unless the combined effect of the prior and the subsequent disabilities is permanent total disability. The provisions of most States, in other words, are applicable in only an extremely small proportion of cases involving handicapped workers, inasmuch as very few work injuries cause the loss of a member and only about 0.1 percent of all injuries result in permanent total disability.

But the role of these special funds, while limited, is essential. Where there is such a fund, the employee is more likely to be fully compensated and the cost is not borne entirely by his present employer. The result is a removal of some barriers to the employment of the handicapped. To be fully effective, however, these funds must be adequately financed and their purpose must be made known to employers through a widespread, continuing publicity program.

—LLOYD W. LARSON

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⁶ Retrospective rating is a special form of experience rating available only to employers paying more than \$1,000 in annual premiums. Essentially, it provides for determining the employer's rate by basing it upon losses of the current insurance period rather than upon the losses of previous years.

Multiemployer Pension Plans Under Collective Bargaining—Pt. II

EDITOR'S NOTE.—*The following article was adapted from a chapter of a report to be published by the Bureau of Labor Statistics on pension plans which have been negotiated between unions and multiemployer groups. Part I, covering prevalence and selected characteristics, appeared in the October issue of the Review (pp. 1092-1099).*

THE PLANNING and development of benefits to be provided by multiemployer pension plans under collective bargaining are usually the exclusive responsibilities of joint employer-union boards, as authorized by the trust agreements. In such cases, after the employers' group and the union(s) have negotiated the rate of contribution for financing benefits, the boards determine the benefits to be provided. Major changes in plan provisions are also worked out by the boards. Clauses similar to the following, giving a board power to formulate plan provisions, appear in most multiemployer pension plans.

To establish a plan . . . which shall define the retirement benefits to be provided by the employer contributions, the conditions of eligibility for such benefits, the terms of payment, and such other items as the trustees shall deem it necessary to include. The aforesaid terms of the plan shall be determined by the trustees in their sole discretion on the basis of actuarial principles, and shall be subject to change by the trustees retroactively or otherwise from time to time.

In contrast, establishment and amendment of the level of benefits and other terms of single employer plans are negotiated directly by the employer and the union, along with wage and other fringe benefit issues, typically under the pressure of contract termination. By shifting the negotiation of benefits from the bargaining table to the calmer, less hurried atmosphere of the board room, multiemployer plan trustees are provided an opportunity to act as trustees rather than as partisan union or management representatives facing the tensions of collective bargaining. In such circumstances, the judgment and cost estimates of actuaries (or insurers) can be more carefully considered.

Although the basic purposes of multiemployer pension plans are similar to those of single employer plans, significant differences exist between them which reflect in part differences in labor markets, industries, and bargaining structures.¹ Vesting and early retirement provisions, for example, are more prevalent in single employer plans; however, the transferability of credited service among participating employers—a built-in feature of multiemployer plans—probably accomplishes as much as vesting for workers remaining within the scope of the plan. Multiemployer plans usually gear benefit amounts solely to credited service; single employer plans more often relate them to both earnings and service. Payment of cash (lump sum or installments) in lieu of periodic pension benefits is more often found in multiemployer than single employer plans. Unlike many single employer pension plans that directly reduce benefits by all or part of a worker's social security benefits or use a more liberal benefit formula for earnings above than for those below the social security taxable wage base (currently \$4,800 a year), multiemployer plans rarely take social security benefits so explicitly into account.

The participation requirements of multiemployer plans and their major benefit provisions—normal, early, and disability retirement provisions and vesting—are described in this article. Certain other benefits, such as death benefits (including widow's benefits) and lump-sum distributions, are also covered. The normal retire-

ment provisions, upon which most other benefit provisions depend, are analyzed in detail, and benefits under assumed conditions are computed. All tabulations relate to 736 of the 798 plans in effect in spring 1960 for which plan benefits were formulated.²

Participation Requirements

For a worker to participate in or to be covered by the plan, most multiemployer pension plans simply required that he be on the payroll of a contributing employer in a unit covered by the collective bargaining agreement.³ If the agreement provides for a union shop, which is typical among multiemployer agreements outside right-to-work States,⁴ all participating employees would thus be union members. Only a seventh of the plans, however, covering less than a tenth of the workers, specifically required union membership for participation. One plan, for example, stated that "Employee means any dues-paying member of the union."⁵ Some plans appended the following explanation which can be generally applied to all plans with such requirements:

So that no misunderstanding may arise with reference to the above definition of the term "employee" in relation to any provisions of the Labor Management Relations Act of 1947, as amended, it is a requirement under the terms of the collective bargaining agreements between participating companies and the union, and it is and always has been the practice of the union, that the union admit into its membership all employees of the participating companies after their 30th day of employment, without discrimination whatsoever, with the exception of those persons to whom reapplication for membership may be denied under said act. Therefore, since there could not be any person against whom discrimination could be exercised within the provisions of said act, the definition of employee as herein stated is considered to be the best terminology for the intent and purposes of coverage and administration under this pension plan.

Age and service participation requirements were included in only 19 plans, covering 66,000 workers (table 1), mainly in the metalworking and trade industries. Age requirements ranged from 22 to 40 years and minimum service requirements from 1 (most common) to 5 years.

Normal Retirement Provisions

Normal retirement provisions, a feature of virtually all pension plans, specify the age at which a qualified worker would normally be

¹ References to negotiated single employer plans are based on a series of Bureau of Labor Statistics studies published in the following bulletins: *Pension Plans Under Collective Bargaining: Part I. Vesting Provisions and Requirements for Early Retirement; Part II. Involuntary Retirement Provisions, Late 1958* (BLS Bull. 1259, 1959); *Pension Plans Under Collective Bargaining: Normal Retirement; Early and Disability Retirement, Fall 1959* (BLS Bull. 1284, 1961); and *Pension Plans Under Collective Bargaining: Survivors Benefits, December 1960* (a forthcoming bulletin).

Although these studies were based on a selection of 300 plans, each covering at least 1,000 workers, it is believed that the coverage adequately represents single employer plans (231 of the 300) under collective bargaining, particularly in terms of workers covered, for the type of comparisons made in this article.

² See *Monthly Labor Review*, October 1961, p. 1092.

³ Generally, the individual participating employer cannot voluntarily include additional employees (supervisors, clerical, etc.) outside the bargaining unit. However, many plans do extend plan coverage to officers and employees of the participating local union(s).

⁴ See *Union Security and Checkoff Provisions in Major Union Contracts, 1958-59* (BLS Bull. 1272, 1960). A union shop clause requires all employees in the bargaining unit, as a condition of employment, to be or become union members within a specified time after hiring.

⁵ The absence of such clauses from most plans may stem from the prohibition against discrimination in the Labor Management Relations (Taft-Hartley) Act. The National Labor Relations Board has held in several cases involving illegal union security arrangements that pension plan clauses restricting payment of benefits to union members only were illegal.

TABLE 1. MINIMUM AGE AND SERVICE PARTICIPATION REQUIREMENTS IN MULTIEMPLOYER PENSION PLANS UNDER COLLECTIVE BARGAINING, SPRING 1960

Participation requirement	Plans	Workers ¹ (thousands)
All plans.....	736	3,229.8
No age or service requirements.....	686	3,133.0
With requirements.....	19	65.9
Age.....	4	52.8
Service.....	10	11.3
Age and service.....	5	1.7
Information not available.....	31	31.0

¹ Worker coverage includes both active and retired workers in 1959.

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

expected to retire, the formula to be used to compute retirement income or the amount if a uniform benefit is paid, and the conditions and duration of benefit payment. The normal retirement age as stipulated in pension plans is not necessarily the age of actual retirement; it is, technically, the earliest age at which a worker having otherwise qualified for benefits, may retire of his own accord and receive immediately the full amount of benefits to which he is entitled. Most plans also require the fulfillment of a specified period of credited service with one or more of the employers participating in the plan.

Age. The normal retirement age in all but 33 plans was 65, the youngest age at which full social security old-age benefits are payable; 24 had ages below 65, and 9, above. Although only 20 plans permitted workers to retire on full benefits at age 60, they covered over 15 percent of the workers; in this group were several large plans in the coal mining and motor transportation industries. All but two plans with a normal age other than 65 were self-insured.

Benefit Formulas. The pension formulas in multiemployer plans do not exhibit the wide diversity found in single employer plans. Most can be classified into two basic types: (a) a flat or uniform benefit for all workers who fulfill specified service requirements or (b) benefits which varied by length of service alone. Formulas in which benefits varied by earnings and service, commonly found in single employer plans, were used by few multiemployer plans.

A fourth of the plans, with almost half of the workers under multiemployer plans, stipulated

uniform benefit formulas, as contrasted with a small fraction of negotiated single employer plans (table 2). Uniform benefits were found mainly in the apparel, mining, and water transportation industries. The vast majority of these plans were self-insured.

Formulas in which benefits varied by length of service alone were found in over 60 percent of the plans, with 40 percent of the workers, as compared to about a third of single employer plans. This type of formula was most common in the food, printing, metalworking, construction, trade, and service industries. Three-fourths of the insured plans and almost three fifths of the self-insured plans had this type of formula.

In 24 plans, benefits were expressed as a percentage of the employer contributions made for each worker—a formula rarely used in single employer plans. These plans were significant in the motor transportation industry. In 13 of these plans, contributions were on a time worked basis, hence benefits were indirectly related to service. Two plans based contributions on individual earnings, thus benefits were indirectly related to both earnings and service. The contributions and the underlying basis of benefits in the remaining plans were not available. Since contributions are often closely related to hours worked, benefits under all 24 plans are more apt to be affected by short breaks in service than are benefits under formulas directly related to service, which usually credit service annually or quarterly.

Twenty-three plans, found mainly in the construction industry, did not contain a specific benefit formula in the pension plan document. Benefits were usually determined by the amount accumulated in a worker's individual account at the time of retirement. Most of the plans paid only lump-sum cash benefits. Since contribution rates were based on time worked, benefits were generally proportionate to service. Usually these plans were self-insured.

Form of Payments. Pension payments were to stop upon the death of the pensioner (payment for life, only) in 80 percent of the multiemployer plans covering almost 90 percent of the workers. Virtually all the remaining plans also provided lifetime benefits and made additional guarantees. Eleven percent (82) of the plans, with almost 9 percent of the workers, mainly in the food and

construction industries, promised that if the worker died before receiving a guaranteed number of pension payments, the remaining payments would be continued to his beneficiary, usually his widow. Such guarantees were included in about the same proportion of insured and self-insured plans. Although the length of the guarantee ranged from 1 to 15 years, it was rarely less than 3 years and usually ran for either 3 years (35 plans) or 5 years (30 plans).

Fourteen of the thirty jointly financed plans promised to make a sufficient number of payments to the worker and, after his death, to return to his beneficiary at least his contributions, with or without interest. Two plans provided that if total payments were less than the cost of the benefit at retirement, the balance would be paid to a beneficiary.

Amount of Benefit. In order to evaluate multi-employer plans in terms of the amount of normal retirement benefit provided, the monthly amount

of benefits was computed for each plan, where possible, under the following assumed conditions: (1) Retirement at age 65 (except for nine plans specifying a higher age); (2) an annual earnings level of \$4,800, assumed to be constant throughout the worker's career; (3) future service credits of 30 years. Since few of these plans have distinctly different past and future service benefits, the amounts computed may, in general, apply to workers retiring at the present time.

No benefit amount could be computed for 69 plans covering 89,500 workers either because they had no benefit formula or sufficient information was not available.

Monthly benefit amounts thus computed ranged from \$10 to \$230. Almost a fourth of the plans covering about the same proportion of workers provided between \$50 and \$60 a month (table 3). The average benefit paid by these plans amounted to \$68.34, influenced by a substantial number of workers in plans paying \$100 or more. If the maximum primary social security benefits of \$127⁶ are added to plan benefits, total monthly retirement income would range from \$137 to \$357. The average for all workers would increase to \$195.34, representing almost half (48.8 percent)

TABLE 2. TYPES OF BENEFIT FORMULAS IN MULTIEMPLOYER PENSION PLANS UNDER COLLECTIVE BARGAINING, BY INDUSTRY, SPRING 1960

[Workers in thousands]

Industry	All plans		Flat benefit for specified service		Benefits vary by service alone		Benefits vary by earnings and service		Benefits are a percent of employer contribution		Other formulas		No specific formula		Information not available	
	Number	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹
All industries.....	736	3,229.8	188	1,563.9	455	1,267.6	6	58.4	24	270.8	9	14.2	23	23.9	31	31.0
Manufacturing.....	270	1,239.6	92	817.9	146	352.2	3	42.9	4	3.3	6	11.7	8	5.0	11	6.5
Food and kindred products.....	84	226.8	2	0.8	74	214.5	-----	-----	2	1.1	4	10.0	1	0.1	1	0.3
Apparel and other finished textile products.....	78	772.9	60	745.8	7	24.1	-----	-----	-----	-----	1	.3	3	.7	7	1.9
Printing, publishing, and allied industries.....	53	63.0	13	17.7	36	41.6	1	.3	1	2.0	1	1.4	-----	-----	1	(2)
Leather and leather products.....	6	24.2	1	1.8	4	21.7	-----	-----	-----	-----	-----	-----	1	.7	-----	-----
Metalworking.....	27	55.7	6	13.6	16	34.5	-----	-----	1	.3	-----	-----	2	3.1	2	4.3
Miscellaneous manufacturing.....	22	97.0	10	38.2	9	15.8	2	42.6	-----	-----	-----	-----	1	.4	-----	-----
Nonmanufacturing.....	454	1,969.1	96	746.0	298	895.1	3	15.5	19	266.7	3	2.6	15	18.8	20	24.5
Mining.....	4	295.4	2	294.6	2	0.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Contract construction.....	232	612.0	16	28.6	183	519.2	1	2.2	8	28.0	2	1.7	11	17.2	11	15.1
Motor transportation.....	46	498.9	11	192.2	30	91.0	-----	-----	4	215.0	-----	-----	-----	-----	1	.7
Water transportation.....	41	147.6	26	92.0	14	53.6	-----	-----	-----	-----	-----	-----	-----	-----	1	2.0
Wholesale and retail trade.....	89	295.8	23	93.2	44	170.9	1	7.2	5	15.6	1	.9	3	1.3	7	6.7
Services.....	25	67.9	7	11.6	15	47.9	-----	-----	2	8.1	-----	-----	1	.3	-----	-----
Motion pictures and recreation.....	14	49.5	4	32.5	9	10.9	1	6.1	-----	-----	-----	-----	-----	-----	-----	-----
Miscellaneous nonmanufacturing.....	3	2.1	2	1.3	1	.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Interindustry manufacturing and nonmanufacturing.....	12	21.0	-----	-----	11	20.2	-----	-----	1	.8	-----	-----	-----	-----	-----	-----

¹ Worker coverage includes both active and retired workers in 1959.

² Fewer than 50 workers.

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

TABLE 3. NORMAL RETIREMENT MONTHLY BENEFITS, EXCLUDING SOCIAL SECURITY, FOR WORKERS EARNING \$4,800 PER YEAR FOR 30 YEARS OF FUTURE CREDITED SERVICE, BY INDUSTRY, IN MULTIEMPLOYER PENSION PLANS UNDER COLLECTIVE BARGAINING, SPRING 1960

[Workers in thousands]

Industry	All plans		Under \$30 ²		\$30 and under \$40		\$40 and under \$50		\$50 and under \$60		\$60 and under \$70		\$70 and under \$80	
	Number	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹
All industries.....	736	3,229.8	40	208.0	84	137.3	87	347.8	169	824.9	96	324.1	67	382.6
Manufacturing.....	270	1,239.6	12	32.1	29	41.9	37	256.4	73	589.2	40	99.1	19	36.1
Food and kindred products.....	84	226.8	2	1.0	4	3.3	8	12.8	10	9.9	21	32.6	7	8.9
Apparel and other finished textile products.....	78	772.9	5	12.2	11	9.9	12	169.2	35	533.7	2	44.1	1	.4
Printing, publishing, and allied industries.....	53	63.0	3	4.4	8	12.2	8	6.9	11	12.8	11	14.7	5	8.2
Leather and leather products.....	6	24.2	-----	-----	3	13.1	1	8.6	1	1.8	-----	-----	-----	-----
Metalworking.....	27	55.7	-----	-----	-----	-----	3	2.4	8	16.8	5	6.7	5	17.7
Miscellaneous manufacturing.....	22	97.0	2	14.5	3	3.4	5	56.6	8	14.3	1	.9	1	.9
Nonmanufacturing.....	454	1,969.1	27	175.5	54	94.4	49	90.6	94	229.6	54	222.6	44	338.0
Mining.....	4	295.4	-----	-----	-----	-----	-----	-----	2	43.4	1	10.3	-----	-----
Contract construction.....	232	612.0	7	126.9	27	20.7	31	31.3	48	83.7	37	151.9	22	87.9
Motor transportation.....	46	498.9	3	6.2	3	2.5	2	2.6	8	20.1	2	1.2	5	199.3
Water transportation.....	41	147.6	7	5.4	6	3.6	4	2.1	4	23.4	5	36.9	1	.3
Wholesale and retail trade.....	89	295.8	3	2.5	11	46.8	8	15.8	23	52.4	6	29.1	12	44.9
Services.....	25	67.9	5	4.3	4	15.8	2	35.1	6	5.8	2	1.1	2	4.3
Motion pictures and recreation.....	14	49.5	1	30.0	2	4.3	2	3.7	3	.7	1	2.0	1	.2
Miscellaneous nonmanufacturing.....	3	2.1	1	.2	1	.8	-----	-----	-----	-----	-----	-----	1	1.1
Interindustry manufacturing and nonmanufacturing.....	12	21.0	1	.4	1	1.0	1	.8	2	6.0	2	2.4	4	8.6

Industry	\$80 and under \$90		\$90 and under \$100		\$100 and under \$110		\$110 and under \$120		\$120 and under \$130		\$130 and over ³		Benefits not computed ⁴	
	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹	Plans	Workers ¹
All industries.....	8	31.7	28	79.9	50	535.0	11	20.4	14	39.2	13	209.5	69	89.5
Manufacturing.....	2	6.2	5	11.4	18	116.2	8	14.8	3	20.8	-----	-----	24	15.4
Food and kindred products.....	1	6.1	2	6.0	15	109.2	8	14.8	3	20.8	-----	-----	3	1.5
Apparel and other finished textile products.....	-----	-----	-----	-----	1	.5	-----	-----	-----	-----	-----	-----	11	3.0
Printing, publishing, and allied industries.....	1	(⁵)	1	.7	1	.5	-----	-----	-----	-----	-----	-----	4	2.5
Leather and leather products.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1	.7
Metalworking.....	-----	-----	2	4.6	1	6.0	-----	-----	-----	-----	-----	-----	4	7.4
Miscellaneous manufacturing.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1	.4
Nonmanufacturing.....	6	25.5	23	68.6	32	418.8	3	5.6	10	16.6	13	209.5	45	74.0
Mining.....	-----	-----	-----	-----	1	251.6	-----	-----	-----	-----	-----	-----	-----	-----
Contract construction.....	2	2.5	14	26.9	9	15.9	1	1.3	6	6.6	1	1.7	27	54.9
Motor transportation.....	2	7.9	⁶ 4	30.0	5	21.5	2	4.3	3	9.6	⁷ 6	193.0	1	.7
Water transportation.....	-----	-----	-----	-----	6	57.4	-----	-----	1	.4	5	12.9	2	5.2
Wholesale and retail trade.....	1	9.0	4	11.5	7	70.9	-----	-----	-----	-----	-----	-----	14	13.0
Services.....	-----	-----	1	.2	2	.9	-----	-----	-----	-----	-----	-----	1	.3
Motion pictures and recreation.....	1	6.1	-----	-----	2	.6	-----	-----	-----	-----	1	1.9	-----	-----
Miscellaneous nonmanufacturing.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Interindustry manufacturing and nonmanufacturing.....	-----	-----	-----	-----	-----	-----	-----	-----	1	1.8	-----	-----	-----	-----

¹ Worker coverage includes both active and retired workers in 1959.

² The smallest benefit was \$10 a month.

³ The largest benefit was \$230 a month.

⁴ Includes 23 plans with 23,900 workers which had no specific benefit and formula; 40 plans with 60,300 workers for which information was not available; and 6 plans with 5,300 workers for which computation of benefit was impossible.

⁵ Fewer than 50 workers.

⁶ Includes 1 plan with 1,000 workers which provided \$90 a month for the first 5 years of retirement and \$25 thereafter.

⁷ Includes 3 plans with 174,500 workers which provided \$135 a month for the first 5 years of retirement and \$70 thereafter, and 1 plan with 3,000 workers which provided \$175 a month for the first 5 years of retirement and \$85 thereafter.

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

of the assumed preretirement earnings level of \$4,800. Plans providing monthly benefit amounts which, when added to maximum primary social security benefits, would equal \$200, or at least half of the worker's preretirement income, were most common in the food, metalworking, construction, motor transportation, and trade industries.

On the average, self-insured plans provided slightly higher monthly benefits than insured plans—\$71.43 and \$67.02, respectively. One out of four self-insured plans (covering 4 out of 10 workers in such plans), as compared with slightly less than 1 out of 4 insured plans (with more than 7 out of 10 workers), provided benefits which, when supplemented by maximum primary social security benefits, amounted to at least half of preretirement earnings.

Benefits averaged a little higher in uniform benefit formulas than those in which the benefit formulas varied by service—\$68.91 and \$66.97, respectively. In part, this differential is attributable to (1) payment of maximum benefits under the service plans after 20 and 25 years of service and (2) inclusion of several large Teamsters plans providing a flat benefit of \$135⁷ a month for only the first 5 years of retirement but a substantially reduced benefit thereafter.

Early and Disability Retirement; Vesting

Multiemployer pension plans, as a group, provide all of the subsidiary benefits found in single employer plans, but with a different emphasis reflecting differences in the nature of the bargaining relationship and the labor market. Slightly more than a fourth of multiemployer plans, covering two-fifths of the workers, provided a normal retirement benefit only (table 4). Another fourth of the plans added a disability retirement provision. The remaining half of all multiemployer plans had different combinations of early and disability retirement and vesting, but only 70

TABLE 4. NUMBER AND PERCENTAGE OF MAJOR BENEFITS PROVIDED IN ADDITION TO NORMAL RETIREMENT BENEFITS IN MULTIEMPLOYER PENSION PLANS UNDER COLLECTIVE BARGAINING, SPRING 1960

Major benefits	Plans		Workers ¹	
	Number	Percent	Number (thousands)	Percent
All plans.....	736	100.0	3,229.8	100.0
No additional benefits.....	202	27.4	1,285.8	39.8
Disability retirement only.....	183	24.9	883.2	27.3
Disability retirement.....	203	27.6	591.3	18.3
And early retirement and vesting.....	70	9.5	194.7	6.0
And early retirement.....	100	13.6	332.5	10.3
And vesting.....	33	4.5	64.1	2.0
Without disability retirement.....	117	15.9	438.6	13.6
With early retirement and vesting.....	40	5.4	124.7	3.9
With early retirement only.....	52	7.1	102.3	3.2
With vesting only.....	25	3.4	211.6	6.6
Information not available.....	31	4.2	31.0	1.0

¹ Worker coverage includes both active and retired workers in 1959.

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

plans covering 195,000 workers provided all three of these major benefits. The construction industry accounted for 31 of the 70 plans, and 52 of the 70 were self-insured.

Early Retirement Provisions. Early retirement, as the term is used in pension plans, means retirement on a reduced benefit before the plan's normal retirement age. The reduction, usually based on actuarial considerations, compensates for the longer period over which benefits will be paid. Although early retirement benefits are always payable immediately on retirement, under some plans the fully qualified worker may choose to defer receiving a benefit until he attains the plan's normal retirement age, when the full benefit is payable. Early retirement is almost always at the option of the worker under multiemployer plans.

Slightly more than a third of the multiemployer plans, covering almost a fourth of the workers, had an early retirement provision applicable to all covered workers, as contrasted with 90 percent of the single employer plans covering 95 percent of the workers.⁸ These provisions were most prevalent in food, printing, metalworking, construction, motor transportation, trade, and service industries

⁷ This benefit was used in the distributions and in the computation of the foregoing averages.

⁸ See Bull. 1284, op. cit.

(table 5). An additional 38 plans, covering 677,000 workers, permitted early retirement for women only, usually at age 62. Seventeen of these plans, accounting for 614,000 workers, were in the apparel industries, where a large majority of employees are women.

The medium of funding (insured or self-insured) appeared to have little or no effect on whether early retirement was provided, perhaps because its inclusion is virtually costless to the plan if the benefit reduction is based on actuarial factors. Although over a third of both self-insured and insured plans provided for early retirement, only 10 percent of the workers covered by insured plans were included.

Disability Retirement Provisions. Disability retirement benefits, when provided, are payable⁹ to totally and permanently disabled workers, provided they meet certain age and/or service requirements. In contrast to early retirement, benefits are often the same as or higher than normal retirement benefits.

Disability benefits were provided by more than half of the multiemployer plans with over 45 percent of the workers, as compared with almost 80 percent of the single employer plans with almost

90 percent of the workers.¹⁰ The provisions were most common in the food, apparel, printing, metalworking, construction, and motor and water transportation industries. Disability pensions were provided by 55 percent of the self-insured plans covering almost half of the workers under self-insured plans, as against 42 percent of the insured plans with about a sixth of the coverage of such plans.¹¹

Vesting Provisions. Vesting is a guarantee to the worker of a right or equity in a pension plan, based on all or part of the employer's contributions made in his behalf (in terms of accrued pension benefits) should his employment or coverage by the plan be terminated before he attains

⁹ Frequently a 6-month waiting period, during which the severity of the disability may be determined, must elapse before benefits are payable.

¹⁰ Plans which paid disability benefits only at age 65 were not counted as providing disability benefits. In these plans, service was credited or frozen after total and permanent disability until age 65, and then the normal benefit was payable. They were found in 17 multiemployer pension plans covering 41,800 workers, primarily in the apparel and service industries.

¹¹ The development of the deposit administration group annuity plan has enabled plan trustees to include disability benefits in the larger insured plans, since possible adverse experience is transferred from the insurer to the fund. Under a deposit administration plan, the insurer's obligations and guarantees are limited to the benefits already purchased. To provide disability benefits under such a plan, the fund may purchase temporary annuities until the disabled worker reaches 65 or is no longer disabled. At 65, the fund purchases the regular annuity from the insurer.

TABLE 5. PROVISIONS FOR EARLY AND DISABILITY RETIREMENT AND VESTING IN MULTIEMPLOYER PENSION PLANS UNDER COLLECTIVE BARGAINING, BY INDUSTRY, SPRING 1960

[Workers in thousands]

Industry	All plans		Plans with early retirement ²		Plans with disability retirement ³		Plans with vesting ⁴		Information not available	
	Number	Workers ¹	Number	Workers ¹	Number	Workers ¹	Number	Workers ¹	Plans	Workers ¹
All industries.....	736	3,229.8	262	754.3	396	1,474.5	168	595.0	31	31.0
Manufacturing.....	270	1,239.6	103	265.4	155	807.6	49	81.0	11	6.5
Food and kindred products.....	84	226.8	52	171.2	63	201.4	22	37.6	1	0.3
Apparel and other finished textile products.....	78	772.9	2	12.6	29	449.9	2	12.6	7	1.9
Printing, publishing, and allied industries.....	53	63.0	31	31.1	36	52.9	12	11.7	1	(⁵)
Leather and leather products.....	6	24.2			2	2.1	1	.3		
Metalworking.....	27	55.7	12	26.3	17	37.2	8	14.8	2	4.3
Miscellaneous manufacturing.....	22	97.0	6	24.2	8	64.0	4	4.0		
Nonmanufacturing.....	454	1,969.1	151	475.1	224	653.5	111	501.4	20	24.5
Mining.....	4	295.4	1	0.4	1	0.4				
Contract construction.....	232	612.0	81	197.7	119	272.8	76	165.3	11	15.1
Motor transportation.....	46	498.9	22	75.7	21	75.6	10	221.7	1	.7
Water transportation.....	41	147.6	12	53.0	35	138.8	2	.6	1	2.0
Wholesale and retail trade.....	89	295.8	19	122.4	32	110.9	13	105.6	7	6.7
Services.....	25	67.9	13	18.4	7	42.9	8	3.7		
Motion pictures and recreation.....	14	49.5	2	6.2	8	10.9	2	4.4		
Miscellaneous nonmanufacturing.....	3	2.1	1	1.1	1	1.1				
Interindustry manufacturing and nonmanufacturing.....	12	21.0	8	13.8	7	13.4	8	12.7		

¹ Worker coverage includes both active and retired workers in 1959.

² Excludes 38 plans, covering, 677,000 workers, which provided early retirement for women only. These plans were mainly in the apparel industry, where the large majority of employees are women.

³ Excludes plans which provided lump-sum disability benefits only.

⁴ Excludes plans which provided lump-sum termination benefits only.

⁵ Fewer than 50 workers.

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

TABLE 6. PROVISIONS FOR DEATH BENEFITS BEFORE AND AFTER RETIREMENT IN MULTIEMPLOYER PENSION PLANS UNDER COLLECTIVE BARGAINING, BY INDUSTRY, SPRING 1960

[Workers in thousands]						
Industry	Death benefits				Information not available	
	Before retirement		After retirement			
	Plans	Work-ers ¹	Plans	Work-ers ¹	Plans	Work-ers ¹
All industries.....	123	830.9	113	849.0	31	31.0
Manufacturing.....	32	46.4	46	423.2	11	6.5
Food and kindred products...	14	25.0	9	19.9	1	0.3
Apparel and other finished textile products.....	4	2.0	27	365.1	7	1.9
Printing, publishing, and allied industries.....	7	7.7	1	3.0	1	(1)
Leather and leather products.....	1	.7	1	.7		
Metalworking.....	6	11.0	6	23.8	2	4.3
Miscellaneous manufacturing.....			2	10.6		
Nonmanufacturing.....	89	778.4	65	417.9	20	24.5
Mining.....	1	251.6	1	251.6		
Contract construction.....	62	110.9	38	57.8	11	15.1
Motor transportation.....	10	401.0	3	3.1	1	.7
Water transportation.....			7	86.0	1	2.0
Wholesale and retail trade.....	11	7.6	12	12.3	7	6.7
Services.....	1	.3	1	.3		
Motion pictures and recreation.....	4	7.0	3	6.8		
Miscellaneous nonmanufacturing.....						
Interindustry manufacturing and nonmanufacturing.....	2	6.1	2	7.9		

¹ Worker coverage includes both active and retired workers in 1959.

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

eligibility for regular (normal or early) retirement benefits. This right is usually payable in the form of a retirement benefit at the plan's normal retirement age, wherever the worker is then employed.

Fewer than 1 out of 4 multiemployer plans, covering about 1 out of 6 workers, had a vesting provision, as contrasted with 7 out of 10 single employer plans covering 5 out of 6 workers. Although not a complete substitute for vesting, the portability of pension credits inherent in multiemployer plans may provide as much protection as a vesting provision in a single employer plan.

Vesting provisions were most common in food, printing, metalworking, construction, motor transportation, and trade industries.

Half of the insured plans with almost 3 out of 4 covered workers, as compared with only 1 out of 6 self-insured plans with 1 out of 7 workers, had vesting. The tradition of including the vesting of the worker's pension rights in insured plans accounts for this difference, both in multiemployer and single employer plans.

Death Benefits

Most workers covered by multiemployer pension plans are also covered by a separate group life insurance program. Under an increasing number of these programs, retired workers retain part of their life insurance coverage.¹² Many pension plans, however, also provide death benefits to protect the worker's equity in the plan as well as that of his dependents.

Death benefit provisions analyzed in this study called for a payment, usually a lump sum, to the worker's beneficiary, in the event of his death before or after retirement. Provisions for the return of worker contributions (with or without interest) and those guaranteeing the number or duration of payments were excluded.

Provisions for death benefits before retirement were found in about the same proportion of plans as provisions for such benefits after retirement (17 and 15 percent, respectively), with each covering over a fourth of the workers (table 6). Sixty-four plans, covering 351,100 workers, provided death benefits both before and after retirement.

Preretirement death benefits were more commonly provided workers in nonmanufacturing industries—especially mining, construction, and motor transportation—than in manufacturing industries. The reverse was true for post retirement benefits, mainly because such benefits were included in the apparel industry plans and excluded from the motor transportation plans.

A fifth of the insured plans as compared with a seventh of the self-insured plans had a death benefit before retirement. However, a tenth of the insured plans had postretirement death benefits as against a sixth of the self-insured plans.

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¹² See *Health and Insurance Plans Under Collective Bargaining: Life Insurance, and Accidental Death and Dismemberment Benefits, Early Summer 1960* (BLS Bull. 1296, 1961).

Wages in Work Clothing and Shirt Factories, May-June 1961

AS PART of its industry wage program, the Bureau of Labor Statistics conducted surveys of the straight-time average hourly earnings in May-June 1961 of production workers in two cotton-garment manufacturing industries—the shirt and nightwear and the work clothing industries. In addition to earnings data, information was also obtained on work schedules and the incidence of supplementary benefits such as paid holidays and vacations, insurance, and pension plans. Summaries of the studies follow.¹

Shirt and Nightwear Industry

Straight-time hourly earnings of production workers in the men's and boys' shirt (except work shirts) and nightwear manufacturing industry² averaged \$1.26 in May-June 1961. Workers employed in establishments primarily engaged in manufacturing sport shirts, accounting for nearly three-fifths of the 93,190 workers covered by the study, averaged \$1.24 an hour. Employees of dress shirt manufacturers averaged \$1.30 an hour, and workers in nightwear establishments averaged \$1.20. Earnings also varied by region, community and establishment size, method of production, type of product, labor-management contract status, and occupation and sex. Paid vacations and holidays, as well as life, hospitalization, and surgical insurance benefits, were provided to a substantial majority of the workers.

Earnings. In comparison with the national average of \$1.26 for the shirt and nightwear manufacturing industry in May-June 1961, average straight-time hourly earnings of production workers ranged from \$1.09 in the Southwest region to \$1.55 on the Pacific Coast.³ Hourly earnings averaged \$1.14 in the Southeast region, where slightly more than half of the industry's workers were employed, \$1.46 in the Middle Atlantic region (accounting for a fourth of the workers), and \$1.24 in the Border States region. (See table 1.)

Pennsylvania and Tennessee, each employing approximately a sixth of the production workers in the industry, had earnings of \$1.42 and \$1.10, respectively, as shown in the following tabulation. The primary product in both States was sport shirts.

State	Number of production workers	Average straight-time hourly earnings
Alabama.....	6, 518	\$1. 12
Georgia.....	9, 141	1. 23
Maryland.....	2, 489	1. 30
Massachusetts.....	1, 771	1. 43
Mississippi.....	6, 598	1. 14
Missouri.....	1, 621	1. 21
New Jersey.....	2, 243	1, 53
New York.....	5, 193	1. 56
North Carolina.....	5, 439	1. 14
Pennsylvania.....	16, 518	1. 42
South Carolina.....	6, 793	1. 15
Tennessee.....	15, 011	1. 10
Virginia.....	2, 290	1. 20
<i>Area</i>		
Allentown-Bethlehem-Easton, Pa..	2, 159	1. 56
Eastern Shore, Md.....	1, 725	1. 33
Los Angeles-Long Beach, Calif....	1, 876	1. 58
New York City, N.Y.....	1, 389	1. 63
Pottsville-Shamokin, Pa.....	4, 126	1. 37
Scranton and Wilkes-Barre-Hazleton, Pa.....	1, 380	1. 40
Troy, N.Y.....	2, 600	1. 62

Workers in establishments primarily using the progressive bundle system averaged \$1.15 in the

¹ More comprehensive accounts of these studies will be presented in BLS Bull. 1323, *Industry Wage Survey: Men's and Boys' Shirts (Except Work Shirts) and Nightwear, May-June 1961*, and Bull. 1321, *Industry Wage Survey: Work Clothing, May-June 1961*. These bulletins will provide detailed information on the level of earnings and the distribution of workers by earnings classes; earnings of workers in selected occupations by such characteristics as product, establishment size, community size, and labor-management contract status; and the incidence of the supplementary wage practices selected for study.

The straight-time average hourly earnings for production and related workers presented in this article differ in concept from the gross average hourly earnings published in the Bureau's monthly hours and earnings series. Unlike the latter, the estimates presented here exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Average earnings are calculated by summing individual hourly earnings and dividing by the number of individuals. In the monthly series, the sum of the man-hour totals reported by establishments in the industry is divided into the reported payroll totals.

² The study covered establishments employing 20 or more workers and primarily engaged in manufacturing men's, youths', and boys' shirts (except work shirts), collars, and nightwear (industry 2321 as defined in the 1957 edition of the *Standard Industrial Classification Manual*, prepared by the U.S. Bureau of the Budget).

³ Regional data provided in table 1 are limited to the three regions employing the largest numbers of workers; the study developed separate information for eight regions.

Southeast, \$1.28 in the Border States, and \$1.42 in the Middle Atlantic region. Corresponding average hourly earnings for workers in establishments using the bundle system were \$1.12, \$1.13, and \$1.49.

Women, accounting for nine-tenths of the production workers in the industry and primarily employed as sewing machine operators, averaged \$1.24 an hour, compared with \$1.47 for men.

Among the three major regions, the proportions of workers employed by sport shirt manufacturers ranged from three-fifths in the Southeast to slightly more than half in the Border and Middle Atlantic regions; regional averages for

this branch of the industry were \$1.11, \$1.18, and \$1.47, respectively. In each of these three regions, the highest average earnings were recorded in plants manufacturing dress shirts, the second largest branch of the industry.

In each of the regions for which comparisons could be made, earnings of production workers were higher in metropolitan areas than in smaller communities. Earnings were also generally higher in plants having collective bargaining agreements than in those not having such agreements. It is not possible to isolate and measure the exact impact of either of these factors on earnings. To illustrate their interrelationship, approximately

TABLE 1. NUMBER AND AVERAGE STRAIGHT-TIME HOURLY EARNINGS¹ OF PRODUCTION WORKERS IN MEN'S AND BOYS' SHIRT (EXCEPT WORK SHIRTS) AND NIGHTWEAR FACTORIES, BY SELECTED CHARACTERISTICS AND REGIONS,² MAY-JUNE 1961

Characteristic	United States ³		Middle Atlantic		Border States		Southeast	
	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹
All production workers ⁴	93,190	\$1.26	23,954	\$1.46	6,927	\$1.24	49,644	\$1.14
SEX								
Women	84,346	\$1.24	21,239	\$1.43	6,387	\$1.22	45,097	\$1.13
Men	8,844	1.47	2,715	1.71	540	1.49	4,547	1.29
MAJOR PRODUCT								
Dress shirts	31,167	1.30	8,164	1.48	1,942	1.33	15,703	1.21
Sport shirts	53,611	1.24	12,847	1.47	3,616	1.18	30,371	1.11
Nightwear	7,458	1.20	2,104	1.28	1,369	1.29	3,570	1.11
PREDOMINANT METHOD OF PRODUCTION								
Line system	4,937	1.23	718	1.54			2,482	1.15
Bundle system	24,031	1.32	9,996	1.49	1,498	1.13	9,014	1.12
Progressive bundle system	63,812	1.24	12,830	1.42	5,105	1.28	38,148	1.15
SIZE OF COMMUNITY								
Metropolitan areas ⁵	28,788	1.46	15,540	1.51			4,543	1.33
Nonmetropolitan areas	64,402	1.17	8,414	1.37	5,954	1.22	45,101	1.12
SIZE OF ESTABLISHMENT								
20-99 workers	10,158	1.36	4,810	1.43			1,960	1.11
100-249 workers	28,607	1.25	7,767	1.47	3,302	1.20	13,996	1.12
250 or more workers	54,425	1.24	11,377	1.46	3,367	1.28	33,688	1.15
LABOR-MANAGEMENT CONTRACT STATUS								
Establishments with—								
Majority of workers covered	40,118	1.42	19,485	1.50	3,975	1.34	9,733	1.28
None or minority of workers covered	53,072	1.14	4,469	1.28	2,952	1.11	39,911	1.11
SELECTED OCCUPATIONS⁶								
Cutters, machine	847	1.87	242	2.16	49	1.89	407	1.54
Inspectors, final (and thread trimmers)	3,916	1.14	836	1.28	247	1.15	2,415	1.08
Pressers, finish, hand	6,690	1.31	2,115	1.56	556	1.26	3,282	1.15
Repairmen, sewing machine	531	2.05	144	2.30	45	1.99	275	1.91
Sewing machine operators	54,934	1.25	13,507	1.44	4,223	1.23	29,799	1.14
Spreaders	1,207	1.35	344	1.58	51	1.56	686	1.21

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² The regions in this study are: *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; and *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee.

³ Includes data for regions in addition to those shown separately. See text footnote 3. Alaska and Hawaii were not included in the study.

⁴ Includes data for major product and method of production classifications in addition to those shown separately.

⁵ The term "metropolitan area" as used in this study refers to the Standard Metropolitan Statistical Areas established under the sponsorship of the U.S. Bureau of the Budget.

⁶ Among the occupations for which data are shown, the machine cutters, sewing machine repairmen, and spreaders were either all or nearly all men; the other 3 occupations were either all or nearly all women.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

three-fourths of the workers in the metropolitan areas were employed in plants with labor-management contracts, whereas only slightly more than a fourth of the workers in the smaller communities were employed by union plants. Furthermore, other characteristics such as method of production and type of product may also have a role in determining earnings levels.

Earnings of all but a small proportion of the industry's production workers in May-June 1961, when the Federal minimum wage was \$1 an hour,⁴ were within a range of \$1 to \$2.50. Earnings of the middle half of the workers were between \$1.04 and \$1.39. At the lower end of the earnings array, 2.0 percent of the workers earned less than \$1 an hour, 32.3 percent less than \$1.05, 48.5 percent less than \$1.15, and 60.8 percent less than \$1.25. As indicated in the following tabulation, the proportion of workers averaging less than certain hourly amounts differed among the three major regions.

Percent of workers with straight-time average hourly earnings of less than—

	\$1. 05	\$1. 10	\$1. 15	\$1. 25
Middle Atlantic.....	9. 4	13. 6	20. 1	32. 2
Border States.....	29. 7	37. 1	45. 8	60. 8
Southeast.....	46. 3	56. 5	66. 2	78. 1

The 20 occupational classifications for which separate data were obtained accounted for four-fifths of the production workers within the scope of the survey. About three-fifths of all production workers were sewing machine operators; their earnings averaged \$1.25 an hour industrywide, \$1.14 in the Southeast, and \$1.44 in the Middle Atlantic region. Nationwide, averages among all occupations studied ranged from \$1.06 for women janitors to \$2.45 for men employed as hand cutters.

The occupations shown in table 1 are representative of different types of activity and indicate variations in earnings levels among the regions.

Establishment Practices. Data were also obtained on certain establishment practices such as work schedules and supplementary benefits.⁵

A work schedule of 40 hours a week was in effect in establishments employing nine-tenths of the production workers in May-June 1961. Less than 1 percent of the workers were employed on second shifts, and none of the plants studied

operated a third shift during the payroll period studied.

Paid holidays were provided by establishments employing seven-tenths of the industry's production workers. Regionally, the proportions ranged from 36 percent in the Southwest and 50 percent in the Southeast to virtually all in the Middle Atlantic and New England regions. Six or seven paid holidays were most commonly provided in all regions except the Southeast and Southwest, where provisions for 5 days or less were most common.

Paid vacations after qualifying periods of service were provided by establishments employing four-fifths of the industry's production workers. After 1 year of service, 43 percent of the workers were eligible for 1 week of vacation pay and 33 percent were eligible for 2 weeks. After 5 years of service, 57 percent of the workers were eligible for 2 weeks of vacation pay. Provisions for more than 2 weeks' vacation pay were not commonly reported.

Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to three-fourths of the production workers. One-half of the workers were eligible for sickness and accident insurance.

Establishments employing two-fifths of the production workers provided retirement pensions (other than Federal old-age, survivors, and disability insurance).

Work Clothing Industry

Production workers in the work clothing industry⁶ earned an average of \$1.24 an hour in May-June 1961. Earnings variations around this average were found by region, principal type of product manufactured, method of production, community and establishment size, labor-management contract status, and occupation and sex. Of the supplementary benefits studied, paid

⁴ Effective September 3, 1961, the Federal minimum wage for manufacturing establishments engaged in interstate commerce was raised to \$1.15 an hour. Under specified conditions, workers certified as learners or handicapped workers may be paid less than the legal minimum.

⁵ Minimum entrance and job rate data were also obtained and appear in Bull. 1323, op. cit.

⁶ The study covered establishments employing 20 or more workers and primarily engaged in manufacturing work clothing (industry 2328 as defined in the 1957 edition of the *Standard Industrial Classification Manual*, prepared by the U.S. Bureau of the Budget.

vacations and holidays, as well as various types of insurance benefits, were provided to a substantial majority of the workers.

Earnings. Compared with the national average of \$1.24 for the work clothing manufacturing industry in May-June 1961, average straight-time hourly earnings of production workers ranged

from \$1.44 in the Pacific region to \$1.19 in the Southeast and Southwest regions and \$1.21 in the Border States; the latter three regions together accounted for nearly 70 percent of the industry's total work force. (See table 2.)

Women comprised nearly nine-tenths of the production workers in the industry and were primarily employed as sewing machine operators.

TABLE 2. NUMBER AND AVERAGE STRAIGHT-TIME HOURLY EARNINGS¹ OF PRODUCTION WORKERS IN WORK CLOTHING FACTORIES, BY SELECTED CHARACTERISTICS AND REGIONS,² MAY-JUNE 1961

Characteristic	United States ³		Middle Atlantic		Border States		Southeast		Southwest		Great Lakes		Middle West		Pacific	
	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹	Workers	Earnings ¹
All production workers.....	51,594	\$1.24	2,552	\$1.39	7,837	\$1.21	20,447	\$1.19	7,271	\$1.19	4,776	\$1.32	5,432	\$1.33	2,501	\$1.44
SEX																
Women.....	45,460	\$1.21	2,192	\$1.34	6,926	\$1.19	17,987	\$1.17	6,518	\$1.17	4,201	\$1.27	4,734	\$1.28	2,239	\$1.38
Men.....	6,134	1.48	360	1.70	911	1.36	2,460	1.37	753	1.38	575	1.66	698	1.63	262	1.95
SIZE OF ESTABLISHMENT																
20-99 workers.....	8,791	1.28	1,502	1.42	1,405	1.18	2,029	1.18	728	1.13	1,513	1.31	796	1.35	508	1.47
100-249 workers.....	19,294	1.23	558	1.40	1,937	1.21	6,819	1.15	3,465	1.18	1,564	1.29	3,527	1.27	956	1.50
250 or more workers.....	23,509	1.25	-----	-----	4,495	1.23	11,599	1.21	3,078	1.21	1,699	1.35	1,109	1.50	1,037	1.37
SIZE OF COMMUNITY																
Metropolitan areas ⁴	16,147	1.33	2,552	1.39	1,042	1.21	2,447	1.26	4,299	1.23	2,012	1.38	1,592	1.45	1,576	1.53
Nonmetropolitan areas.....	35,447	1.20	-----	-----	6,795	1.21	18,000	1.18	2,972	1.13	2,764	1.28	3,840	1.28	925	1.29
LABOR-MANAGEMENT CONTRACT STATUS																
Establishments with—																
Majority of workers covered.....	21,729	1.33	1,522	1.38	2,405	1.36	4,879	1.26	2,966	1.26	2,921	1.35	4,232	1.38	2,083	1.44
None or minority of workers covered.....	29,865	1.18	1,030	1.40	5,432	1.15	15,568	1.17	4,305	1.14	1,855	1.27	1,200	1.13	-----	-----
MAJOR PRODUCT																
Dungarees.....	12,007	1.26	-----	-----	3,223	1.17	3,778	1.22	1,628	1.27	588	1.31	1,878	1.35	-----	-----
Overalls and industrial garments.....	8,718	1.29	662	1.43	1,247	1.34	2,664	1.19	-----	-----	1,935	1.35	847	1.27	-----	-----
Washable service apparel.....	3,875	1.40	920	1.46	-----	-----	853	1.31	-----	-----	589	1.41	708	1.47	-----	-----
Work pants.....	22,589	1.21	557	1.27	2,929	1.23	10,332	1.19	4,269	1.19	1,246	1.24	1,605	1.25	1,468	1.28
Work shirts.....	4,405	1.15	-----	-----	-----	-----	2,820	1.12	-----	-----	-----	-----	394	1.36	-----	-----
PREDOMINANT METHOD OF PRODUCTION																
Line system.....	5,734	1.20	-----	-----	296	1.11	1,232	1.20	2,618	1.19	545	1.18	913	1.24	-----	-----
Bundle system.....	8,437	1.29	2,108	1.36	557	1.18	1,607	1.15	1,298	1.17	1,210	1.41	626	1.49	939	1.34
Progressive bundle system.....	37,423	1.24	444	1.53	6,984	1.22	17,608	1.19	3,355	1.20	3,021	1.30	3,893	1.32	1,562	1.50
SELECTED OCCUPATIONS																
Cutters, machine.....	824	1.82	40	2.09	134	1.71	256	1.65	97	1.66	105	2.01	114	1.93	62	2.29
Inspectors, final (inspectors only).....	527	1.23	16	1.13	21	1.44	206	1.18	126	1.16	-----	-----	118	1.36	-----	-----
Inspectors, final (and thread trimmers).....	2,033	1.21	70	1.18	425	1.18	889	1.17	259	1.16	185	1.32	115	1.34	70	1.46
Janitors.....	490	1.13	9	1.17	49	1.09	190	1.06	92	1.08	54	1.22	79	1.28	9	1.41
Pressers, finish, machine.....	1,052	1.32	51	1.60	136	1.35	512	1.26	164	1.22	75	1.35	85	1.48	23	1.61
Repairmen, sewing machine.....	459	2.02	13	2.42	61	1.80	192	1.94	65	2.03	49	2.04	53	2.10	20	2.65
Sewing machine operators ⁵	36,271	1.22	1,706	1.39	5,705	1.20	13,881	1.17	5,196	1.17	3,390	1.28	3,943	1.28	1,849	1.39
Dungarees.....	8,161	1.25	183	1.55	2,230	1.19	2,559	1.22	942	1.23	518	1.27	1,206	1.30	-----	-----
Overalls and industrial garments.....	4,456	1.28	375	1.39	680	1.33	1,145	1.20	-----	-----	1,103	1.29	701	1.26	-----	-----
Washable service apparel.....	2,514	1.36	689	1.45	-----	-----	497	1.31	-----	-----	381	1.32	399	1.44	-----	-----
Work pants.....	14,345	1.19	351	1.28	2,213	1.21	6,065	1.16	2,738	1.18	857	1.27	1,010	1.21	1,070	1.26
Work shirts.....	4,538	1.15	-----	-----	298	1.06	2,615	1.14	652	1.13	334	1.18	531	1.31	-----	-----
Work distributors.....	993	1.18	66	1.23	135	1.12	458	1.15	124	1.14	80	1.26	72	1.26	48	1.43

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

² The regions in this study are: *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; and *Pacific*—California, Nevada, Oregon, and Washington.

³ Includes data for 2 regions in addition to those shown separately. Alaska and Hawaii were not included in the study.

⁴ The term "metropolitan area" as used in this study refers to the Standard Metropolitan Statistical Areas established under the sponsorship of the U.S. Bureau of the Budget.

⁵ Includes data for workers in classification in addition to those shown separately.

NOTE: Dashes indicate no data reported or data that do not meet publication criteria.

Women as a group averaged \$1.21 an hour, compared with \$1.48 for men, who were employed largely in such relatively high-wage occupations as machine cutters and sewing machine repairmen.

Information was also developed separately for 12 important work clothing manufacturing States as indicated in the following tabulation:

	Number of production workers	Average straight-time hourly earnings
Alabama.....	1, 475	\$1. 24
California.....	1, 830	1. 49
Georgia.....	5, 713	1. 20
Indiana.....	2, 640	1. 33
Kentucky.....	3, 911	1. 26
Mississippi.....	4, 348	1. 15
Missouri.....	4, 153	1. 37
North Carolina.....	2, 754	1. 20
Pennsylvania.....	1, 933	1. 35
Tennessee.....	6, 154	1. 19
Texas.....	4, 046	1. 20
Virginia.....	2, 836	1. 16

In most of the regions for which separate data were obtained, earnings of production workers in plants employing 250 or more workers were somewhat higher than those of workers in smaller plants; earnings of workers in metropolitan areas were higher than those in the smaller communities; and earnings in plants having collective bargaining agreements were higher than those in plants not having such agreements. The exact impact of any one of these factors on earnings cannot be isolated and measured. To illustrate the interrelationship of these factors, approximately three-fifths of the workers in the large metropolitan areas were employed in plants with labor-management contracts, whereas only about a third of the workers in smaller communities were employed in union plants. Method of production, type of product, and other characteristics may also have a role in determining earnings levels.

Work pants manufacturers employed slightly more than two-fifths of the 51,594 production workers covered by the Bureau's study, accounting for the majority of the work clothing employment in the Southeast, Southwest, and Pacific regions. Average earnings in this branch of the industry ranged from \$1.19 in the Southeast and Southwest regions to \$1.28 on the Pacific Coast. Earnings of workers in plants primarily engaged in the manufacture of dungarees, the second most important branch of the industry in terms of

employment, were somewhat higher than those of workers manufacturing work pants in most of the regions where comparisons were possible. Highest earnings, ranging from \$1.31 in the Southeast region to \$1.47 in the Middle West, were recorded in plants manufacturing washable service apparel. Nearly two-thirds of the employees in the work shirts branch of the industry were located in the Southeast region, where they averaged \$1.12 an hour.

Earnings of nearly all production workers in the industry in May-June 1961 were between \$1 to \$2.50 an hour, with the middle half of the workers earning between \$1.04 and \$1.37. Two percent of the workers earned less than \$1 an hour, the Federal minimum wage at the time of the survey.⁷ Less than \$1.05 an hour was earned by 28.9 percent of the workers, less than \$1.15 by 45.5 percent, and less than \$1.25 by 60.5 percent. The following tabulation indicates that the proportion of workers earning less than \$1.15 an hour amounted to half in the three southern sectors, roughly a third in the three northern sectors, and a fourth in the Pacific sector of the industry.

	Percent of workers with straight-time average hourly earnings of less than—			
	\$1. 05	\$1. 10	\$1. 15	\$1. 25
Middle Atlantic.....	17. 0	20. 6	30. 1	43. 3
Border States.....	31. 7	40. 2	50. 0	63. 7
Southeast.....	32. 8	41. 7	52. 0	68. 4
Southwest.....	35. 9	44. 4	53. 4	69. 5
Great Lakes.....	17. 2	24. 2	32. 5	48. 2
Middle West.....	22. 2	27. 3	34. 0	46. 5
Pacific.....	18. 9	22. 5	26. 4	36. 8

The occupational classifications for which earnings data are presented in table 2 accounted for more than four-fifths of the production workers within the scope of the survey.⁸ The 36,271 sewing machine operators, averaging \$1.22 an hour, were virtually all women and with few exceptions were paid on an incentive basis, usually individual piecework. Women also dominated the inspection and pressing jobs. All sewing machine repairmen and the large majority of the machine cutters, work distributors, and janitors were men. Workers in these occupations were, for the most part, paid on a time-rate basis.

⁷ See footnote 4.

⁸ Earnings data are presented for additional occupations in Bull. 1321, op. cit.

Establishment Practices. Data were also obtained on certain establishment practices such as work schedules and supplementary wage benefits.⁹

Work schedules of 40 hours a week were in effect in establishments employing 93 percent of the production workers in the industry at the time of the study. Extra-shift operations were virtually nonexistent.

Paid holidays were provided by establishments employing approximately three-fifths of the industry's production workers. Regionally, the proportions ranged from two-fifths in the Southeast to about nine-tenths in the Middle Atlantic, Middle West, and Pacific regions. Six or seven paid holidays annually were most commonly provided.

Nine-tenths of the production workers received paid vacations after qualifying periods of service. Four-fifths of the workers were eligible for 1 week's vacation pay after 1 year of service, and three-fifths were eligible for 2 weeks' vacation pay after 5 years of service. Provisions for 3 or more weeks' vacation pay were not commonly reported. Vacation provisions in the Great Lakes, Middle West, and Pacific regions were somewhat more liberal than those reported in the other regions.

Life, hospitalization, and surgical insurance, for which employers paid at least part of the cost, were available to approximately seven-tenths of the industry's production workers. Accidental death and dismemberment insurance and sickness and accident insurance benefits applied to approximately three-tenths of the workers. About a fifth of the workers were covered by medical insurance.

Retirement pension benefits (other than those available under Federal old-age, survivors, and disability insurance) were provided by establishments employing 18 percent of the production workers. Among the regions, provisions for retirement pensions were most common in the Middle Atlantic and Pacific regions, applying to 55 and 45 percent of the workers, respectively.

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⁹ Minimum entrance and job rate data were also obtained and appear in Bull. 1321, op. cit.

Wage Chronology: Sinclair Oil Companies¹

Supplement No. 2—1957-61

UNDER THE TERMS of a wage agreement² concluded in June 1957 by some Sinclair Oil Companies³ and the Oil, Chemical and Atomic Workers International Union (OCAW), over 9,000 workers received a general wage increase of 5 percent retroactive to April 1 and an additional 1 percent retroactive to May 1, 1957.

A separate 2-year working agreement signed by the companies and the union on August 8, 1957, increased premium pay for holiday work, reduced the service requirement for 4 weeks' vacation to 20 years, and increased allowances for employees required to spend the night away from home or to move to another location. Hospital and surgical benefits were improved by a supplemental agreement signed on the same day.

Under the terms of the 1957 master agreement which permitted new negotiations on wages at the request of one of the parties, the union in June 1958 proposed the wage increase set forth in its 1958 bargaining program for the oil industry. The OCAW's 1958 program called for wage increases to compensate for increases in the cost of living and productivity and a reduction of the work-week from 40 to 36 hours (with no change in take-home pay) to provide jobs for men laid off because of increasing automation. The union also sought from the Sinclair Companies liberalization of pension benefits, particularly with regard to early retirement; improvements in sickness and accidents benefits; and changes in the employee savings plan. In reply, the companies offered to improve pensions. After almost 5 months of negotiations, the OCAW revised its industry bargaining program at its October 1958 annual

¹ For earlier developments, see *Monthly Labor Review*, November 1952 (pp. 535-544) and February 1957 (pp. 194-198), or Wage Chronology Series 4, No. 31.

² Wage agreements and working agreements for employees covered under the master agreement are frequently negotiated separately and at different times by the Sinclair Oil Companies with the Oil, Chemical and Atomic Workers. Pension and insurance plans are contained in supplemental agreements.

³ The companies were the Sinclair Refining Co., Sinclair Oil and Gas Co., Sinclair Pipe Line Co., and Sinclair Research, Inc.

convention and, in November, proposed a 25-cent-an-hour pay increase. This proposal was also rejected by Sinclair's representatives, who maintained that economic conditions in the oil industry did not justify a pay increase at that time. In mid-January 1959, a 5-percent general pay increase was offered by Sinclair to the OCAW and on January 18—the Sinclair strike deadline—the union's National Bargaining Policy Committee accepted that offer, subject to ratification by the membership. This wage settlement became the industry pattern.

Concurrent with the January 1959 wage settlement, the companies agreed to amend the employee savings plan. Under the terms of a memorandum of understanding signed February 27, 1959, participants in the jointly financed plan were given vested rights to company contributions if their employment was terminated because of lack of work. In addition, provisions regarding withdrawals of employee allotments and company contributions were liberalized. Benefit coverage was also improved under the sickness and accident benefits plan in January 1959, but the pension plan issue was referred to a study committee.

Negotiations on contract provisions covering working conditions, pensions, and insurance began again in May 1959. The union demands for a shorter workweek and improvements in the pension, insurance, and severance pay plans, as well as other proposals, were countered by a company proposal to eliminate "restrictive and costly provisions" from the contracts. Settlement was reached just prior to the June 14, 1959, expiration date of the 1957 agreements. The new contracts increased allowances for overnight living and moving expenses. For the first time in the 25 years since the companies and the union had signed a nationwide contract, a supplemental agreement on life insurance—to replace a plan established earlier by the companies—was negotiated by the parties; the revised plan substantially increased benefits. The retirement plan was also improved by a supplemental agreement; the improvements, effective January 1, 1960, included increased normal and minimum annuities, a wider choice of annuity options, and elimination of the \$600 annual earnings minimum previously necessary to qualify under the plan. No changes were made in the hospital and surgical plan when the union members failed to ratify the proposed substitution of comprehen-

sive medical insurance for the hospital and surgical program in effect. The new basic working agreement was to continue until June 14, 1961. The life insurance plan is to remain in effect until September 1, 1964, and the retirement plan until January 1, 1965; both plans may be reopened on or after April 15, 1964.

Early in June 1960, the parties reached agreement on an employee-financed extended medical expense plan which would be available to participants in the basic hospital-surgical insurance program, effective December 1, 1960.

In July 1960, the National Bargaining Policy Committee of the OCAW, after considering the rise in the Consumer Price Index and the estimated increase in productivity in the industry since the last wage increase in January 1959, established general wage increases of 18 cents an hour and agreements lasting 1 year as bargaining goals for all negotiations scheduled during the year. By mid-November, subsequent to the recess of negotiations with Sinclair, several major producers other than Sinclair had offered their workers 5-percent wage increases in 2-year agreements. After resuming negotiations, Sinclair and the OCAW on December 15, agreed to a 14-cent-an-hour general wage increase, effective December 19. This was the union's first settlement in the 1960 round of wage negotiations with a major petroleum company.

A 1-year working agreement was announced on July 12, 1961, by the parties. The settlement, affecting about 9,000 workers, was ratified on July 27, ending a strike by some 4,000 workers at four refineries that had begun on June 16. Workers at other operations covered under the master agreement continued on the job after the previous contract expired on June 14. Severance pay was the key issue. Under the settlement, the severance benefits of the previous contract (a maximum of 4 weeks' pay for laid-off workers with 10 or more years' service) were left unchanged; should major layoffs be required at any time in the future, the parties agreed to review conditions existing at that time. Allowances for overnight living and moving expenses were increased, however, as proposed by the companies before the strike. The new working agreement is to be effective through July 26, 1962.

This supplement reports changes negotiated in 1957, 1959, 1960, and 1961.

A—General Wage Changes

Effective date	Provisions	Applications, exceptions, and other related matters
May 1, 1957 (agreement of June 14, 1957).	6 percent increase, averaging 15 cents an hour.	5 percent retroactive to Apr. 1, 1957.
Jan. 18, 1959 (agreement of February 27, 1959).	5 percent increase, averaging 13.5 cents an hour.	Some additional rate increases, effective February 1, resulted from adjustment of classification inequities. ¹
Dec. 19, 1960 (agreement of December 15, 1960).	14 cents an hour increase-----	

¹ Since 1949, the master agreement between the Sinclair companies and the OCAW has provided that the union could request adjustment of classification rate inequities resulting from a comparison with the average rates of pay for jobs having comparable duties and responsibilities in agreed-upon

major competitive companies in the local area. Requests by the union for adjustments in basic wage rates could be made no more than twice annually, to be effective February 1 and August 1.

B—Basic Hourly Rates Paid for Selected Refinery Occupations on Specified Dates, 1956–60

Occupation	Corpus Christi, Tex.	East Chicago, Ind.	Houston, Tex.	Marcus Hook, Pa.	Sinclair, Wyo.	Wells-ville, N.Y.	Corpus Christi, Tex.	East Chicago, Ind.	Houston, Tex.	Marcus Hook, Pa.	Sinclair, Wyo.	Wells-ville, N.Y.
	February 1, 1956						May 1, 1957					
Boilermakers.....	\$2.81	\$2.76	\$2.81	\$2.835	\$2.765	-----	\$2.98	\$2.925	\$2.98	\$3.005	\$2.93	-----
Boilermakers' helpers.....	2.36	2.45	2.36	2.48			2.50	2.595	2.50	2.63		
Firemen.....		2.565	2.585		2.67	\$2.415		2.72	2.74		2.83	\$2.56
Light oil treaters.....		2.99	2.975	2.935	2.84	2.65		3.17	3.155	3.11	3.01	2.81
Laborers, entrance.....	1.915	2.105	1.915	2.06	2.06	2.125	2.03	2.23	2.03	2.185	2.185	2.255
Laborers, skilled.....	1.995	2.215	1.995	2.175	2.15	2.125	2.115	2.35	2.115	2.305	2.28	2.255
Machinists.....	2.81	2.76	2.81	2.85	2.765	2.48	2.98	2.925	2.98	3.02	2.93	2.63
Machinists' helpers.....	2.36	2.45	2.36	2.48		2.29	2.50	2.595	2.50	2.63		2.425
Pipefitters.....	2.81	2.76	2.81	2.835	2.765	2.62	2.98	2.925	2.98	3.005	2.93	2.775
Pipefitters' helpers.....	2.36	2.45	2.36	2.48	2.425	2.29	2.50	2.595	2.50	2.63	2.57	2.425
Pumpers.....	2.84	2.99	2.84	2.86	2.84	2.48	3.01	3.17	3.01	3.03	3.01	2.63
Stillmen.....	3.02	2.99	3.02	3.12	2.965	2.895	3.20	3.17	3.20	3.31	3.145	3.07
Stillmen's helpers.....	2.65	2.745	2.65	2.67	2.67	2.585	2.81	2.91	2.81	2.83	2.83	2.74
	January 18, 1959 ¹						December 19, 1960					
Boilermakers.....	\$3.235	\$3.08	\$3.13	\$3.165	\$3.075	(2)	\$3.375	\$3.22	\$3.27	\$3.305	\$3.215	(2)
Boilermakers' helpers.....	2.625	2.735	2.625	2.76		(2)	2.765	2.875	2.775	2.90		(2)
Firemen.....		2.855	2.865		2.97	(2)		2.995	3.005		3.11	(2)
Light oil treaters.....		3.345	3.315	3.28	3.16	(2)		3.485	3.455	3.42	3.30	(2)
Laborers, entrance.....	2.13	2.34	2.13	2.295	2.295	(2)	2.27	2.48	2.27	2.435	2.435	(2)
Laborers, skilled.....	2.22	2.47	2.22	2.42	2.395	(2)	2.36	2.61	2.36	2.56	2.535	(2)
Machinists.....	3.13	3.08	3.13	3.18	3.075	(2)	3.27	3.21	3.27	3.32	3.215	(2)
Machinists' helpers.....	2.625	2.735	2.625	2.76		(2)	2.765	2.865	2.775	2.90		(2)
Pipefitters.....	3.13	3.08	3.13	3.165	3.075	(2)	3.27	3.21	3.27	3.305	3.215	(2)
Pipefitters' helpers.....	2.625	2.735	2.625	2.76	2.70	(2)	2.765	2.865	2.775	2.90	2.84	(2)
Pumpers.....	3.16	3.345	3.16	3.14	3.16	(2)	3.30	3.485	3.30	3.28	3.30	(2)
Stillmen.....	3.36	3.345	3.36	3.485	3.30	(2)	3.50	3.485	3.50	3.625	3.44	(2)
Stillmen's helpers.....	2.95	3.055	2.95	3.065	2.97	(2)	3.09	3.195	3.09	3.205	3.11	(2)

¹ Includes inequity adjustments effective Feb. 1, 1959.

² Plant closed prior to Jan. 18, 1959.

C—Related Wage Practices

Effective date	Provision	Applications, exceptions, and other related matters
<i>Holiday Pay</i>		
June 15, 1957 (agreement dated Aug. 8, 1957).	Increased to: 8 hours at straight-time plus time and one-half for hours worked up to normal daily hours, and double time for work after normal daily hours.	

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Paid Vacations</i>		
June 15, 1957 (agreement dated Aug. 8, 1957).	Changed to: 4 weeks' vacation for employees with 20 or more years' service.	In effect: Additional day's pay provided when paid holiday fell in vacation period. Employee rehired within 1 year of layoff because of force reduction or any reason beyond his control retained vacation rights, but forfeited $\frac{1}{12}$ of vacation pay for each month lost during year.
<i>Subsistence Pay</i>		
June 15, 1957 (agreement dated Aug. 8, 1957).	Increased to: \$7.25 a day-----	
June 15, 1959 (agreement dated Nov. 12, 1959).	Increased to: \$7.50 a day-----	
July 27, 1961 (agreement dated Aug. 10, 1961).	Increased to: \$7.75 a day-----	
<i>Moving Expense</i>		
June 15, 1957 (agreement dated Aug. 8, 1957).	Increased to: \$120 maximum-----	
June 15, 1959 (agreement dated Nov. 12, 1959).	Increased to: \$130 maximum-----	
July 27, 1961 (agreement dated Aug. 10, 1961).	Increased to: \$140 maximum-----	
<i>Employee Sickness and Accident Disability Benefits Plan</i>		
Jan. 18, 1959 (supplemental agreement dated Feb. 27, 1959).	-----	Benefits applicable for oral surgery when company accepted certification of employee's surgeon that dental surgery had been performed.
<i>Group Life Insurance Plan</i>		
Aug. 22, 1955 (stipulation of same date).	-----	Companies agreed that union could strike if insurance plan was unilaterally changed. In effect: For participants in retirement plan, face value of noncontributory term life insurance policy continued on retirement, without cost to employee.
Sept. 1, 1959 (supplemental agreement dated Sept. 9, 1959).	Revised and expanded plan made available-- Changed to: <i>Total insurance</i> (including \$1,000 noncontributory insurance) equal to 2 years' base salary.	Voluntary plan for which employee pays 55 cents per month per \$1,000 in excess of first \$1,000 and employer pays balance. On retirement, insurance to equal (a) 50 percent of total life insurance or (b) total life insurance in force on Aug. 31, 1959 (maximum \$10,000), whichever was greater. Insurance continued during leave of absence for sickness or injury, providing employee continued contributions. Insurance continued only 1 month during leave of absence for reasons other than sickness or injury, unless company permitted extension. Noncontributory accidental death and dismemberment insurance, providing up to

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Group Life Insurance Plan—Continued</i>		
Sept. 1, 1959 (supplemental agreement dated Sept. 9, 1959)—Continued.		\$1,000 for any one occupational or non-occupational accident within 90 days after injury, for active employee with at least 6 months' service, added to Group Life Insurance Plan; formerly in Hospital and Surgical Plan.
<i>Employee Hospital and Surgical Plan¹</i>		
Aug. 1, 1957 (supplemental agreement dated Aug. 8, 1957).	Increased to, for employees and dependents: <i>Hospital room and board</i> , maximum of \$13 a day up to 120 days. Added, for employees and dependents: <i>Diagnostic laboratory and X-ray benefits</i> , up to \$50 for all sickness during 12 consecutive months and for each accident.	For active employees, contributions increased to \$1.70 for personal coverage; \$4.05 to include children; \$4.55 to include wife or wife and children. For retired employees, contributions increased to \$1.15 for personal coverage; \$3 to include children; \$3.50 to include wife or wife and children. Daily hospital services similarly improved on basis of standard-type "one shot" plan. ² Benefits applicable to retired employees and dependents. Applicable to any examination made in hospital outpatient department in diagnosis of accidental injury or sickness. Excluded benefits related to pregnancy, occupational injury or sickness, dentistry, radiation therapy, or ordinary physical checkup.
Sept. 1, 1959 (supplemental agreement dated Sept. 9, 1959).	Deleted: Accidental death and dismemberment provision.	Transferred to Group Life Insurance Plan.
<i>Retirement Benefits</i>		
Jan. 1, 1960 (supplemental agreement dated Sept. 9, 1959).	Plan amended to provide: For <i>normal retirement</i> at age 65 or later, the greater of (1) minimum annuity—for participants with 15 or more years' service, 1 percent per month of highest average monthly salary per year of service after age 25, maximum 40 years, reduced by benefits to which employee would have been entitled under other company plans for periods during which he refused to participate in pension plan, or (2) normal annuity— $\frac{1}{12}$ of 62.5 percent per month of participant's total contributions on or after Jan. 1, 1960, plus future and past service annuities due under earlier plans. <i>Early retirement</i> at or after age 55 but less than 65, on request of either employee or company—greater of minimum or normal annuity reduced by a specified amount for each year under 65. ³ <i>Total and permanent disability</i> —Employee with 15 or more years' service permanently and totally disabled received (1) if age 55 but less than 65—greater of minimum or normal annuity, (2) if age 50 but less than 55—normal annuity, (3) if less than 50 years of age—normal annuity reduced by 5 percent for each year under 50.	Eligibility changed to eliminate previous earnings requirement. Highest average salary defined as highest average salary for any 5 years during 10-year period preceding retirement. Employee's monthly contribution changed to equal 2.4 percent of first \$400 of monthly salary rate on November 1 or preceding calendar year, plus 3.2 percent of excess. Company contributed balance required to provide plan benefits and cost of administration. Employee could elect to defer annuity to any date up to age 65 and receive benefits based on age at early retirement. To qualify for annuity, employee must be unable to work for wages or profit. Employees below 60 years of age considered disabled only if qualified for total and permanent disability benefits under group life insurance plan. Employees 60 or over must (a) qualify for disability social security benefits or (b) provide medical evidence of total and permanent disability if not

See footnotes at end of table.

C—Related Wage Practices—Continued

Effective date	Provision	Applications, exceptions, and other related matters
<i>Retirement Benefits—Continued</i>		
Jan. 1, 1960 (supplemental agreement dated Sept. 9, 1959)—Continued.	<p>Added:</p> <p><i>10 year certain option</i>—minimum 120 monthly actuarially reduced payments guaranteed employee and dependent if employee died less than 10 years after retirement.</p> <p><i>Social security adjustment option</i>—Employee retiring before becoming eligible for primary social security benefits received actuarially adjusted payment providing larger than normal plan benefits before commencement of Federal payments and reduced plan benefits thereafter.</p> <p>In effect:</p> <p><i>Joint and survivorship option</i>—Providing actuarially reduced benefits for life to employee and spouse or child.</p>	<p>covered under disability social security provisions.</p> <p>Employee could elect to defer annuity to any date up to age 65 and receive benefits based on age at such date.</p> <p>Employee required to have made election (a) before Mar. 1, 1960, or (b) not later than normal retirement date but at least 2 years before first payment, or to submit evidence of good health at time of election. Applicable to deferred and early retirement provisions.</p> <p>Employee required to make election before retirement.</p> <p>Spouse's or child's benefits to begin after annuitant died and to be equal to or less than employee's benefits. Employee required to have made election (a) before Oct. 1, 1942, or (b) 5 years before retirement, but not later than 60th birthday, or to submit evidence of good health at time of election. Election could be modified under certain circumstances.</p>
<i>Employee Savings Plan</i>		
May 1, 1959 (memorandum of understanding dated Feb. 27, 1959).	<p><i>Vested rights:</i></p> <p>Added: Employee obtained vested right to company contributions on involuntary termination because of lack of work.</p> <p><i>Withdrawals:</i></p> <p>Changed: Prior to vesting, employee could withdraw (a) full value of account less company contributions or (b) two-thirds of value of account including company contributions.</p> <p>Added: After vesting, employee given option of withdrawing not more than half of total amount of employee's allotments reduced by any prior withdrawals. Alternatives of withdrawing one-third or full value of account including company contributions continued.</p> <p>Participant's allotments or company contributions were not suspended when employee withdrew not more than 50 percent of his allotment. When more than 50 percent was withdrawn, allotments and contributions were suspended for 6 months.</p>	<p>Nonvested company contributions relinquished by employees terminating participation held by trustee as uninvested cash for proportionate distribution to respective funds at end of each plan year.</p>

¹ A "good and welfare" meeting held in Kansas City, Mo., in early June 1960 resulted in agreement on an extended medical expense plan to supplement basic hospital insurance. By agreement dated Aug. 31, 1960, the plan was made available to participants in the basic Employee Hospital and Surgical Plan, effective Dec. 1, 1960. Since the program is supported entirely by employee contributions, and the companies assume only the administrative expenses, details of the program are not provided here.

² All periods of hospital confinement after retirement considered as one period and benefits limited to payment for 120 days' hospitalization or maximum special service benefits.

³ For men, 5 percent for each year; for women, 3 percent at age 64 and 5 percent for each additional year.

Technical Notes

Some Alternative Indexes of Employment and Unemployment

GERTRUDE BANCROFT*

IN PAST DISCUSSIONS of the meaning and measurement of employment and unemployment, many proposals have been made for discarding or expanding the conventional measures in order to provide more comprehensive, or more limited, or more sensitive indicators. These proposals are usually most numerous in times of high unemployment. Recently, for example, it was suggested that the official estimate of unemployment in the United States be limited to family breadwinners, or to family breadwinners in need, or to regular full-time members of the labor force only (excluding part-time and intermittent workers). On the other hand, it is argued that even the present measure of total unemployment (which includes all persons 14 years old and over who are not working but are looking for work) does not tell the whole story, and that a complete count would include persons in, or even outside, the labor force who are not able to work when or as much as they want. Even if the definition is not changed, it has been suggested, new combinations of the data would sharpen the public understanding of the unemployment problem.

A detailed analysis of all these proposals is beyond the scope of this paper. Rather, it is limited to the discussion of several supplementary measures or indexes which have been developed by the Bureau of Labor Statistics as a result of a request by the Joint Economic Committee of the U.S. Congress.

Unemployment and Part-Time Employment

The monthly sample survey of households provides, in addition to a measure of totally unemployed persons, counts of two types of "under-employed": (1) persons who usually work full

time (35 hours a week or more) at their current jobs but who worked part time during the survey week because of slack work, layoffs, or the start of a new job; and (2) persons who usually work part time at their current jobs because they cannot find full-time work. These two groups are usually described as working part time for economic reasons, or "economic part-time workers." (There are large numbers of part-time workers who do not want more work.)

The first group is preponderantly industrial and construction workers. These tend to increase in number early in the downturn of the business cycle, when hours of work are first reduced in preference to layoffs. The second group is more diversified. It consists largely of trade and service workers; but as the recession progresses, the group is augmented by industrial workers who move into this category when their reduced hours have persisted for so long that they can no longer say they usually work full time. It also increases markedly in the summer when so many students seeking full-time vacation jobs have to settle for part-time work.

Statistics on these part-time workers have been available monthly since May 1955, and prior to that on a quarterly basis or less frequently. (The monthly statistics also show the hours they work, their personal characteristics, and their industrial attachment.) In the publications of the survey results, these part-time workers are counted as employed. However, they are identified separately, and from time to time, special analyses of the group are published. The logic of classifying these workers as employed is that even though they are working fewer hours than they wish, they are quite different from the totally unemployed.

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The article presented here is an excerpt, with some minor changes in wording, of a paper prepared for the Subcommittee on Economic Statistics of the Congressional Joint Economic Committee in connection with the subcommittee's study of employment and unemployment. The paper is published in *Unemployment: Terminology, Measurement, and Analysis*, Subcommittee on Economic Statistics of the Joint Economic Committee, Congress of the United States (87 Cong., 1st sess.), 1961, pp. 35-48.

Moreover, the public policies designed to create jobs for the unemployed might prove very different from the actions necessary to restore these workers to full-time work. Therefore, the part-time workers have not been added to the unemployed to compute a combined rate of "economic idleness"; anyone who wishes to do so has the data at hand every month.

For some purposes, a measure of the joint impact of total unemployment and part-time employment would be useful, particularly if it could reflect the differential in the seriousness of the two problems. In 1955, the Joint Economic Committee suggested such a measure—basically, the conversion of hours lost by economic part-time workers into an equivalent number of wholly unemployed persons. The standard proposed was 37.5 hours, i.e., every 37.5 hours lost was taken to equal one unemployed person. In effect, this computation would count five men working 22.5 hours each as equivalent to two unemployed men, since their combined hours lost equaled 75 hours. These "equivalent unemployed persons," it was proposed, would be added to the fully unemployed to measure the combined impact of unemployment and part-time work.

The proposal that the Federal Government publish this measure, as well as the conventional statistics on unemployed and part-time workers, was reviewed by the Office of Statistical Standards of the Bureau of the Budget. The Office recommended against official publication on the grounds that such a measure would be confusing to the public, that it had certain technical drawbacks, and that it had not been proven useful as a new economic indicator as a guide to policy or in manpower analysis. For example, assumption of a 37.5-hour standard workweek is arbitrary. This type of measure also ignores overtime worked by the employed, which might be regarded as an offset to time lost in assessing the performance of the economy.¹ Another technical problem arises when the numbers of unemployed and equivalent unemployed persons are related to the labor force in order to calculate a rate of total, and partial unemployment. The labor force, the base of the rate, is an unduplicated count of persons, with each part-time worker counted only once, regardless of the number of hours he worked. The numerator is not a count of persons, but of persons plus hours lost converted to persons.

The "hybrid" measure could be misleading as well as confusing.

Although the Census Bureau earlier, and now the Bureau of Labor Statistics, never published these full-time equivalent unemployment measures, they were computed each month and furnished to the Joint Economic Committee and to any other user who requested them. Because of the continuing interest in some composite figure reflecting the severity of both total and partial unemployment, the Bureau of Labor Statistics, at the request of the Joint Economic Committee, has experimented with several different approaches. The most satisfactory approach relates man-hours worked (or lost) to man-hours that could have been worked by the labor force if there were no unemployment or part-time employment due to economic causes. In effect, this ratio provides a measure of the extent to which the Nation's labor force is being fully utilized at a given point in time. The major advantage of this approach over the "full-time equivalent unemployment" computation is that it is in terms of comparable units, i.e., man-hours, and not a combination of *people* and *hours lost* converted to "people."

As in the "full-time equivalent" computation, some assumption has to be made about how many hours the unemployed and part-time employed would have worked if the labor force were operating fully. Three assumptions have been made in the computations underlying chart 1. The first assumes that they would have worked 37.5 hours. The second assumes 40 hours, the most common scheduled workweek and the standard set by the Fair Labor Standards Act, beyond which workers in covered employment must receive overtime pay.² The third, a variable standard, assumes that the unemployed and the economic part-time employed would have worked the average hours actually worked each month by the "fully employed," that is, the voluntary part-time workers plus those who worked 35 hours or more and those who would have worked 35 hours or more except for noneconomic reasons (bad weather, vacation, illness, etc.). For example, in May 1960, the

¹ See letter and statement of Raymond T. Bowman, Assistant Director, Office of Statistical Standards, to Honorable Richard Bolling, in *Hearings before the Subcommittee on Economic Statistics of the Joint Committee on the Economic Report*, November 7 and 8, 1955.

² Employees included under the act by the 1961 amendments will be brought gradually under the act's overtime provisions until they receive time and a half pay after 40 hours a week by September 1965.

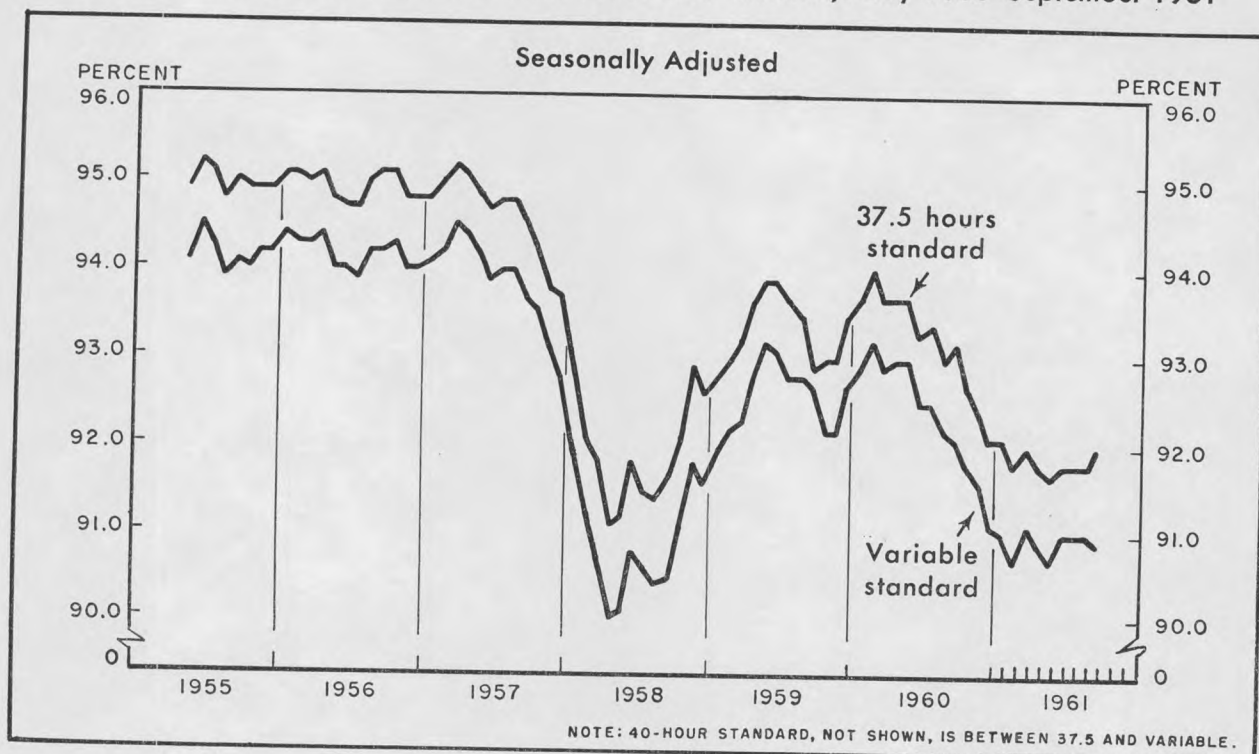
turning point of the business cycle, as determined by the National Bureau of Economic Research, all persons at work averaged 40.8 hours. When the hours for the economic part-time workers were subtracted, the average for the fully employed was 41.6 hours. This average was used as the standard for that month. The variable standard reflects changes in overtime, voluntary part-time work, part time because of bad weather, vacation, etc.

In all three standards, persons with a job but not at work all week because of vacation, illness, bad weather, strikes, or personal reasons have been treated as *if they were at work*, thereby minimizing large accidental fluctuations traceable to these causes. It is assumed that they would have worked the standard number of hours. This group could have been omitted altogether from the computations, but since, on the average, half of the wage and salary workers in this group are receiving pay while not at work and since presumably the economy had work for them if they had not been absent all week, it seems more reasonable to include them in the estimate of available work time.

Each of these three standards is only an approximation of an ideal standard. To choose the most appropriate standard, additional information would be needed that is not available: (a) how many hours of work unemployed workers were looking for, (b) how many hours of work the economic part-time worker wanted, as well as (c) the number of hours that persons absent all week from their jobs usually work at their jobs. The basic assumption underlying the variable standard is that these three groups would have the same hours as the "fully employed" (in our example—41.6 hours in May 1960) despite their different occupational or industrial characteristics. Actually a much higher proportion are operatives and laborers, a much smaller proportion are white-collar workers. Nevertheless, tests which have been made indicate that the differences are offsetting as far as hours worked are concerned.

The indexes are presented in chart 1 as a percent of available labor force time which was being utilized each month. In effect, these measures are derived by comparing the hours actually worked by the labor force (including hours imputed to persons with a job but not at work all

Chart 1. Percent of Available Labor Force Time Utilized, May 1955–September 1961



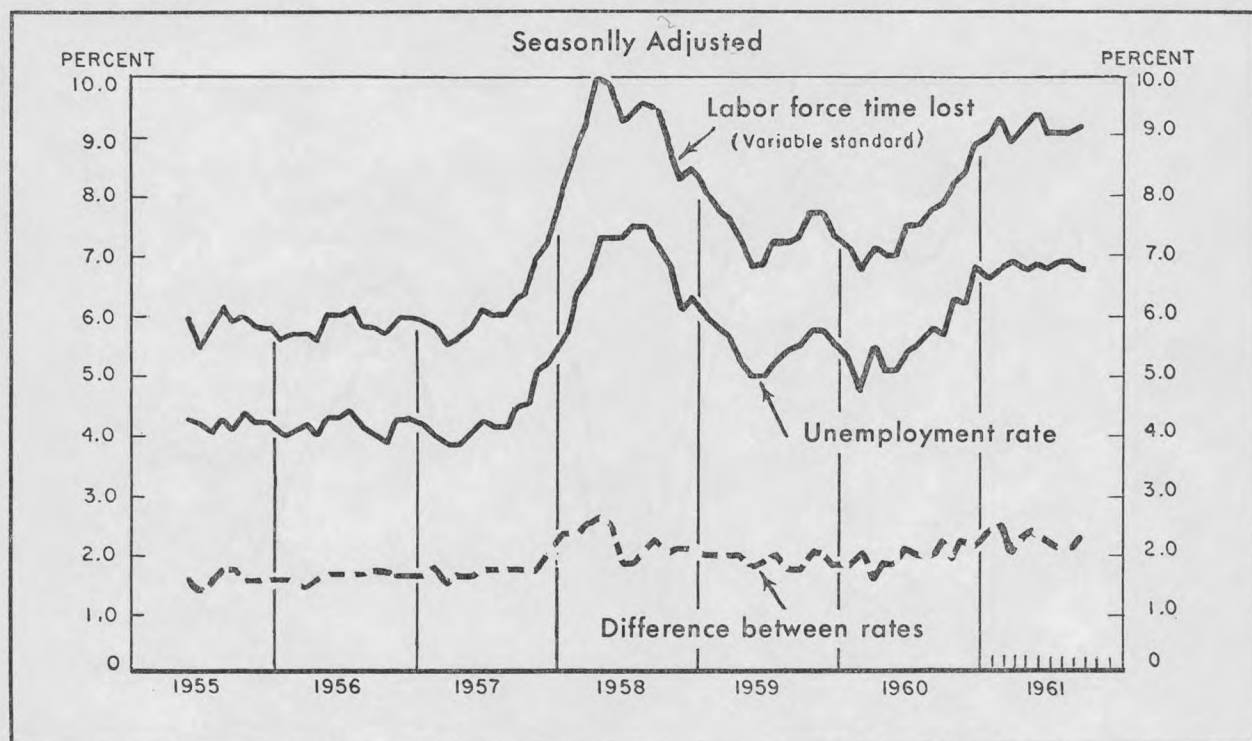
week) with the hours that could have been worked (hours worked plus hours lost through unemployment and economic part time). Like the conventional unemployment rate, this measure has a seasonal pattern and has been adjusted for seasonal variation, using the standard BLS method.

The three measures are close together: the 37.5-hour standard gives a ratio about 1 percentage point above the variable standard, with the 40-hour standard in between. Their trends are also identical. In months of high employment, such as July 1955 through July 1957, the measures reached 94-95 percent; at the other extreme, in the 1958 recession, they fell to 90-91 percent. Since January 1961, they have been running around 91 or 92 percent, and as of September showed no clear sign of improvement. Like the unemployment rate and other indicators, the percent of labor force time utilized shows that recovery from the 1957-58 recession was never complete. It also suggests that the present recession has been more moderate than the previous one, but that recovery in man-hours worked has not been so rapid.

Comparison with the official seasonally adjusted unemployment rate is made in chart 2. To facilitate the comparison, the index is shown in terms of percent of available labor force time lost through unemployment and part-time employment. With the exception of mid-1958, the patterns of the two measures are almost parallel; the discrepancy at that time probably reflects the fact that the seasonal adjustment of the unemployment rate is by four age-sex groups, while that of the time lost index is not. The difference between the two rates, shown at the bottom of the chart, increased during the 1958-59 and 1960-61 recessions, but not until after each recession was several months old. Apparently, as man-hours lost were rising, man-hours provided by the economy for persons with jobs also were adversely affected, and the rate moved up more rapidly than the unemployment rate. There is no evidence in the limited period studied that the composite index is more sensitive at turning points in the cycle.

Details of the computations for July 1961, as an example, are shown in table 1.

Chart 2. Percent of Labor Force Time Lost Through Unemployment and Part-Time Employment and Percent of Labor Force Unemployed, May 1955-September 1961



Overtime Versus Undertime Work

It has been suggested that if time lost through involuntary part-time employment is to be measured, then account should also be taken of time worked above a standard number of hours. Two possible methods of computation are presented here:

One approach is to convert the whole labor force to a full-time equivalent basis. Hours worked, as well as hours lost, can be expressed in full-time equivalents by dividing total man-hours worked (or lost) by whatever standard is selected. For example, in September 1961, there were 4,085,000 unemployed, 2,785,000 part-time workers for economic reasons, and 61,325,000 other persons at work. In addition, there were 2,928,000 employed persons away from their jobs all week. Assuming a 37.5-hour standard as the workweek for full-time workers, the time lost because of unemployment and economic part-time employment amounted to the equivalent of 5,310,000 fully unemployed persons. On the same basis, total man-hours worked (2,719,077,000) can be divided by 37.5 to give the full-time equivalent number of employed persons, or 72,509,000. For the purpose of this calculation, the group absent from their jobs all week for noneconomic reasons were regarded as full-time workers, although some small proportion had part-time jobs.

The effect of converting the labor force to a full-time equivalent basis is shown in table 2. In terms of persons, unemployment actually affected 5.7 percent of the labor force, and part-time for economic reasons, 3.9 percent, together 9.6 percent. The combined rate of unemployment and part-time employment, when converted to the full-time equivalent unemployment of hours lost, amounted to 6.8 percent of the full-time equivalent labor force.

Another way of looking at this problem is to measure the extent to which the hours of work provided by the economy would give a full workweek to everyone in the labor force, if hours worked beyond 40 were made available in the form of additional jobs or as additional hours for the underemployed. The substantial number of persons in the American labor force

TABLE 1. WORKSHEET FOR ESTIMATING PERCENT OF LABOR FORCE TIME UTILIZED, USING ALTERNATIVE HOURS STANDARDS, JULY 1961

[Man-hours and employment in thousands]

Step in calculation	Variable standard (42.5 hours) ¹	Constant standard	
		37.5 hours	40.0 hours
1. Total man-hours worked.....	2,519,009	2,519,009	2,519,009
2. Man-hours worked by economic part-time workers.....	67,203	67,203	67,203
3. Man-hours worked by "fully employed" (1-2).....	2,451,806	2,451,806	2,451,806
4. Number of "fully employed" (total minus economic part-time).....	57,679	57,679	57,679
5. Average hours worked by "fully employed" (3÷4).....	42.5	(37.5)	(40.0)
6. Man-hours imputed to persons with a job but not at work (7,357×hours standards).....	312,672	275,888	294,280
7. Man-hours provided by the economy (1+6).....	2,831,681	2,794,897	2,813,289
8. Man-hours lost by unemployed (5,140×hours standards).....	218,450	192,750	205,600
9. Man-hours lost by economic part-time workers (3,462×difference between hours standards and 19.4).....	79,972	62,662	71,317
10. Total man-hours lost (8+9).....	298,422	255,412	276,917
11. Total available labor force time (7+10).....	3,130,103	3,050,309	3,090,206
12. Time lost as percent of available labor force time (10÷11).....	9.5	8.4	9.0
13. Percent utilization of available labor force time (100.0—line 12).....	90.5	91.6	91.0

¹ Standard equals average hours worked in specified month by the "fully employed," i.e., all persons at work except economic part-time workers.

who work more than 40 hours is not generally realized. For example, in September 1961, 21,579,000 persons, or one-third of all persons at work, worked 41 hours or more, 3,071,000 in agriculture and 18,508,000 in nonagricultural industries. Not all of this time, of course, was overtime, in the sense of work at premium pay. A small proportion of these 40-plus workers are doubtless multiple jobholders, but periodic surveys suggest that probably no more than 3 to 3.5 million are working more than 40 hours for this reason. The most recent report, covering December 1960, shows that there were 3 million holding more than one job, working, on the average, a combined 50 hours on both jobs, with but 11 hours on the second job.³

Estimates of man-hours worked by those at work are compared in table 3 with the man-hours that would have been required to provide everyone in the labor force, except voluntary part-time workers, with 40 hours' work. This group was allowed the hours they actually worked rather than 40 hours in the calculation. An adjustment was also made for the fact that some proportion of the unemployed are looking for part-time jobs; this group, estimated at 10 percent, was assumed to want the average hours actually worked by regular, voluntary part-time workers that month.

³ See "Multiple Jobholders in December 1960," *Monthly Labor Review*, October 1961, pp. 1066-1073.

The ratio of hours worked to hours required (col. 3) ranges from 102.0 in October 1960 to 91.3 in July 1961, and 93.4 in July 1960. Part of the reason for the "deficit" in the month of July is the large number of persons on vacation all week; they do not work at all during the week, but are assumed to require 40 hours. It can be argued that the economy was operating at a level to provide work for these members of the labor force had they chosen to stay on the job. If this is assumed, then the ratios in column 5 are valid, and show that the hours provided by the economy were sufficient or more than sufficient to meet the requirement of 40 hours per labor force member.

Some of the workers who put in more than a 40-hour week are in agriculture or are nonfarm self-employed, and are not strictly in the same competitive labor force as most of the unemployed and partially employed. In January 1961, for example, 41 million of the 280 million man-hours worked over 40 were contributed by agricultural workers and another 70 million were by nonfarm self-employed and unpaid family workers; in July, these amounts were somewhat higher (table 4). A more appropriate segment of hours to be balanced against the hours lost by the unemployed and partially employed is the hours over 40 worked by nonagricultural wage and salary workers; in both January and July 1961, estimated hours lost amounted to 277 million, while hours over 40 were 168 million.

This comparison of the time worked over 40 hours in relation to the time lost by the unemployed and the partially employed raises a number of questions. It would obviously be difficult to

TABLE 2. ACTUAL AND FULL-TIME EQUIVALENT LABOR FORCE, SEPTEMBER 1961

Item	Actual labor force	Full-time equivalent labor force (assuming full time is 37.5 hours)
Total	71,123,000	77,819,000
Employed	67,038,000	72,509,000
Working part time for economic reasons	2,785,000
All other employed	64,253,000
Unemployed	4,085,000	5,310,000
Percent of labor force unemployed and employed part time for economic reasons	9.6
Percent of full-time equivalent labor force affected by unemployment and part-time employment	6.8

TABLE 3. MAN-HOURS WORKED AND MAN-HOURS REQUIRED, FOR SPECIFIED MONTHS

[In thousands]					
Month	Man-hours actually worked	Man-hours required if each labor force member worked 40 hours ¹	Ratio of (1) to (2)	Man-hours actually worked plus man-hours imputed to persons absent from job	Ratio of (4) to (2)
	(1)	(2)	(3)	(4)	(5)
1960					
January	2,467,000	2,513,489	98.2	2,560,720	101.9
April	2,563,032	2,553,628	100.4	2,652,752	103.9
July	2,590,297	2,740,602	93.4	2,851,937	104.1
October	2,669,340	2,616,643	102.0	2,751,860	105.2
1961					
January	2,496,280	2,581,297	96.7	2,578,080	99.9
April	2,561,303	2,603,675	98.4	2,642,103	101.5
July	2,519,009	2,759,462	91.3	2,813,289	102.0

¹ Except for voluntary part-time workers who are assumed to want the hours they actually worked.

make available to the unemployed and the partially employed the total time now worked over 40 hours. Even if, by Government edict, all persons would be prohibited from working longer than 40 hours, the extent to which this step would increase job opportunities for the partially employed or the unemployed is problematical.

Many workers in nonagricultural industries still have standard workweeks of more than 40 hours. The Fair Labor Standards Act extends only to workers in interstate commerce and many groups of workers are specifically excluded from its provisions. There is no legal requirement for the hours over 40 worked by these workers to be paid for at premium rates of pay. All self-employed workers, including farmers, are excluded from hours regulations.

Relative Risk of Unemployment

The suggestion has been made that the unemployment rate should be reweighted to reflect more adequately the relative risk of unemployment of various segments of the labor force. The total rate, which is most frequently quoted, shows the relationship between the number of unemployed and the total civilian labor force, including self-employed and unpaid family workers who, because they are working in their own or a family enterprise, are not as vulnerable to un-

employment as are wage and salary workers. Many other rates, however, are published by the Bureau of Labor Statistics every month—rates for men and women in various age or marital status groups, and rates for various occupation and industry groups. A rate for experienced wage and salary workers is also published monthly; it runs a fraction of a percentage point above the total rate in the fall and winter months but during recent years has averaged out at the same level. For purposes of this article, a rate has been computed for wage and salary workers plus new workers (those unemployed who have never held a full-time job lasting 2 weeks or more). This rate, which excludes from both the numerator and denominator the self-employed and unpaid family workers, who constitute about 15 percent of the labor force, is considered by some to be a more sensitive indicator of the course of unemployment from month to month and over the business cycle.

The unemployment rate for wage and salary workers plus new workers is shown on chart 3, seasonally adjusted, together with the rate for the

whole labor force. The trends and cyclical patterns of the two rates are almost identical. (Differences in the summer months are due to the composite age-sex seasonal adjustment of the total rate, a refinement that was not incorporated in the alternative rate.) On the average, the rate for wage and salary and new workers exceeded the conventional total rate by about 0.8 percentage points. The difference increases to 1.0 to 1.5 percentage points in recession months because the more sensitive rate rises somewhat faster.

A proposal to reweight the unemployment rate to reflect the uneven risk of unemployment of various occupation groups was also examined. In effect, of course, the unemployment rate as ordinarily computed does just that. Professional and technical workers, for example, who constitute about 10 percent of the experienced labor force, are seldom unemployed, and have about one-third as much weight in the numerator as they do in the denominator of the rate. Nonfarm laborers, on the other hand, make up 15 percent of the experienced unemployed, but constitute only about 6 percent of the labor force. Thus they

Chart 3. Unemployment Rate for All Workers and for Wage and Salary Plus New Workers, July 1948–September 1961

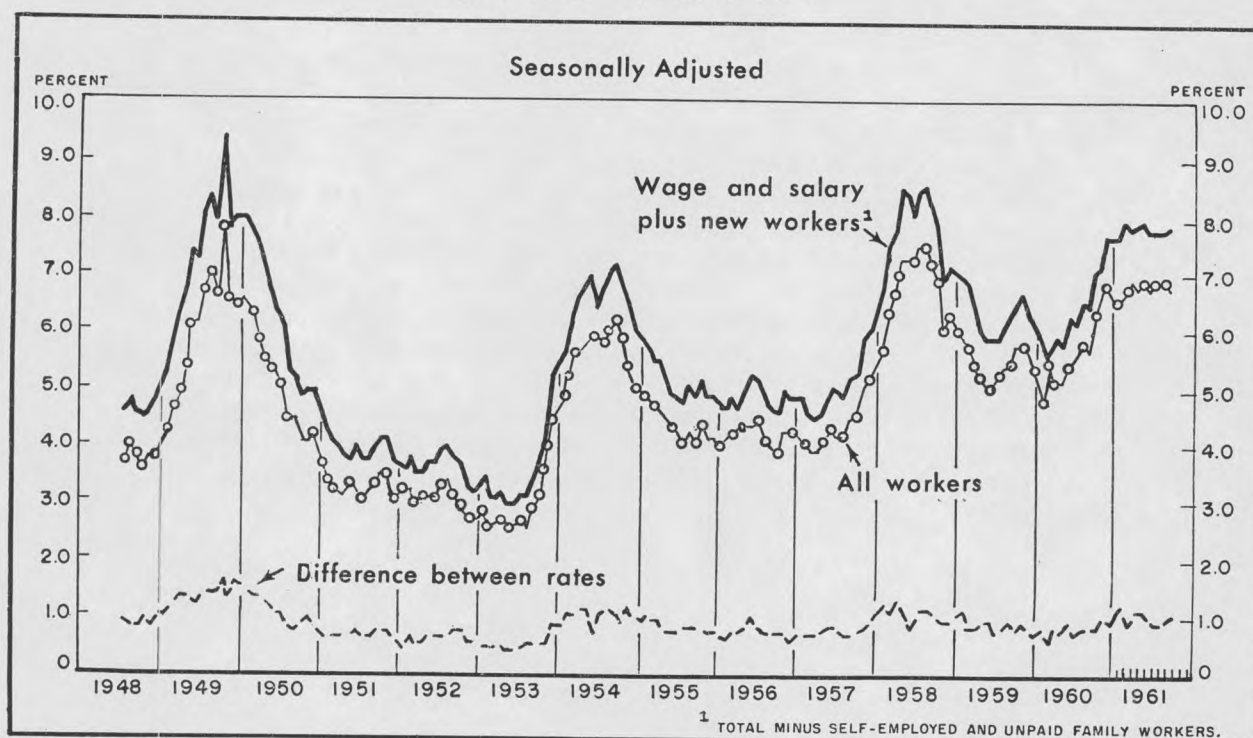


TABLE 4. MAN-HOURS BALANCE SHEET, JANUARY AND JULY 1961

Item	January	July
Man-hours lost by unemployed and economic part-time workers (assuming 40-hour standard).....	276,994,000	276,917,000
Man-hours worked over 40.....	279,805,000	322,770,000
Agricultural workers.....	41,189,000	78,866,000
Nonagricultural workers.....	238,616,000	243,904,000
Wage and salary workers.....	168,241,000	168,676,000
Self-employed and unpaid family workers.....	70,375,000	75,228,000

have a disproportionate weight in the rate because their risk of unemployment is high.

Analysis of the changes in unemployment rates by occupation groups leads to the conclusion that low-risk occupations feel the impact of business recessions in about the same proportions as high-risk occupations. A test was made, using the relationship that prevailed in 1957, a year of moderate unemployment. Ratios of the unemployment rate in each occupation group to that of professional and technical workers, a low-risk

occupation, were computed. Using these same ratios for 1958 and 1960, hypothetical total unemployment rates were estimated as follows: The actual unemployment rate for professional and technical workers was used as a base, and the 1957 ratios applied to derive assumed rates for the other occupation groups. A new overall rate was then computed. The hypothetical rate for 1958 was 6.3 percent as compared with an actual 6.2 percent; for 1960, the hypothetical rate was 5.4 percent as compared with an actual 5.0 percent. The reason for the greater difference in 1960 was that the actual unemployment rates for some high-risk occupations—operatives, service workers, and nonfarm laborers—were not as high relative to that of professional workers as they had been in 1957, and that there were no offsetting changes in the other direction. There is no evidence from this test that the overall unemployment rate as now computed is too low because it fails to reflect adequately the differential risk of unemployment.

But wee, for all the statutes that hitherto can be devised, and the sharpe execution of the same in poonishinge idle and lazye persons, for wante of sufficient occasion of honest employmente, cannot deliver our commonwealthe from multitudes of loyterers and idle vagabondes. Truthe it is, that throughe our longe peace and seldome sicknes (twoo singular blessinges of Almightye God), wee are growen more populous than ever hertofore; so that nowe there are of every arte and science so many, that they can hardly lyve one by another, nay rather they are readie to eate upp one another; yea many thousandes of idle persons are within this realme, which, haveinge no way to be sett on worke, be either mutinous and seeke alteration in the state, or at leaste very burdensome to the commonwealthe, and often fall to pilferinge and thevinge and other lewdnes, whereby all the prisons of the lande are daily pestered and stuffed full of them, where either they pitifully pyne awaye, or els at lengthe are miserably hanged, even XX^{ti} at a clappe oute of some one jayle.

—Richard Hakluyt. "Discourse Concerning Western Planting," 1584.

Weight Revisions in the Wholesale Price Index, 1890-1960

ALLAN D. SEARLE*

THE REVISION of the Wholesale Price Index completed in July 1961 introduced into the index weights based on the 1958 sales value of commodities traded in primary markets. At the same time, the number of commodities priced was increased to about 2,200 and the number of quotations obtained to more than 6,300. This article describes these changes and discusses their effect on the index. It also presents a brief history of weight revisions in the WPI since 1890. It has long been the policy of the Bureau of Labor Statistics to make periodic weight revisions in the WPI as new industrial censuses become available, but this is the first time that information about the effects of these revisions throughout the existence of the index has been published.

The New Weighting Structure

The current revision leaves the WPI concept basically unchanged. The index, as before, represents the price movements of the aggregate of commodities produced and processed in this country—or imported into it—and flowing into primary markets. The prices are those prevailing for sales in large lots at the first commercial transaction at each stage of processing—raw materials and semifinished and finished goods. These prices are combined into indexes using weights that represent the value of sales (or shipments) in primary markets during the weight-base reference period—currently 1958.

As in the past, each commodity series in the index represents a class of prices, and weights are based on the value of shipments of the priced commodity plus that of other commodities in the class which are not priced but whose prices are known, or assumed, to move similarly.¹ Usually values of unpriced items are assigned—or imputed—to commodities with a similar manufacturing process, because their price movements are assumed to yield the most accurate estimates of price changes for the unpriced items.

For domestic products, the 1958 weights are based on the net selling values as reported in the 1958 Census of Manufactures, the 1958 Census of Minerals Industries, and data furnished by the U.S. Departments of Agriculture and the Interior and other sources. These values are f.o.b. production point and exclude excise taxes. They also exclude interplant transfers² (where data permit), military products, and goods sold directly to household consumers by producing establishments. They now include the value of shipments for Alaska and Hawaii, formerly represented in the index by estimates of imports from these two new States.

For imports, the 1958 weights are based on market value in the country of export, as reported by the U.S. Department of Commerce. These values were adjusted to "landed U.S.A. values" by adding estimated duty and transportation charges.³

Census of Manufactures data were supplemented with estimates of shipments of "manufactures" produced outside the manufacturing sector for processed poultry, frozen fruits and vegetables, manufactured animal feeds, and converters' shipments of finished fabrics. In earlier revisions, nonmanufacturing sales data had been added to the Census totals for such items as dried fruits, hides and skins, and processed fish.

Because the Census data were not available for some time after the date of reference, the new weights were adjusted for price changes from 1958 to December 1960, when they were "linked" into the index.⁴ Indexes for January

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¹ Before 1947, the items were self-weighted, i.e., weights excluded the values of related items.

² For manufacturing industries, significant interplant transfers (i.e., the transfer of goods among establishments owned by the same company) were separated from commercial shipments in the 1958 Census of Manufactures. For the minerals industries and imported commodities, estimates of interplant transfer values developed in the preceding WPI weight revision were refined and extended.

³ Duty charges were based on tariff rates and transportation costs on ocean freight rates from each exporting country to each of four U.S. entry districts. No estimate was made for other forms of transportation into the United States or for insurance, loading, and handling charges.

⁴ Weight changes are generally made in December. The reweighted indexes after December (or the date of the change) are made comparable with indexes for earlier periods by the process of linking, which prevents the change from affecting the level of the index. In this process, the percentage change in price from December to January, computed on the new weights, is applied to the index for December, computed on the old weights.

1961 and subsequent months are based on the new weights. (See table D-3, pp. 236-237 of this issue.)

Effect of the Weight Change

The effect of the weight revision on the relative importance of major groups, subgroups, and product classes of commodities in the index is shown in table 1. The relative importance of an item for any specified period is its basic value weight (1958 value in this case) adjusted for the percentage change in price from the weight date to the specified date, with the result expressed as a percentage of the total adjusted value for all commodities. Changes in relative importance result from (1) weight revisions such as the one just completed, (2) minor interim weight adjustments to account for the addition or deletion of items, and (3) different rates of price change among various commodities. Thus, relative importance figures are distinguishable from weights because they change from month to month, whereas weights, by definition, are fixed for long periods. However, relative importances are in fact the weights implicit in the month-to-month changes in the index numbers.⁵

The relative importance figures in the first column of table 1 are the 1958 weight values adjusted for price changes between the reference date (1958) and the month of introduction (December 1960) and thus represent the effective weights of the groups in the WPI from December 1960 forward. The data in the second column of the table show, for the same date, the relative importance of the various groups of commodities in December 1960 under the 1954 weighting structure. Since both 1954 and 1958 data have been adjusted for price movements to December 1960, differences in the two sets of figures reflect only changes in weight assignments and in the sample of items priced.

Comparison of the relative importance figures for December 1957 and December 1960 based on 1954 weights shows the effect of price change (and minor sample revisions) on the relative importance of items. For example, between December 1957 and December 1960, when the all commodities index advanced 0.8 percent, eight of the major com-

modity group indexes advanced more in price and therefore gained in relative importance.

In general, the results of the recent weight revision represent the effect of updating the index to take account of changes in production and marketing patterns between 1954 and 1958. Thus the increase in relative importance of the fuels group from 7.65 to 7.87 percent is due principally to the large increase in production of gas and electricity which took place between 1954 and 1958. In other groups, the weight revision reflects not only shifting market patterns, but also improvements in coverage of the data used in developing the weights and changes in imputation patterns. Some of the more important reasons for the changes in relative importance in December 1960 are as follows:

Farm Products. The larger increase in farm output than in industrial production between 1954 and 1958 accounts for almost all of the rise in the relative importance of the farm products group from 10.16 to 10.59 percent of the total WPI. The remainder is due to addition to the 1958 weights of the value of baby chicks produced in commercial hatcheries.

Processed Foods. Weights in the processed foods group were increased by the addition of processed poultry and frozen fruits and vegetables produced in establishments not classified in manufacturing industries.

Textile Products and Apparel. The increase in relative importance of textile products was due largely to the inclusion of the value of converters' shipments of finished goods in the weight structure for the first time.

Chemicals and Allied Products. Between 1954 and 1958, production of chemicals and related products increased 29.8 percent compared with 8.9 percent for total industrial production. Increases in the value of shipments ranged from 35 percent to more than 50 percent for commodities such as soaps and synthetic detergents, photographic

⁵ See formula (2), footnote 6.

TABLE 1. RELATIVE IMPORTANCE OF GROUPS AND SUBGROUPS OF COMMODITIES IN THE WHOLESALE PRICE INDEX, DECEMBER 1957 AND DECEMBER 1960

Groupings	Relative importance			Groupings	Relative importance		
	December 1960		Decem- ber 1957		December 1960		Decem- ber 1957
	1958 weights	1954 weights			1958 weights	1954 weights	
All commodities.....	100.000	100.000	100.000	All commodities except farm and foods—Con.			
Farm products and processed foods.....	24.627	22.991	23.418	Pulp, paper, and allied products.....	4.860	5.175	5.168
Farm products.....	10.589	10.156	10.691	Woodpulp.....	.229	.302	.323
Fresh and dried fruits and vegetables.....	1.129	1.108	1.217	Wastepaper.....	.090	.094	.123
Grains.....	1.479	1.259	1.405	Paper.....	1.276	1.435	1.423
Livestock and live poultry.....	3.741	3.437	3.461	Paperboard.....	.445	.430	.447
Plant and animal fibers.....	.686	.881	1.015	Converted paper and paperboard products.....	2.646	2.732	2.674
Fluid milk.....	1.514	1.576	1.537	Building paper and board.....	.174	.182	.178
Eggs.....	.619	.616	.661	Metals and metal products.....	12.826	13.573	13.530
Hay, hayseeds, and oilseeds.....	.631	.481	.515	Iron and steel.....	4.728	5.518	5.493
Other farm products.....	.790	.798	.880	Nonferrous metals.....	2.793	2.802	2.756
Processed foods.....	14.038	12.835	12.727	Metal containers.....	.618	.614	.617
Cereal and bakery products.....	2.251	2.281	2.203	Hardware.....	.522	.582	.565
Meats, poultry, and fish.....	4.545	3.936	3.896	Plumbing fixtures and brass fittings ²193	.200	.198
Dairy products and ice cream.....	2.588	2.514	2.385	Heating equipment.....	.308	.325	.341
Canned and frozen fruits and vege- tables.....	1.093	.904	.865	Fabricated structural metal products.....	1.933	1.666	1.689
Sugar and confectionery.....	1.336	1.287	1.276	Fabricated nonstructural metal prod- ucts.....	1.731	1.866	1.871
Packaged beverage materials.....	.525	.480	.595	Machinery and motive products.....	17.573	19.654	19.270
Animal fats and oils.....	.103	.090	.103	Agricultural machinery and equip- ment.....	.829	.967	.911
Crude vegetable oils.....	.139	.121	.157	Construction machinery and equip- ment.....	.814	.899	.846
Refined vegetable oils.....	.101	.098	.114	Metalworking machinery and equip- ment.....	1.177	2.042	1.932
Vegetable oil end products.....	.353	.337	.375	General purpose machinery and equipment.....	1.975	2.700	2.636
Other processed foods.....	1.004	.787	.758	Miscellaneous machinery.....	1.335	1.494	1.481
All commodities except farm products.....	89.411	89.844	98.309	Special industry machinery and equipment.....	1.390		
All commodities except farm and foods.....	75.373	77.009	76.582	Electrical machinery and equipment.....	4.682	5.925	5.916
Textile products and apparel.....	7.754	7.419	7.454	Motor vehicles.....	5.039	5.627	5.548
Cotton products.....	1.994	2.010	2.003	Transportation equipment, railroad rolling stock.....	.332		
Wool products.....	.432	.464	.491	Furniture and other household durables.....	4.001	4.166	4.232
Manmade fiber textile products.....	1.374	1.024	1.090	Household furniture.....	.935	.938	.924
Silk products.....	.019	.028	.027	Commercial furniture.....	.395	.380	.376
Apparel.....	3.758	3.691	3.671	Floor coverings.....	.383	.353	.362
Other textile products.....	.156	.187	.154	Household appliances.....	.978	.983	1.041
Plastic products.....	.021	.015	.018	Television, radio receivers, and phonographs.....	.487	.523	.554
Hides, skins, leather, and leather prod- ucts.....	1.432	1.470	1.354	Other household durable goods.....	.823	.989	.975
Hides and skins.....	.110	.109	.085	Nonmetallic mineral products ³	2.865	2.650	2.630
Leather.....	.234	.266	.245	Flat glass.....	.244	.251	.259
Footwear.....	.769	.785	.728	Concrete ingredients.....	.719	.749	.728
Other leather products.....	.319	.310	.296	Concrete products.....	.908	.730	.715
Fuels and related products, and power ¹	7.870	7.651	7.716	Structural clay products.....	.343	.343	.330
Coal.....	.549	.609	.630	Gypsum products.....	.126	.117	.113
Coke.....	.069	.071	.068	Prepared asphalt roofing.....	.136	.153	.181
Gas fuels.....	.707	.450	.368	Other nonmetallic minerals.....	.389	.307	.304
Electric power.....	1.639	1.564	1.541	Tobacco products and bottled beverages ⁴	2.473	2.476	2.421
Crude petroleum and natural gaso- line.....	.778	.837	.875	Tobacco products.....	.955	.967	.966
Petroleum products, refined.....	4.128	4.120	4.234	Alcoholic beverages.....	1.038	1.058	1.059
Chemicals and allied products.....	6.643	5.777	5.847	Nonalcoholic beverages.....	.480	.451	.396
Industrial chemicals.....	2.379	2.257	2.282	Miscellaneous products.....	3.049	2.497	2.377
Prepared paint.....	.306	.507	.503	Toys, sporting goods, small arms, ammunition.....	.470	.449	.451
Paint materials.....	.564	.289	.284	Manufactured animal feeds.....	1.603	1.052	.942
Drugs and pharmaceuticals.....	.898	.685	.695	Notions and accessories.....	.105	.102	.104
Fats and oils, inedible.....	.122	.107	.145	Jewelry, watches, and photographic equipment.....	.574	.625	.611
Mixed fertilizer.....	.229	.234	.236	Other miscellaneous products.....	.297	.269	.269
Fertilizer materials.....	.256	.219	.213				
Other chemicals and allied products.....	1.889	1.479	1.489				
Rubber and rubber products.....	1.430	1.548	1.611				
Crude rubber.....	.236	.274	.275				
Tires and tubes.....	.550	.590	.666				
Other rubber products.....	.644	.684	.670				
Lumber and wood products.....	2.597	2.953	2.972				
Lumber.....	1.493	2.005	2.048				
Millwork.....	.697	.590	.561				
Plywood.....	.407	.358	.363				

¹ Formerly titled Fuel, power, and lighting materials.² Formerly titled Plumbing equipment.³ Formerly titled Nonmetallic minerals—structural.⁴ Formerly titled Tobacco manufactures and bottled beverages.

supplies, plastic materials, pharmaceuticals, and toilet preparations. As a result, the relative importance of the chemicals and allied products group has increased from 5.78 to 6.64 percent.

Pulp, Paper, and Allied Products. The small drop in the relative importance of the pulp, paper, and allied products group which resulted from the introduction of 1958 weights was due almost entirely to further exclusions of interplant transfers and direct sales to consumers by the printing and publishing industry.

Metals and Metal Products. The introduction of the 1958 weights for metals and metal products reduced the relative importance of that group, mainly because production of iron and steel decreased between 1954 and 1958. In addition, production of fabricated metal products rose considerably less than total industrial production.

Machinery and Motive Products. The machinery group experienced the greatest change in weight, falling from 19.65 to 17.57 percent of all commodities. A large part of the decrease occurred because, between 1954 and 1958, production of machinery and related products increased relatively less than total industrial output—only 2.5 percent compared with 8.9 percent. Many items such as machine tools, fans and blowers, and motors and generators actually decreased in volume. Production of nonelectrical machinery dropped 4.2 percent. About one-eighth of the total decrease in the weight assigned to this group resulted from a change in imputation patterns. A sizable value for the instruments and related products industry, formerly assigned to the machinery group as a whole, was assigned elsewhere, mainly to the miscellaneous products group. Also, the weight structure now excludes, for the first time, the values of rebuilt machinery and of railroad cars made in railroad car shops—the former being considered as repair work and the latter, as captive production and thus an interplant transfer.

Miscellaneous Products. The introduction of the 1958 weights brought an increase in the relative importance of miscellaneous products, since the production of such items as toys, sporting goods, and phonograph records had risen at a higher rate

than industrial output as a whole and because of the assignment here of values of some instruments and related products. In addition, the weight for manufactured animal feeds was increased by the inclusion of prepared animal feeds produced in nonmanufacturing establishments.

Other Commodity Groups. Changes in relative importance in the remaining major commodity groups were less than 0.5 percentage points and arose mainly from shifts in production and marketing patterns between 1954 and 1958. As mentioned previously, large increases in gas and electricity sales raised the weight for the fuels and related products and power group. Declining output of lumber and various household appliances reduced the weight for the lumber and wood products and for the furniture and other household durables groups. Higher production of cement, clay products, and concrete and plaster products resulted in greater relative importance for the nonmetallic mineral products group. In the hides, skins, leather, and leather products group, a less-than-average increase in volume of leather and leather products caused a decline despite the addition to the weights of raw furs and of sheepskins sold for pulled wool. The drop in weight in the rubber and rubber products group resulted from a decline in the value of imports and from the exclusion of interplant transfers for crude natural rubber.

Revision of Commodity and Reporter Sample

In January 1961, 290 commodities were added to the WPI sample and 78 items were dropped. In addition, 554 individual reporter series were added, 538 from company reporters and 16 from trade publications. Nearly 100 new reporters strengthened reports for existing items; the rest were used to construct new commodity series.

Increases in commodity coverage in three major groups—chemicals and allied products, metals and metal products, and machinery and motive products—account for over 80 percent of the new items (and nearly all of the net increase). These groups, plus furniture and other household durables, also gained nearly 80 percent of the additional individual reporter series.

In the chemicals group, the principal increase in coverage occurred among pharmaceutical prep-

arations. The sample of commodities in this grouping was completely reappraised, and the index was subdivided by end use. This will facilitate comparison with price trends at retail as shown in the Consumer Price Index.

In the machinery group, the expansion of coverage provides a new grouping for special industry machinery and equipment, with indexes for food products machinery, textile machinery and equipment, woodworking machinery, and printing trades machinery and equipment. In addition, in October 1960, seven types of imported and domestic compact passenger automobiles were introduced because of their increasing importance in the United States domestic car market.

In the metals and metal products group, items were added to the nonferrous and the fabricated metal products subgroups and a new index was introduced for lighting fixtures.

Other improvements include strengthening of the furniture and other household durables group with the addition of over 50 new company reporter series and introduction of an index for porch and lawn furniture. Moreover, cotton broadwoven goods in the textile products group were regrouped to show finished goods and grey goods separately.

History of Weighting Structure

Throughout its existence, the concept of the WPI as an indicator of price changes in primary markets has remained essentially as described. Within these broad limits, however, there have been a number of modifications in calculation methods and in the scope of the index, as well as

⁶ A full description of the 1952 revision appears in "A Description of the Wholesale Price Index," *Monthly Labor Review*, February 1952, pp. 180-187.

Basically, the index is constructed according to the Laspeyere's fixed weight index formula:

$$(1) \quad R_t = \frac{\sum q_0 p_t}{\sum q_0 p_0}$$

Where p_0 is the price in the base period,

p_t , the price in the current period, and

q_0 , the quantity of commodities implicit in the value data.

This formula is mathematically equivalent to an arithmetic mean of price relatives with fixed value weights:

$$(2) \quad R_t = \frac{\sum \left(\frac{p_t}{p_0} \right) q_0 p_0}{\sum q_0 p_0}$$

In formula (1), the quantities are the weights used to combine *prices*; in formula (2), the values are the weights used to combine *price relatives*. In practice, of course, the index is calculated in a variation of this formula as changing specifications for commodities and reweighting of the index require chaining or linking computations.

periodic weight revisions. (The base period has also been changed several times, but these changes have not affected the weighting structure of the index and hence are not discussed here.)

Calculation. From 1921 until the major weight revision in 1952, articles properly falling under more than one classification were included under each of the classifications. Thus, structural steel, nails, and certain other metal products used in building were placed in both the building materials and the metals and metal products groups. Foods produced on the farm which reach the consumer practically unchanged, such as potatoes, eggs, and milk, were included among both farm products and foods. In computing the all-commodities index, however, such articles were counted only once. This system, unlike today's, made it impossible for the users of the WPI to construct their own special groupings by using detailed price indexes and relative importance figures. Also, the original WPI, which covered the years 1890-99, was compiled as an unweighted index of price relatives, but the number of series used for each commodity was roughly proportional to its importance in the market. This system was eliminated in 1914, when the index was recomputed retroactively with 1909 weights.

Another change in calculation methods was made in the major revision of 1952, when value weights were substituted for quantity estimates but without changing the basic formula.⁶ A chaining procedure was adopted whereby month-to-month price relatives are weighted with values, rather than the absolute prices weighted by physical quantities. In addition, once-a-month pricing replaced the use of arithmetic averages of 4 or 5 weeks' prices each month, after comparisons revealed little difference in movement.

Scope. In the two most recent revisions, attention was also given to the definition of the universe. In order to avoid an overlap of the CPI and WPI universes, the concept was clarified to exclude primary market sales directly to consumers. As indicated, the present weight universe is the value of commercial shipments of all goods produced by manufacturing, mining, agricultural, forestry, and fishing industries, in the United States, as well as commercial imports. It includes shipments originating in the United States, whether for domestic

or foreign use; imports for resale in U.S. primary markets; sales of gas and electricity to industrial and commercial users, including sales of electricity by Federal, State, and local governments; sales of scrap and waste materials for industrial use; and sales to the Federal Government of types of goods which are also sold to civilian customers, such as food and office supplies. Also included are sales through factory-owned retail outlets where data are lacking to permit the separation of these sales from other company shipments.

Excluded from the weight universe are the values of interplant transfers; goods produced and consumed within the same establishment; sales to the Federal Government of specialized products, such as military aircraft and ships; sales of goods by Federal, State, and local governments, except sales of electricity; direct sales from producers to household consumers (e.g., sales of electricity to residential users, and bread and milk sold on retail delivery routes);⁷ all services, whether transportation, distribution, personal, business, etc.,⁸ including services performed by establishments primarily engaged in producing goods (e.g., repair work and processing, on a commission basis, of goods owned by others); and such individual items as works of art or race horses.

Weight Revisions. New weights have been introduced into the WPI numerous times since the U.S. Department of Labor first published an index of wholesale prices covering the years 1890-99.⁹ Often, the new weights were applied retroactively and the index for earlier years was revised. Three principal retroactive revisions were as follows:

1. In 1921, the index incorporated weights from the 1919 Census of Manufactures. Computations were carried back to 1890 and 1909 weights (introduced in an earlier retroactive revision) were replaced.

2. In 1927, a decision was made to change weights each 2 years (in that period a Census of Manufactures was collected biennially). The index was revised back to 1913.

3. In 1952, there was a comprehensive revision of weights, sample, and methodology and the WPI was recalculated back to 1947. Value weights, based on the 1947 industrial censuses, replaced quantity weights; and the present system of imputation was introduced, wherein

each commodity series in the index represents a class of items whose prices are presumed to move similarly.

Weights have been changed three times since 1952. In January 1955, adjustments were made to align relative importance of major commodity groups with 1952-53 values. Value weights from the 1954 and 1958 industrial censuses were introduced in January 1958 and January 1961.

Changes in the relative importance of major groups, 1890-1960, and in the number of commodities are shown in table 2. These figures refer to the WPI as it is now published from 1890 to date and do not show the effect of those weight changes which were later replaced by the retroactive revisions described above.

Relative importance data are shown before and after each weight change. For each set of weights, the relative importance for the first time period shown reflects change brought about by the introduction of the new weights; the relative importance for the other time period reflects the effect of price change from the introduction of new weights to the specified revision date as well as minor changes due to introducing or dropping items.

Weights in the WPI reflect in broad outline changes which have taken place in the marketing economy of the United States over the years. The decreasing importance of farm products is portrayed strikingly. The relative importance of this group fell from 29.04 percent of the total index in 1890 to 13.67 in 1933, then rose to 20.83 in 1947, as farm prices rose at a rate greater than industrial prices during intervening years. From 1947 to 1960, the newly defined farm products group again fell in relative importance. It can be observed that, although farm products gained relative importance several times owing to greater than average price increases between weight revisions, only two revisions increased their weights in comparison with those at the time of the preceding revision.

⁷ Direct sales of other commodities may be included in the weight universe if separate data for commercial shipments are not available.

⁸ Electricity and gas, although deemed services for some purposes, are included in the WPI because they are considered to be functionally similar to and competitive with fuels such as coal and oil.

⁹ This early index was an unweighted average of 99 price relatives. This index represented an updating and revision by Roland P. Falkner of the University of Pennsylvania, of indexes compiled in accordance with a U.S. Senate resolution of 1891 which led to the publication of data on wholesale prices for 1840-91 in the so-called "Aldrich Reports" of the Senate Committee on Finance.

TABLE 2. RELATIVE IMPORTANCE OF COMMODITIES IN THE WHOLESALE PRICE INDEX AND NUMBER OF COMMODITIES AS OF DATES OF MAJOR WEIGHT CHANGES, 1890-DECEMBER 1960

[Percent of total index weights]

Commodity group	Year 1890	Year 1913		December 1913		December 1918		December 1920	
	1919 weights		1909 and 1914 average weights		1914 and 1919 average weights		1919 and 1921 average weights		1921 and 1923 average weights
All commodities.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Farm products ¹	29.04	33.22	27.12	28.02	24.91	27.74	27.11	21.15	19.49
Foodstuffs.....	25.54	23.07	24.95	24.85	25.06	25.43	25.80	23.69	21.92
Hides and leather products.....	4.24	3.96	5.65	5.83	5.23	4.91	4.80	5.28	5.28
Textile products.....	7.32	5.74	8.34	8.30	7.92	9.59	9.06	8.37	8.11
Fuel and lighting materials.....	11.19	13.57	7.78	7.77	9.46	8.82	10.47	14.88	16.33
Metals and metal products.....	7.84	6.58	10.00	9.35	11.88	10.09	9.72	10.42	12.48
Building materials.....	5.40	6.80	5.72	5.60	4.38	3.89	3.34	4.77	4.83
Chemicals and allied products ²	1.35	1.12	2.62	2.62	2.42	2.61	2.12	2.04	2.01
Housefurnishing goods.....	1.08	0.94	2.07	2.07	1.81	1.45	1.41	2.40	2.27
Miscellaneous.....	7.00	5.00	5.75	5.59	6.93	5.47	6.17	7.00	7.28
Number of commodities ³	199	215	531	531	531	534	534	534	536
December 1922		December 1929		December 1931		December 1933		January 1947	
1921 and 1923 average weights		1923 and 1925 average weights		1925 and 1927 average weights		1927 and 1929 average weights		1929 and 1931 average weights	
All commodities.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Farm products ¹	22.26	20.88	19.16	19.01	14.16	14.15	13.67	13.98	20.83
Foodstuffs.....	22.68	20.93	18.96	18.36	17.87	17.14	15.20	16.31	21.71
Hides and leather products.....	5.24	4.15	3.52	3.40	3.34	3.44	3.66	3.58	3.48
Textile products.....	9.30	9.13	9.41	9.18	8.56	8.00	9.68	9.72	8.76
Fuel and lighting materials.....	14.30	16.45	13.19	13.69	15.30	15.97	16.64	18.19	12.09
Metals and metal products.....	11.65	13.45	16.45	16.15	18.51	19.05	18.98	16.52	13.66
Building materials.....	5.29	5.47	6.43	6.54	7.12	6.72	7.59	6.23	6.59
Chemicals and allied products ²	1.75	1.78	1.62	1.74	1.94	2.08	1.97	1.98	1.81
Housefurnishing goods.....	2.02	2.12	3.08	3.11	3.57	3.31	3.18	3.01	2.31
Miscellaneous.....	5.51	5.64	8.18	8.82	9.63	10.14	9.63	10.48	8.76
Number of commodities ³	537	544	784	784	784	784	784	784	888
January 1947		December 1954		December 1957		December 1960			
1929 and 1931 average weights ⁴		1947 weights		1952 and 1953 average weights		1954 weights		1958 weights	
All commodities.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Farm products ¹	22.52	14.59	12.67	10.84	10.32	10.69	10.16	10.59	
Processed foods.....	20.14	15.87	14.74	13.75	13.19	12.73	12.83	14.04	
Textile products and apparel.....	8.49	10.37	8.41	8.30	7.65	7.45	7.42	7.75	
Hides, skins, leather, and leather products ⁵	3.48	2.17	1.78	1.41	1.41	1.35	1.47	1.43	
Fuel, power, and lighting materials ⁶	12.60	7.75	8.48	9.02	9.01	7.72	7.65	7.87	
Chemicals and allied products ⁷	3.99	5.83	5.14	6.54	6.24	5.85	5.78	6.64	
Rubber and rubber products.....	2.21	1.75	1.81	1.75	1.79	1.61	1.55	1.43	
Lumber and wood products.....	3.35	2.43	2.83	2.66	2.38	2.97	2.95	2.60	
Pulp, paper, and allied products.....	1.99	3.57	3.62	3.73	3.89	5.17	5.17	4.86	
Metals and metal products.....	7.86	11.18	13.62	13.56	14.53	13.53	13.57	12.83	
Machinery and motive products.....	6.07	13.75	15.97	17.07	18.75	19.27	19.65	17.57	
Furniture and other household durables.....	2.23	3.94	4.06	4.14	4.09	4.23	4.17	4.00	
Nonmetallic minerals—structural.....	1.96	1.35	1.51	2.07	2.14	2.63	2.65	2.87	
Tobacco products and bottled beverages ⁸	2.33	2.49	2.57	2.40	2.34	2.42	2.48	2.47	
Miscellaneous products.....	0.78	2.96	2.79	2.76	2.27	2.38	2.50	3.05	
Number of commodities ³	888	1,819	1,846	1,868	1,859	1,870	1,949	2,161	

¹ These relative importance figures for 1890 through January 1947 refer to the indicated weight-base reference periods for all major groups except farm products. For farm products, the following are the weight-base reference periods:

Weight data for—	Indexes for—	Weight data for—	Indexes for—
1919	1890-1912	1921-23	1921-22
1913-15	1923-25	1923-25	1923-29
1915-17	1915-16	1925-27	1930-31
1917-19	1917-18	1927-29	1932-33
1919-21	1919-20	1929-31	1934-Jan. 1947

From January 1947 through 1960, the weights for farm products have the same reference date as other components.

² Before 1940, titled Chemicals and drugs.

³ Commodities included in more than 1 major group are counted only once.

⁴ The 1929-31 weight-base index was calculated through 1951; the 1947 weight-base index was calculated retroactively to 1947. These data based on 1929 and 1931 weights have been reclassified into the 15 major groups used in the 1947 weight-base index.

⁵ Before 1947, titled Hides and leather products.

⁶ Before 1947, titled Fuel and lighting materials.

⁷ Before 1960, titled Tobacco manufactures and bottled beverages.

NOTE: For comparability with earlier data, figures for 1947 and later periods have been rounded to 2 decimals.

On the other hand, metals and metal products (which included some machinery items in the early years) gained in relative importance at most weight revisions, keeping pace with increasing industrialization of the country.

On the whole, the relative importance data show a gradual shift, roughly in accord with the relative volume of sales in the market place. However, analysis of the weight changes in the early years cannot be carried too far, for during the period before 1947, items in the index were assigned weights equal to their own value in the market without imputation of values for similar

unpriced items. Because of this, the weight of the chemicals group, for instance, increased when the number of items increased in 1913.

The comprehensive revision in 1952, with recalculation back to 1947, makes comparison of the weights before and after 1947 difficult. The effect of classification changes was, however, important. Farm products, for example, rose in importance as certain items were transferred from foods and textiles. Chemicals gained from the miscellaneous products group, and new groups were formed for rubber and rubber products and for pulp, paper, and allied products.

Difficult as it is to secure satisfactory price quotations, it is still more difficult to secure satisfactory statistics concerning the relative importance of the various commodities quoted. What is wanted is an accurate census of the quantities of the important staples, at least, that are annually produced, exchanged, or consumed. . . . [But] the compilers are forced to confine themselves for the most part to extracting such information as they can from statistics already gathered by other hands and for other purposes To extract acceptable results from this mass of heterogeneous data requires intimate familiarity with the statistical methods by which they were made, endless patience, and critical judgment of a high order, not to speak of tactful diplomacy in dealing with the authorities whose figures are questioned. The keenest investigator, after long labor, can seldom attain more than a rough approximation to the facts. . . .

—Wesley C. Mitchell, *The Making and Using of Index Numbers* (BLS Bull. 656, 1938), p. 26.

Significant Decisions in Labor Cases*

Labor Relations

Enforcement of NLRB Order. The Supreme Court of the United States held¹ that a Federal court, in an enforcement proceeding, may not modify an order by the National Labor Relations Board which was consented to by the parties even though the record does not contain findings supporting so broad an order.

The Board in this case had found that two unions and an employer had committed unfair labor practices by executing and maintaining a collective bargaining agreement which conditioned employment upon union membership, gave the unions exclusive control over hiring, and provided for dues checkoff. The final order, to which both the unions and the employer consented, directed the employer to refrain from giving effect to the agreement or engaging in other discriminatory activities in conjunction with the unions in question or "any other labor organization." Similarly, the Board's order required the unions to refrain from forcing or urging these contract provisions or other discriminatory activities upon this employer or "any other employer over which the Board will assert jurisdiction."

When the Board petitioned the U.S. Court of Appeals for the First Circuit for enforcement of its order, the parties abided by their agreement not to contest the order. The court, on its own volition, struck out² the quoted phrases wherever they appeared in the consent order and compliance notices. It ordered enforcement of the order as so modified.

The Supreme Court asserted that court authority to modify a Board order derives from section 10(e) of the Labor Management Relations Act, which empowers a court to "make and enter . . . a decree enforcing, modifying, and enforcing as so modified, or setting aside in whole or in part the order of the Board." The section

further provides: "No objection that has not been urged before the Board . . . shall be considered by the court, unless the failure or neglect to urge such objection shall be excused because of extraordinary circumstances."

The Supreme Court understood the appellate decision as holding that the limitations of 10(e) do not apply unless the record contains findings of fact supporting the Board order. The court of appeals had noted that there were no such findings of fact in this record—not even a stipulation of facts which would warrant broad relief. The circuit court had also concluded that the consent of the parties did not entitle the Board to issue an order without foundation in the record.

In reversing the decision of the court of appeals, the Supreme Court held the consent of the parties to be most significant; "it relieves the Board of the . . . necessity of making a supporting record." A decree rendered by consent is always affirmed without considering the merits of the case, with exceptions to this rule only for circumstances, such as fraud in the procurement of the consent order or lack of Federal jurisdiction. The Court found none of the exceptions present in this case and therefore remanded it to the lower court with directions to affirm the Board's order.

Discriminatory Discharge. The National Labor Relations Board ruled³ that discriminatorily discharged union employees were entitled to back pay only from the date of their dismissal until they refused the employer's subsequent offers of reinstatement.

Prior to the expiration of his contract with the union and while negotiations for a new agreement were in progress, the employer arranged for the installation of certain labor-saving machinery. He also brought 17 so-called "reserve" employees to town, housing them at his expense until they should become "regulars." When the contract expired, the employer informed the union that he

*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 *NLRB v. Ochoa Fertilizer Corp.*, 82 S. Ct. No. 37 (1961).

² 283 F.2d 26 (1960).

³ *Northern Virginia Sun Publishing Co. and Wheeler*, 134 NLRB No. 109 (Dec. 7, 1961).

would not continue to negotiate and had the machinery installed. He posted a notice stating that negotiations had been broken off, the contract terminated, and that the establishment was an open shop. The notice asserted that the foreman would hire all employees and make all rules until permanent rules were posted, and that there would be no discrimination with regard to the hiring of employees. Nevertheless, 14 of the 24 union employees were discharged and a nonunion foreman and "reserve" employees were put to work. The remaining union employees went on strike.

The employer later found himself in need of three additional experienced employees. The employer then sent telegrams to three of the discharged employees requesting that they return to work. The employees refused to go back to work unless the employer agreed to reinstate all persons on the payroll as of the expiration of the old contract. Thereupon, the employer sent separate telegrams in groups of threes to all but three of the discharged employees asking them to return to work. They similarly refused.

On ordering reinstatement and back pay, the majority of the Board found that the employer's discharge of the 14 union employees violated sections 8(a)(1) and 8(a)(3) of the Labor Management Relations Act and the discharged employees were therefore entitled to back pay from the date of their illegal discharge. But those who refused to return when the employer offered to reinstate them became strikers who were withholding their services in an attempt to compel the employer to comply with their demands. The Board held that while the LMRA forbids an employer to engage in discrimination to encourage or discourage union membership, it does not require him to reimburse employees who choose voluntarily to be absent from their work in exercise of their statutory rights to engage in collective activities. The Board therefore ordered back pay for the 11 discriminatees who refused reinstatement to the date that their telegrams of refusal were received by the employer.

Member Brown, in his dissent argued that the employer's individual offers to different employees at different times could only be construed as an attempt to break the collective opposition of the employees by dealing with them individually and that they therefore constituted additional viola-

tions of the LMRA. Since Member Brown did not think that the employer's offers of reinstatement were valid, he did not believe that a refusal of such offers should impose limits upon the employer's liability for back pay. Even if the offers had been valid, Member Brown would not have permitted an employer who had no intention of rehiring more than three dischargees to limit back pay for all those to whom he offered reinstatement merely by rotating offers a few at a time. To permit such a result would be, according to Member Brown, to give "a windfall to the perpetrator of illegal acts."

Representation. The National Labor Relations Board ruled⁴ that unless a union security provision is clearly unlawful on its face or has been found to be unlawful in an unfair labor practice proceeding, its presence in a collective bargaining agreement will not henceforth remove the contract as a bar to a representation petition. The Board asserted, however, that the mere existence of clearly unlawful union security provisions in a contract will not remove the contract bar if the effectiveness of the clause has been deferred or if the clause has been eliminated by a properly executed rescission. By its ruling in the instant case, the Board modified its decision in the *Keystone* case.⁵ The effect of that decision was that any contract containing a union security clause which did not reflect the precise requirements of the statute was presumed illegal and therefore no bar to a petition for representation.

In view of recent Supreme Court decisions⁶ frowning on the use of presumptions of illegality in unfair labor practice cases, the NLRB did not regard it as sound administrative practice to continue their use with respect to union security provisions. The majority believed, furthermore, that the application of the *Keystone* rule had had an extremely unsettling impact upon established collective bargaining relations. It asserted that a substantial number of contracts containing perfectly legal union security provisions did not expressly reflect the statutory language. As a

⁴ *Paragon Products Corp. and District, 50 United Mine Workers*, 134 NLRB No. 86 (Nov. 22, 1961).

⁵ *Keystone Coat, Apron, and Towel Supply Co.*, 121 NLRB 880 (1958); see *Monthly Labor Review*, December 1958, pp. 1399-1400.

⁶ For example, *NLRB v. News Syndicate Co.*, 365 U.S. 695 (1961); see *Monthly Labor Review*, June 1961, pp. 643-644.

result, an "inordinate number" of contracts have been disrupted.

The Board expressed the view that, in representation proceedings, it should ensure that contracts containing union security clauses explicitly forbidden by statute do not prevent a Board-conducted election. The following union security provisions would be deemed unlawful on their face: (1) those which expressly and unambiguously require the employer to give preference to union members in hiring, laying off, or seniority; (2) those which specifically withhold the statutory 30-day grace period; and (3) those which expressly require as a condition of employment payments other than uniform dues and initiation fees.

Ambiguous but not clearly unlawful union security provisions will bar an election unless they have been determined to be illegal, by either the Board or the Federal courts, in an unfair labor practice proceeding. In representation cases, the Board will not consider testimony or evidence of lack of enforcement or intent under the contract which is urged as an election bar. Litigation of these issues should be reserved for unfair labor practice proceedings.

Members Rodgers and Leedom dissented. In their view, the majority had held that "no union security provision will remove a contract as a bar unless its nonconformity with the act is so blatant that even the blind must see it."

Union Members' Rights

Removal of Union Officers. A Federal district court held⁷ that section 101(a)(5) of the Labor-Management Reporting and Disclosure Act, which establishes safeguards for union members against improper disciplinary action, does not apply to the removal of a union officer for misconduct as an officer.

The union official in this case alleged that he was removed from office in a procedure which met none of the specific requirements of section 101(a)(5): "No member of any labor organization may be fined, suspended, expelled, or otherwise

disciplined, except for nonpayment of dues . . . unless such member has been (a) served with written specific charges; (b) given a reasonable time to prepare his defense; and (c) afforded a full and fair hearing."

In reaching its decision, the court relied on two district court cases⁸ which held that the safeguards of 101(a)(5) were not applicable where union officers were removed because of statutory ineligibility to hold office. In a third case,⁹ another district court had pointed out—in interpreting section 609 of the LMRDA—that there was a distinction between being removed from office for misconduct as an officer and for misconduct as a member. Since the union official's charges in the present case indicated that he had been removed for his alleged misconduct in office, the court did not believe that the safeguards of 101(a)(5) were applicable.

The court dismissed his argument that since he had been subject to the possibility of fine, expulsion, or other disciplinary action while before the union's trial board, he should be protected by the statute. None of these possibilities actually occurred. It therefore dismissed his complaint against the union.

Political Activities of Union Members. A California appellate court held invalid¹⁰ as against public policy the expulsion of two union members for their active advocacy, contrary to official union policy, of a proposed "right-to-work" law in a State referendum. The court concluded that the union's interest in subduing public dissent among its members was outweighed by the interest of society in public debate over right-to-work legislation and by the individual's right to speak freely on political matters.

In this case, two union members had issued press releases, distributed handbills, and made speeches on television and before various groups in support of a State right-to-work law. As a result, they were expelled by their local for "conduct unbecoming a member." The expelled members did not purport to speak as representatives of their union, but only as union members. Further, neither lost his job as a result of his expulsion from the union.

At the outset, the court dismissed the union's argument that the threat of expulsion for such activities in no way impairs a member's freedom,

⁷ *Burton v. Independent Packinghouse Workers Union, Local 12* (D.C., Kans., Nov. 21, 1961).

⁸ *Strauss v. International Brotherhood of Teamsters*, 179 F. Supp. 297 (D.C., E.D. Pa., 1959); and *Jackson v. Martin Co.*, 180 F. Supp. 475 (D.C., Md., 1960).

⁹ *Sheridan v. United Brotherhood of Carpenters, Local 626*, 191 F. Supp. 347 (D.C., Del., 1961).

¹⁰ *Mitchell v. International Association of Machinists* (Calif. Dist. Ct. of App., 2d Dist., Nov. 14, 1961).

since he is assured by Federal legislation that loss of membership for reasons other than nonpayment of dues does not mean the loss of his job. Expulsion would deny a member his stake in the strike fund and other funds to which he has contributed. It would deprive him of any voice as to how the union represents the employees, though the union is required by law to represent him as well as its members. It might impair his rights if he subsequently quit his job and sought employment elsewhere. Finally, the court noted that the social consequences of a nonmember working among union members could not be overlooked.

The court examined several prior decisions in its attempt to resolve the conflict between the interest of the community, the rights of the individual, and that of a union to enforce discipline. It divided the case law roughly into three categories. At one extreme were situations in which the activities of a member were fundamentally antagonistic to the union as collective bargaining agent. Among these were cases involving union spies and dual unionism, where the courts had upheld union discipline. At the other extreme were cases in which the courts had frustrated union attempts to interfere with specific obligations of citizenship. For example, a union was prohibited¹¹ from expelling a member who, as a public official, refused to appoint another member of the union as an inspector. Cases dealing with the expulsion of union members for political activity formed the middle category. The court could not find among these cases any precedent controlling the facts of the present case.

Therefore, the court proceeded to weigh the interests of the various parties involved. Because of the strong interest in the free expression of

political ideas, the court found it desirable to scrutinize carefully the attempted restriction by a union of political activities injurious to its interests. The nature of the doctrine advocated is a factor in determining the rights of a union to suppress its advocacy. If the union members concerned had advocated the repeal of the Wagner Act or the abolition of unions, their expulsion would have raised a different question. Such advocacy would have constituted in the court's eyes a challenge to the very fundamentals of unionism. Here, the expelled members had espoused the adoption of right-to-work laws. While the union might reasonably consider such enactments to be seriously inimical to its interests, the court asserted that there was substantial respectable opinion to the contrary. There being such a disparity of opinion as to the long-run effects of voluntary unionism, the question was not whether the union was justified in its opinion. Rather, it was whether the issue is sufficiently debatable so that society's interest in the debate, together with the individual's right to speak freely on political matters, outweighs the union's interest in subduing public dissent among its members. Since the court found that the political activity in this case was not patently in conflict with the union's interests, it concluded that the union should not be permitted to use its power over members, which is partly derived from the special protection given unions under Federal law, to curb the advocacy of their political views. In this case, furthermore, any possible danger to the union was mitigated by the fact that the expelled members did not purport to represent their union.

¹¹ *Manning v. Klein*, 1 Pa. Super. 210 (1896).

Chronology of Recent Labor Events

December 1, 1961

THE Pratt and Whitney Aircraft Division of the United Aircraft Corp. put into effect a 3-percent pay increase for 10,000 nonunion salaried employees. The increase followed agreement between the company and the International Association of Machinists on raises of 6-11 cents an hour for some 23,000 production workers, effective December 4, under a wage reopening of the current contract.

December 5

RULING that bargaining units for insurance agents will henceforth be determined by applying "normal unit principles," the National Labor Relations Board overturned its 1944 decision that such units must be company- or state-wide in scope, which was "adopted solely in anticipation of broader organization [that] has not materialized." The current case was *Quaker City Life Insurance Co. and Insurance Workers International Union*.

THE Teamsters union foreclosed on the General Oglethorpe Hotel Co. of Savannah, Ga., when the company defaulted on the repayment of a \$2,400,000 loan made in 1959. The union pension fund purchased the company at public auction for \$1,960,000.

December 7

THE NLRB modified a policy adopted in 1959 under which it automatically excluded all technical workers from a production and maintenance bargaining unit whenever their unit placement was disputed. Henceforth, the Board said, the overriding consideration will be the "community of interests" between technical employees and others in the unit, with decisions in disputed cases based on the "desires of the parties, history of bargaining, similarity of skills and job functions, common supervision, contact and/or interchange with other employees, similarity of working conditions, type of industry, organization of plant, whether the technical employees work in separately situated and separately controlled areas, and whether any union seeks to represent technical employees separately." The case was *Sheffield Corp. and District 13, International Association of Machinists*.

AGREEMENT on a 27-month contract between the Amalgamated Meat Cutters and the Great Atlantic and Pacific Tea Co. ended a 7-day strike of butchers which had idled

15,000 workers in the Philadelphia area. Contract provisions included wage increases totaling \$11 a week over 2 years. (See also p. 192 of this issue.)

December 8

REVERSING a rule in effect since 1955, the NLRB held that an employee subject to a lawful union-security contract may not escape discharge for dues delinquency by making a belated tender of dues, provided the discharge is motivated solely by his delinquency. The Board found that the previous rule was contrary to the congressional intent to permit the making and effective enforcement of lawful union shop agreements. The current case involved Local 717 of the International Union of Electrical Workers and a group of dissident members at the Packard Electric Division of the General Motors Corp. who had delayed payment to harass the union.

December 11

THE U.S. Supreme Court refused to review *Goldberg v. Truck Drivers Local 299, International Brotherhood of Teamsters*, thereby leaving in effect a lower court's ruling that the Secretary of Labor can subpoena union records without establishing a reasonable basis for belief of actual or probable violation of the Landrum-Griffin Act (Chron. item for Aug. 16, 1961, MLR, Oct. 1961).

December 13

THE fourth biennial convention of the AFL-CIO adjourned in Bal Harbour, Fla., after taking action that included: (1) approval of new procedures for settling jurisdictional disputes (Chron. items for Nov. 17 and 30, MLR, Jan. 1962) and for adjusting complaints of racial discrimination by affiliates; (2) conditioning approval of applications for reaffiliation by expelled unions (notably the Teamsters) on full compliance with AFL-CIO ethical standards; (3) calling for renewed efforts to organize the unorganized; and (4) raising monthly per capita dues from 5 to 7 cents. (For a full account of the convention, see pp. 133-138 of this issue.)

MEMBERS of the Utility Workers Union ratified a 1-year contract with the Consolidated Edison Co. of New York, Inc., which provided pay increases of \$4-\$5 a week and other benefits for 21,000 workers. (See also p. 191 of this issue.)

December 14

THE NLRB unanimously ruled that in the future it would consider charges of pre-election misconduct dating back to the filing of the election petition instead of the directing of the election, as under a policy adopted in 1954, but would not apply the rule to contested election cases currently pending. The Board noted that its recent delegation of authority in election cases to its regional directors (Chron. item for Apr. 28, 1961, MLR, June 1961)

had markedly lessened the interval between the filing of petitions and the holding of elections. The case was *Ideal Electric and Manufacturing Co. and International Union of Electrical Workers*.

SECRETARY OF LABOR ARTHUR J. GOLDBERG, acting as arbitrator between the Metropolitan Opera Association and Local 802 of the American Federation of Musicians (Chron. item for Aug. 28, 1961, MLR, Oct. 1961), awarded salary increases totaling \$20 a week over the life of a 3-year contract and other improvements. Secretary Goldberg also advocated Federal subsidies and wide public financial support for the performing arts. (See also pp. 191-192 of this issue.)

December 15

RECONSIDERING an earlier decision (MLR, Dec. 1960, pp. 1314-1315), the NLRB found that the jurisdictional disputes provisions of the National Labor Relations Act do not require the Board to make a specific award of a work assignment where the employer has created the dispute by unilaterally transferring the work away from the only group claiming it. The case, *Local 107, International Brotherhood of Teamsters and Safeway Stores, Inc.*, involved picketing when the employer discharged the union's members after its contract had expired and their work had been transferred to the jurisdiction of sister locals, neither of which claimed the right to perform the transferred work.

December 17

THE Honest Ballot Association announced that New York City public school teachers, voting in a representation election, had cast 20,045 ballots for Local 2 of the American Federation of Teachers (AFL-CIO); 9,770 for the Teachers Bargaining Organization; 2,575 for the Teachers Union (Ind.); and 662 for no union. (See also p. 190 of this issue.)

December 18

REVERSING an appellate court's decision, the U.S. Supreme Court ruled that a Federal court may not modify an NLRB order to which both parties have consented. The Court found that, in the absence of such circumstances as lack of actual consent or fraud in procurement of the order, the NLRA prevents the courts from modifying

an uncontested consent decree because they cannot consider objections not raised by the parties before the Board. The case was *NLRB v. Ochoa Fertilizer Corp.* (See also p. 183 of this issue.)

December 19

THE NLRB held, in companion cases, that the "hot cargo" provisions of the 1959 amendments to the NLRA prohibit agreements that permit subcontracting but require the employer to give preference to subcontractors having contracts with, or approved by, the union whenever he sends out work ordinarily performed by his own employees. The Board found that such clauses would illegally cause the employer to cease doing business with nonunion subcontractors. A majority of the Board also ruled that, although the clauses in question had been executed before the 1959 amendments, their subsequent maintenance or reaffirmation violated the act. The cases involved the Greater St. Louis Automotive Trimmers and Upholsterers Association and two unions—District 9 of the Machinists and Local 618 of the Teamsters.

December 28

PRESIDENT JOHN F. KENNEDY appointed Clarence Randall, a director of Inland Steel Co., to head a seven-man panel to review and advise him on a proposal for improving Federal civilian pay systems so that Government salaries will be closer to those in private industry.

THE Transport Workers Union and the New York Transit Authority agreed on a 2-year contract covering 27,000 employees. Provisions included wage increases totaling 8 percent an hour, a guarantee of no layoffs during the contract, and improvements in the pension and health and welfare funds and in vacations. (See also p. 191 of this issue.)

IN THE FIRST formal holding against a union under the Subversive Activities Control Act as amended in 1954, Hearing Examiner Francis A. Cherry recommended that the Subversive Activities Control Board make a determination that the International Union of Mine, Mill and Smelter Workers (Ind.) is a "Communist-infiltrated" organization. Such a determination, if upheld upon appeal to the courts, would strip the union of all rights and privileges under the NLRA.

Developments in Industrial Relations*

Union Conventions

The AFL-CIO held its fourth biennial convention in Miami Beach, Fla., December 7-13, 1961. Its principal actions related to internal disputes, unemployment, and civil rights.¹

On the last day of the convention, delegates approved an amendment to the constitution setting up a formula for mediation and arbitration to settle jurisdictional disputes between affiliates, primarily between building trades and industrial unions. The plan binds affiliates to respect the established collective bargaining relationships and work relationships of other affiliates. Complaints of infringements are to be filed with AFL-CIO President George Meany, who will then designate one or more persons from a panel of mediators "within the labor movement" to effect a settlement.² If the dispute is not settled within 14 days, it is to be referred to an impartial umpire selected from a panel. (David L. Cole, umpire under the AFL-CIO no-raiding pact, was the first umpire to be designated.) If his determination is appealed, the case goes to a subcommittee of the Executive Council which may either uphold the decision (in which event the determination becomes final) or refer the appeal to the full Executive Council. The umpire's decision could be set aside or altered only by a majority vote of the 29-member Council.

The resolutions concerning wages, unemployment, and economic growth stressed the necessity for a constantly expanding economy. Among the measures advocated were wage advances to increase purchasing power, protection against loss of income or employment, shorter hours with no loss in pay, and an expansionary Federal budget policy. Many of the resolutions reflected the AFL-CIO view that "most industries can afford to grant improvements of wages, salaries, and fringe benefits without price increases."

The resolution on civil rights called for an intensified drive against discrimination in trade unions. To implement this policy, a new Civil Rights Committee was set up to overhaul the Federation's Civil Rights Department.

The convention reelected Mr. Meany, Secretary-Treasurer William F. Schnitzler, and 27 other members of the Executive Council to office. A 2-cent-a-month increase in Federation dues was approved to raise almost \$3 million more a year, mostly to meet operating expenses.

Two AFL-CIO departments—the Maritime Trades Department and the Metal Trades Department—held their conventions just prior to the Federation's meeting. The Maritime Trades convention centered its attention on the effects of transfers of U.S.-registered vessels to foreign flags. The officers' report asserted that in the past 16 years "practically all" of the U.S. merchant marine had "disappeared from domestic coastal and intercoastal trade," and that U.S.-flag vessels were carrying only about 10 percent of the country's foreign commerce. Resolutions urged that Congress enact legislation to end present "tax havens" for "runaway" shipping and called for a broad revision of ship subsidy laws governing construction and operation of American-flag vessels.

Delegates to the Metal Trades convention endorsed a program calling for a major organizing effort by the Department and its affiliates. They urged that a "code of organizing ethics" be adopted, warning that organizing techniques that "discredit, undermine, or criticize other unions are a disservice to the overall membership of organized labor."

The AFL-CIO Food and Beverage Trades Department was officially established in December at its founding convention in Miami Beach. The purpose of the Department, authorized by the AFL-CIO Executive Council at its June 1961 meeting,³ is to aid its 9 members in collective bargaining, coordinate activities, and assist in political, legislative, and education activities. It is to be financed by a monthly per capita tax of 1 cent per member, paid by each affiliate for that portion of its membership engaged in food

*Prepared in the Division of Wages and Industrial Relations, Bureau of Labor Statistics, on the basis of available material.

¹ For details of the convention, see pp. 133-138 of this issue.

² On January 7, Mr. Meany named 23 members of the AFL-CIO Executive Council and 19 other officials of affiliates to the panel.

³ See *Monthly Labor Review*, August 1961, p. 889.

and beverage trades. Local councils are to be established and will pay \$25 in annual dues to the Department. Harry R. Poole, executive vice president of the Meat Cutters, and Daniel E. Conway, president of the American Bakery and Confectionery Workers, were elected president and secretary-treasurer, respectively.

Reports and Rulings

President Kennedy on December 4 endorsed the recommendations of his Task Force on Employee-Management Relations in the Federal Service, which affirmed Federal employees' right to join or refrain from joining "bona fide employee organizations." The Task Force, headed by Secretary of Labor Arthur J. Goldberg, presented a set of general guidelines for establishing "a Governmentwide Presidential policy which acknowledges the legitimate role these organizations should have in the formulation and implementation of Federal personnel policies and practices." The guides would prohibit both provisions for closed or union shops and unions that deny membership based on discrimination, or that are corrupt, or assert the right to strike or overthrow the Government. They provide three forms of recognition for dealing with unions on matters such as division of workers into shifts or transfers of personnel. Agencies would not recognize the unions on salaries and other conditions of employment fixed by the Congress or matters which conflict with agency regulations or Governmentwide personnel policies. Informal recognition would give a union whose members comprise less than 10 percent of the employees in a unit or activity the right to present its views to the agency but would place no obligation upon the agency. Formal recognition would entitle any organization representing at least 10 percent of the employees the right to be consulted. Exclusive recognition would give any organization representing a majority of the employees the right to enter negotiations for an agreement applicable to all employees in the unit.

The National Labor Relations Board, in two companion cases on December 19, ruled that the ban on "hot cargo" provisions in union contracts applies to clauses that permit subcontracting but require an employer to give preference, in con-

tracting out work normally performed by his own employees, to concerns having contracts with the union. The Board found that such a clause could cause the employer to cease doing business with a nonunion subcontractor and would therefore be illegal under section 8(e) of the 1959 amendments to the National Labor Relations Act. Further, even though the clauses in question had been executed prior to the 1959 amendments, their subsequent maintenance or reaffirmation violated the statutory ban. The cases involved locals of the Teamsters union and the International Association of Machinists on the one hand, and the Greater St. Louis Automotive Trimmers and Upholsterers Association, Inc., on the other.

Wages and Collective Bargaining

Elections. In an NLRB runoff election on December 19, the Teamsters union defeated the Independent Aircraft Guild for the right to represent 5,000 workers at the Stratford and Bridgeport, Conn., plants of the Sikorsky Aircraft Division of United Aircraft Corp. The vote was 2,377 to 2,284. It reportedly was the first major aircraft company in New England to be organized by the Teamsters, in a drive personally led by union President James R. Hoffa. The independent union was formed in 1960 as an aftermath of an unsuccessful strike by the United Automobile Workers. The UAW, which had represented employees since 1943, was ousted as bargaining agent in a decertification election in November 1960.⁴

Also during December, the United Federation of Teachers (Local 2 of the American Federation of Teachers, AFL-CIO) won bargaining rights for about 40,000 teachers of New York City's public schools system. The mail vote—supervised by the Honest Ballot Association—was 20,045 for the UFT, 9,770 for the Teachers Bargaining Organization (a coalition of professional organizations), 2,575 for the Teachers Union of New York (an independent union since it was expelled some years ago by the AFT on charges of Communist domination), and 662 for no union. Representatives of the UFT subsequently met with the Board of Education and Superintendent of Schools to establish procedures for negotiating a contract.

⁴ See *Monthly Labor Review*, January 1961, p. 68.

Developments in New York City. During December, agreements were reached in transit, utilities, trade, and service trades in New York City. The settlement affecting the largest number of workers was between the Transport Workers Union and the New York City Transit Authority, for about 27,000 employees. The 2-year contract—agreed to on December 28 in the face of a strike scheduled for midnight December 31—calls for wage increases of 4½ percent in the first contract year and 3½ percent in the second. In addition, the Transit Authority is to pay 5 percent of employee earnings to the city pension fund (resulting in a comparable reduction in employee contributions), as well as 1½ cents a man-hour to correct health and welfare inequities. The union did not win its much-publicized demand for a 4-day, 32-hour scheduled workweek, but the parties did write into the contract a provision guaranteeing no layoffs during the term of the contract but presumably permitting reductions in force caused by attrition. An unwritten agreement of this sort reportedly has been in effect for several years. A fourth week of vacation after 15 instead of 20 years' service was also agreed to. The Amalgamated Street, Electric Railway and Motor Coach Employees union, representing about 1,800 workers in Queens and Staten Island, was also reported to have a contract providing similar terms with the Authority.

On December 30, the TWU and five privately operated bus lines, with about 2,000 employees, agreed to wage increases ranging from 22 to 26 cents an hour over a 2-year period. Fringe benefit improvements were said to be worth about 5 cents additional.

Subsequent to this settlement, the TWU agreed on January 4, 1962, to a 1-year contract with two other private bus lines (Fifth Avenue Coach Lines and its subsidiary, Surface Transit, Inc.), ending a 4-day strike. The 6,000 workers affected struck when the companies and city could not agree on concessions (including a request for a 5-cent fare increase) that would allow these lines a 7-percent return on investment after meeting higher labor costs. The settlement provided a 13-cent-an-hour wage increase, retroactive to December 1, 1961.

Improvements in fringe benefits included 4 weeks' vacation after 15 instead of 20 years' service. The issue of financial relief for the companies was resolved when the city, after threatening to withdraw the companies' lapsed franchises, agreed to permit elimination of transfers and to increase its subsidy for school fares; these measures would reportedly allow the companies a return of about 4½ percent.

The Consolidated Edison Co. of New York, Inc., and the Utility Workers Union, representing about 21,000 of the company's employees, reached agreement in late November after nearly 3 months of negotiations. The 1-year contract, ratified by union members on December 13, provided wage increases of \$4 a week for employees earning less than \$3.41½ an hour and \$5 weekly for those earning more. Additional increases resulted from promotions and job reclassifications. The union estimated the wage package to be worth 17.8 cents an hour.

Independent distributors of oil and coal supplies in New York City and a local of the Teamsters union agreed on December 22 to a contract covering about 3,000 drivers, servicemen, maintenance men, weighmasters, and helpers. The length of the contract was not reported. The settlement reportedly called for a wage increase of 20 cents an hour and improvements in fringe benefits. The average wage prior to the new contract was said to be \$2.95 an hour.

Secretary of Labor Arthur J. Goldberg on December 14 announced an arbitration award providing the 91 musicians of the Metropolitan Opera Association a \$10-a-week raise for the current season (retroactive to July 1, 1961) and additional raises in the next two seasons. The award brought the minimum weekly pay to \$180 for the 1961-62 season (instead of \$170.13), \$185 next season, and \$190 for the 1963-64 season. Secretary Goldberg also granted raises in pay for both rehearsals and nonacting stage appearances, as well as in overnight per diem allowances. In settling the dispute between the association and Local 802 of the American Federation of Musicians, which he had entered when cancellation of the season was threatened⁵—the Secretary called attention to the lack of adequate financial backing for the performing arts in general and appealed for Federal subsidies

⁵ See *Monthly Labor Review*, October 1961, p. 1122.

and broad public support to assure the arts "their place alongside the already accepted responsibilities for health, education, and welfare." He suggested as "the most important immediate step" the creation of a Federal advisory council on the arts, which the Congress failed to approve in 1961.

New York City Mayor Robert Wagner on December 29 signed a bill requiring firms that do public contract work for the city government to pay their workers a minimum \$1.50 an hour. The law, to go into effect on January 29, 1962, covers all concerns that "contract for or on behalf of the city for the manufacture, furnishing or purchases of supplies, material or for the furnishing of work, labor or services. . . ."

Other Contract Settlements. The Communications Workers of America and the American Telephone and Telegraph Co. agreed in late November to general pay increases ranging from \$1.50 to \$4 a week for 20,000 Long Lines Department employees. Additional wage increases were provided for some job classifications and as a result of some town reclassifications. The increases were negotiated under an annual wage reopening provision of a 3-year contract signed in 1960.

Wage increases ranging from 5 to 10 cents an hour went into effect in December for about 21,000 organized employees of Western Electric Co., Inc. At the company's Hawthorne Works in Cicero, Ill., the increases, effective December 19, affected about 11,000 employees represented by the International Brotherhood of Electrical Workers. The other settlement was negotiated with the Communications Workers of America for about 10,000 distribution and warehousing employees throughout the country. According to the CWA, the latter increases (effective December 20) averaged about 7½ cents an hour. Both increases were negotiated under annual wage reopening provisions of 3-year contracts signed in 1960.

The Hughes Aircraft Co. and the Electronic and Space Technicians union (a local of the United Brotherhood of Carpenters and Joiners) on November 26, 1961, signed a 3-year contract covering about 10,000 workers in the Los Angeles area. The settlement called for general wage increases ranging from 5 to 8 cents an hour effective November 29 and the same increases for November of both 1962 and 1963. Other contract improvements in-

cluded an eighth paid "floating" holiday (the day to be selected by the company) and, effective January 1, 1962, liberalized health insurance benefits.

Seven locals of the Amalgamated Meat Cutters and Butcher Workmen, representing 10,000 employees of meat departments of chain and independent food stores in the Chicago area, agreed in late November to a 3-year contract. The agreement provided journeymen and head meat cutters with a \$5-weekly raise retroactive to October 9, 1961, and an additional \$5 in October 1963. The initial raise brought journeymen meatcutters' scale in self-service markets to \$129 for a 40-hour week. Raises of \$1 to \$4—effective in both October 1961 and 1963—were negotiated for apprentices except those in the lowest wage bracket, whose rates were not changed. Other contract changes included a fourth week of vacation after 20 years' service and a jointly administered health and welfare fund in to which employers will pay \$21 per month for each full-time employee. (A majority of the meat department employees of any company may, however, elect to continue participating in that company's own health-welfare program on a noncontributory basis.)

In the Philadelphia area, the Meat Cutters agreed in early December to new 27-month contracts covering about 4,000 meat department employees of three retail food chains. The settlement—applying to A & P, American, and Food Fair stores bargaining through the Philadelphia Food Store Employers Labor Council—provides a \$6-a-week raise for the first 15 months of the contract and an additional \$5 during the next 12 months. Agreement was preceded by a 1-week strike at A & P; during the strike, the two other companies reportedly locked out their butchers. Issues centered on workloads and nightwork. A committee was set up to handle the first problem and pay for nightwork was liberalized.

Minimum Wage. The District of Columbia Minimum Wage and Industrial Safety Board on November 28 approved raises in the minimum wage covering about 16,000 women employed in retail trade. The first increase, effective January 27, 1962, brought the minimum to \$42 a week for a workweek of 36 through 40 hours and to \$1.05 an hour for fewer than 36 hours; for each hour over 40 a week, time and one-half will be based on

the rate of \$1.05. These minimums will be raised each year, beginning in September 1963, to \$50 for 36-40 hours, \$1.25 an hour for hours below 36 a week, and time and one-half of an employee's regular rate after 40 hours, by September 3, 1965. Previous minimums were \$36 for full-time work and \$1 an hour for part time and overtime.

Other Developments

New York State Governor Nelson Rockefeller announced on December 21 a State program to provide qualified welfare recipients with free retraining for new jobs. Mr. Rockefeller said the plan was primarily intended to offset the impact of automation by retraining workers whose skills had been outmoded by technological changes. The program, to be financed out of existing appropriations, will provide retraining to unemployed fathers receiving aid for dependent children and employable recipients of home relief. It also provides training for youths who have dropped out of high school and who are members of families receiving public assistance. The State Department of Labor is to decide on the training needed in a community and the Department of Welfare is to assign relief recipients to courses provided by local schools under the direction of the State's Department of Education.

The International Brotherhood of Electrical Workers on January 1, 1962, notified the Industrial Union Department of the AFL-CIO that it was withdrawing from that Department. The IBEW gave no explanation for its disaffiliation; its with-

drawal—after a 6-year membership since the Department was formed—reportedly will result in a loss of \$65,000 in annual dues for the Department.

An insurgent group of members of Teamster Local 107 in Philadelphia announced in early December it would seek NLRB elections with the aim of disaffiliating from the International Brotherhood of Teamsters and affiliating with the AFL-CIO. Local 107 has a membership of about 13,000 truckdrivers, helpers, and platform men. The rebel organization—referred to as the Voice of Local 107—was formed in protest of the July 1961 amendments to the IBT constitution which restricted the autonomy of local unions⁶ and of the policies of Raymond Cohen, secretary-treasurer of the local, which were said to ignore the rights of individual members.

In other Teamster developments, two union officials were indicted by a Federal grand jury in Philadelphia on charges they had received illegal payoffs from trucking companies in order to raise money for the defense of Mr. Cohen in pending civil and criminal court actions. (In November 1960, a Federal court of appeals had ruled that members of Local 107 were entitled to an injunction restraining union officers from using the local's funds for this purpose.) The two men were Lawrence J. Mullen, secretary-treasurer of Local 161 in Philadelphia, and Joseph Westernberg, an organizer for Local 107. During the month, five other Teamster officials in Toledo, northern New Jersey, and New York City were also indicted or held on bail on charges of attempted extortion or of accepting illegal payments from employers.

⁶ See "The 18th Convention of the Teamsters Union," *Monthly Labor Review*, August 1961, pp. 829-834.

The freedom to bargain collectively, the freedom to seek higher wages and better working conditions, the freedom to strike, are not unlimited freedoms. They are freedoms that imply responsibility. They must be exercised in good faith and in full recognition of the public interest.

—Secretary of Labor Arthur J. Goldberg, Address to the Convention of the Maritime Trades Department, AFL-CIO, Miami Beach, Fla., December 5, 1961.

Book Reviews and Notes

EDITOR'S NOTE.—*Listing of a publication in this section is for record and reference only and does not constitute an endorsement of point of view or advocacy of use.*

Special Reviews

Productivity Trends in the United States. By John W. Kendrick. New York, National Bureau of Economic Research, Inc., 1961. lii, 630 pp. (General Series, 71.) \$12.50, Princeton University Press, Princeton, N.J.

Productivity, in its broadest sense, defines the efficiency with which resources—human and material, tangible and intangible—are transformed into real goods and services. Its importance clearly transcends the limited application permitted by major conceptual and statistical problems in the past. To the economic historian, productivity reveals key factors in a nation's growth. Economic projections require productivity data as a central tool of analysis. Discussions about costs and inflation can be approached more objectively. Interindustry and international productivity comparisons yield insight into differential patterns of development. Productivity study illuminates both challenges (labor displacement) and benefits (higher living standards) accompanying economic growth.

In his excellent volume and significant contribution, Kendrick presents long-term estimates of productivity in the U.S. economy, and includes the most exhaustive series and variants of the productivity measure yet attempted: output in relation to workers, man-hours, labor input (where labor quality differentials are weighted according to wage scales), and "total factor productivity"—his most comprehensive measure, relating output to combined capital and labor inputs, appropriately

weighted. In addition, capital/output and capital/labor ratios are shown. These measures span the period between the late 19th century and the 1950's and cover 5 major industry segments and some 33 secondary groups, though gaps in coverage remain. Alternative formulations of total *national* output are used; for *industries*, "gross product originating" (sometimes called "net industry output") concepts are approximated, but with serious, and acknowledged, deficiencies. An important byproduct of Kendrick's work is the comprehensive appendixes describing long-term estimates and derivations of employment, hours, output, and capital stock—nationwide and by industry. This information provides the underpinnings to the productivity figures, but will be of immense help in economic analysis generally.

During the 70-year period beginning in 1889, the annual average rate of productivity growth for the private domestic economy was 2.4 percent (based on man-hour inputs—recently, Kendrick projected this figure at 3 percent to 1970), 2 percent (weighted man-hours), and 1.7 percent (total factor productivity). An accelerated advance occurred after World War I, notably in the output/capital relationship. Marked spurts in productivity advance accompany cyclical upswings; deceleration occurs as recessions begin. But there has been distinct secular variability in rates of advance: spurts of accelerated growth characterized the late 1870's, late 1890's, early 1920's, late 1930's, late 1940's, and early 1950's; low rates prevailed during the late 1880's, the early 1930's, and the two World War periods. Over the long run, growth of total factor inputs amount to about half of output growth. Innovation, scale of operations, and cyclical factors are reasonably well correlated with total factor productivity in numerous sectors, but a nagging amount of variance remains unexplained.

No single measure of productivity fits all needs of economic analysis, and none is so designated by the author. To the extent that productivity data contribute to labor-management negotiations, the conventional man-hour productivity concept is probably still a useful guide to wage-rate policies—although this point is not considered by Kendrick. For analysis of long-term growth and interindustry comparisons, study of Kendrick's

more comprehensive measures is likely to prove beneficial. To illustrate the usefulness of these productivity concepts: During 1899–1953, output per unit of labor input increased at the annual rate of 2 percent in the telephone industry and 3 percent in natural gas; with capital per unit of labor input rising by 0.4 percent in the telephone sector and 3.1 percent in natural gas, total factor productivity grew at 2 percent in both industries. Can one conclude that total efficiency in the two industries is roughly comparable? Is such an interindustry comparison even possible? And, if possible, what should be compared, and, more important, how should it be interpreted? Does a correlation between rapidly growing capital/labor and output/labor ratios allow one to conclude that provision of more capital per worker will raise his output? Or, is it not possible that a particular capital/labor combination may be unique to technological and managerial conditions in one industry (or country) and inapplicable elsewhere? In any case, the variety of measurements clearly permits a more meaningful analysis than would a single productivity measure.

We should, however, recognize a certain arbitrariness on Kendrick's part in the selection of the number and type of input factors and the weights by which they are combined. Thus, Kendrick's most comprehensive inputs comprise weighted man-hours plus capital. By comparison, Stein and Denison, in their contribution to the President's Commission on National Goals, quantify such "intangible" resources as increased education, more efficient utilization of womanpower, and man-hour productivity *increases* resulting (up to a point) from a *shortened* workweek. For 1929–57, their yearly rate of total productivity increase (0.8 percent) is less than half of Kendrick's total factor productivity estimate. Also, since productivity analysis relates output growth to *associated*, not *causal*, inputs, conclusions such as "so much of increased worker output resulted from factor x," are inferentially justified only to a point.

An introductory preface by the National Bureau's research director, Solomon Fabricant, contains cautionary words on uses and abuses of different productivity estimates. Though regarding total factor productivity as "the best currently

available approximation to a measure of efficiency," his commitment to this single concept is not complete. Stanley Ruttenberg of the AFL-CIO, an NBER director, registers a dissenting comment, questioning the adequacy of Kendrick's treatment of total factor productivity, particularly with respect to its significance in labor-management issues. In my judgment, while Kendrick covers the statistical-conceptual aspects of this problem (chapter 5), he would have been well advised to anticipate, and meet more adequately, the policy questions this subject justifiably raises in the minds of many.

No present study can fully solve all theoretical and quantitative difficulties in productivity research. Nevertheless, Kendrick's is a milestone—necessary for those wishing to gain sharper insight into the American economy, its past record and future prospects.

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Equitable Payment: A General Theory of Work, Differential Payment, and Individual Progress.

By Elliott Jaques. New York, John Wiley & Sons, Inc., 1961. 336 pp. bibliography. \$6.

In April 1948, the Tavistock Institute of Human Relations entered upon a series of joint projects with the Glacier Metal Co. in London. The purpose of one of the projects was to determine appropriate payment and status for individuals and the work they do. An interim report on this project was prepared by Jaques in 1956 (*Measurement of Responsibility, A Study of Work, Payment and Individual Capacity*, London, Tavistock Publications). Wilfred Brown, chairman and managing director of Glacier, reported in 1960 on the project's effect on the structure and organization of Glacier (*Exploration of Management*, New York, John Wiley & Sons).

The present volume is a summary of the theory and procedure directly related to the problem of equitable payment for work in the project. Its full implications and effect are best understood in the context of the previous reports.

Jaques has applied his wide experience as a social-analytic consultant to industry directly to the problem. He bases his system on (1) the

time span of discretion used for any work task, i.e., the time a subordinate, after receiving an assignment, exercises discretion without supervisory review, (2) the equitable work payment scale, and (3) standard earning progression curves. The theory deals with differentials in kinds of work and payment for work. It is concerned with both the allocation of and the payment for work and their psychological and socioeconomic effects on the status of the individual.

Basic to Jaques' theory is the assumption, based on observations, that each individual intuitively knows what constitutes a fair or equitable payment for any given level of work and that this is a shared social norm. When these norms are assessed in total, they constitute a pattern of equitable differential payment at different levels of work.

The author's standard earning progression pattern is based on the individual's capacity for work and its characteristic growth and decline with age. Individual differences in work capacity are recognized. A psychoeconomic equilibrium is reached when level of work corresponds to capacity and payment for this work is equated with these items. Jaques demonstrates that difficulties arise when capacity exceeds work level and payment, when payment exceeds capacity and work level, when work level exceeds capacity and payment, etc. His thesis envisions an economic society where the capacity, work, and payment are at equilibrium.

The implications of such a theory for wage bargaining are significant; it would tend to make such activity unnecessary. The author reaches quite deeply into the socioeconomic system and, should his theory be further developed, applied, or adopted, it could have considerable impact on economic society.

This report is worthy of thoughtful consideration by both management and labor. It is not to be tackled, however, without rigorous concentration on the logical development of the theory.

—JOHN W. KELTNER
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The Impact of the Professional Engineering Union: A Study of Collective Bargaining Among Engineers and Scientists and Its Significance for Management. By Richard E. Walton. Boston, Harvard University, Graduate School of Business Administration, 1961. 419 pp., bibliography. \$5.

World War II ushered in a revolution in the employment conditions of engineers and scientists in American industry. For the first time, literally thousands of them were thrust into new job situations in which, although they continued to do professional work, engineers also took on the character of regular clock number employees with little or no direct contact with company management. In any number of aircraft, instrument, and electronics companies, engineers were employed by the hundreds or thousands, in contrast with prior years when engineers were few and most of them worked closely with and were largely identified with management. It was in response to these conditions which have continued and in many ways deepened in the past 15 years that engineering unionism began to emerge.

Professor Richard E. Walton has made a noteworthy study of the impact of engineering unionism upon industrial management. Based primarily upon an investigation of 11 large industrial companies in which engineering unionism has been established and recognized (in most instances in the form of unions independent of the industrial unions representing the shop employees), Walton concludes that this impact has been rather modest in character—more modest, for example, than the impact of production worker unionism. The reason for this modest impact is found partly in the complex character of engineering work, partly in the outlook of the engineer. It can also be attributed to the rather limited experience to date in this new field of unionism.

A major reason for the somewhat indecisive nature of engineering unionism stems from what Walton believes is the attitude of the majority of engineers about "the lack of compatibility between the engineers' concept of unionism and their concept of professionalism. As long as this incompatibility exists in the minds of engineers, unionization, whatever form it actually takes,

will represent not only a problem for management, but less than a satisfactory solution for the engineers."

The result of this ambivalence in most cases has been that engineering unionism has been primarily a process of "educating management" rather than the kind of independent, militant force one usually associates with new forms of unionism. One of its principal results has been to lead management to replace some of its looser personnel practices with more objective standards and criteria: "the demand to rationalize, formalize, and make explicit is greater under unionized conditions" For example, in preunion situations when layoffs occurred, it was quite possible "for a supervisor to 'take care of' his personal friends or to get rid of an antagonist without too many repercussions. It becomes clearly quite another matter . . ." when pressures from the engineering union help introduce formal rating systems to control layoffs. The same tendency toward rationalization also takes place in the systems of merit increase wage reviews, as the union insists upon more objective procedures and criteria.

The evidence with regard to the impact of engineering unionism on salaries is inconclusive since this has been a period when because of market forces "engineering salaries in virtually all companies, unionized or nonunionized, advanced rapidly" On the other hand, Walton does conclude that in the companies he has studied "The engineering unions have been a factor in bringing about more formal salary administration; indeed, they have been active, purposeful agents in this regard."

Despite such changes as have been introduced, Walton notes that earlier company fears about the possible evil effects of unionism upon professional performance and morale have been "largely unfounded." In some cases, however, difficulties in recruiting new engineers have occurred because some young graduates have tended to identify unionized situations as undesirable places to work. Walton does not go into the indoctrination process at work in engineering schools which produce such attitudes.

The peculiar interdependence of the engineer on the one hand and his supervisor and general engineering management on the other deeply

colors the engineer's attitude toward grievance machinery, discharge problems, and the like. He inclines to make less use of these, for as Walton notes, "An engineer's whole future, both salary-wise and job-assignment-wise, depends almost exclusively on his supervisor's opinion of him." Discharge-for-cause cases are almost unknown, for when an impasse is reached the engineer prefers not to press his case and risk a bad reference in the future; the company in turn is content to permit him to resign "voluntarily."

Engineering unionism is a new phenomenon. Patently, the way in which it may develop is still something of an open affair. Walton's study illuminates at least one side of this experience to date, namely its impact upon management. The other side of the coin—the engineering union and the engineer himself—should also be studied. Even a passing acquaintance with some of the unions covered in Walton's book suggests they should not be treated with quite the uniformity he seems to employ. Some of these unions have developed into effective instruments and have passed beyond the stage where they are primarily "educating" management.

—EVERETT M. KASSALOW

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Labor in the Japanese Cotton Industry. By Takejiro Shindo. Tokyo, Japan Society for the Promotion of Science, 1961. 276 pp., bibliography. \$8.

On September 6, 1961, the *Japan Times*, after discussing the fact that "the Japanese farmer is now better off than he has ever been in history," noted that "he no longer has to sell the extra daughter into virtual bondage to a textile mill simply to remove that one mouth from the family table." It is the aim of Mr. Shindo's illuminating volume to refute charges, made both in Japan and abroad, that low wages and inferior working conditions are responsible for the competitive advantages of Japanese cotton spinning and weaving in the domestic and international markets.

Mr. Shindo seeks to provide a comprehensive review of many of the industry's aspects. After a brief account of its history, he discusses the industry's labor force, recruitment methods, wages,

welfare policies, and the relationship between productivity and wage determination. He also provides some examination of labor-management practices and present-day unionism. To his task he brings the experience of many years in the industry, including chairmanship of the board of the Toyo Spinning Co., one of the major cotton textile producers in Japan.

The study provides important insights into practices of the Japanese cotton textile industry and into the mind of Japanese management, though at times Mr. Shindo tends to overstate his argument. He seems aware of this when he writes, "This book may, at first glance, give the impression that in my eagerness to refute the charges of low wages . . . I have argued too much in its defense."

Mr. Shindo recognizes that "the internationally low wage level of the Japanese cotton industry workers has been an important factor in the development of the industry." But in the main, he holds that "the secret behind Japan's seemingly mysterious ability sometimes to produce for export cotton fabrics cheaper than raw cotton" was due to the development of cotton blending techniques and trading in raw cotton futures. Although he raises the issue of possible dumping on the international markets, he dismisses the charge by arguing, "It goes without saying that such a strained price policy cannot be maintained for long by the exporting industries."

Mr. Shindo does recognize the need for gradual improvements in working conditions and the need to maintain good labor relations. His approach is essentially paternalistic. Employment in cotton mills in prewar days is viewed as an opportunity for young farm girls "to learn manners." The role of the industry's labor relations personnel is to act as "friends and mouthpieces" of the workers. Even though welfare facilities provided to workers by the industry, according to Mr. Shindo, "are virtually identifiable with wages in character," he argues simultaneously that they "do not fall within the working conditions to be decided in collective bargaining."

For all its shortcomings, Mr. Shindo's volume provides a most interesting survey of the Japanese industry's problems and practices.

—LAZARE TEPER

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The Harvesters: The Story of the Migrant People.

By Louisa R. Shotwell. New York, Doubleday & Co., Inc., 1961. 242 pp. \$3.95.

The web of Mexican, Puerto Rican, Indian, and "Anglo" men, women, and children who crisscross the country in search of seasonal work represents some of the sorest problems of the American economic system: "pockets of poverty," the survival of the small farmer versus big business agriculture, and the advance of mechanization.

Louisa Shotwell has incorporated the complexities into a readable, even stirring, primer of the migrant situation. From her association with the Migrant Ministry of the National Council of Churches, she has gathered anecdotal material about people called Fontanez or Grady that compels attention and ties the facts to people. The incredibly inadequate housing, health, and education standards which exist for stoop labor are described as the workers experience them and as they appear in statistics, public testimony, and documents.

Public Law 78, which replaced the wetback with the bracero by authorizing the Secretary of Labor to recruit and supervise the contracting process for Mexican workers and to guarantee them a minimum wage, was not supposed to have an adverse effect on domestic workers. Miss Shotwell classifies the law's defenders and opponents by subject matter and by organizations. Then after summarizing the efforts of Federal agencies and legislative committees to obtain realistic reforms in the areas of migrant housing, minimum wage, child labor, health and sanitation, education, crew-leader regulation, and social security, Miss Shotwell looks at each of these situations as it is now. "The bitter conclusion is inescapable: migrant workers who are United States citizens can't hope to do as well as others represented by the Government of Mexico," without some of the same minimum guarantees. Little space in this book is given to the noncontract, non-English-speaking Puerto Rican who may well be currently the most helpless of all the migrants. So far the unique immunity of agriculture from labor standards has been largely unaffected by pressure from unions or the U.S. Department of Labor.

The Harvesters states and documents the challenge for communities, growers, volunteer agencies, and for legislatures at every level.

—MARY ANN WOLFE
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Training in Business and Industry. By William McGehee and Paul W. Thayer. New York, John Wiley & Sons, Inc., 1961. 305 pp., bibliography. \$7.50.

Early in this work, the authors state, "Training will not come of age until it abandons intuitive approaches to the solution of training problems." Thus in part, the book is a plea for trainers to acquire a greater understanding and appreciation of sociological and psychological findings as they relate to the development of the individual. However, it is repeatedly emphasized that training must contribute to the "goals and objectives" of the enterprise.

The authors have undertaken a review and a partial evaluation of selected training methods as they are used, or are proposed for use in industry. Their basic interests, however, are the underlying problems of training as a management tool rather than the details of training methodology. They comment on the training systems reviewed, but generally do not interject preferences among alternative possibilities like group conferences or roleplaying. The book is not, however, without advice concerning more general concepts. The authors advocate that training relates directly to the job-learning or supervising process rather than manipulation of worker actions or indoctrination toward a particular employer viewpoint.

This is not an elementary text. It is written for the trained practitioner and can be most useful because it directs his attention beyond the mechanics involved. It surveys both the work of pragmatic trainers and the efforts of those who have experimented in the general theory of learning as applied to industrial training. It skillfully welds together the contributions of each. The practical training specialist is exposed through this book to a number of brief synopses of learning experiments as they have been carried out primarily in universities or the armed services. Without recommending any particular schools of learning theory, the authors advise the trainer to acquaint himself with the literature, because experimental research has in many cases developed principles that are "better guides to planning industrial training than the folklore of training."

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Current Labor Statistics

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¹ This table is included in the January, April, July, and October 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 Bull. 1168, 1954), and cover the United States without Alaska and Hawaii.

A.—Employment

TABLE A-1. Estimated total labor force classified by employment status and sex

(In thousands)

Employment status	Estimated number of persons 14 years of age and over ¹													1960	Annual average	
	1961												1959		1958	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr	Mar.	Feb.	Jan. ²				
	Total, both sexes															
Total labor force.....	73,372	74,096	74,345	73,670	75,610	76,153	76,790	74,059	73,216	73,540	72,894	72,361	73,079	71,946	71,284	
Civilian labor force.....	70,559	71,339	71,759	71,123	73,081	73,639	74,286	71,546	70,696	71,011	70,360	69,837	70,549	69,394	68,647	
Unemployment.....	4,091	3,990	3,934	4,085	4,542	5,140	5,580	4,768	4,962	5,495	5,705	5,385	4,540	3,813	4,681	
Unemployment rate, seasonally adjusted ³	6.1	6.1	6.8	6.8	6.9	6.9	6.8	6.9	6.8	6.9	6.8	6.6	6.8	5.5	6.8	
Unemployed 4 weeks or less.....	1,723	1,725	1,723	1,814	1,683	1,995	2,857	1,672	1,600	1,729	2,063	2,200	2,107	1,658	1,833	
Unemployed 5-10 weeks.....	830	782	725	638	1,046	1,243	845	851	827	1,097	1,408	1,281	994	778	969	
Unemployed 11-14 weeks.....	306	347	246	374	373	268	303	330	407	806	610	564	424	335	438	
Unemployed 15-26 weeks.....	572	448	517	497	527	608	647	1,008	1,205	1,063	950	696	516	469	785	
Unemployed over 26 weeks.....	661	689	723	760	913	1,026	928	907	923	799	674	643	499	571	667	
Employment.....	66,467	67,349	67,824	67,038	68,539	68,499	68,706	66,778	65,734	65,516	64,655	64,452	66,009	65,581	63,966	
Nonagricultural.....	62,049	62,149	61,860	61,372	62,215	62,046	62,035	61,234	60,734	60,539	59,947	59,818	61,059	59,745	58,122	
Worked 35 hours or more.....	48,819	48,896	47,679	47,473	46,080	44,981	47,803	47,927	47,650	47,301	45,341	47,132	47,675	45,068	44,873	
Worked 15-34 hours.....	7,278	7,301	8,380	7,785	6,644	6,837	7,081	7,533	7,536	7,522	8,952	7,414	8,044	8,531	7,324	
Worked 1-14 hours.....	4,057	4,027	3,560	3,369	3,071	3,067	3,466	3,858	3,736	3,900	8,722	3,483	3,589	3,172	3,047	
With a job but not at work ⁴	1,897	1,928	2,240	2,747	6,421	7,162	3,688	1,916	1,811	1,816	1,933	1,789	1,752	2,974	2,876	
Agricultural.....	4,418	5,199	5,964	5,666	6,325	6,453	6,671	5,544	5,000	4,977	7,708	4,634	4,950	5,836	5,844	
Worked 35 hours or more.....	2,658	3,186	4,212	3,835	4,279	4,364	4,405	3,700	3,139	3,122	2,842	2,745	3,015	3,852	3,827	
Worked 15-34 hours.....	953	1,271	1,189	1,243	1,345	1,385	1,577	1,341	1,200	1,195	1,121	1,266	1,163	1,356	1,361	
Worked 1-14 hours.....	535	479	449	405	517	509	537	393	453	432	505	507	535	442	457	
With a job but not at work ⁴	273	262	114	181	183	195	150	111	209	228	240	256	237	186	199	
	Males															
Total labor force.....	49,283	49,563	49,612	49,621	51,281	51,540	51,614	49,753	49,299	49,309	49,109	49,031	49,186	49,081	48,802	
Civilian labor force.....	46,506	46,841	47,059	47,107	48,784	49,058	49,142	47,272	46,812	46,812	46,608	46,539	46,688	46,562	46,197	
Unemployment.....	2,767	2,422	2,307	2,393	2,816	3,092	3,303	3,033	3,270	3,709	3,887	3,717	3,092	2,473	3,155	
Employment.....	43,739	44,418	44,751	44,713	45,968	45,966	45,839	44,238	43,542	43,103	42,721	42,822	43,596	44,089	43,042	
Nonagricultural.....	39,834	40,078	40,127	40,117	40,904	40,874	40,598	39,686	39,244	38,845	38,627	38,796	39,337	39,340	38,240	
Worked 35 hours or more.....	33,612	33,902	33,422	33,192	32,819	32,182	33,758	33,286	32,895	32,506	31,531	32,698	32,888	31,715	31,390	
Worked 15-34 hours.....	3,356	3,356	3,855	3,739	3,280	3,344	3,388	3,603	3,629	3,609	4,356	3,534	3,806	4,405	3,736	
Worked 1-14 hours.....	1,614	1,573	1,434	1,436	1,381	1,344	1,485	1,638	1,596	1,624	1,552	1,460	1,472	1,378	1,329	
With a job but not at work ⁴	1,252	1,250	1,415	1,751	3,425	4,004	1,967	1,160	1,123	1,107	1,188	1,105	1,173	1,840	1,784	
Agricultural.....	3,905	4,340	4,625	4,597	5,064	5,092	5,241	4,553	4,298	4,258	4,094	4,027	4,259	4,749	4,802	
Worked 35 hours or more.....	2,426	2,819	3,520	3,344	3,716	3,758	3,804	3,325	2,889	2,840	2,609	2,530	2,747	3,421	3,413	
Worked 15-34 hours.....	756	917	713	800	843	813	921	843	831	841	832	813	839	823	857	
Worked 1-14 hours.....	469	366	292	302	361	351	379	289	384	356	438	450	455	336	363	
With a job but not at work ⁴	254	236	100	150	144	170	138	96	194	213	217	233	217	170	179	
	Females															
Total labor force.....	24,089	24,534	24,733	24,048	24,329	24,612	25,176	24,306	23,916	24,232	23,785	23,330	23,893	22,865	22,482	
Civilian labor force.....	24,053	24,499	24,700	24,016	24,297	24,580	25,144	24,274	23,884	24,199	23,752	23,298	23,861	22,832	22,451	
Unemployment.....	1,325	1,568	1,627	1,692	1,726	2,048	2,277	1,784	1,692	1,786	1,818	1,669	1,448	1,340	1,526	
Employment.....	22,728	22,930	23,073	22,325	22,571	22,532	22,867	22,540	22,192	22,413	21,934	21,630	22,413	21,492	20,924	
Nonagricultural.....	22,215	22,071	21,733	21,256	21,311	21,172	21,437	21,549	21,490	21,695	21,321	21,023	21,722	20,405	19,882	
Worked 35 hours or more.....	15,206	14,993	14,258	14,282	13,262	12,798	14,044	14,641	14,754	14,794	13,809	14,434	14,788	13,352	13,483	
Worked 15-34 hours.....	3,921	3,946	4,525	4,046	3,364	3,493	3,693	3,930	3,907	3,913	4,596	3,880	4,238	4,126	3,589	
Worked 1-14 hours.....	2,442	2,454	2,126	1,934	1,691	1,723	1,980	2,220	2,141	2,276	2,170	2,023	2,117	1,794	1,718	
With a job but not at work ⁴	645	678	825	996	2,995	3,158	1,721	756	688	709	744	684	579	1,134	1,093	
Agricultural.....	513	859	1,339	1,069	1,261	1,361	1,430	991	701	718	613	607	692	1,087	1,042	
Worked 35 hours or more.....	230	368	693	491	562	607	602	375	250	273	235	215	268	431	414	
Worked 15-34 hours.....	197	354	476	442	502	672	656	499	369	354	289	314	324	533	604	
Worked 1-14 hours.....	66	113	157	103	156	158	159	103	69	76	67	57	80	106	104	
With a job but not at work ⁴	19	26	15	32	39	26	13	14	15	15	24	22	20	17	20	

¹ Estimates are based on information obtained from a sample of households and are subject to sampling variability. Data relate to the calendar week ending nearest the 15th day of the month. The employed total includes all wage and salary workers, self-employed persons, and unpaid workers in family-operated enterprises. Persons in institutions are not included.

Because of rounding, sums of individual items do not necessarily equal totals.

² Beginning in 1960, data include Alaska and Hawaii and are therefore not directly comparable with earlier data. The levels of the civilian labor force, the employed, and nonagricultural employment were each increased by more than 200,000. The estimates for agricultural employment and unemployment were affected so slightly that these series can be regarded as entirely comparable with pre-1960 data.

³ Unemployment as a percent of labor force.

⁴ Includes persons who had a job or business but who did not work during the survey week because of illness, bad weather, vacation, or labor dispute. Prior to January 1957, also included were persons on layoff with definite instructions to return to work within 30 days of layoff and persons who had new jobs to which they were scheduled to report within 30 days. Most of the persons in these groups have, since that time, been classified as unemployed.

NOTE: For a description of these series, see Explanatory Notes (in Employment and Earnings, U.S. Department of Labor, Bureau of Labor Statistics current issues).

TABLE A-2. Employees in nonagricultural establishments, by industry ¹

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Total employees	55,503	55,121	55,065	54,978	54,538	54,227	54,429	53,708	53,171	52,785	52,523	52,864	54,706	54,347	53,380
Mining	663	668	668	676	677	672	678	668	657	654	656	666	682	709	731
Metal mining	86.1	87.6	86.3	88.2	85.8	88.4	88.5	87.1	85.8	86.3	86.2	89.9	91.0	93.3	83.6
Iron ores	27.7	28.0	28.3	28.3	26.5	28.0	27.8	27.4	26.6	27.0	26.6	28.3	29.8	33.2	27.7
Copper ores	29.4	28.0	29.5	29.6	29.3	29.5	29.0	28.3	28.3	28.2	28.3	30.0	30.3	28.3	23.3
Coal mining	157.0	157.7	156.2	155.4	153.9	142.9	153.5	153.2	153.3	157.5	163.2	163.9	167.1	182.2	196.8
Bituminous	147.7	148.0	146.5	145.2	143.7	132.8	143.2	143.0	142.4	147.4	151.6	152.0	155.2	168.2	178.3
Crude petroleum and natural gas	306.5	305.5	310.6	314.9	318.0	314.4	309.9	306.1	304.5	304.4	306.3	310.5	313.9	313.9	330.9
Crude petroleum and natural gas fields	174.9	175.1	177.8	180.6	181.0	178.2	175.4	175.3	175.3	176.9	177.6	178.8	181.7	186.4	186.4
Oil and gas field services	131.6	130.4	132.8	134.3	137.0	136.2	134.5	130.8	129.1	127.5	128.7	131.7	132.2	144.5	144.5
Quarrying and nonmetallic mining	110.4	116.5	120.3	121.7	122.3	121.7	117.6	112.2	106.0	102.3	106.2	113.6	119.5	119.6	119.6
Contract construction	2,579	2,826	2,981	3,021	3,075	3,023	2,971	2,775	2,619	2,454	2,342	2,457	2,630	2,882	2,955
General building contractors	882.8	926.2	935.8	961.4	940.8	923.1	890.0	816.6	768.9	728.0	774.6	831.4	911.7	960.1	960.1
Heavy construction	586.9	652.0	671.3	679.9	668.8	653.8	589.6	515.5	446.0	413.9	438.7	493.4	581.3	585.8	585.8
Highway and street construction	317.8	372.5	384.3	392.0	383.5	370.5	320.5	262.7	211.3	185.5	199.7	234.8	302.4	312.7	312.7
Other heavy construction	269.1	279.5	287.0	287.9	285.3	283.3	269.1	252.8	234.7	228.4	239.0	258.6	278.9	273.0	273.0
Special trade contractors	1,356.0	1,402.5	1,413.4	1,433.5	1,413.4	1,394.0	1,325.8	1,286.6	1,241.0	1,199.9	1,243.4	1,305.5	1,388.8	1,409.5	1,409.5
Manufacturing	16,564	16,661	16,607	16,646	16,531	16,268	16,320	16,076	15,904	15,866	15,838	15,933	16,213	16,762	16,667
Durable goods	9,316	9,338	9,201	9,189	9,083	9,051	9,106	8,986	8,836	8,775	8,769	8,867	9,036	9,441	9,389
Nondurable goods	7,248	7,323	7,406	7,457	7,448	7,217	7,214	7,080	7,068	7,091	7,069	7,066	7,177	7,321	7,298
Durable goods															
Ordnance and accessories	207.7	206.9	205.8	204.1	202.1	201.6	199.2	197.6	196.0	196.6	195.8	195.2	194.7	187.3	173.0
Ammunition, except for small arms	105.3	104.8	104.0	103.9	104.0	104.0	103.0	102.4	102.8	101.5	100.4	99.0	98.4	93.9	86.5
Sighting and fire control equipment	52.5	52.5	52.3	51.3	51.1	51.1	50.2	49.5	49.6	50.0	50.5	51.6	52.1	50.0	45.0
Other ordnance and accessories	49.1	48.5	47.8	46.9	46.5	46.0	45.7	43.6	43.6	45.1	44.9	44.6	44.2	43.4	41.5
Lumber and wood products, except furniture	589.3	605.3	618.9	630.0	634.0	628.9	630.9	602.8	581.1	558.8	557.4	568.3	583.0	636.8	660.9
Logging camps and logging contractors	94.1	99.1	103.2	105.4	104.5	104.3	89.5	80.9	73.6	73.6	76.2	77.7	80.8	92.6	94.4
Sawmills and planing mills	270.0	276.2	279.3	278.6	278.6	278.9	271.6	263.6	254.6	252.4	259.9	267.5	294.7	306.9	306.9
Millwork, plywood, and related products	142.4	144.5	147.5	149.5	145.8	146.3	141.7	138.3	134.0	132.1	133.9	137.0	146.6	156.1	156.1
Wooden containers	40.2	40.3	41.2	41.7	41.7	42.6	42.2	40.9	39.9	39.6	39.5	40.3	43.2	43.8	43.8
Miscellaneous wood products	58.6	58.8	58.8	58.8	58.8	58.8	58.8	57.4	57.4	56.7	57.1	57.3	57.4	59.6	59.8
Furniture and fixtures	376.6	379.7	381.6	377.6	374.0	363.1	364.3	359.1	359.5	357.7	357.2	356.5	366.5	383.4	384.9
Household furniture	269.2	270.9	267.7	262.7	254.9	255.4	252.6	252.6	252.8	252.8	251.1	257.8	271.1	277.5	277.5
Office furniture	28.5	28.3	28.1	28.1	27.0	27.0	27.2	26.5	26.6	26.7	26.6	27.3	27.8	28.3	26.7
Partitions; office and store fixtures	36.8	37.1	35.6	37.4	36.3	36.5	35.7	34.6	36.0	35.9	36.0	36.9	39.0	36.6	36.6
Other furniture and fixtures	45.2	45.3	46.2	45.8	44.9	45.2	44.3	43.1	42.2	42.2	41.9	42.1	44.0	45.1	44.2
Stone, clay, and glass products	558.9	576.4	582.6	589.7	590.6	583.5	581.7	569.3	555.6	541.7	531.2	539.1	559.9	595.3	601.7
Flat glass	29.5	29.4	29.2	28.6	27.7	26.5	26.7	25.7	25.7	26.7	26.7	28.8	30.2	31.1	33.7
Glass and glassware, pressed or blown	101.2	101.2	103.8	103.4	101.7	101.7	101.0	99.8	99.4	98.1	98.1	98.3	98.6	102.9	99.4
Cement, hydraulic	40.3	40.6	41.1	41.7	42.4	42.2	40.9	40.1	37.5	36.5	36.0	39.5	42.8	43.9	43.9
Structural clay products	71.2	71.8	73.8	74.1	74.1	73.1	71.7	69.9	67.1	64.8	63.1	69.7	70.1	77.7	77.7
Pottery and related products	45.0	44.8	44.6	43.7	41.6	42.9	42.9	42.9	42.8	43.1	43.2	43.7	47.1	47.8	47.8
Concrete, gypsum, and plaster products	152.1	157.6	159.9	162.0	160.3	159.5	153.0	145.8	138.3	133.1	137.4	143.9	155.4	157.9	157.9
Other stone and mineral products	122.0	122.0	122.3	122.5	121.1	121.5	118.9	117.4	115.6	114.5	115.4	118.6	124.0	124.6	124.6
Primary metal industries	1,183.1	1,181.7	1,178.7	1,181.4	1,168.4	1,155.5	1,154.0	1,130.6	1,099.1	1,088.4	1,085.8	1,095.3	1,110.6	1,228.7	1,181.9
Blast furnace and basic steel products	621.7	626.8	631.0	621.7	616.8	609.9	596.8	575.0	563.4	556.9	555.1	560.7	652.5	587.5	587.5
Iron and steel foundries	189.3	186.0	187.5	187.4	186.2	187.0	184.2	179.9	180.8	182.5	186.9	191.3	203.6	211.6	211.6
Nonferrous smelting and refining	69.0	68.7	67.6	68.3	68.0	67.8	65.7	65.0	65.5	66.0	68.0	68.3	70.8	68.0	68.0
Nonferrous rolling, drawing, and extruding	176.8	176.3	174.2	171.8	166.7	169.1	166.1	164.4	164.1	164.9	167.4	170.5	175.6	184.5	184.5
Nonferrous foundries	64.5	63.0	62.6	61.3	60.0	61.8	60.4	58.0	58.7	59.3	60.7	61.8	65.1	68.0	68.0
Miscellaneous primary metal industries	60.4	57.9	58.5	57.9	57.8	58.4	57.4	55.9	55.9	56.2	57.2	58.0	61.1	62.3	62.3
Fabricated metal products	1,108.0	1,116.2	1,106.8	1,097.2	1,088.6	1,067.1	1,082.3	1,071.4	1,044.7	1,034.1	1,039.6	1,061.5	1,083.7	1,128.6	1,120.8
Metal cans	58.1	60.4	63.3	64.3	63.6	62.6	61.8	60.6	59.1	59.1	57.9	57.1	57.9	62.5	62.5
Cutlery, handtools, and general hardware	136.9	135.3	130.1	129.5	125.5	129.2	128.3	121.6	124.6	126.4	130.0	132.8	136.0	135.4	135.4
Heating equipment and plumbing fixtures	76.6	76.8	76.8	77.4	75.1	75.6	74.6	73.0	73.3	72.4	73.9	74.4	79.0	81.0	81.0
Fabricated structural metal products	330.8	334.4	338.5	334.0	330.3	330.0	322.5	318.1	312.8	313.5	319.1	327.4	334.3	331.9	331.9
Screw machine products, bolts, etc.	84.4	82.8	81.2	80.7	79.4	79.9	78.5	77.3	77.6	78.6	79.3	79.4	85.6	86.7	86.7
Metal stampings	194.7	182.2	178.6	175.5	169.4	180.0	181.9	174.6	170.0	173.8	183.7	189.7	197.7	189.1	189.1
Coating, engraving, and allied services	67.3	67.9	66.9	64.9	63.5	64.6	63.8	61.9	60.3	59.5	59.6	61.8	64.2	63.2	63.2
Miscellaneous fabricated wire products	56.2	56.3	54.9	54.2	52.9	53.4	53.0	52.0	50.8	51.8	52.2	53.1	56.9	56.5	56.5
Miscellaneous fabricated metal products	111.2	110.7	106.9	108.1	107.4	107.0	107.0	105.6	105.6	105.7	106.6	107.2	112.4	114.6	114.6

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry ¹—Continued

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	1,414.7	1,403.0	1,390.5	1,395.5	1,389.3	1,394.8	1,405.3	1,406.5	1,407.3	1,404.8	1,406.3	1,404.1	1,409.3	1,471.4	1,450.5
Engines and turbines.....	81.5	80.7	80.8	80.8	79.3	77.9	78.4	80.8	81.0	80.1	80.1	81.1	82.0	86.8	89.9
Farm machinery and equipment.....	103.8	103.1	104.9	102.7	108.7	113.9	120.5	124.1	123.5	120.9	116.0	112.9	114.1	122.7	122.7
Construction and related machinery.....	198.7	198.6	200.6	201.8	199.6	200.5	199.4	198.0	196.1	195.8	195.4	197.2	219.7	225.5	225.5
Metalworking machinery and equipment.....	245.3	242.9	243.3	239.7	240.2	241.9	240.1	244.2	244.8	246.8	246.2	245.9	258.2	244.7	244.7
Special industry machinery.....	167.5	165.9	167.4	166.6	166.9	168.7	167.8	167.6	168.6	169.5	169.7	171.1	173.8	164.9	164.9
General industrial machinery.....	214.5	213.8	211.3	212.0	213.1	212.3	209.2	206.4	206.9	207.7	209.9	211.8	223.0	220.1	220.1
Office, computing, and accounting machines.....	150.7	150.4	149.9	150.5	149.5	149.1	147.9	148.4	147.6	147.9	148.2	148.0	145.7	138.1	138.1
Service industry machines.....	93.0	90.3	90.6	89.0	93.8	95.1	98.2	96.8	96.3	96.0	95.2	95.1	99.8	97.3	97.3
Miscellaneous machinery.....	148.0	144.8	146.7	147.7	145.1	145.4	142.6	140.8	140.9	141.6	142.4	145.3	150.4	147.5	147.5
Electrical equipment and supplies.....	1,497.4	1,487.7	1,470.4	1,455.3	1,443.3	1,416.8	1,423.0	1,413.2	1,401.1	1,404.4	1,410.5	1,414.9	1,421.5	1,445.6	1,391.4
Electric distribution equipment.....	162.1	162.3	161.7	162.3	160.7	160.4	158.8	158.8	159.2	160.3	161.6	162.5	163.2	156.8	156.8
Electrical industrial apparatus.....	172.6	170.2	172.9	171.7	170.7	170.7	171.2	169.5	167.8	167.9	168.0	169.4	170.2	174.7	174.7
Household appliances.....	155.5	155.4	153.0	150.0	148.7	150.9	150.2	149.4	148.7	148.3	146.6	148.3	157.2	157.6	157.6
Electric lighting and wiring equipment.....	132.4	132.3	130.2	130.9	126.7	127.3	126.0	125.5	125.5	126.0	126.4	129.4	132.7	133.2	133.2
Radio and TV receiving sets.....	128.9	128.2	125.8	120.6	111.7	107.9	104.2	98.5	100.3	103.4	102.9	99.5	111.5	114.4	114.4
Communication equipment.....	390.0	385.2	379.1	375.0	371.9	373.8	372.2	372.5	373.7	375.6	377.5	380.5	366.9	336.1	336.1
Electronic components and accessories.....	233.8	230.5	228.6	226.9	222.9	225.8	226.8	225.9	224.8	223.3	222.0	218.8	225.2	211.3	211.3
Miscellaneous electrical equipment and supplies.....	112.4	106.3	104.0	105.9	103.5	105.7	105.5	102.7	104.3	105.6	108.5	112.3	111.4	107.3	107.3
Transportation equipment.....	1,645.6	1,621.9	1,505.1	1,505.2	1,451.9	1,521.5	1,534.9	1,526.4	1,482.4	1,484.3	1,482.2	1,533.1	1,587.0	1,617.3	1,670.4
Motor vehicles and equipment.....	726.1	619.6	628.3	587.1	660.6	670.0	658.9	613.0	610.3	614.0	664.3	715.1	727.6	693.2	693.2
Aircraft and parts.....	685.7	676.4	671.9	660.5	661.4	659.9	661.5	664.0	668.0	664.8	663.1	663.7	673.8	755.4	755.4
Ship and boat building and repairing.....	146.2	144.6	141.1	140.7	136.9	140.4	142.7	143.2	143.9	141.5	142.9	141.0	141.0	146.4	146.4
Railroad equipment.....	37.0	36.2	36.0	35.4	34.5	35.2	34.2	34.1	35.1	36.5	38.8	40.0	43.8	40.9	40.9
Other transportation equipment.....	26.9	28.3	27.9	28.2	28.1	29.4	29.1	28.1	27.0	25.4	24.0	26.3	31.1	34.4	34.4
Instruments and related products.....	353.5	353.3	351.7	351.6	348.4	343.5	345.2	342.4	340.2	340.2	341.1	343.9	347.0	354.2	345.2
Engineering and scientific instruments.....	72.9	73.1	73.8	73.0	72.1	73.9	74.3	74.6	75.5	75.4	75.7	76.0	75.7	72.3	72.3
Mechanical measuring and control devices.....	93.5	93.0	92.9	91.5	91.2	91.3	91.1	90.5	90.0	90.4	90.8	91.1	95.1	92.8	92.8
Optical and ophthalmic goods.....	40.5	40.2	39.9	39.7	39.1	39.4	38.9	38.5	38.2	38.3	38.4	39.1	40.6	39.0	39.0
Surgical, medical, and dental equipment.....	48.4	48.0	47.7	47.3	47.5	47.3	47.2	47.0	47.5	47.4	47.2	47.3	45.4	45.4	45.4
Photographic equipment and supplies.....	69.3	69.0	69.0	68.4	68.5	68.4	67.3	67.1	67.0	67.6	68.2	68.9	69.0	67.5	67.5
Watches and clocks.....	28.7	28.4	28.0	27.1	25.3	24.7	23.5	22.3	22.4	21.9	23.4	24.7	26.6	28.2	28.2
Miscellaneous manufacturing industries.....	381.2	406.2	409.1	401.6	392.4	375.0	385.4	376.8	368.7	364.2	362.2	355.0	373.0	392.1	388.0
Jewelry, silverware, and plated ware.....	43.0	43.0	42.5	41.8	39.5	41.0	41.0	41.2	41.4	41.9	42.0	42.9	43.2	43.2	43.2
Toys, amusement, and sporting goods.....	115.2	119.9	116.0	112.3	104.7	106.3	102.3	95.9	89.4	85.3	79.3	89.1	102.3	98.0	98.0
Pens, pencils, office and art materials.....	33.0	32.8	32.0	32.0	30.9	30.8	30.2	29.9	30.1	30.3	30.3	30.9	31.0	30.9	30.9
Costume jewelry, buttons, and notions.....	57.4	56.6	55.8	55.5	52.8	54.5	51.8	50.9	51.9	52.8	51.8	54.7	57.5	59.4	59.4
Other manufacturing industries.....	157.6	156.8	155.3	150.8	147.1	152.8	151.5	150.8	151.4	151.9	151.6	155.4	158.1	156.5	156.5
<i>Nondurable goods</i>															
Food and kindred products.....	1,749.0	1,803.6	1,877.6	1,930.4	1,919.1	1,825.7	1,778.2	1,707.9	1,697.2	1,688.2	1,681.4	1,700.6	1,753.9	1,792.7	1,790.3
Meat products.....	323.1	320.7	321.0	319.8	322.1	323.7	315.2	309.7	307.7	307.7	313.8	319.3	321.1	316.7	316.7
Dairy products.....	306.9	311.6	318.3	325.2	326.1	323.4	313.9	311.1	308.2	304.9	304.6	308.2	316.6	317.5	317.5
Canned and preserved food, except meats.....	245.4	304.9	371.8	352.4	264.5	222.9	195.1	196.0	189.6	183.0	186.5	202.9	241.8	245.1	245.1
Grain mill products.....	126.4	128.3	133.4	134.2	133.8	132.2	126.7	125.0	125.3	124.8	126.2	127.0	128.4	133.5	133.5
Bakery products.....	304.9	306.4	306.4	309.8	310.1	309.4	305.1	302.3	303.3	303.0	303.7	308.1	307.5	302.2	302.2
Sugar.....	45.1	45.8	31.0	31.1	29.7	29.0	28.7	31.4	29.7	31.2	38.0	44.4	36.9	38.2	38.2
Confectionery and related products.....	88.2	89.4	83.2	81.5	71.9	75.9	72.6	72.4	77.7	80.4	78.7	86.9	79.6	79.0	79.0
Beverages.....	216.9	222.8	223.3	225.2	227.4	221.1	212.3	210.9	208.5	206.1	207.9	214.1	218.2	215.0	215.0
Miscellaneous food and kindred products.....	146.7	147.7	142.0	139.9	140.1	140.6	138.3	138.4	138.2	140.3	141.2	143.0	142.8	143.1	143.1
Tobacco manufactures.....	86.6	93.7	108.2	118.0	100.0	76.0	78.2	77.3	78.7	83.3	88.3	92.3	96.1	94.1	94.6
Cigarettes.....	36.9	37.0	37.3	37.5	37.2	37.5	36.6	36.5	36.7	36.9	36.8	37.0	37.2	36.7	36.7
Cigars.....	24.7	24.7	24.4	24.1	22.8	24.9	25.1	25.0	25.7	26.4	26.1	27.5	27.9	29.5	29.5
Textile mill products.....	885.6	891.5	892.4	891.0	889.0	874.6	887.0	877.8	871.3	865.7	864.5	864.9	877.9	914.6	942.9
Cotton broad woven fabrics.....	252.4	251.7	250.4	249.6	248.5	250.8	249.7	250.5	251.2	252.4	254.4	255.7	260.4	264.7	264.7
Silk and synthetic broad woven fabrics.....	70.5	70.6	70.6	70.5	68.7	69.1	68.6	68.7	68.9	69.7	70.7	71.9	73.4	74.4	74.4
Weaving and finishing broad woolens.....	50.4	51.9	53.8	53.9	54.3	55.2	53.7	52.3	51.1	51.0	49.2	49.1	56.0	60.0	60.0
Narrow fabrics and smallwares.....	27.3	27.2	27.1	26.6	26.1	26.4	26.4	26.2	25.9	26.1	26.1	26.3	27.6	28.5	28.5
Knitting.....	216.4	217.8	216.9	217.4	212.2	216.6	212.7	209.4	204.7	200.5	197.7	203.2	214.4	219.6	219.6
Finishing textiles, except wool and knit.....	71.8	70.9	70.8	70.6	69.8	70.9	70.6	70.6	70.4	70.3	70.7	72.1	74.3	76.4	76.4
Floor covering.....	33.9	33.7	33.2	32.7	31.0	32.2	32.4	32.1	33.8	34.2	34.4	35.1	35.9	37.1	37.1
Yarn and thread.....	102.3	102.1	102.1	102.0	99.6	101.1	99.9	98.7	98.4	98.0	97.6	99.3	103.7	108.6	108.6
Miscellaneous textile goods.....	66.5	66.5	66.1	65.7	64.4	64.7	63.8	62.8	61.3	62.3	64.1	65.2	69.0	73.3	73.3

See footnotes at end of table

TABLE A-2. Employees in nonagricultural establishments, by industry ¹—Continued

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,214.4	1,225.3	1,220.8	1,214.3	1,233.9	1,167.5	1,184.6	1,165.3	1,178.5	1,213.7	1,203.2	1,170.1	1,186.6	1,228.4	1,224.9
Men's and boys' suits and coats.....	114.1	116.2	116.2	117.2	117.9	112.5	117.5	113.5	112.2	117.9	119.7	120.1	120.3	121.5	118.8
Men's and boys' furnishings.....	309.7	308.4	308.8	311.1	299.0	303.8	298.5	295.7	295.9	295.7	295.7	289.0	294.7	307.5	297.9
Women's, misses', and juniors' outerwear.....	352.1	347.8	346.9	356.0	333.0	331.9	335.4	351.1	370.3	361.2	347.0	347.2	361.3	369.0	369.0
Women's and children's undergarments.....	124.6	123.6	121.2	120.3	112.1	115.6	115.2	116.3	116.2	115.7	112.3	117.2	119.7	119.0	119.0
Hats, caps, and millinery.....	33.4	35.3	34.4	37.6	32.7	32.5	29.2	31.4	40.2	40.7	36.6	34.1	36.2	37.5	37.5
Girls' and children's outerwear.....	74.0	75.0	74.1	77.9	77.2	76.4	72.0	69.2	73.8	75.7	72.9	70.5	76.1	75.4	75.4
Fur goods and miscellaneous apparel.....	74.5	75.1	73.2	73.8	69.2	70.8	67.1	66.5	66.7	65.4	61.3	66.6	69.4	71.2	71.2
Miscellaneous fabricated textile products.....	142.9	139.4	138.5	139.3	131.8	136.1	134.4	136.1	132.7	129.1	130.9	136.0	136.9	136.2	136.2
Paper and allied products.....	598.1	598.8	597.0	597.0	595.8	588.5	593.6	583.6	581.1	580.1	578.2	581.9	586.2	593.3	584.9
Paper and pulp.....	225.5	225.1	226.7	228.1	225.7	227.9	222.9	221.7	221.5	220.9	222.1	224.0	224.4	217.7	217.7
Paperboard.....	65.8	65.9	66.1	67.1	66.8	68.2	67.1	67.0	67.2	67.1	67.5	67.4	69.3	70.6	70.6
Converted paper and paperboard products.....	126.8	126.1	126.5	125.0	123.9	123.7	122.6	122.8	122.1	121.2	121.9	122.0	124.4	123.2	123.2
Paperboard containers and boxes.....	180.7	179.9	177.7	175.6	172.1	173.8	171.0	169.6	169.3	169.0	170.4	172.8	175.1	173.3	173.3
Printing, publishing, and allied industries.....	936.6	934.6	933.2	929.6	926.0	925.6	924.9	919.2	921.3	924.5	920.6	919.0	928.1	917.2	889.5
Newspaper publishing and printing.....	341.9	341.3	339.6	339.2	339.8	340.2	338.0	337.7	337.4	335.6	336.3	338.8	332.6	320.0	320.0
Periodical publishing and printing.....	70.3	70.8	70.7	69.9	70.4	70.4	70.0	71.4	72.2	72.6	72.8	72.6	71.0	69.8	69.8
Books.....	73.9	74.5	74.4	74.1	72.2	72.6	72.3	72.3	72.0	71.6	71.6	72.1	71.1	67.0	67.0
Commercial printing.....	293.0	290.8	290.4	288.7	289.0	288.5	287.8	288.3	289.9	287.8	287.5	291.4	289.2	283.5	283.5
Bookbinding and related industries.....	47.4	47.6	47.7	47.9	47.7	47.0	46.3	46.4	47.0	46.8	46.4	46.1	47.0	45.4	45.4
Other publishing and printing industries.....	108.1	108.2	106.8	106.2	106.5	106.2	104.8	105.2	106.0	106.2	104.4	107.1	106.3	103.8	103.8
Chemicals and allied products.....	836.3	834.4	834.4	834.7	838.1	833.1	832.0	831.7	830.9	823.1	815.9	817.9	821.1	829.6	809.6
Industrial chemicals.....	285.5	284.7	286.1	288.8	288.0	285.8	283.5	282.4	282.0	282.2	283.8	285.3	286.8	279.2	279.2
Plastics and synthetics, except glass.....	155.7	154.4	153.2	153.7	152.9	152.1	150.8	150.3	149.1	149.0	149.4	150.9	153.2	149.1	149.1
Drugs.....	107.6	106.9	107.4	108.0	107.3	107.1	105.6	105.3	105.2	105.0	106.4	107.0	107.4	104.5	104.5
Soap, cleaners, and toilet goods.....	98.5	98.8	98.3	98.2	97.2	97.6	96.0	95.3	94.0	93.5	93.0	92.3	92.2	89.0	89.0
Paints, varnishes, and allied products.....	61.7	62.4	63.2	64.0	64.0	63.4	62.5	62.0	61.3	61.0	61.4	61.9	63.5	62.3	62.3
Agricultural chemicals.....	40.7	42.3	42.1	40.6	40.1	43.0	51.3	54.5	51.1	45.1	43.9	42.5	44.8	45.3	45.3
Other chemical products.....	84.7	84.9	84.4	84.8	83.6	83.0	82.0	81.1	80.4	80.1	80.0	81.2	81.8	80.2	80.2
Petroleum refining and related industries.....	194.5	196.2	203.5	204.9	207.4	204.5	207.9	205.3	204.0	202.4	201.5	203.0	204.5	211.7	215.3
Petroleum refining.....	163.4	169.0	170.4	171.8	169.6	172.9	171.6	172.0	171.8	171.7	172.0	173.1	173.1	177.6	181.4
Other petroleum and coal products.....	32.8	34.5	34.5	35.6	34.9	35.0	33.7	31.9	30.6	29.8	31.0	31.4	34.1	34.0	34.0
Rubber and miscellaneous plastic products.....	382.4	381.6	380.0	376.6	369.2	361.7	363.6	358.0	351.6	349.2	350.7	355.5	361.8	374.0	371.4
Tires and inner tubes.....	103.2	103.3	102.7	100.3	101.1	100.5	99.3	98.6	99.2	97.9	101.3	102.6	106.8	105.0	105.0
Other rubber products.....	156.0	154.4	153.9	150.3	147.0	148.8	146.4	143.0	141.7	144.2	146.6	149.3	153.3	153.2	153.2
Miscellaneous plastic products.....	122.4	122.3	120.0	118.6	113.6	114.3	112.3	110.0	108.3	108.6	107.6	109.9	113.8	113.3	113.3
Leather and leather products.....	364.4	362.9	358.7	360.4	369.0	359.7	364.0	353.4	353.5	360.9	364.2	360.5	360.8	365.8	374.6
Leather tanning and finishing.....	33.5	33.2	33.4	33.2	32.4	33.2	32.9	32.5	32.3	32.4	33.4	33.8	34.1	36.4	36.4
Footwear, except rubber.....	236.0	232.3	235.4	243.7	240.5	243.0	236.4	235.1	241.3	244.7	243.2	241.2	242.6	247.5	247.5
Other leather products.....	93.4	93.2	91.6	92.1	86.8	87.8	84.1	85.9	87.3	87.1	83.9	85.8	89.1	90.6	90.6
Transportation and public utilities.....															
Railroad transportation.....	3,924	3,942	3,953	3,971	3,971	3,977	3,945	3,891	3,870	3,872	3,871	3,888	3,966	4,017	4,010
Class I railroads.....	816.4	821.9	825.5	835.0	832.5	826.5	813.3	808.9	807.4	810.7	811.9	843.7	886.9	925.2	925.2
Local and interurban passenger transit.....	715.2	720.8	723.4	733.0	730.8	725.5	713.0	708.1	706.0	708.5	710.3	734.6	780.5	815.2	815.2
Local and suburban transportation.....	267.7	267.8	267.9	257.1	257.7	266.0	270.4	272.7	278.3	282.3	283.9	284.6	282.6	281.1	281.1
Taxicabs.....	90.6	91.1	91.6	91.2	91.0	92.2	92.4	92.1	92.0	92.1	92.3	92.3	94.6	96.8	96.8
Intercity and rural bus lines.....	106.5	106.1	104.7	103.7	104.5	104.9	106.3	109.8	116.9	121.1	121.1	122.6	120.4	118.9	118.9
Motor freight transportation and storage.....	47.7	48.0	49.4	50.0	50.1	49.6	48.4	47.5	46.6	46.2	47.7	47.0	47.2	47.6	47.6
Air transportation.....	914.0	913.4	907.0	891.0	891.0	880.3	852.8	837.1	840.4	832.0	848.7	874.5	873.8	848.2	848.2
Air transportation, common carriers.....	198.6	202.0	203.0	202.9	201.2	197.3	196.0	193.6	190.9	191.1	190.5	191.3	191.0	179.7	179.7
Pipeline transportation.....	178.2	180.6	181.1	180.4	178.9	174.4	172.5	171.5	169.4	170.2	169.8	170.9	171.6	160.9	160.9
Other transportation.....	21.7	21.7	22.0	22.6	22.8	22.7	22.2	22.2	22.1	22.2	22.3	22.4	23.1	24.3	24.3
Communication.....	301.9	299.0	304.7	306.9	314.9	307.0	303.3	303.3	297.9	297.4	292.8	304.5	308.0	303.4	303.4
Telephone communication.....	818.2	819.5	824.7	832.4	834.5	828.5	824.4	827.6	828.3	829.8	830.8	835.0	838.7	836.6	836.6
Telegraph communication.....	687.3	689.2	693.5	700.8	701.8	697.1	693.7	695.7	696.8	697.2	698.4	701.3	706.0	707.1	707.1
Radio and television broadcasting.....	36.8	36.7	37.1	37.0	37.1	37.2	37.0	36.9	37.0	37.4	37.6	38.2	38.3	39.0	39.0
Electric, gas, and sanitary services.....	601.3	603.6	607.9	616.1	623.0	622.5	616.4	608.5	604.1	606.5	606.7	609.8	613.0	611.6	611.6
Electric companies and systems.....	249.1	250.1	253.6	256.2	256.0	254.7	251.3	251.4	251.5	251.6	251.9	252.7	254.3	254.3	254.3
Gas companies and systems.....	152.4	152.8	157.9	156.7	156.9	154.3	152.6	148.2	151.8	152.0	152.5	153.0	153.4	153.7	153.7
Combined utility systems.....	172.3	175.1	177.2	178.9	178.5	176.4	174.5	174.4	173.7	172.9	173.1	174.6	175.0	173.7	173.7
Water, steam, and sanitary systems.....	29.8	29.9	30.4	31.2	31.1	31.0	30.1	30.1	29.5	29.1	29.2	29.5	30.3	30.0	30.0

See footnotes at end of table.

TABLE A-2. Employees in nonagricultural establishments, by industry ¹—Continued

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Wholesale and retail trade	12,152	11,605	11,450	11,378	11,342	11,327	11,354	11,238	11,162	11,101	11,040	11,233	12,146	11,412	11,125
Wholesale trade.....	3,052	3,049	3,049	3,035	3,044	3,013	2,990	2,959	2,955	2,964	2,974	2,995	3,057	3,009	2,941
Motor vehicles and automotive equipment.....		218.5	217.1	217.1	216.7	217.5	215.0	213.6	213.7	211.9	211.8	213.1	215.2	213.6	206.9
Drugs, chemicals, and allied products.....		192.6	190.5	189.5	190.8	190.5	188.4	186.0	185.3	185.1	184.7	184.0	184.6	183.8	176.8
Dry goods and apparel.....		131.7	131.2	131.0	132.4	131.5	130.6	129.3	129.2	129.1	130.7	130.2	131.2	130.8	125.9
Groceries and related products.....		498.7	496.4	486.1	481.7	487.3	493.1	486.7	484.8	489.9	495.2	498.0	504.8	494.0	486.8
Electrical goods.....		205.7	204.7	204.6	205.1	204.8	203.6	202.4	203.2	204.3	205.0	206.2	207.9	208.1	201.2
Hardware, plumbing and heating goods.....		143.1	143.0	143.2	143.9	143.6	142.0	142.3	142.1	141.6	141.5	142.2	143.2	145.1	146.0
Machinery, equipment, and supplies.....		487.4	488.3	489.0	489.2	488.6	484.5	478.9	476.8	477.4	475.6	476.8	477.6	479.1	458.6
Retail trade	9,100	8,556	8,401	8,343	8,298	8,314	8,364	8,279	8,207	8,137	8,066	8,238	9,089	8,403	8,184
General merchandise stores.....	2,063.9	1,688.4	1,576.5	1,526.5	1,488.8	1,480.0	1,501.5	1,488.1	1,468.6	1,463.9	1,420.7	1,500.7	2,036.7	1,563.1	1,531.1
Department stores.....		997.1	919.6	880.3	861.0	858.5	874.4	866.3	859.5	857.7	833.4	889.2	1,221.9	914.4	896.2
Limited price variety stores.....		351.9	333.5	328.8	317.3	311.4	320.0	322.2	313.5	311.1	299.1	313.4	443.2	335.4	324.8
Food stores.....	1,384.9	1,367.5	1,353.8	1,342.7	1,346.1	1,355.0	1,358.9	1,353.7	1,349.2	1,352.5	1,360.7	1,361.5	1,394.5	1,356.1	1,305.0
Grocery, meat, and vegetable stores.....		1,196.2	1,184.8	1,174.2	1,174.9	1,184.9	1,187.3	1,181.0	1,180.1	1,181.7	1,187.2	1,191.1	1,208.5	1,181.6	1,134.0
Apparel and accessories stores.....	766.6	675.4	653.2	643.1	612.1	616.5	644.1	637.5	625.9	630.7	593.8	633.0	766.0	637.2	608.7
Men's and boys' apparel stores.....		111.6	105.7	103.2	102.1	103.4	109.5	102.6	101.5	102.8	101.9	110.4	135.9	104.3	97.9
Women's ready-to-wear stores.....		258.0	249.4	247.5	236.3	234.7	243.7	245.8	241.1	240.0	225.9	238.7	286.7	243.1	235.7
Family clothing stores.....		101.6	97.3	95.3	90.7	93.7	95.1	93.3	91.8	92.8	89.4	95.7	120.6	94.7	89.5
Shoe stores.....		118.3	117.4	117.6	109.0	111.5	117.5	117.4	114.7	115.9	105.0	113.9	132.4	119.0	112.8
Furniture and appliance stores.....	424.1	412.6	408.9	405.4	403.7	402.7	401.8	396.8	399.4	400.2	401.3	406.1	424.4	409.2	398.0
Eating and drinking places.....	1,615.3	1,616.5	1,626.6	1,649.7	1,658.6	1,662.5	1,667.6	1,637.2	1,617.3	1,558.2	1,548.5	1,565.5	1,593.1	1,626.5	1,596.2
Other retail trade.....	2,845.2	2,795.4	2,781.6	2,775.3	2,788.9	2,797.7	2,790.0	2,765.8	2,746.5	2,731.8	2,740.8	2,771.5	2,874.7	2,811.1	2,744.9
Motor vehicle dealers.....		652.3	650.9	648.9	657.1	659.1	655.7	653.4	656.0	657.1	661.2	667.9	670.7	674.6	656.1
Other vehicle and accessory dealers.....		143.1	141.6	140.4	140.2	142.1	142.5	136.8	134.5	129.9	129.4	130.7	144.7	142.8	140.5
Drug stores.....		375.6	373.4	373.0	372.3	370.4	371.2	368.3	366.6	367.3	367.0	373.0	389.6	369.5	355.2
Finance, insurance, and real estate	2,758	2,756	2,758	2,770	2,801	2,795	2,766	2,734	2,724	2,710	2,706	2,702	2,709	2,684	2,597
Banking.....		699.6	697.7	699.6	707.6	704.7	696.3	688.2	688.0	687.9	686.6	684.5	686.7	674.7	641.7
Credit agencies other than banks.....		263.5	261.6	263.1	264.6	264.3	261.3	259.5	262.2	261.4	261.1	261.8	260.8	256.2	242.4
Savings and loan associations.....		81.0	80.7	80.1	80.4	80.7	78.7	76.5	76.6	75.6	75.3	75.8	74.4	72.4	66.9
Personal credit institutions.....		143.1	141.7	144.1	145.2	144.7	144.4	145.1	147.5	147.8	147.8	148.0	148.5	146.0	138.5
Security dealers and exchanges.....		130.8	130.3	131.0	133.2	132.5	130.5	126.9	123.3	119.7	117.1	115.1	115.0	114.2	106.7
Insurance carriers.....		858.4	856.8	861.2	866.9	863.9	857.3	853.2	853.8	853.4	850.8	846.2	848.3	839.0	818.2
Life insurance.....		469.4	468.0	470.1	473.2	471.7	467.4	467.0	467.8	467.3	465.8	463.2	463.7	459.0	450.0
Accident and health insurance.....		51.8	51.6	51.8	52.3	52.0	52.0	51.5	51.5	51.2	51.0	50.8	51.3	50.9	49.9
Fire, marine, and casualty insurance.....		295.1	295.3	297.1	298.9	298.0	295.0	293.5	293.6	293.3	291.4	292.1	287.3	277.7	
Insurance agents, brokers, and services.....		199.1	200.0	200.7	203.8	204.0	201.9	200.0	198.5	197.9	197.0	196.2	197.9	196.2	189.7
Real estate.....		529.7	536.8	538.8	548.4	548.6	542.3	529.8	522.5	513.6	518.0	521.7	523.9	527.3	521.4
Operative builders.....		31.2	32.8	33.9	34.5	34.7	34.4	33.6	32.6	31.6	29.5	30.5	32.1	36.1	43.3
Other finance, insurance, and real estate.....		75.3	75.2	75.9	76.7	76.5	76.2	75.9	76.0	75.8	76.5	76.0	75.9	76.7	76.4
Services and miscellaneous	7,552	7,588	7,618	7,612	7,606	7,631	7,598	7,510	7,448	7,359	7,333	7,313	7,380	7,361	7,105
Hotels and lodging places.....		559.9	570.3	615.3	702.9	700.6	619.6	559.8	551.8	537.3	536.4	532.1	534.6	567.7	547.3
Hotels, tourist courts, and motels.....		516.1	523.9	559.1	597.6	597.4	559.7	509.6	506.6	495.6	495.3	491.0	492.0	511.1	490.8
Personal services.....		509.9	513.5	512.0	510.9	518.5	522.4	514.2	506.8	504.6	500.8	507.2	509.3	521.0	529.1
Laundries, cleaning and dyeing plants.....															
Miscellaneous business services.....		111.2	110.7	109.7	109.4	110.4	111.2	109.8	110.7	110.5	111.4	109.2	110.6	109.9	105.5
Advertising.....		176.5	183.0	189.1	190.2	193.4	192.1	189.0	187.9	181.5	178.3	179.6	182.3	189.3	194.9
Motion pictures.....		42.2	42.0	42.2	41.7	43.1	43.3	42.4	42.8	45.9	46.9	47.9	48.3	43.5	44.8
Motion picture filming and distributing.....		134.3	141.0	146.9	148.5	150.3	148.8	146.6	145.1	135.6	131.4	131.7	134.0	145.8	150.2
Motion picture theaters and services.....															
Medical services.....		1,157.2	1,154.0	1,148.9	1,149.6	1,152.8	1,142.8	1,132.6	1,130.1	1,130.2	1,126.2	1,119.6	1,119.2	1,105.0	1,062.0
Hospitals.....															
Government	9,311	9,075	9,030	8,904	8,535	8,534	8,797	8,816	8,787	8,769	8,737	8,672	8,980	8,520	8,190
Federal Government ³	2,536	2,291	2,283	2,281	2,300	2,294	2,277	2,240	2,233	2,221	2,213	2,208	2,506	2,270	2,233
Executive.....		2,261.9	2,254.3	2,252.6	2,271.2	2,265.0	2,248.1	2,212.1	2,205.0	2,193.3	2,185.7	2,180.5	2,478.2	2,242.6	2,205.2
Department of Defense.....		956.6	954.4	948.9	950.0	944.2	942.9	933.0	935.6	933.7	932.8	931.8	931.2	940.6	966.2
Post Office Department.....		585.7	579.1	584.2	587.0	586.7	581.1	573.7	572.2	567.9	565.9	566.9	864.8	586.7	574.5
Other agencies.....		719.6	720.0	719.5	734.2	734.1	724.1	700.4	697.2	691.7	687.0	681.8	682.2	715.3	664.5
Legislative.....		23.4	23.4	23.5	23.6	23.6	23.5	23.1	22.9	22.6	22.5	22.5	22.4	22.6	22.5
Judicial.....		5.3	5.3	5.1	5.1	5.1	5.1	5.1	5.1	5.0	5.0	5.0	5.0	4.9	4.8
State and local government ⁴	6,775	6,784	6,747	6,623	6,235	6,240	6,520	6,576	6,554	6,548	6,524	6,464	6,474	6,250	5,957
State government.....		1,700.9	1,702.0	1,665.4	1,623.5	1,613.6	1,664.6	1,680.2	1,668.7	1,661.2	1,654.3	1,638.3	1,637.1	1,592.7	1,541.1
Local government.....		5,082.8	5,044.6	4,957.1	4,611.4	4,626.0	4,855.4	4,896.2	4,885.1	4,886.6	4,869.6	4,825.8	4,837.3	4,657.0	4,416.2
Education.....		3,419.6	3,377.0	3,194.2	2,738.1	2,750.6	3,089.1	3,233.0	3,232.0	3,234.7	3,228.0	3,185.9	3,197.0	2,983.2	2,776.8
Other State and local government.....		3,364.1	3,369.6	3,428.3	3,496.8	3,489.0	3,430.9	3,343.4	3,321.8	3,313.1	3,295.9	3,278.2	3,277.4	3,266.4	3,180.6

¹ Beginning with the December 1961 issue, figures differ from those previously published for three reasons. The industry structure has been converted to the 1957 Standard Industrial Classification; the series have been adjusted to March 1959 benchmark levels indicated by data from government social insurance programs; and, beginning with January 1959, the estimates are prepared from a sample stratified by establishment size and, in some cases, region. For comparable back data, see *Employment and Earnings Statistics for the United States, 1909-60*, BLS Bull. 1312. Statistics from April 1959 forward are subject to further revision when new benchmarks become available.

In addition, data include Alaska and Hawaii beginning in January 1959. This inclusion increased the nonagricultural total by 212,000 (0.4 percent) for the March 1959 benchmark month, with increases for industry divisions ranging from 0.1 percent in mining to 0.8 percent in government.

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 ending nearest the 15th 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 Data relate to civilian employees who worked on, or received pay for, the last day of the month.

⁴ 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-3. Production workers in nonagricultural establishments, by industry¹

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Mining		529	529	536	536	530	539	529	518	514	517	526	541	567	589
Metal mining.....		72.1	71.0	72.5	70.1	72.8	72.8	71.9	70.2	70.6	70.5	73.8	74.5	76.9	67.2
Iron ores.....		23.0	23.3	23.6	21.8	23.4	23.0	22.8	21.9	22.2	21.8	23.4	24.9	28.6	23.0
Copper ores.....		24.2	22.9	24.2	24.3	24.1	24.4	23.9	23.1	23.0	23.1	24.5	24.6	22.6	18.5
Coal mining.....		139.3	137.8	137.1	135.2	123.8	135.0	134.4	134.6	137.9	143.8	144.3	146.1	161.2	175.7
Bituminous.....		130.8	129.2	128.0	126.2	114.8	126.0	125.5	124.9	129.3	133.5	133.6	135.4	148.9	159.2
Crude petroleum and natural gas.....		220.2	218.9	224.2	228.2	230.7	228.8	224.2	220.7	219.4	219.9	222.0	226.5	229.1	245.2
Crude petroleum and natural gas fields.....		106.4	106.3	109.0	111.3	111.1	110.5	107.7	107.6	107.6	108.9	110.0	111.1	113.8	118.5
Oil and gas field services.....		113.8	112.6	115.2	116.9	119.6	118.3	116.5	113.1	111.8	111.0	112.0	115.4	115.3	126.7
Quarrying and nonmetallic mining.....		97.5	101.0	102.3	102.6	102.7	101.9	98.0	92.6	86.4	82.9	86.3	93.6	99.6	100.5
Contract construction		2,413	2,567	2,603	2,655	2,602	2,550	2,355	2,203	2,042	1,931	2,043	2,213	2,458	2,535
General building contractors.....		761.5	806.1	815.1	840.0	819.3	800.9	739.1	695.9	647.7	609.1	654.6	710.3	788.3	835.4
Heavy construction.....		515.4	579.2	597.1	605.2	595.3	579.6	513.5	442.9	374.9	343.0	368.2	421.2	509.0	516.5
Highway and street construction.....		286.6	340.7	352.0	359.2	351.3	338.0	288.7	231.0	180.4	155.7	169.3	203.4	270.6	281.9
Other heavy construction.....		228.8	238.5	245.1	246.0	244.0	241.6	224.8	211.9	194.5	187.3	198.9	217.8	238.4	234.6
Special trade contractors.....		1,136.3	1,181.2	1,190.4	1,209.8	1,187.5	1,169.1	1,102.5	1,063.8	1,019.2	978.6	1,020.5	1,081.2	1,160.7	1,183.1
Manufacturing	12,321	12,418	12,379	12,407	12,274	12,023	12,090	11,875	11,712	11,666	11,642	11,740	12,005	12,562	12,596
Durable goods.....	6,867	6,891	6,771	6,753	6,641	6,616	6,678	6,582	6,426	6,358	6,351	6,449	6,613	7,021	7,031
Nondurable goods.....	5,454	5,527	5,608	5,654	5,633	5,407	5,412	5,293	5,286	5,308	5,291	5,291	5,392	5,541	5,565
Durable goods															
Ordnance and accessories.....	98.8	98.3	98.2	96.7	94.1	93.8	93.1	92.9	90.9	92.2	91.3	91.6	91.7	89.4	84.4
Ammunition, except for small arms.....		41.0	41.2	40.3	39.5	39.1	39.0	39.1	39.4	38.9	38.6	37.9	38.2	37.0	34.5
Sighting and fire control equipment.....		23.2	23.3	23.2	22.2	22.6	22.2	21.9	21.7	22.0	21.6	22.9	23.2	22.7	21.3
Other ordnance and accessories.....		34.1	33.7	33.2	32.4	32.1	31.9	31.9	29.8	31.3	31.1	30.8	30.3	29.7	28.6
Lumber and wood products, except furniture.....	524.1	541.4	554.7	565.2	567.8	563.3	564.8	536.6	513.5	492.0	490.3	501.7	518.0	570.3	594.3
Logging camps and logging contractors.....		88.5	93.3	97.6	99.5	98.8	98.3	82.4	73.5	66.1	68.9	71.6	75.6	87.1	88.5
Sawmills and planing mills.....		245.0	251.2	253.9	253.0	253.2	253.1	246.5	237.5	228.8	226.6	233.6	241.7	268.5	281.5
Millwork, plywood, and related products.....		120.8	122.8	125.6	127.3	123.5	123.9	119.8	116.4	112.4	110.4	112.0	115.1	124.1	133.6
Wooden containers.....		36.5	36.6	37.3	37.4	37.7	38.8	38.3	36.8	36.0	35.6	35.5	36.3	39.1	39.7
Miscellaneous wood products.....		50.6	50.8	50.8	50.6	50.1	50.7	49.6	49.3	48.7	48.8	49.0	49.3	51.4	51.7
Furniture and fixtures.....	312.8	315.7	317.2	313.6	310.8	299.8	301.0	295.7	296.6	294.1	294.2	293.8	302.3	318.9	321.0
Household furniture.....		230.7	232.0	229.3	224.9	217.1	217.6	214.8	217.5	214.7	215.2	213.8	219.4	232.3	235.3
Office furniture.....		22.8	22.6	22.4	22.3	21.3	21.7	21.5	21.0	21.0	21.0	21.7	22.2	22.8	21.7
Partitions, office and store fixtures.....		27.5	27.7	28.1	28.0	26.8	26.9	26.0	26.0	26.3	26.2	26.4	27.2	29.2	27.3
Other furniture and fixtures.....		34.7	34.9	35.8	35.6	34.6	35.0	34.1	33.1	32.1	31.8	31.9	33.5	34.5	33.7
Stone, clay, and glass products.....	449.1	463.8	469.9	477.1	477.4	470.6	469.9	458.1	444.2	431.2	421.2	428.9	448.8	483.2	494.0
Flat glass.....		25.2	25.1	25.0	24.5	23.6	22.5	22.7	21.7	22.7	22.6	24.7	26.0	27.0	29.6
Glass and glassware, pressed or blown.....		85.1	85.1	87.9	87.3	85.6	85.6	84.9	83.5	83.4	82.1	80.2	82.5	86.9	84.0
Cement, hydraulic.....		32.5	32.9	33.3	33.8	34.5	34.4	33.1	32.3	29.8	28.8	30.3	31.7	34.9	36.2
Structural clay products.....		60.8	61.4	63.4	63.7	63.6	62.8	61.4	59.7	56.8	54.4	56.1	59.5	65.9	67.6
Pottery and related products.....		38.3	38.2	38.0	37.0	35.1	36.5	36.4	36.3	36.3	36.5	36.4	36.9	40.3	41.1
Concrete, gypsum and plaster products.....		119.9	124.7	127.2	129.2	127.7	127.0	121.2	114.0	106.9	102.3	106.4	112.8	123.5	127.9
Other stone and mineral products.....		89.4	89.9	89.9	89.8	88.5	89.4	86.9	85.3	83.7	82.7	83.6	86.4	91.8	93.4
Primary metal industries	953.4	952.2	949.8	954.6	904.2	927.2	926.1	904.3	872.6	861.0	858.5	866.5	880.0	992.0	953.2
Blast furnace and basic steel products.....		502.5	507.9	513.3	503.5	498.0	491.8	479.4	458.0	446.3	439.7	437.5	441.9	529.3	471.0
Iron and steel foundries.....		159.4	155.9	157.8	157.3	156.2	157.1	154.6	150.0	150.7	152.4	156.4	160.7	172.4	181.3
Nonferrous smelting and refining.....		53.2	52.9	52.0	52.5	52.2	52.1	50.3	49.6	49.8	50.4	52.2	52.6	54.9	51.9
Nonferrous rolling, drawing, and extruding.....		135.6	135.1	133.5	131.0	126.1	128.3	125.2	123.5	123.0	124.0	126.3	129.1	133.6	142.9
Nonferrous foundries.....		53.6	52.2	51.8	50.5	49.4	50.8	49.6	47.8	47.6	48.1	49.4	50.4	53.7	56.6
Miscellaneous primary metal industries.....		47.9	45.8	46.2	45.4	45.3	46.0	45.2	43.7	43.6	43.9	44.7	45.3	48.2	49.5
Fabricated metal products	853.1	859.1	847.7	839.2	831.3	809.4	825.4	816.4	789.6	780.4	784.4	804.4	826.5	869.0	867.1
Metal cans.....		49.0	51.2	54.2	55.1	54.5	53.7	53.2	52.0	50.6	49.3	48.5	49.4	54.1	54.5
Outlets, handtools, and general hardware.....		108.3	107.0	101.8	100.9	97.1	101.1	100.4	93.5	96.4	98.0	101.7	104.3	107.3	107.5
Heating equipment and plumbing fixtures.....		56.7	56.8	57.0	57.2	55.2	55.4	54.6	52.9	53.6	52.5	53.8	54.2	58.7	61.2
Fabricated structural metal products.....		235.1	238.4	242.0	237.9	234.1	234.1	227.2	223.0	218.3	219.3	224.0	231.6	238.1	236.8
Screw machine products, bolts, etc.....		66.4	65.0	63.4	63.0	61.5	62.1	60.8	59.7	60.0	60.9	61.4	61.6	67.2	69.1
Metal stampings.....		159.8	145.4	142.6	140.9	134.0	144.7	146.5	139.1	134.6	137.7	146.7	153.2	160.7	153.3
Coating, engraving, and allied services.....		56.1	56.8	55.8	53.7	52.5	53.6	53.0	51.3	49.7	48.9	49.0	51.3	53.8	53.3
Miscellaneous fabricated wire products.....		44.7	44.8	43.5	42.6	41.3	42.0	41.7	40.6	39.4	40.3	40.8	41.7	45.5	45.6
Miscellaneous fabricated metal products.....		83.0	82.3	78.9	80.0	79.2	78.7	79.0	77.5	77.8	77.5	78.5	79.2	83.6	86.0

See footnotes at end of table.

TABLE A-3. Production workers in nonagricultural establishments, by industry ¹—Continued

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Machinery.....	977.2	966.8	955.1	959.6	949.9	956.7	967.0	970.9	971.8	968.4	970.1	967.5	971.7	1,030.4	1,025.9
Engines and turbines.....		53.1	52.4	52.2	50.2	49.0	49.6	51.6	51.9	50.9	50.9	51.7	52.1	56.1	59.5
Farm machinery and equipment.....		71.3	70.3	71.7	69.0	75.2	79.0	86.1	89.5	88.8	86.5	81.8	78.8	79.6	89.2
Construction and related machinery.....		129.2	129.3	130.7	131.4	129.6	130.4	129.6	127.9	126.0	125.4	124.6	126.1	144.5	148.6
Metalworking machinery and equipment.....		181.4	179.0	179.9	175.6	176.5	178.6	176.8	180.9	181.2	183.1	182.4	182.1	194.0	183.9
Special industry machinery.....		115.3	114.2	115.5	115.2	115.1	116.9	116.4	116.1	117.0	117.8	118.3	119.7	122.3	116.3
General industrial machinery.....		146.0	145.3	143.0	143.4	144.6	144.3	141.5	139.0	139.2	140.1	142.2	143.8	154.9	154.6
Office, computing and accounting machines.....		95.6	95.4	95.0	94.4	94.0	94.4	94.1	94.2	93.2	94.0	94.4	95.0	95.2	92.6
Service industry machines.....		62.7	60.0	60.2	58.7	63.2	64.5	67.7	66.8	66.4	66.0	65.1	64.9	69.7	68.2
Miscellaneous machinery.....		112.2	109.2	111.4	112.0	109.5	109.3	107.1	105.5	105.7	106.3	107.0	109.2	114.2	112.9
Electrical equipment and supplies.....	1,024.4	1,012.2	997.0	982.1	968.3	943.5	950.4	942.7	930.6	933.5	938.9	946.5	952.1	986.9	967.0
Electric distribution equipment.....		106.8	106.8	106.3	106.0	104.8	104.6	103.3	103.2	103.8	104.9	106.1	107.1	108.3	104.7
Electrical industrial apparatus.....		117.7	115.0	116.9	115.4	114.8	115.4	113.9	111.9	111.9	112.2	113.2	113.7	121.5	122.4
Household appliances.....		119.3	119.4	117.1	113.8	112.6	114.8	114.3	113.3	112.8	112.0	110.3	111.6	120.7	122.1
Electric lighting and wiring equipment.....		103.7	103.5	102.0	101.8	97.9	98.8	97.5	97.3	97.2	97.5	98.0	100.6	103.6	104.4
Radio and TV receiving sets.....		97.8	97.5	95.1	90.4	81.8	78.1	74.3	68.3	69.1	71.8	73.2	70.5	82.2	85.6
Communication equipment.....		208.1	204.4	199.3	196.1	193.2	195.7	195.9	197.1	199.1	201.2	204.9	206.0	201.4	185.9
Electronic components and accessories.....		173.2	170.4	167.8	163.2	161.4	163.7	164.5	163.5	162.1	160.7	159.3	157.3	164.4	159.6
Miscellaneous electrical equipment and supplies.....		85.6	80.0	77.6	79.6	77.0	79.3	79.0	76.0	77.5	78.6	81.5	85.3	84.9	82.5
Transportation equipment.....	1,142.1	1,124.1	1,021.4	1,013.0	961.2	1,032.9	1,049.6	1,043.7	1,005.9	999.0	998.5	1,047.4	1,101.0	1,132.7	1,181.0
Motor vehicles and equipment.....		563.9	469.3	489.9	429.8	504.8	514.9	504.5	463.8	454.2	457.4	503.4	553.6	566.5	538.5
Aircraft and parts.....		389.9	383.0	378.7	368.2	369.5	371.3	373.8	377.4	380.1	379.3	380.2	381.7	392.5	462.6
Ship and boat building and repairing.....		122.6	120.9	117.1	116.1	112.5	115.4	118.4	118.7	119.3	116.6	117.8	116.9	116.6	122.0
Railroad equipment.....		26.1	25.3	24.8	24.5	23.5	24.2	23.4	23.3	23.9	25.1	27.3	28.2	32.0	29.3
Other transportation equipment.....		21.6	22.9	22.5	22.6	22.6	23.8	23.6	22.7	21.5	20.1	18.7	20.6	25.1	28.5
Instrument and related products.....	226.1	226.9	225.7	225.9	222.5	217.5	220.5	218.9	216.7	217.4	217.4	221.0	223.9	232.0	230.1
Engineering and scientific instruments.....		38.7	38.8	39.7	39.5	38.4	40.5	41.2	41.4	42.4	42.0	42.8	43.0	42.8	41.4
Mechanical measuring and control devices.....		61.4	60.8	60.8	59.1	58.8	59.2	58.8	58.4	58.3	58.7	59.3	59.4	63.3	62.5
Optical and ophthalmic goods.....		29.9	29.8	29.5	29.2	28.6	29.2	28.9	28.4	28.2	28.3	28.4	29.1	30.7	29.9
Surgical, medical, and dental equipment.....		33.5	33.3	33.3	33.1	32.5	32.8	32.8	32.7	32.6	32.9	32.9	33.0	33.1	31.8
Photographic equipment and supplies.....		40.0	39.8	39.9	39.8	39.1	39.3	38.8	38.7	38.7	38.9	39.6	40.3	41.1	41.3
Watches and clocks.....		23.4	23.2	22.7	21.8	20.1	19.5	18.4	17.1	17.2	16.6	18.0	19.1	21.1	23.2
Miscellaneous manufacturing industries.....	306.2	330.2	333.9	326.3	317.4	300.9	309.8	301.5	293.2	288.7	286.4	279.6	296.9	316.0	313.2
Jewelry, silverware, and plated ware.....		33.8	34.1	33.6	33.0	30.8	32.0	32.0	32.1	32.2	32.6	32.6	33.6	33.9	33.8
Toys, amusement, and sporting goods.....		98.0	103.2	99.2	95.8	88.3	89.5	85.7	79.4	73.1	69.2	63.6	73.3	86.4	82.9
Pens, pencils, office and art materials.....		24.6	24.4	23.7	23.6	22.7	22.5	21.9	21.7	22.0	22.2	22.3	22.8	23.0	22.9
Costume jewelry, buttons, and notions.....		48.0	47.4	46.3	46.0	43.5	44.8	42.2	41.3	42.3	43.0	42.0	44.7	47.3	49.1
Other manufacturing industries.....		125.8	124.8	123.5	119.0	115.6	121.0	119.7	118.7	119.1	119.4	119.1	122.5	125.4	124.6
<i>Nondurable goods</i>															
Food and kindred products.....	1,163.2	1,215.1	1,286.1	1,334.8	1,317.9	1,226.4	1,184.2	1,120.7	1,114.1	1,104.4	1,100.6	1,121.2	1,169.2	1,211.3	1,222.0
Meat products.....		260.7	259.0	258.9	257.6	259.0	260.3	252.4	247.0	244.7	244.5	250.3	256.2	257.9	255.2
Dairy products.....		156.4	159.9	165.8	171.5	172.6	171.6	164.5	162.9	160.0	158.1	158.5	160.9	169.7	175.3
Canned and preserved food, except meats.....		208.0	266.5	332.5	313.2	226.3	186.1	158.4	160.0	153.6	147.1	149.9	166.5	206.1	209.4
Grain mill products.....		87.1	89.4	93.8	94.0	93.9	92.6	88.1	86.4	86.7	86.5	87.8	88.6	89.8	93.3
Bakery products.....		175.3	176.5	175.6	177.8	178.2	177.3	173.3	171.3	171.7	172.0	172.5	176.0	176.6	176.4
Sugar.....		39.4	39.6	25.1	24.8	23.6	22.9	22.7	25.7	23.8	25.5	32.5	38.7	30.3	31.3
Confectionery and related products.....		70.9	72.1	66.4	64.1	55.2	59.1	55.9	55.6	60.2	62.6	62.9	68.6	63.5	63.3
Beverages.....		116.0	120.9	120.1	120.8	123.3	119.6	112.8	111.9	110.1	108.3	109.9	115.0	118.3	118.0
Miscellaneous food and kindred products.....		101.3	102.2	96.6	94.2	94.3	94.7	92.6	93.3	93.6	96.0	96.9	98.7	99.0	99.7
Tobacco manufactures.....	75.4	82.4	96.4	106.5	88.7	65.0	67.2	66.4	68.0	72.4	77.4	81.4	85.1	83.3	84.0
Cigarettes.....		31.2	31.3	31.7	32.0	31.6	32.0	31.3	31.3	31.5	31.6	31.7	31.9	32.2	31.7
Cigars.....		23.0	22.9	22.6	22.3	21.1	23.1	23.3	23.2	23.9	24.6	24.3	25.6	26.0	27.7
Textile mill products.....	799.2	805.0	805.9	804.4	802.2	788.1	800.3	791.4	784.9	779.0	778.1	778.3	790.8	826.7	855.0
Cotton broad woven fabrics.....		236.0	235.4	234.0	233.1	232.0	234.1	233.4	233.9	234.7	236.1	238.0	239.3	244.1	248.4
Silk and synthetic broad woven fabrics.....		63.7	63.8	63.8	63.7	62.1	62.6	62.1	62.1	62.4	63.1	64.2	65.3	66.9	68.2
Weaving and finishing broad woolsens.....		44.6	45.7	47.6	47.7	48.1	48.9	47.6	46.0	45.1	44.9	42.9	42.8	49.5	53.9
Narrow fabrics and smallwares.....		24.0	23.9	23.8	23.2	22.8	23.0	23.0	22.8	22.4	22.6	22.6	22.9	24.1	24.9
Knitting.....		196.0	197.3	196.3	196.8	191.5	196.3	192.3	189.2	184.3	180.4	177.7	182.9	194.3	199.4
Finishing textiles, except wool and knit.....		61.7	61.0	60.8	60.7	60.0	61.1	60.8	60.8	60.6	60.3	60.9	62.0	64.1	66.2
Floor covering.....		28.2	28.2	27.9	27.4	25.9	27.0	27.1	26.9	28.4	28.8	29.0	29.7	30.4	31.5
Yarn and thread.....		94.9	94.7	94.8	94.6	92.2	93.5	92.3	91.3	90.8	90.7	90.2	91.9	95.9	100.6
Miscellaneous textile goods.....		55.9	55.9	55.4	55.0	53.5	53.8	52.8	51.9	50.3	51.2	52.8	54.0	57.5	61.9

See footnotes at end of table.

TABLE A-3. Production workers in nonagricultural establishments, by industry ¹—Continued

[In thousands]

Revised series; see box, p. 212.

Industry	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Apparel and related products.....	1,082.6	1,092.6	1,087.3	1,081.5	1,100.4	1,033.7	1,050.3	1,033.3	1,045.8	1,082.1	1,071.4	1,039.2	1,055.3	1,094.2	1,090.6
Men's and boys' suits and coats.....	102.4	104.1	105.0	105.8	105.8	100.6	103.3	101.7	99.8	105.5	107.4	107.6	107.9	108.9	106.3
Men's and boys' furnishings.....	280.9	279.3	279.9	282.1	270.5	275.1	270.0	267.4	267.4	268.1	267.6	261.1	266.6	279.6	271.3
Women's, misses', and juniors' outerwear.....	317.4	313.2	312.3	321.5	297.7	296.9	301.2	316.5	335.7	326.8	312.5	312.6	325.8	331.8	331.8
Women's and children's undergarments, hats, caps, and millinery.....	111.0	109.9	107.7	107.1	98.9	102.6	102.2	103.4	103.4	102.4	99.6	104.2	106.2	105.8	105.8
Girls' and children's outerwear.....	29.6	31.5	30.6	33.8	29.0	28.8	25.5	27.5	36.3	36.9	32.9	30.7	32.4	33.6	33.6
Fur goods and miscellaneous apparel.....	66.2	67.2	66.3	69.8	69.1	68.4	64.1	61.5	65.8	67.5	64.9	62.6	67.5	66.9	66.9
Miscellaneous fabricated textile products.....	65.1	65.7	64.0	64.5	59.8	60.9	57.2	57.0	57.8	56.6	52.6	57.6	60.2	61.9	61.9
Paper and allied products.....	478.3	478.1	477.0	476.2	475.0	467.4	473.7	464.4	462.1	460.8	459.4	462.9	466.3	474.0	470.1
Paper and pulp.....	182.4	182.0	183.2	184.3	182.2	184.9	180.1	179.2	178.8	178.3	178.3	179.5	180.9	181.9	177.3
Paperboard.....	53.3	53.4	53.3	54.1	53.8	55.1	54.4	54.2	54.3	54.3	54.2	54.6	54.5	56.4	57.8
Converted paper and paperboard products.....	96.9	96.7	96.9	95.8	94.2	94.6	93.6	93.8	93.1	92.5	93.2	93.0	95.7	95.7	95.7
Paperboard containers and boxes.....	145.5	144.9	142.8	140.8	137.2	139.1	136.3	134.9	134.6	134.4	135.6	137.9	140.1	139.4	139.4
Printing, publishing and allied industries.....	602.9	602.9	602.2	599.2	594.2	593.7	593.7	590.3	592.2	594.3	591.2	591.4	598.7	591.5	575.6
Newspaper publishing and printing.....	177.9	177.2	175.5	174.2	175.0	176.2	175.4	175.1	174.5	174.5	173.2	174.4	176.6	172.4	167.1
Periodical publishing and printing.....	29.2	29.7	29.6	28.5	29.0	29.1	29.2	30.3	30.7	30.7	30.7	30.9	30.7	29.8	28.9
Books.....	45.0	45.4	45.9	45.1	43.4	44.2	44.2	43.8	43.7	43.7	43.6	43.6	43.7	43.0	40.6
Commercial printing.....	233.4	232.0	231.8	230.1	229.6	228.4	227.8	228.5	229.9	228.1	228.0	231.5	229.5	224.6	224.6
Bookbinding and related industries.....	38.3	38.5	38.5	38.7	38.6	37.9	37.1	37.3	37.7	37.5	37.2	36.9	38.1	37.0	37.0
Other publishing and printing industries.....	79.1	79.4	77.9	77.6	78.1	77.9	76.6	77.2	77.8	78.1	77.3	79.3	78.8	77.4	77.4
Chemicals and allied products.....	511.0	510.2	509.9	509.0	509.2	506.1	507.0	509.1	508.7	502.0	495.2	496.6	499.5	510.8	505.9
Industrial chemicals.....	166.1	165.2	165.4	166.5	166.1	164.8	163.8	162.7	162.7	163.0	164.7	166.3	169.0	167.5	167.5
Plastics and synthetics, except glass.....	105.9	104.4	103.1	103.4	102.9	102.8	101.6	100.9	100.0	99.8	100.1	101.2	103.5	102.2	102.2
Drugs.....	58.6	58.1	58.7	58.8	58.9	58.8	57.7	57.3	57.4	57.4	57.5	58.1	58.8	58.3	58.3
Soap, cleaners and toilet goods.....	59.9	60.2	60.1	59.6	58.9	59.2	58.0	57.6	56.3	55.7	55.5	55.5	56.1	54.7	54.7
Paints, varnishes and allied products.....	35.3	35.8	36.4	36.8	36.9	36.4	35.8	35.2	34.2	34.1	34.6	34.9	36.7	36.4	36.4
Agricultural chemicals.....	27.3	28.7	28.2	26.8	26.1	28.9	37.2	40.5	37.3	31.3	30.2	28.6	31.0	31.7	31.7
Other chemical products.....	57.1	57.5	57.1	57.3	56.3	56.1	55.0	54.5	54.1	53.9	54.0	54.9	55.6	55.0	55.0
Petroleum refining and related industries.....	123.1	124.6	131.5	132.7	134.7	131.6	134.3	132.1	131.0	129.7	129.3	131.0	132.5	137.7	139.8
Petroleum refining.....	101.4	106.7	107.9	108.8	106.4	108.8	108.0	108.4	108.4	108.4	108.8	109.3	110.2	113.1	115.2
Other petroleum and coal products.....	23.2	24.8	24.8	25.9	25.2	25.5	24.1	22.6	21.3	20.5	21.7	22.3	24.6	24.6	24.6
Rubber and miscellaneous plastic products.....	296.9	295.9	294.4	291.5	284.1	277.2	278.7	273.7	267.8	265.5	266.0	271.1	276.7	288.7	288.7
Tires and inner tubes.....	75.1	75.2	74.9	72.4	73.5	72.6	71.3	70.7	71.3	69.9	73.4	74.2	78.2	77.4	77.4
Other rubber products.....	123.2	121.8	121.6	118.1	114.7	116.7	114.6	111.5	110.1	112.1	114.5	117.0	120.8	121.3	121.3
Miscellaneous plastic products.....	97.6	97.4	95.0	93.6	89.0	89.4	87.8	85.6	84.1	84.0	83.2	85.5	89.7	90.1	90.1
Leather and leather products.....	321.8	320.5	317.1	318.6	326.9	317.9	322.2	311.4	311.2	318.2	321.9	317.8	317.5	322.9	333.4
Leather tanning and finishing.....	29.4	29.3	29.3	29.0	28.3	29.1	28.8	28.3	28.3	28.0	28.4	29.3	29.7	32.3	32.3
Footwear, except rubber.....	210.4	207.1	210.3	218.4	215.3	217.7	210.9	209.4	215.4	218.9	217.2	214.8	216.4	222.6	222.6
Other leather products.....	80.7	80.7	79.0	79.5	74.3	75.4	71.7	73.5	74.8	74.6	71.3	73.0	76.5	78.5	78.5
Transportation and public utilities:															
Local and interurban passenger transit:															
Local and suburban transportation.....	85.9	86.3	87.0	86.4	86.2	87.4	87.4	87.3	87.1	87.3	87.4	87.5	89.2	91.5	91.5
Intercity and rural bus lines.....	44.4	44.7	46.1	46.8	46.9	46.4	45.2	44.3	43.5	43.3	44.8	44.2	44.6	44.9	44.9
Motor freight transportation and storage.....	836.7	836.6	831.7	816.2	816.3	805.9	778.4	764.1	763.2	757.8	775.2	801.1	801.8	779.1	779.1
Pipeline transportation.....	18.3	18.3	18.5	19.1	19.3	19.2	18.8	18.8	18.8	18.8	19.0	19.1	19.8	21.0	21.0
Communication:															
Telephone communication.....	560.7	562.4	566.7	574.0	575.5	571.1	568.3	569.9	571.3	571.7	573.2	576.1	581.9	585.4	585.4
Telegraph communication.....	26.9	26.7	27.0	26.9	27.0	27.0	26.8	26.8	26.8	26.8	27.0	27.3	27.6	27.9	28.4
Radio and television broadcasting.....	77.8	77.9	78.3	78.8	79.6	78.3	77.5	78.8	78.0	78.6	78.2	79.0	77.9	74.8	74.8
Electric, gas, and sanitary services:															
Electric companies and systems.....	531.0	534.8	543.0	550.0	549.9	544.0	536.6	533.2	536.0	535.1	539.7	543.6	544.3	544.3	544.3
Gas companies and systems.....	213.5	214.3	217.4	220.2	220.1	218.9	216.0	216.2	216.6	216.9	217.5	218.2	220.2	221.4	221.4
Combined utility systems.....	135.4	135.9	138.0	139.9	140.0	137.6	135.9	132.3	135.3	135.4	136.2	136.8	137.3	137.9	137.9
Water, steam, and sanitary systems.....	156.2	158.6	161.3	162.8	162.7	160.6	158.7	158.7	158.4	157.5	157.7	158.8	159.4	158.6	158.6
	25.9	26.0	26.3	27.1	27.1	26.9	26.0	26.0	25.7	25.3	25.3	25.9	26.7	26.5	26.5

See footnotes at end of table.

TABLE A-3. Production workers in nonagricultural establishments, by industry ¹—Continued

[In thousands]

Revised series; see box below.

Industry	1960												1961	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
Wholesale and retail trade ⁴		8,972	8,806	8,716	8,672	8,658	8,676	8,599	8,549	8,554	8,502	8,676	9,558	8,810	8,592
Wholesale trade	2,632	2,632	2,620	2,631	2,600	2,580	2,552	2,550	2,559	2,559	2,569	2,591	2,650	2,610	2,558
Motor vehicles and automotive equipment	184.8	183.4	183.3	182.7	182.7	181.9	180.6	180.6	178.9	179.1	180.5	182.4	181.5	175.7	
Drugs, chemicals, and allied products	162.3	160.2	159.5	160.2	160.2	158.5	157.2	156.8	156.9	156.6	155.8	156.7	155.6	149.8	
Dry goods and apparel	111.2	110.5	110.6	112.6	111.7	111.1	109.9	110.7	110.8	111.7	111.5	112.5	112.0	108.7	
Groceries and related products	442.8	440.3	430.1	425.2	431.6	436.9	431.5	429.1	434.6	439.0	442.5	449.3	439.1	438.6	
Electrical goods	180.4	179.2	179.1	180.1	179.5	178.3	177.0	178.2	179.2	179.9	181.1	182.4	183.6	178.5	
Hardware, plumbing and heating goods	124.3	124.3	124.6	125.3	125.0	123.6	123.7	123.7	123.1	123.1	123.9	125.4	127.7	129.2	
Machinery, equipment, and supplies	416.0	417.7	418.6	419.2	418.9	415.2	410.1	408.0	408.8	407.3	408.5	408.5	412.0	396.2	
Retail trade ⁴	6,339	6,174	6,096	6,041	6,058	6,096	6,047	5,999	5,995	5,933	6,085	6,908	6,201	6,034	
General merchandise stores	1,564.8	1,453.5	1,405.2	1,366.6	1,360.5	1,378.5	1,365.0	1,347.1	1,346.9	1,303.8	1,383.6	1,916.9	1,447.9	1,421.1	
Department stores	922.4	844.3	805.6	786.9	786.4	801.7	793.9	787.9	787.1	762.6	817.9	1,148.9	843.6	828.5	
Limited price variety stores	331.3	312.8	308.5	297.1	291.6	297.4	299.0	291.2	292.1	279.8	294.2	423.2	316.8	307.9	
Food stores	1,282.8	1,296.5	1,257.3	1,260.7	1,270.4	1,272.6	1,268.5	1,265.4	1,268.4	1,276.2	1,277.6	1,312.1	1,273.1	1,219.9	
Grocery, meat, and vegetable stores	1,119.4	1,108.3	1,096.8	1,097.6	1,108.1	1,109.0	1,103.5	1,103.8	1,104.7	1,110.2	1,114.6	1,133.5	1,106.5	1,037.0	
Apparel and accessories stores	615.4	592.6	582.7	553.6	558.5	583.9	579.1	568.5	574.0	537.8	575.5	707.7	582.3	557.2	
Men's and boys' apparel stores	101.7	95.8	93.5	92.5	93.7	99.0	92.9	92.0	93.2	92.6	100.4	126.6	95.6	89.8	
Women's ready-to-wear stores	236.5	227.5	225.2	215.2	214.0	222.3	224.6	220.4	219.8	205.7	217.9	266.2	223.3	217.3	
Family clothing stores	94.4	90.1	88.2	83.6	86.6	88.1	86.3	84.9	85.9	82.7	89.2	113.4	88.1	83.5	
Shoe stores	104.8	104.0	104.2	95.9	98.2	104.1	104.7	102.0	103.1	92.4	101.0	119.2	106.3	100.8	
Furniture and appliance stores	372.0	367.8	364.4	362.5	361.6	360.8	355.7	358.1	358.9	359.8	364.9	383.5	368.9	359.9	
Other retail trade ⁴	2,504.1	2,490.5	2,486.5	2,497.9	2,507.4	2,500.2	2,478.2	2,480.2	2,446.9	2,455.7	2,453.6	2,588.1	2,528.3	2,475.7	
Motor vehicle dealers	570.6	568.9	567.9	576.5	578.5	575.6	573.8	576.4	578.4	582.5	588.9	591.5	596.2	579.6	
Other vehicle and accessory dealers	122.2	120.9	119.2	118.6	120.9	121.8	116.1	114.5	109.7	109.4	110.2	125.6	123.1	121.3	
Drug stores	351.0	348.6	348.6	348.1	346.1	347.4	344.5	342.9	344.3	343.2	348.4	367.0	347.5	336.2	
Finance, insurance, and real estate:															
Banking	595.5	593.8	596.4	604.1	602.2	593.3	585.4	585.0	585.1	584.0	582.5	586.4	575.9	547.9	
Security dealers and exchanges	122.8	122.3	122.9	125.2	124.7	122.8	119.2	115.7	112.1	109.6	107.6	107.8	107.0	99.9	
Insurance carriers	776.4	775.9	780.8	787.0	784.7	778.2	773.8	774.6	774.1	771.8	768.1	771.1	763.9	746.8	
Life insurance	428.3	427.9	430.4	433.8	432.7	428.4	427.6	428.5	427.6	426.0	423.7	424.3	420.7	412.7	
Accident and health insurance	46.6	46.3	46.5	47.1	46.8	46.8	46.4	46.3	46.1	45.8	45.7	46.4	46.0	45.3	
Fire, marine, and casualty insurance	264.6	264.9	266.8	268.9	268.1	266.0	263.6	263.8	264.4	264.2	262.8	264.2	260.3	252.4	
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels	488.5	496.6	530.5	568.7	568.0	533.0	482.7	480.4	469.6	469.8	465.1	466.6	485.0	465.9	
Personal services:															
Laundries, cleaning and dyeing plants	375.8	379.5	379.2	379.7	385.2	388.4	381.0	374.5	373.1	370.4	376.3	378.1	389.2	396.6	
Motion picture filming and distributing	27.1	26.7	27.1	27.2	28.2	28.0	27.4	27.7	29.4	30.4	31.5	31.7	29.0	30.9	

¹ For comparability of data with those published in issues prior to December 1961 and coverage of these series, see footnote 1, table A-2.

For mining, manufacturing, and laundries, cleaning and dyeing plants, 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., power plant), 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 Excludes eating and drinking places.

A comprehensive description of the 1961 revision of the Bureau's statistics on employment, hours and earnings, and labor turnover in nonagricultural establishments, which was reflected for the first time in the figures published in the December 1961 issue, appears on pp. 59-62 of the January 1962 issue.

TABLE A-4. Employees in nonagricultural establishments, by industry division and selected groups, seasonally adjusted ¹

[In thousands]

Revised series; see box, p. 212.

Industry division and group	1961												1960
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.
Total.....	54,491	54,517	54,385	54,304	54,333	54,335	54,182	53,894	53,663	53,561	53,485	53,581	53,707
Mining.....	660	666	661	666	665	672	669	670	666	668	667	672	679
Contract construction.....	2,703	2,720	2,758	2,754	2,770	2,776	2,795	2,742	2,766	2,792	2,765	2,773	2,757
Manufacturing.....	16,521	16,469	16,361	16,323	16,381	16,392	16,373	16,275	16,119	16,023	15,962	16,021	16,174
Durable goods.....	9,265	9,221	9,112	9,105	9,131	9,138	9,114	9,058	8,904	8,820	8,797	8,863	8,988
Ordnance and accessories.....	207	206	208	203	202	202	200	199	196	196	196	195	194
Lumber and wood products, except furniture.....	600	601	600	603	603	604	606	602	601	595	591	596	594
Furniture and fixtures.....	374	373	372	370	371	370	368	366	365	361	358	356	364
Stone, clay, and glass products.....	564	570	574	573	578	575	573	569	561	557	551	556	564
Primary metal industries.....	1,179	1,177	1,174	1,179	1,174	1,170	1,151	1,135	1,101	1,085	1,084	1,092	1,107
Fabricated metal products.....	1,097	1,098	1,091	1,090	1,094	1,082	1,085	1,084	1,057	1,040	1,041	1,055	1,073
Machinery.....	1,419	1,420	1,409	1,400	1,404	1,401	1,396	1,398	1,395	1,388	1,394	1,401	1,414
Electrical equipment and supplies.....	1,476	1,456	1,455	1,428	1,444	1,442	1,442	1,439	1,422	1,416	1,411	1,405	1,402
Transportation equipment.....	1,611	1,581	1,496	1,528	1,530	1,559	1,560	1,537	1,487	1,468	1,455	1,491	1,553
Instruments and related products.....	352	350	349	350	349	349	347	346	342	340	341	343	345
Miscellaneous manufacturing industries.....	386	389	384	381	382	384	386	383	377	374	375	373	378
Nondurable goods.....	7,256	7,248	7,249	7,218	7,250	7,254	7,259	7,217	7,215	7,203	7,165	7,158	7,186
Food and kindred products.....	1,783	1,786	1,787	1,769	1,770	1,773	1,775	1,772	1,787	1,794	1,785	1,785	1,788
Tobacco manufactures.....	83	88	91	96	90	88	89	89	90	92	91	91	92
Textile mill products.....	884	884	882	880	882	887	887	884	877	870	869	870	876
Apparel and related products.....	1,207	1,203	1,204	1,194	1,213	1,208	1,210	1,196	1,204	1,201	1,182	1,171	1,180
Paper and allied products.....	596	594	591	589	592	593	592	588	585	585	583	584	584
Printing, publishing, and allied industries.....	930	927	925	927	929	932	929	925	924	925	922	920	922
Chemicals and allied products.....	839	837	835	832	835	836	834	828	824	822	819	821	824
Petroleum refining and related industries.....	197	196	204	202	205	203	206	206	205	204	204	205	206
Rubber and miscellaneous plastic products.....	376	373	370	372	372	371	371	365	356	351	350	352	356
Leather and leather products.....	361	360	360	357	362	362	365	364	363	359	360	359	358
Transportation and public utilities.....	3,908	3,926	3,929	3,939	3,939	3,942	3,914	3,903	3,901	3,919	3,922	3,931	3,950
Wholesale and retail trade.....	11,339	11,368	11,365	11,363	11,410	11,437	11,392	11,355	11,320	11,252	11,296	11,347	11,334
Wholesale trade.....	2,998	3,013	3,022	3,020	3,020	3,022	3,011	3,001	2,988	2,991	2,989	2,992	3,003
Retail trade.....	8,341	8,355	8,343	8,343	8,390	8,415	8,381	8,354	8,332	8,261	8,307	8,355	8,331
Finance, insurance, and real estate.....	2,772	2,770	2,764	2,756	2,757	2,748	2,747	2,739	2,732	2,732	2,731	2,727	2,723
Service and miscellaneous.....	7,621	7,603	7,580	7,567	7,546	7,533	7,471	7,436	7,425	7,463	7,460	7,439	7,447
Government.....	8,967	8,995	8,967	8,936	8,865	8,835	8,821	8,774	8,734	8,712	8,682	8,671	8,643
Federal.....	2,266	2,324	2,320	2,313	2,309	2,301	2,288	2,270	2,251	2,248	2,245	2,255	2,239
State and local.....	6,701	6,671	6,647	6,623	6,556	6,534	6,533	6,504	6,483	6,464	6,447	6,413	6,404

¹ For coverage of the series, see footnote 1, table A-2.² Preliminary.NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822-827.TABLE A-5. Production workers in manufacturing industries, by major industry group, seasonally adjusted ¹

[In thousands]

Revised series; see box, p. 212.

Major industry group	1961												1960
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.
Manufacturing.....	12,274	12,226	12,129	12,104	12,156	12,164	12,145	12,060	11,910	11,812	11,755	11,820	11,962
Durable goods.....	6,818	6,772	6,676	6,673	6,699	6,709	6,682	6,637	6,491	6,403	6,377	6,447	6,568
Ordnance and accessories.....	98	97	99	97	95	95	93	93	91	92	91	91	91
Lumber and wood products, except furniture.....	535	537	536	539	538	538	540	535	533	528	523	530	529
Furniture and fixtures.....	311	310	308	306	309	307	305	303	302	297	295	294	300
Stone, clay, and glass products.....	453	458	461	460	464	462	461	458	449	446	440	445	453
Primary metal industries.....	951	943	943	950	944	944	924	911	876	859	858	864	878
Fabricated metal products.....	843	841	831	833	838	824	828	828	802	786	786	799	817
Machinery.....	980	981	971	965	967	966	959	962	959	953	958	963	975
Electrical equipment and supplies.....	1,006	983	983	957	972	968	968	967	950	944	939	937	935
Transportation equipment.....	1,106	1,084	1,011	1,037	1,039	1,073	1,072	1,052	1,010	983	971	1,006	1,066
Instruments and related products.....	224	224	223	224	225	223	222	221	218	217	217	220	222
Miscellaneous manufacturing industries.....	311	314	310	305	308	309	310	307	301	298	299	298	302
Nondurable goods.....	5,456	5,454	5,453	5,431	5,457	5,455	5,463	5,423	5,419	5,409	5,378	5,373	5,394
Food and kindred products.....	1,192	1,195	1,196	1,184	1,182	1,183	1,183	1,197	1,197	1,202	1,195	1,197	1,198
Tobacco manufactures.....	71	77	79	85	80	77	78	78	79	81	80	80	81
Textile mill products.....	797	797	796	794	795	800	800	798	790	784	783	784	789
Apparel and related products.....	1,075	1,074	1,073	1,063	1,081	1,072	1,076	1,063	1,069	1,068	1,050	1,039	1,048
Paper and allied products.....	476	473	471	469	472	472	473	468	466	466	464	465	464
Printing, publishing, and allied industries.....	598	596	594	595	596	601	597	595	594	595	594	593	593
Chemicals and allied products.....	513	511	509	507	510	513	510	505	500	499	497	499	501
Petroleum refining and related industries.....	124	125	132	131	134	130	132	132	131	131	131	133	134
Rubber and miscellaneous plastic products.....	291	288	285	287	287	287	286	279	271	267	266	267	271
Leather and leather products.....	319	318	318	316	320	320	323	322	321	316	318	316	315

¹ For definition of production workers, see footnote 1, table A-3.² Preliminary.NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822-827.

TABLE A-6. Unemployment insurance and employment service program operations ¹

[All items except average benefit amounts are in thousands]

Item	1961												1960	
	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	
Employment service: ¹														
New applications for work.....	866	859	793	845	818	1,018	873	808	895	949	1,065	820	881	
Nonfarm placements.....	511	596	607	603	501	551	520	440	417	342	365	378	430	
State unemployment insurance programs: ²														
Initial claims ³	1,406	1,219	1,081	1,248	1,501	1,229	1,368	1,468	1,709	1,619	2,381	2,175	1,744	
Insured unemployment ⁴ (average weekly volume).....	1,662	1,502	1,558	1,744	1,958	1,991	2,328	2,779	3,168	3,394	3,266	2,639	2,039	
Rate of insured unemployment ⁵	4.1	3.7	3.8	4.3	4.8	4.9	5.7	6.8	7.8	8.4	8.1	6.6	5.1	
Weeks of unemployment compensated.....	5,869	5,644	5,772	7,310	6,992	8,273	9,835	10,656	13,334	11,935	11,975	9,105	7,054	
Average weekly benefit amount for total unemployment.....	\$33.67	\$33.30	\$33.12	\$33.36	\$32.91	\$32.92	\$33.46	\$34.18	\$34.37	\$34.45	\$34.34	\$34.18	\$34.01	
Total benefits paid.....	\$190,883	\$180,938	\$185,008	\$237,168	\$223,978	\$264,448	\$320,089	\$362,539	\$461,543	\$399,264	\$397,609	\$300,204	\$231,114	
Unemployment compensation for ex-service-men: ⁶														
Initial claims ⁴	22	24	25	30	29	26	26	29	35	33	30	36	33	
Insured unemployment ⁵ (average weekly volume).....	47	47	52	58	60	61	71	83	91	91	86	71	59	
Weeks of unemployment compensated.....	193	202	221	263	236	291	326	380	370	355	355	279	227	
Total benefits paid.....	\$6,081	\$6,344	\$6,886	\$8,174	\$7,271	\$8,984	\$10,190	\$11,980	\$11,618	\$11,002	\$11,017	\$8,597	\$7,016	
Unemployment compensation for Federal civilian employees: ¹⁰														
Initial claims ⁴	12	13	10	11	15	12	12	13	12	13	19	14	14	
Insured unemployment ⁵ (average weekly volume).....	29	28	28	31	32	31	33	36	40	41	40	35	33	
Weeks of unemployment compensated.....	118	116	118	139	115	142	148	167	160	162	164	142	131	
Total benefits paid.....	\$4,128	\$4,053	\$4,136	\$4,878	\$3,932	\$4,913	\$5,090	\$6,228	\$5,504	\$5,534	\$5,606	\$4,817	\$4,464	
Railroad unemployment insurance:														
Applications ¹¹	15	14	19	26	100	9	6	6	10	13	38	21	23	
Insured unemployment (average weekly volume).....	77	74	77	74	83	83	100	107	106	113	123	103	95	
Number of payments ¹²	172	174	167	200	164	224	253	203	270	242	266	226	194	
Average amount of benefit payment ¹³	\$80.51	\$79.72	\$80.70	\$80.61	\$77.88	\$78.43	\$80.01	\$79.57	\$81.60	\$80.99	\$82.69	\$82.46	\$81.52	
Total benefits paid ¹⁴	\$13,807	\$13,770	\$13,558	\$16,173	\$12,713	\$17,551	\$20,485	\$16,273	\$22,274	\$19,706	\$22,208	\$18,793	\$16,036	
All programs: ¹⁵														
Insured unemployment ⁵	1,817	1,653	1,719	1,907	2,136	2,175	2,543	3,046	3,403	3,638	3,515	2,847	2,225	

¹ Data relate to the United States (including Alaska and Hawaii), except where otherwise indicated.² Includes Guam, Puerto Rico, and the Virgin Islands.³ Includes data for Puerto Rico, beginning January 1961 when the Commonwealth's program became part of the Federal-State UI system.⁴ Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transitional claims.⁵ Includes interstate claims for Puerto Rico and the Virgin Islands for the entire period.⁶ Number of workers reporting the completion of at least 1 week of unemployment.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 Puerto Rico and 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 group ¹

[Per 100 employees]

Revised series; see box, p. 212.

Major industry group	1961											1960		Annual average	
	Nov. ²	Oct. ²	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Accessions: Total ³															
Manufacturing:															
Actual.....	3.3	4.3	4.7	5.3	4.4	5.0	4.2	4.0	4.0	3.2	3.7	2.3	2.9	3.8	4.2
Seasonally adjusted.....	4.0	4.4	3.7	4.1	4.0	3.9	4.2	4.4	4.6	3.8	4.0	3.3	3.5	-----	-----
Durable goods.....	3.2	4.0	4.3	4.9	3.9	4.5	4.2	4.2	4.3	3.2	3.8	2.2	2.6	3.5	4.2
Ordinance and accessories.....	3.0	3.3	3.6	2.7	2.8	3.3	2.5	2.6	2.2	2.5	2.7	2.4	2.4	2.6	3.1
Lumber and wood products, except furniture.....	3.4	4.1	5.0	5.1	5.3	8.8	7.1	7.6	5.4	4.2	5.4	2.3	2.6	4.8	5.5
Furniture and fixtures.....	3.7	4.9	5.1	5.9	5.3	4.4	3.7	3.6	3.5	3.0	3.1	2.1	2.5	3.9	4.5
Stone, clay, and glass products.....	2.4	3.2	3.2	4.0	3.7	4.9	4.4	4.4	5.0	3.4	3.0	1.7	1.9	3.4	4.0
Primary metal industries.....	2.3	2.9	3.1	3.5	3.1	4.1	4.8	4.1	4.1	2.9	3.4	2.1	2.3	2.4	3.1
Fabricated metal products.....	3.2	4.4	5.0	5.6	4.6	4.7	4.7	4.8	5.0	3.5	4.3	2.5	2.7	3.9	4.7
Machinery.....	2.8	3.2	3.4	3.3	3.0	3.6	2.9	3.0	3.0	2.6	3.3	2.1	2.4	2.9	3.6
Electrical equipment and supplies.....	3.6	4.3	4.6	4.7	3.4	4.0	3.2	3.2	2.9	2.8	3.5	2.0	2.7	3.2	4.0
Transportation equipment.....	4.0	4.9	4.9	7.0	4.1	4.3	4.4	5.0	6.8	3.6	4.2	2.7	3.4	4.3	4.8
Instruments and related products.....	2.8	3.3	3.2	3.5	2.8	3.4	2.6	2.1	1.9	1.9	2.4	1.5	1.8	2.4	2.9
Miscellaneous manufacturing industries.....	3.9	6.3	6.9	7.6	6.1	5.9	5.7	5.5	4.7	5.6	2.2	3.5	5.3	5.3	5.5
Nondurable goods.....	3.5	4.6	5.2	5.8	5.0	5.5	4.3	3.6	3.6	3.2	3.5	2.5	3.1	4.1	4.3
Food and kindred products.....	4.3	6.9	8.4	9.8	7.7	8.3	5.7	4.9	4.4	3.5	3.9	3.3	3.9	6.0	6.2
Tobacco manufactures.....	3.0	3.5	15.3	22.0	6.8	2.9	4.5	1.4	2.2	1.7	5.0	5.8	3.6	5.6	5.4
Textile mill products.....	3.1	3.9	4.1	4.4	3.6	3.9	4.0	3.6	3.4	2.9	2.9	1.9	2.6	3.2	3.5
Apparel and related products.....	5.4	5.8	5.2	6.4	6.9	6.9	6.3	4.9	5.2	5.7	5.8	3.5	4.9	5.3	5.7
Paper and allied products.....	2.1	2.9	3.0	2.8	2.9	4.0	2.7	2.4	2.3	2.0	2.3	1.5	1.9	2.6	2.8
Printing, publishing, and allied industries.....	2.4	3.3	3.8	3.1	3.0	4.0	2.6	2.2	2.6	2.3	2.5	2.0	2.5	3.0	3.0
Chemicals and allied products.....	1.7	2.1	2.2	2.0	2.0	3.1	2.2	2.3	2.5	1.7	1.8	1.2	1.3	2.0	2.2
Petroleum refining and related industries.....	.7	1.2	1.3	1.2	1.4	2.6	1.8	1.3	1.0	.8	1.1	.6	.7	1.2	1.3
Rubber and miscellaneous plastic products.....	2.8	3.8	4.5	5.1	3.9	4.6	4.8	4.1	3.4	2.7	3.6	1.8	2.3	3.1	3.6
Leather and leather products.....	4.9	5.1	4.8	5.3	6.5	6.0	5.8	3.9	4.0	4.5	5.2	3.7	4.3	4.8	4.8
Nonmanufacturing:															
Metal mining.....	1.5	2.7	2.5	2.3	2.1	3.9	2.8	3.1	1.9	2.5	3.8	1.8	1.7	3.4	3.6
Coal mining.....	2.2	2.3	3.0	3.4	3.6	1.3	1.9	.8	1.6	1.5	1.6	1.2	1.2	1.6	2.2
Accessions: New hires															
Manufacturing:															
Actual.....	1.9	2.7	3.0	3.1	2.5	2.9	2.1	1.8	1.6	1.4	1.5	1.0	1.5	2.2	2.6
Seasonally adjusted.....	2.4	2.5	2.2	2.3	2.2	2.1	2.1	2.0	1.9	1.7	1.8	1.8	1.9	-----	-----
Durable goods.....	1.9	2.5	2.6	2.6	2.1	2.4	1.8	1.6	1.4	1.2	1.3	.9	1.2	1.9	2.5
Ordinance and accessories.....	2.1	2.2	2.7	1.9	2.1	2.6	1.8	1.8	1.5	1.2	1.3	1.6	1.7	1.8	2.4
Lumber and wood products, except furniture.....	2.3	3.3	3.9	4.3	4.1	5.8	4.7	3.9	2.4	1.5	1.9	1.2	1.7	3.4	4.2
Furniture and fixtures.....	2.9	3.8	4.1	4.4	3.6	2.9	2.2	1.8	2.0	1.4	1.4	1.1	1.7	2.8	3.4
Stone, clay, and glass products.....	1.3	2.0	2.1	2.5	2.2	2.9	2.1	1.8	1.7	1.1	1.0	.6	.9	2.0	2.6
Primary metal industries.....	.9	1.2	1.3	1.4	1.0	1.3	.9	.6	.5	.4	.5	.4	.4	.8	1.7
Fabricated metal products.....	2.0	2.8	3.0	3.2	2.4	2.7	2.1	1.8	1.5	1.3	1.3	1.0	1.3	2.1	2.7
Machinery.....	1.6	1.8	1.8	1.8	1.5	2.1	1.4	1.3	1.5	1.1	1.4	.9	1.1	1.7	2.3
Electrical equipment and supplies.....	2.5	3.0	3.1	2.9	1.9	2.2	1.5	1.5	1.3	1.2	1.4	1.0	1.5	2.0	2.6
Transportation equipment.....	1.8	2.2	2.2	1.9	1.5	1.8	1.3	1.3	1.3	1.1	1.1	.9	1.3	1.7	1.9
Instruments and related products.....	2.1	2.6	2.4	2.2	2.0	2.3	1.5	1.2	1.1	1.1	1.4	.9	1.2	1.7	2.3
Miscellaneous manufacturing industries.....	2.8	5.1	5.3	5.9	3.8	3.8	3.5	2.8	2.6	2.3	2.5	1.4	2.3	3.4	3.5
Nondurable goods.....	2.1	3.0	3.6	3.8	3.1	3.4	2.4	1.9	1.9	1.6	1.7	1.2	1.7	2.5	2.8
Food and kindred products.....	2.2	4.3	5.6	6.1	4.8	5.2	3.1	2.4	2.0	1.5	1.7	1.4	2.0	3.5	3.6
Tobacco manufactures.....	1.1	2.2	9.7	13.4	2.2	1.3	1.3	.5	.6	.8	2.1	1.4	1.8	2.9	3.0
Textile mill products.....	2.1	2.7	2.9	3.1	2.4	2.7	2.5	1.9	1.6	1.3	1.3	.9	1.4	2.0	2.4
Apparel and related products.....	2.8	3.5	3.4	4.0	3.7	3.6	3.2	2.8	2.9	2.7	2.5	1.5	2.4	3.2	3.6
Paper and allied products.....	1.4	2.1	2.3	2.0	1.9	2.9	1.7	1.3	1.2	1.0	1.0	.7	1.1	1.8	2.1
Printing, publishing, and allied industries.....	1.9	2.6	3.0	2.4	2.3	2.9	1.8	1.7	1.9	1.7	1.9	1.4	1.9	2.4	2.4
Chemicals and allied products.....	1.1	1.5	1.5	1.4	1.5	2.3	1.4	1.4	1.5	1.0	.9	.6	.8	1.4	1.6
Petroleum refining and related industries.....	.4	.9	1.0	.8	1.1	2.1	1.1	.7	.5	.5	.5	.4	.5	.8	.8
Rubber and miscellaneous plastic products.....	1.7	2.5	3.0	2.8	2.2	2.4	1.9	1.4	1.3	1.1	1.0	.6	1.2	1.7	2.4
Leather and leather products.....	3.0	3.3	3.2	3.7	3.6	3.6	2.9	1.9	1.9	2.1	2.9	2.1	2.3	2.9	3.2
Nonmanufacturing:															
Metal mining.....	.6	1.3	1.3	1.2	1.1	2.3	1.3	.9	.8	.9	1.3	1.0	1.0	1.9	1.9
Coal mining.....	1.0	.9	.8	.7	.7	.3	.3	.2	.2	.3	.8	.3	.3	.4	.4

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group ¹—Continued

[Per 100 employees]

Revised series; see box, p. 212.

Major industry group	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Separations: Total ²															
Manufacturing:															
Actual.....	3.9	4.1	5.1	4.1	4.1	3.6	3.5	3.4	3.9	3.9	4.7	4.8	4.5	4.3	4.1
Seasonally adjusted.....	3.8	3.6	4.1	3.8	4.3	4.0	3.8	3.5	4.2	4.5	4.7	4.9	4.5	4.3	4.0
Durable goods.....	3.5	3.7	4.3	3.9	4.3	3.5	3.3	3.1	4.2	4.2	5.1	5.0	4.5	4.3	4.0
Ordinance and accessories.....	2.2	2.2	3.0	2.4	2.1	2.3	2.1	1.9	2.4	2.2	2.3	1.9	2.3	2.4	2.3
Lumber and wood products, except furniture.....	5.1	5.4	6.7	6.2	5.9	4.3	4.0	3.7	4.8	6.1	6.1	6.8	7.8	6.1	5.4
Furniture and fixtures.....	4.2	4.7	4.9	4.6	4.3	3.3	4.3	3.5	4.3	4.0	5.1	4.8	4.9	4.6	4.4
Stone, clay, and glass products.....	3.7	4.0	4.4	3.7	2.2	3.0	2.8	3.2	3.2	4.0	5.3	5.5	4.8	4.1	3.8
Primary metal industries.....	3.2	3.0	3.0	2.7	2.2	2.3	2.2	2.2	3.2	3.5	4.4	4.9	4.5	4.0	2.5
Fabricated metal products.....	4.0	4.5	5.0	4.5	4.5	4.3	3.5	3.1	4.4	5.2	6.7	6.4	4.9	4.8	4.7
Machinery.....	2.5	3.1	3.8	3.5	3.4	3.4	3.2	2.9	3.2	2.8	3.4	3.1	3.1	3.4	3.1
Electrical equipment and supplies.....	3.4	3.2	4.0	3.1	3.0	3.1	2.8	2.8	3.5	3.2	3.9	3.4	3.8	3.5	3.2
Transportation equipment.....	3.2	3.6	4.4	4.2	8.2	4.3	4.0	3.9	5.7	6.6	7.3	5.9	4.8	5.2	5.5
Instruments and related products.....	2.8	2.5	3.8	2.6	2.4	2.4	2.0	2.3	2.3	2.2	2.9	2.4	2.7	2.7	2.4
Miscellaneous manufacturing industries.....	6.5	5.7	5.8	5.9	5.1	4.3	4.7	4.3	5.0	4.3	5.6	10.4	7.5	5.9	5.3
Nonmanufacturing:															
Food and kindred products.....	4.3	4.6	6.0	4.5	3.9	3.7	3.7	3.8	3.6	3.5	4.2	4.7	4.5	4.4	4.2
Tobacco manufactures.....	7.7	6.9	9.7	6.8	5.0	4.8	4.3	4.6	4.4	4.3	5.5	6.6	6.9	6.0	6.1
Textile mill products.....	9.8	13.5	7.2	3.2	2.1	2.1	2.9	6.3	5.3	7.0	3.4	6.2	13.4	5.9	5.1
Apparel and related products.....	3.2	3.6	4.5	3.9	3.4	3.1	3.1	3.1	3.3	3.1	3.9	3.8	3.7	3.7	3.5
Paper and allied products.....	4.7	5.4	6.5	5.2	6.1	5.5	6.6	6.5	5.2	5.1	6.1	6.8	5.7	6.1	5.6
Printing, publishing, and allied industries.....	2.3	2.9	4.3	2.9	2.5	2.3	2.2	2.2	2.4	2.4	2.9	2.9	2.9	2.9	2.7
Chemicals and allied products.....	2.2	3.1	4.1	3.1	2.5	2.8	2.6	2.5	2.5	2.6	2.8	3.0	2.4	2.8	2.8
Petroleum refining and related industries.....	2.0	2.0	3.1	2.2	1.7	2.2	2.4	1.8	1.6	1.6	2.0	2.0	2.0	2.1	2.0
Rubber and miscellaneous plastic products.....	1.9	1.9	2.8	2.2	1.7	1.4	1.0	1.0	1.1	1.1	1.6	1.6	1.5	1.6	1.4
Leather and leather products.....	3.5	3.8	4.1	3.4	3.1	3.1	2.8	2.7	4.0	4.3	4.5	4.4	4.3	3.9	3.4
Nonmanufacturing:															
Metal mining.....	4.1	5.2	6.1	5.8	5.6	4.2	4.3	5.1	5.1	4.5	4.9	5.3	4.3	5.0	4.7
Coal mining.....	3.0	2.9	4.1	2.9	2.3	1.8	2.4	2.2	2.8	2.4	5.1	6.6	4.1	3.8	3.4
Seasonally adjusted.....	1.6	2.4	1.8	1.7	5.8	1.4	2.3	2.6	3.4	3.5	1.7	5.0	2.1	3.6	3.8
Separations: Quits															
Manufacturing:															
Actual.....	1.1	1.4	2.3	1.7	1.2	1.2	1.1	1.0	0.9	0.8	0.9	0.7	0.9	1.3	1.5
Seasonally adjusted.....	1.3	1.3	1.3	1.2	1.1	1.2	1.2	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Durable goods.....	1.0	1.2	1.9	1.4	1.0	1.0	.9	.8	.8	.6	.7	.6	.7	1.1	1.3
Ordinance and accessories.....	.8	1.0	1.8	1.2	1.0	1.0	.9	.9	.8	.8	.9	.7	.8	1.0	1.2
Lumber and wood products, except furniture.....	1.4	2.1	3.6	2.9	2.2	2.2	2.0	1.7	1.3	1.0	1.2	1.0	1.3	2.3	2.6
Furniture and fixtures.....	1.5	1.9	2.5	2.3	1.6	1.3	1.4	1.2	1.1	.8	1.0	.9	1.1	1.7	1.9
Stone, clay, and glass products.....	.8	1.1	1.8	1.5	1.0	1.0	.9	.8	.7	.6	.7	.6	.7	1.1	1.4
Primary metal industries.....	.4	.6	1.0	.7	.5	.5	.4	.4	.4	.3	.3	.3	.4	.6	.8
Fabricated metal products.....	1.0	1.3	2.1	1.5	1.0	1.0	.9	.8	.7	.6	.6	.6	.7	1.1	1.4
Machinery.....	.7	.9	1.4	1.1	.8	.9	.7	.7	.7	.5	.6	.5	.6	.9	1.1
Electrical equipment and supplies.....	1.3	1.4	2.1	1.5	1.0	1.1	.9	.9	.8	.8	1.0	.7	.9	1.2	1.4
Transportation equipment.....	.7	.9	1.4	1.0	.7	.8	.7	.7	.7	.6	.6	.5	.6	.9	1.1
Instruments and related products.....	1.1	1.2	2.2	1.3	.9	1.0	.8	.8	.8	.7	.8	.7	.8	1.1	1.3
Miscellaneous manufacturing industries.....	1.7	2.5	3.4	2.7	1.6	1.7	1.6	1.4	1.3	1.1	1.2	1.1	1.3	1.9	1.9
Nonmanufacturing:															
Food and kindred products.....	1.3	1.6	2.7	2.1	1.4	1.5	1.3	1.2	1.1	1.0	1.1	.9	1.1	1.6	1.7
Tobacco manufactures.....	1.4	1.9	3.6	2.6	1.5	1.5	1.4	1.1	1.0	.9	1.0	.9	1.2	1.7	1.9
Textile mill products.....	.6	.9	2.2	1.3	.8	.7	.6	.9	.8	.6	.9	.7	.7	1.0	1.1
Apparel and related products.....	1.6	1.8	2.6	2.3	1.6	1.6	1.5	1.3	1.2	1.0	1.1	.9	1.2	1.6	1.7
Paper and allied products.....	1.9	2.2	2.8	2.7	2.3	2.1	2.0	1.8	1.8	1.5	1.7	1.3	1.7	2.3	2.3
Printing, publishing, and allied industries.....	.8	1.1	2.3	1.4	.9	.9	.8	.7	.7	.6	.7	.6	.7	1.2	1.3
Chemicals and allied products.....	1.2	1.5	2.5	1.7	1.4	1.4	1.2	1.1	1.1	1.3	1.1	1.1	1.1	1.5	1.5
Petroleum refining and related industries.....	.5	.7	1.7	1.0	.6	.8	.6	.6	.5	.5	.5	.4	.5	.8	.8
Rubber and miscellaneous plastic products.....	.3	.5	1.1	.7	.5	.5	.4	.4	.3	.3	.4	.3	.3	.5	.5
Leather and leather products.....	1.1	1.3	2.0	1.6	1.0	1.1	1.0	.9	.8	.7	.8	.6	.8	1.1	1.3
Nonmanufacturing:															
Metal mining.....	1.9	2.3	3.2	2.9	2.2	2.1	1.9	1.7	1.7	1.5	1.7	1.4	1.6	2.2	2.2
Coal mining.....	.5	.9	2.0	1.6	.9	.9	1.0	.8	.7	.6	.9	.9	.7	1.5	1.5
Seasonally adjusted.....	.4	.5	.5	.4	.5	.2	.3	.2	.3	.2	.1	.2	.2	.3	.3

See footnotes at end of table.

TABLE B-1. Labor turnover rates, by major industry group ¹—Continued

[Per 100 employees]

Revised series; see box, p. 212.

Major industry group	1961												1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959	
	Separations: Layoffs															
Manufacturing:																
Actual.....	2.2	2.0	2.0	1.7	2.3	1.7	1.8	1.9	2.3	2.6	3.2	3.6	3.1	2.4	2.0	
Seasonally adjusted.....	1.8	1.7	2.2	1.9	2.6	2.2	2.0	1.9	2.3	2.9	2.9	2.9	2.6			
Durable goods.....	1.9	1.7	1.6	1.7	2.7	1.8	1.7	1.7	2.6	3.1	3.7	3.9	3.2	2.6	2.0	
Ordnance and accessories.....	.7	.6	.5	.7	.7	.9	.8	.5	1.0	.8	.9	.7	1.0	.9	.7	
Lumber and wood products, except furniture.....	3.1	2.5	2.1	2.4	3.0	1.4	1.3	1.4	2.8	4.5	4.3	5.4	6.0	3.1	2.1	
Furniture and fixtures.....	1.9	1.9	1.7	1.6	2.2	1.5	2.3	1.7	2.6	2.5	3.4	3.3	3.2	2.1	1.8	
Stone, clay, and glass products.....	2.4	2.1	1.8	1.5	1.5	1.3	1.3	1.8	1.9	3.0	4.1	4.5	3.5	2.4	1.8	
Primary metal industries.....	2.1	1.6	1.2	1.4	1.1	1.2	1.2	1.2	2.3	2.6	3.5	4.2	3.7	3.0	1.1	
Fabricated metal products.....	2.4	2.3	2.2	2.2	2.7	2.7	2.0	1.7	3.2	4.1	5.5	5.4	3.6	3.1	2.6	
Machinery.....	1.2	1.5	1.6	1.9	2.0	1.7	1.9	1.5	1.8	1.8	2.1	2.1	2.0	1.9	1.4	
Electrical equipment and supplies.....	1.3	1.0	1.0	.8	1.3	1.3	1.3	1.3	2.0	1.9	2.2	2.1	2.2	1.6	1.2	
Transportation equipment.....	1.9	1.7	2.2	2.4	6.8	2.8	2.6	2.6	4.5	5.6	6.1	4.9	3.7	3.6	3.7	
Instruments and related products.....	1.0	.6	.7	.6	1.1	1.0	.6	1.0	1.0	1.0	1.4	1.3	1.4	1.0	.6	
Miscellaneous manufacturing industries.....	4.0	2.2	1.4	2.2	2.7	1.9	2.4	2.2	3.0	2.6	3.7	8.7	5.6	3.2	2.7	
Nondurable goods.....	2.5	2.3	2.6	1.8	1.9	1.6	1.9	2.1	2.0	2.1	2.6	3.3	2.9	2.2	2.0	
Food and kindred products.....	5.7	4.3	5.3	3.6	2.9	2.7	2.4	2.9	2.8	2.8	3.8	5.2	5.2	3.6	3.6	
Tobacco manufactures.....	9.0	12.1	4.6	1.4	1.0	1.1	2.1	5.1	4.2	5.9	2.0	5.2	12.1	4.5	3.6	
Textile mill products.....	1.1	1.1	1.2	1.0	1.2	1.0	1.0	1.3	1.6	1.7	2.3	2.5	2.0	1.5	1.3	
Apparel and related products.....	2.3	2.5	2.9	1.7	3.1	2.8	4.0	4.1	2.8	3.0	3.9	5.1	3.5	3.2	2.7	
Paper and allied products.....	1.0	1.0	1.2	.8	1.0	.8	.8	1.0	1.1	1.3	1.7	1.8	1.7	1.2	.9	
Printing, publishing, and allied industries.....	.6	1.0	.9	.9	.7	.8	1.0	.9	1.0	1.0	1.1	1.5	.9	.9	.9	
Chemicals and allied products.....	1.0	.8	.8	.7	.7	.9	1.4	.9	.7	.8	1.0	1.2	1.1	.9	.8	
Petroleum refining and related industries.....	1.3	.7	1.0	.6	.6	.4	.2	.3	.4	.4	.6	.8	.8	.6	.5	
Rubber and miscellaneous plastic products.....	1.7	1.6	1.3	1.0	1.5	1.2	1.2	1.2	2.5	3.0	3.1	3.3	3.0	2.2	1.5	
Leather and leather products.....	1.4	2.2	2.1	2.1	2.7	1.4	1.8	2.8	2.8	2.2	2.5	3.2	2.1	2.1	1.8	
Nonmanufacturing:																
Metal mining.....	1.8	1.3	1.2	.7	.8	.2	.8	.8	1.3	1.1	3.4	4.7	2.6	1.5	1.1	
Coal mining.....	.7	1.4	.7	.9	4.8	.9	1.7	1.9	2.7	2.8	1.1	4.4	1.5	2.9	3.1	

¹ Beginning with the December 1961 issue, figures differ from those previously published. The industry structure has been converted to the 1957 Standard Industrial Classification, and the printing and publishing industry and some seasonal manufacturing industries previously excluded are now included.

Data include Alaska and Hawaii beginning in January 1959; this inclusion has not significantly affected the labor turnover rates.

Month-to-month changes in total employment in manufacturing and non-manufacturing 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 mid-month 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.

³ Beginning with January 1959, transfers between establishments of the same firm are included in total accessions and total separations; therefore, rates for these items are not strictly comparable with prior data. Transfers comprise part of "other accessions" and "other separations," the rates for which are not shown separately.

C.—Earnings and Hours

TABLE C-1. Gross hours and earnings of production workers,¹ by industry

Revised series; see box, p. 212.

Industry	1961												1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959	
	Average weekly earnings															
Mining.....	\$109.74	\$111.19	\$109.06	\$108.09	\$110.24	\$108.09	\$104.92	\$103.49	\$101.14	\$104.15	\$106.27	\$103.75	\$102.82	\$105.44	\$103.68	
Metal mining.....	115.79	117.88	114.68	113.02	114.40	114.24	109.62	111.25	109.35	110.29	110.97	112.19	108.95	111.19	102.77	
Iron ores.....	119.03	122.61	120.77	120.09	119.20	117.91	109.66	110.26	106.03	107.74	110.19	109.15	106.14	114.73	107.34	
Copper ores.....	124.88	125.77	118.83	116.47	117.00	117.72	113.05	117.82	116.68	117.75	117.21	120.06	118.26	116.77	105.90	
Coal mining.....	116.56	117.18	114.19	113.83	119.32	115.18	106.91	101.35	96.71	107.22	110.09	107.53	103.18	110.76	109.08	
Bituminous.....	118.00	118.63	115.92	115.55	120.46	117.29	108.26	102.65	97.34	108.26	110.84	108.58	103.87	112.77	111.70	
Crude petroleum and natural gas.....	106.59	107.95	106.08	104.67	106.93	103.75	104.00	105.75	104.75	104.42	106.68	103.09	103.99	103.32	103.52	
Crude petroleum and natural gas fields.....	112.87	114.80	114.52	110.95	116.33	112.19	111.35	114.11	110.95	111.63	116.20	108.54	109.21	108.54	108.12	
Oil and gas field services.....	100.39	101.85	97.90	98.93	98.21	96.48	97.81	97.78	98.97	97.61	97.33	97.75	98.97	98.31	99.68	
Quarrying and nonmetallic mining.....	101.43	106.48	105.08	104.42	103.50	102.60	100.34	96.10	92.99	92.55	93.21	92.25	95.87	96.58	94.57	
Contract construction.....	118.26	123.00	120.43	122.05	119.76	119.13	116.29	112.77	112.41	114.08	115.39	108.07	110.98	112.67	108.41	
General building contractors.....	110.05	112.98	109.85	111.74	110.23	110.23	108.78	105.40	103.70	106.50	107.46	99.33	102.76	103.72	100.32	
Heavy construction.....	117.09	127.08	121.80	127.15	122.60	121.72	116.40	109.92	110.48	112.11	113.87	107.51	110.19	114.77	108.94	
Highway and street construction.....	110.98	124.13	118.20	124.24	120.13	117.88	109.85	100.66	100.10	101.14	104.37	98.10	104.37	110.00	105.06	
Other heavy construction.....	125.14	131.36	127.75	131.57	126.77	127.30	123.91	119.42	119.87	121.27	122.09	115.82	117.87	119.60	113.65	
Special trade contractors.....	123.84	127.97	126.25	126.45	125.06	124.02	121.32	118.96	118.61	119.65	121.00	114.58	117.22	118.11	113.62	
Manufacturing.....	95.82	94.54	92.73	92.86	93.20	93.03	92.10	90.78	89.54	89.31	89.08	88.62	89.21	89.72	88.26	
Durable goods.....	103.98	102.66	100.00	100.44	100.35	101.09	99.70	98.31	97.17	96.29	96.29	96.19	96.23	97.44	96.05	
Nondurable goods.....	84.99	84.77	83.74	83.58	84.16	83.56	82.29	81.27	80.88	80.47	80.47	79.84	80.52	80.36	78.61	
Industry	Average weekly hours															
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959	
	Average weekly hours															
Mining.....	41.1	41.8	41.0	41.1	41.6	41.1	40.2	39.5	38.9	39.6	40.1	39.6	39.7	40.4	40.5	
Metal mining.....	41.5	42.1	41.7	41.4	41.6	42.0	40.6	40.9	40.5	41.0	41.1	41.4	40.5	41.8	40.3	
Iron ores.....	38.9	40.2	40.8	40.3	39.6	39.7	37.3	37.0	35.7	36.4	37.1	37.0	36.6	39.7	37.4	
Copper ores.....	44.6	44.6	42.9	42.2	42.7	43.6	42.5	43.8	43.7	44.1	43.9	44.8	43.8	44.4	42.7	
Coal mining.....	37.6	37.8	36.6	36.6	38.0	36.8	34.6	32.8	31.5	34.7	35.4	34.8	33.5	35.5	35.4	
Bituminous.....	37.7	37.9	36.8	36.8	38.0	37.0	34.7	32.9	31.4	34.7	35.3	34.8	33.4	35.8	35.8	
Crude petroleum and natural gas.....	41.8	42.5	41.6	41.7	42.1	41.5	41.6	41.8	41.9	41.6	42.0	41.4	42.1	42.0	42.6	
Crude petroleum and natural gas fields.....	40.6	41.0	40.9	40.2	41.4	40.5	40.2	40.9	40.2	40.3	41.5	40.2	40.6	40.5	40.8	
Oil and gas field services.....	42.9	43.9	42.2	43.2	42.7	42.5	42.9	42.7	43.6	43.0	42.5	42.5	43.6	43.5	44.3	
Quarrying and nonmetallic mining.....	44.1	45.7	45.1	45.4	45.0	45.2	44.4	42.9	41.7	41.5	41.8	41.0	42.8	43.7	44.4	
Contract construction.....	36.5	38.2	37.4	38.5	37.9	37.7	36.8	35.8	35.8	36.1	36.4	34.2	35.8	36.7	37.0	
General building contractors.....	35.5	36.8	35.9	37.0	36.5	36.5	35.9	34.9	34.8	35.5	35.7	33.0	34.6	35.4	35.7	
Heavy construction.....	38.9	42.5	40.6	43.1	41.7	41.4	40.0	38.3	38.9	39.2	39.4	37.2	38.8	40.7	40.8	
Highway and street construction.....	38.4	43.1	40.9	43.9	42.6	41.8	39.8	37.7	38.5	38.9	38.8	36.2	38.8	41.2	41.2	
Other heavy construction.....	39.6	41.7	40.3	41.9	40.5	40.8	40.1	38.9	39.3	39.5	39.9	38.1	38.9	40.0	40.3	
Special trade contractors.....	36.0	37.2	36.7	37.3	37.0	36.8	36.0	35.3	35.3	35.4	35.8	33.9	35.2	35.9	36.3	
Manufacturing.....	40.6	40.4	39.8	40.2	40.0	40.1	39.7	39.3	39.1	39.0	38.9	38.7	39.3	39.7	40.3	
Durable goods.....	41.1	40.9	40.0	40.5	40.3	40.6	40.2	39.8	39.5	39.3	39.3	39.1	39.6	40.1	40.7	
Nondurable goods.....	39.9	39.8	39.5	39.8	39.7	39.6	39.0	38.7	38.7	38.5	38.5	38.2	38.9	39.2	39.7	
Industry	Average hourly earnings															
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959	
	Average hourly earnings															
Mining.....	\$2.67	\$2.66	\$2.66	\$2.63	\$2.65	\$2.63	\$2.61	\$2.62	\$2.60	\$2.63	\$2.65	\$2.62	\$2.59	\$2.61	\$2.56	
Metal mining.....	2.79	2.80	2.75	2.73	2.75	2.72	2.70	2.72	2.70	2.69	2.70	2.71	2.69	2.66	2.55	
Iron ores.....	3.06	3.05	2.96	2.98	3.01	2.97	2.94	2.98	2.97	2.96	2.97	2.95	2.90	2.89	2.87	
Copper ores.....	2.80	2.82	2.77	2.76	2.74	2.70	2.66	2.69	2.67	2.67	2.67	2.68	2.70	2.63	2.48	
Coal mining.....	3.10	3.10	3.12	3.11	3.14	3.13	3.09	3.09	3.07	3.09	3.11	3.09	3.08	3.12	3.08	
Bituminous.....	3.13	3.13	3.15	3.14	3.17	3.17	3.12	3.12	3.10	3.12	3.14	3.12	3.11	3.15	3.12	
Crude petroleum and natural gas.....	2.55	2.54	2.55	2.51	2.54	2.50	2.50	2.53	2.50	2.51	2.54	2.49	2.47	2.46	2.43	
Crude petroleum and natural gas fields.....	2.78	2.80	2.80	2.76	2.81	2.77	2.77	2.79	2.76	2.77	2.80	2.70	2.69	2.68	2.65	
Oil and gas field services.....	2.34	2.32	2.32	2.29	2.30	2.27	2.28	2.29	2.27	2.27	2.29	2.30	2.27	2.26	2.25	
Quarrying and nonmetallic mining.....	2.30	2.33	2.33	2.30	2.30	2.27	2.26	2.24	2.23	2.23	2.23	2.25	2.24	2.21	2.13	
Contract construction.....	3.24	3.22	3.22	3.17	3.16	3.16	3.16	3.15	3.14	3.16	3.17	3.16	3.10	3.07	2.93	
General building contractors.....	3.10	3.07	3.06	3.02	3.02	3.02	3.03	3.02	2.98	3.00	3.01	3.01	2.97	2.93	2.81	
Heavy construction.....	3.01	2.99	3.00	2.95	2.94	2.94	2.91	2.87	2.84	2.86	2.89	2.89	2.84	2.82	2.67	
Highway and street construction.....	2.89	2.88	2.89	2.83	2.82	2.82	2.76	2.67	2.60	2.60	2.69	2.71	2.69	2.67	2.55	
Other heavy construction.....	3.16	3.15	3.17	3.14	3.13	3.12	3.09	3.07	3.05	3.07	3.06	3.04	3.03	2.99	2.82	
Special trade contractors.....	3.44	3.44	3.44	3.39	3.38	3.37	3.37	3.37	3.36	3.38	3.38	3.38	3.33	3.29	3.13	
Manufacturing.....	2.36	2.34	2.33	2.31	2.33	2.32	2.32	2.31	2.29	2.29	2.29	2.29	2.27	2.26	2.19	
Durable goods.....	2.53	2.51	2.50	2.48	2.49	2.49	2.48	2.47	2.46	2.45	2.45	2.46	2.43	2.43	2.36	
Nondurable goods.....	2.13	2.13	2.12	2.10	2.12	2.11	2.11	2.10	2.09	2.09	2.09	2.09	2.07	2.05	1.98	

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. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
	Average weekly earnings														
Manufacturing—Continued															
Durable goods—Continued															
Ordnance and accessories.....	\$117.18	\$115.92	\$114.11	\$112.87	\$111.76	\$112.19	\$112.19	\$112.06	\$112.61	\$111.50	\$111.79	\$109.47	\$110.30	\$108.67	\$106.30
Ammunition, except for small arms.....	116.72	116.57	115.75	115.75	115.34	114.39	114.67	114.26	114.40	114.26	115.65	114.54	111.52	110.29	108.05
Sighting and fire control equipment.....	122.43	121.18	116.87	116.11	116.00	117.97	117.09	117.09	115.53	111.55	112.35	105.75	114.24	113.16	111.07
Other ordnance and accessories.....	113.48	111.87	110.27	107.18	104.94	105.46	105.20	105.59	107.98	107.98	106.37	106.66	105.59	103.17	100.69
Lumber and wood products, except furniture.....	77.81	81.41	81.00	79.19	78.21	79.79	77.42	74.88	71.23	69.89	70.84	69.94	71.05	73.71	74.24
Sawmills and planing mills.....	69.99	72.54	73.20	71.38	70.71	71.20	69.70	67.55	65.45	64.39	64.56	63.75	65.40	67.20	67.26
Millwork, plywood, and related products.....	84.03	85.68	86.09	86.94	84.84	86.11	85.27	84.24	81.59	79.76	79.56	80.38	79.18	81.19	82.81
Wooden containers.....	64.52	66.57	65.67	63.83	64.80	64.08	62.87	61.86	59.91	59.75	59.68	58.81	60.68	62.17	61.35
Miscellaneous wood products.....	71.28	71.28	70.93	69.95	69.60	71.05	70.12	70.12	68.06	67.55	67.32	66.91	68.97	69.32	68.21
Furniture and fixtures.....	79.93	80.12	79.52	78.12	75.62	76.02	73.53	73.14	73.14	72.77	72.20	75.43	74.26	75.20	74.48
Household furniture.....	75.58	75.35	74.80	72.67	70.49	71.28	68.17	68.35	68.35	67.44	66.73	71.06	69.74	70.45	70.82
Office furniture.....	95.22	92.34	93.34	91.65	92.48	89.28	87.78	86.94	87.20	87.42	87.85	89.47	88.40	90.42	86.27
Partitions; office and store fixtures.....	105.75	107.43	105.08	106.42	99.54	99.63	98.49	93.75	94.43	95.26	93.65	92.79	95.74	96.72	93.09
Other furniture and fixtures.....	81.00	81.20	80.98	82.35	79.00	80.19	79.20	78.01	80.20	79.00	78.80	79.40	79.19	78.78	77.83
Average weekly hours															
Ordnance and accessories.....	41.7	41.4	40.9	40.6	40.2	40.5	40.5	40.6	40.8	40.4	40.8	40.1	40.7	40.7	41.2
Ammunition, except for small arms.....	41.1	40.9	40.9	40.9	40.9	41.0	41.1	41.1	41.3	41.1	41.6	41.5	41.0	41.0	41.4
Sighting and fire control equipment.....	41.5	41.5	40.3	39.9	40.0	40.4	40.1	40.1	39.7	38.6	39.7	37.5	40.8	41.0	41.6
Other ordnance and accessories.....	42.5	41.9	41.3	40.6	39.6	40.1	40.0	40.3	40.9	40.9	40.6	40.4	40.3	40.3	40.6
Lumber and wood products, except furniture.....	39.3	40.5	40.1	40.2	39.5	40.5	39.7	38.8	38.5	38.4	38.5	37.6	38.2	39.0	39.7
Sawmills and planing mills.....	39.1	40.3	40.0	40.1	39.5	40.0	39.6	38.6	38.5	38.1	38.2	37.5	38.7	39.3	39.8
Millwork, plywood, and related products.....	40.4	40.8	40.8	41.4	40.4	41.2	40.8	40.5	39.8	39.1	39.0	39.4	39.2	39.8	41.2
Wooden containers.....	39.1	40.1	39.8	40.4	40.5	40.3	40.3	39.4	38.9	38.8	38.5	37.7	38.9	39.6	40.1
Miscellaneous wood products.....	40.5	40.5	40.3	40.2	40.0	40.6	40.3	40.3	39.8	39.5	39.6	38.9	40.1	40.3	40.6
Furniture and fixtures.....	41.2	41.3	41.2	40.9	39.8	39.8	38.7	38.7	38.7	38.5	38.2	39.7	39.5	40.0	40.7
Household furniture.....	41.3	41.4	41.1	40.6	39.6	39.6	38.3	38.4	38.4	38.1	37.7	39.7	39.4	39.8	40.7
Office furniture.....	41.4	40.5	41.3	41.1	41.1	40.4	39.9	39.7	40.0	40.1	40.3	40.3	40.0	41.1	40.5
Partitions; office and store fixtures.....	41.8	42.8	42.2	42.4	40.3	40.5	40.2	38.9	38.7	39.2	38.7	38.5	39.4	40.3	40.3
Other furniture and fixtures.....	40.3	40.6	40.9	41.8	40.1	40.5	40.0	39.8	40.1	39.7	39.4	40.1	40.2	40.4	40.7
Average hourly earnings															
Ordnance and accessories.....	\$2.81	\$2.80	\$2.79	\$2.78	\$2.78	\$2.77	\$2.77	\$2.76	\$2.76	\$2.76	\$2.74	\$2.73	\$2.71	\$2.67	\$2.58
Ammunition, except for small arms.....	2.84	2.85	2.83	2.83	2.82	2.79	2.79	2.78	2.77	2.78	2.78	2.76	2.72	2.69	2.61
Sighting and fire control equipment.....	2.95	2.92	2.90	2.91	2.90	2.92	2.92	2.92	2.91	2.89	2.83	2.82	2.80	2.76	2.67
Other ordnance and accessories.....	2.67	2.67	2.67	2.64	2.65	2.63	2.63	2.62	2.64	2.64	2.62	2.64	2.62	2.56	2.48
Lumber and wood products, except furniture.....	1.98	2.01	2.02	1.97	1.98	1.97	1.95	1.93	1.85	1.82	1.84	1.86	1.86	1.89	1.87
Sawmills and planing mills.....	1.79	1.80	1.83	1.78	1.79	1.78	1.76	1.75	1.70	1.69	1.69	1.70	1.69	1.71	1.69
Millwork, plywood, and related products.....	2.08	2.10	2.11	2.10	2.10	2.09	2.09	2.08	2.05	2.04	2.04	2.04	2.02	2.04	2.01
Wooden containers.....	1.65	1.66	1.65	1.58	1.60	1.59	1.66	1.57	1.54	1.54	1.55	1.56	1.56	1.57	1.53
Miscellaneous wood products.....	1.76	1.76	1.76	1.74	1.74	1.75	1.74	1.74	1.71	1.71	1.70	1.72	1.72	1.72	1.68
Furniture and fixtures.....	1.94	1.94	1.93	1.91	1.90	1.91	1.90	1.89	1.89	1.89	1.89	1.90	1.88	1.88	1.83
Household furniture.....	1.83	1.82	1.82	1.79	1.78	1.80	1.78	1.78	1.78	1.77	1.77	1.77	1.79	1.77	1.74
Office furniture.....	2.30	2.28	2.26	2.23	2.25	2.21	2.20	2.19	2.18	2.18	2.18	2.22	2.21	2.20	2.13
Partitions; office and store fixtures.....	2.53	2.51	2.49	2.51	2.47	2.46	2.45	2.41	2.44	2.43	2.42	2.41	2.43	2.40	2.31
Other furniture and fixtures.....	2.01	2.00	1.98	1.97	1.97	1.98	1.98	1.96	2.00	1.99	2.00	1.98	1.97	1.95	1.90

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. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Stone, clay, and glass products.....	\$96.93	\$97.88	\$97.47	\$98.18	\$97.06	\$97.29	\$94.83	\$93.03	\$91.54	\$90.62	\$91.08	\$90.39	\$93.38	\$92.97	\$91.46
Flat glass.....	118.50	115.48	128.30	127.84	125.42	126.56	124.19	118.18	122.07	122.07	124.03	130.29	135.47	127.35	132.29
Glass and glassware, pressed or blown.....	96.72	96.56	94.09	96.56	95.68	96.32	94.72	95.20	94.64	94.24	92.90	91.49	93.37	91.94	88.36
Cement, hydraulic.....	110.68	109.88	111.92	108.79	109.06	107.16	105.56	103.46	102.94	100.74	101.65	103.06	105.67	102.87	98.98
Structural clay products.....	86.72	86.93	86.51	86.11	85.28	86.32	85.07	83.42	81.18	79.56	80.36	79.95	82.00	82.21	81.19
Pottery and related products.....	84.67	84.50	83.38	81.49	81.38	83.00	83.44	81.59	81.43	80.25	78.97	79.45	82.64	81.37	78.90
Concrete, gypsum, and plaster products.....	99.03	102.73	101.36	103.69	101.85	101.62	96.90	93.56	90.76	87.96	89.69	87.30	93.21	93.04	92.45
Other stone and mineral products.....	97.75	97.99	99.19	97.64	97.00	97.00	95.24	93.90	92.57	91.71	92.63	91.18	92.80	93.79	93.15
Primary metal industries.....	118.99	119.29	118.19	116.11	117.68	116.58	114.16	111.25	108.49	107.26	106.69	104.90	103.60	109.59	112.19
Blast furnace and basic steel products.....	127.33	127.83	127.43	123.80	126.80	125.06	121.76	118.80	114.27	112.98	112.06	108.58	105.73	116.13	122.71
Iron and steel foundries.....	103.20	101.38	99.20	99.96	100.33	100.19	98.67	95.63	94.00	93.25	92.25	93.62	94.00	96.61	97.04
Nonferrous smelting and refining.....	113.16	111.93	110.12	110.43	110.70	110.29	108.00	107.33	106.66	107.86	108.79	108.00	108.65	108.09	104.81
Nonferrous rolling, drawing, and extruding.....	115.45	115.48	113.42	114.90	112.67	112.94	110.92	108.77	107.30	105.59	105.59	104.15	105.97	105.01	105.59
Nonferrous foundries.....	103.16	103.50	100.10	100.10	99.60	100.35	98.95	98.95	98.06	98.31	97.46	97.22	97.57	97.51	96.87
Miscellaneous primary metal industries.....	122.36	120.25	121.06	115.82	116.18	117.74	115.60	113.47	111.25	112.11	113.37	111.93	110.48	112.92	111.50
Average weekly hours															
Stone, clay, and glass products.....	40.9	41.3	41.3	41.6	41.3	41.4	40.7	40.1	39.8	39.4	39.6	39.3	40.6	40.6	41.2
Flat glass.....	36.8	36.2	40.6	40.2	40.2	39.8	39.3	38.0	39.0	39.0	39.5	41.1	42.6	40.3	41.6
Glass and glassware, pressed or blown.....	40.3	40.4	39.7	40.4	40.2	40.3	39.8	40.0	40.1	40.1	39.7	39.1	39.9	39.8	39.8
Cement, hydraulic.....	41.3	41.0	41.3	40.9	41.0	40.9	40.6	40.1	39.9	39.2	39.4	40.1	40.8	40.5	40.9
Structural clay products.....	41.1	41.2	41.0	41.4	41.0	41.3	40.9	40.3	39.6	39.0	39.2	39.0	40.0	40.3	40.8
Pottery and related products.....	39.2	39.3	38.6	37.9	37.5	37.9	38.1	37.6	37.7	37.5	36.9	37.3	38.8	38.2	38.3
Concrete, gypsum, and plaster products.....	42.5	43.9	43.5	44.5	43.9	43.8	42.5	41.4	40.7	39.8	40.4	39.5	41.8	42.1	43.2
Other stone and mineral products.....	40.9	41.0	41.5	41.2	41.1	41.1	40.7	40.3	39.9	39.7	40.1	39.3	40.0	40.6	41.4
Primary metal industries.....	40.2	40.3	40.2	39.9	40.3	40.2	39.5	38.9	38.2	37.9	37.7	37.2	37.4	39.0	40.5
Blast furnace and basic steel products.....	39.3	39.7	40.2	39.3	40.0	39.7	38.9	38.2	37.1	36.8	36.5	35.6	35.6	38.2	40.1
Iron and steel foundries.....	40.0	39.6	38.9	39.2	39.5	39.6	39.0	38.1	37.6	37.3	36.9	37.3	37.6	38.8	40.1
Nonferrous smelting and refining.....	41.3	41.0	39.9	40.6	41.0	41.0	40.6	40.5	40.4	40.7	40.9	40.6	41.0	41.1	41.1
Nonferrous rolling, drawing, and extruding.....	42.6	42.3	41.7	42.4	42.2	42.3	41.7	41.2	40.8	40.3	40.3	39.6	40.6	40.7	41.9
Nonferrous foundries.....	41.1	41.4	40.2	40.2	40.0	40.3	39.9	39.9	39.7	39.8	39.3	39.2	39.5	39.8	40.7
Miscellaneous primary metal industries.....	41.2	40.9	40.9	39.8	40.2	40.6	40.0	39.4	38.9	39.2	39.5	39.0	38.9	39.9	40.4
Average hourly earnings															
Stone, clay, and glass products.....	\$2.37	\$2.37	\$2.36	\$2.36	\$2.35	\$2.35	\$2.33	\$2.32	\$2.30	\$2.30	\$2.30	\$2.30	\$2.30	\$2.29	\$2.22
Flat glass.....	3.22	3.19	3.16	3.18	3.12	3.18	3.16	3.11	3.13	3.13	3.14	3.17	3.18	3.16	3.18
Glass and glassware, pressed or blown.....	2.40	2.39	2.37	2.39	2.38	2.39	2.38	2.38	2.36	2.35	2.34	2.34	2.34	2.31	2.22
Cement, hydraulic.....	2.68	2.68	2.71	2.66	2.66	2.62	2.60	2.58	2.58	2.57	2.58	2.57	2.59	2.54	2.42
Structural clay products.....	2.11	2.11	2.11	2.08	2.08	2.09	2.08	2.07	2.05	2.04	2.05	2.05	2.05	2.04	1.99
Pottery and related products.....	2.16	2.15	2.16	2.15	2.17	2.19	2.19	2.17	2.16	2.14	2.14	2.13	2.13	2.13	2.06
Concrete, gypsum, and plaster products.....	2.33	2.34	2.33	2.33	2.32	2.32	2.28	2.26	2.23	2.21	2.22	2.21	2.23	2.21	2.14
Other stone and mineral products.....	2.39	2.39	2.39	2.37	2.36	2.36	2.34	2.33	2.32	2.31	2.31	2.32	2.32	2.31	2.25
Primary metal industries.....	2.96	2.96	2.94	2.91	2.92	2.90	2.89	2.86	2.84	2.83	2.83	2.82	2.77	2.81	2.77
Blast furnace and basic steel products.....	3.24	3.22	3.17	3.15	3.17	3.15	3.13	3.11	3.08	3.07	3.07	3.05	2.97	3.04	3.06
Iron and steel foundries.....	2.58	2.56	2.55	2.55	2.54	2.53	2.51	2.50	2.50	2.50	2.51	2.50	2.49	2.49	2.42
Nonferrous smelting and refining.....	2.74	2.73	2.76	2.72	2.70	2.69	2.66	2.65	2.64	2.65	2.66	2.66	2.65	2.63	2.55
Nonferrous rolling, drawing, and extruding.....	2.71	2.73	2.72	2.71	2.67	2.67	2.66	2.64	2.63	2.62	2.62	2.63	2.61	2.58	2.52
Nonferrous foundries.....	2.51	2.50	2.49	2.49	2.49	2.49	2.48	2.48	2.47	2.47	2.48	2.48	2.47	2.45	2.38
Miscellaneous primary metal industries.....	2.97	2.94	2.96	2.91	2.89	2.90	2.89	2.88	2.86	2.86	2.87	2.87	2.84	2.83	2.76

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. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Manufacturing—Continued															
Average weekly earnings															
Durable goods—Continued															
Fabricated metal products.....	\$104.08	\$102.75	\$99.45	\$102.34	\$101.75	\$102.09	\$100.85	\$99.45	\$97.81	\$96.92	\$96.78	\$96.68	\$97.60	\$98.82	\$96.12
Metal cans.....	120.60	122.18	122.80	128.19	128.19	126.73	120.96	118.37	115.02	116.00	116.16	114.29	114.62	114.68	113.21
Cutlery, hand tools, and general hardware.....	100.67	96.15	84.04	94.24	92.90	94.64	94.64	92.50	91.34	88.47	91.10	92.12	94.07	93.03	89.10
Heating equipment and plumbing fixtures.....	97.69	97.77	96.80	96.00	94.64	95.52	94.56	93.21	90.82	91.87	92.25	91.15	90.48	91.26	91.43
Fabricated structural metal products.....	104.04	105.22	104.30	104.24	102.47	102.66	101.40	100.40	99.90	99.00	100.00	99.60	100.78	99.47	95.68
Screw machine products, bolts, etc.	103.81	102.09	101.43	99.14	98.17	99.63	97.36	94.17	94.17	93.45	93.53	92.90	93.69	95.58	97.06
Metal stampings.....	108.84	105.83	97.50	105.47	107.42	108.05	107.53	105.56	102.14	100.47	99.31	101.00	101.89	107.74	104.33
Coating, engraving, and allied services.....	92.06	91.98	92.84	91.43	90.72	91.43	89.51	89.28	87.96	85.41	84.80	81.70	84.16	86.43	84.46
Miscellaneous fabricated wire products.....	97.16	96.51	97.16	95.17	94.12	95.63	94.02	92.06	91.54	92.00	90.68	89.54	90.63	90.50	89.21
Miscellaneous fabricated metal products.....	103.25	103.41	100.60	101.09	99.70	101.18	99.94	98.00	97.27	96.78	96.29	94.82	96.38	96.96	95.82
Machinery.....	109.45	109.63	107.83	106.75	107.16	107.68	106.75	106.49	105.04	104.90	104.23	103.46	103.17	104.55	102.92
Engines and turbines.....	116.18	114.62	115.60	113.65	112.68	113.54	113.03	115.87	112.18	111.72	110.21	111.39	109.31	109.69	109.48
Farm machinery and equipment.....	103.06	102.00	102.40	100.04	100.62	102.43	103.20	105.56	104.12	104.90	103.72	102.80	100.84	99.85	99.47
Construction and related machinery.....	108.00	107.59	107.86	108.24	107.30	107.30	106.63	105.85	103.62	103.48	103.08	102.56	102.43	102.66	103.25
Metalworking machinery and equipment.....	118.58	117.60	115.93	115.93	117.18	117.60	116.34	116.62	115.09	114.68	113.85	112.34	110.84	117.27	113.32
Special industrial machinery.....	104.16	103.42	103.66	101.19	101.11	101.92	100.28	99.39	98.90	99.22	99.39	98.33	99.53	99.72	96.37
General industrial machinery.....	108.50	108.09	104.14	105.71	104.92	106.08	104.64	102.80	101.77	101.12	100.35	98.30	100.98	101.71	102.01
Office, computing and accounting machines.....	113.57	113.15	112.74	111.51	113.28	112.47	110.29	108.81	108.40	108.79	108.12	107.86	107.98	106.23	101.91
Service industry machines.....	96.32	98.09	96.88	93.69	96.56	95.34	95.91	95.20	94.72	94.72	92.98	91.96	93.30	93.43	93.02
Miscellaneous machinery.....	105.75	105.25	106.09	102.09	103.75	104.75	103.58	102.26	102.01	101.27	101.76	102.26	101.11	101.26	99.54
Average weekly hours															
Fabricated metal products.....	41.3	41.1	40.1	41.1	40.7	41.0	40.5	40.1	39.6	39.4	39.5	39.3	40.0	40.5	40.9
Metal cans.....	41.3	41.7	42.2	43.9	43.9	43.7	42.0	41.1	40.5	40.7	40.9	40.1	40.5	41.4	42.4
Cutlery, hand tools, and general hardware.....	41.6	40.4	36.7	40.1	39.7	40.1	40.1	39.7	39.2	38.3	39.1	39.2	40.2	40.1	40.5
Heating equipment and plumbing fixtures.....	40.2	40.4	40.0	40.0	39.6	39.8	39.4	39.0	38.0	38.6	38.6	38.3	38.5	39.0	40.1
Fabricated structural metal products.....	40.8	41.1	40.9	41.2	40.5	40.9	40.4	40.0	39.8	39.6	40.0	40.0	40.8	40.6	40.2
Screw machine products, bolts, etc.	42.2	41.5	41.4	40.8	40.4	41.0	40.4	39.4	39.4	39.1	39.3	39.2	39.7	40.5	42.2
Metal stampings.....	41.7	41.5	39.0	41.2	41.0	41.4	41.2	40.6	39.9	39.4	39.1	39.3	39.8	41.6	41.9
Coating, engraving, and allied services.....	41.1	40.7	40.9	41.0	40.5	41.0	40.5	40.4	39.8	39.0	38.9	38.0	39.7	40.2	41.0
Miscellaneous fabricated wire products.....	41.7	41.6	41.7	41.2	41.1	41.4	40.7	40.2	39.8	40.0	39.6	39.1	40.1	40.4	41.3
Miscellaneous fabricated metal products.....	41.3	41.2	40.4	40.6	40.2	40.8	40.3	40.0	39.7	39.5	39.3	38.7	39.5	39.9	40.6
Machinery.....	41.3	41.3	41.0	40.9	40.9	41.1	40.9	40.8	40.4	40.5	40.4	40.1	40.3	41.0	41.5
Engines and turbines.....	40.2	39.8	40.0	39.6	39.4	39.7	39.8	40.8	39.5	39.9	39.5	39.5	38.9	39.6	40.7
Farm machinery and equipment.....	40.1	40.0	40.0	39.7	39.0	39.7	40.0	40.6	40.2	40.5	40.2	40.0	39.7	40.1	40.6
Construction and related machinery.....	40.6	40.6	40.7	41.0	40.8	40.8	40.7	40.4	39.7	39.8	39.8	39.6	39.7	40.1	41.3
Metalworking machinery and equipment.....	42.2	42.0	41.7	41.7	42.0	42.0	41.7	41.8	41.4	41.4	41.4	41.0	40.9	42.8	42.6
Special industrial machinery.....	42.0	41.7	41.8	41.3	41.1	41.6	41.1	40.9	40.7	41.0	40.9	40.8	41.3	41.9	41.9
General industrial machinery.....	41.1	41.1	39.9	40.5	40.2	40.8	40.4	40.0	39.6	39.5	39.2	38.4	39.6	40.2	41.3
Office, computing and accounting machines.....	41.6	41.6	41.6	41.3	41.8	41.5	41.0	40.6	40.6	40.9	40.8	40.7	40.9	40.7	40.6
Service industry machines.....	39.8	40.7	40.2	39.7	40.4	40.4	40.3	40.0	39.8	39.8	39.4	38.8	39.7	40.1	40.8
Miscellaneous machinery.....	41.8	42.1	42.1	41.0	41.5	41.9	41.6	41.4	41.3	41.0	41.2	41.4	41.1	41.5	42.0
Average hourly earnings															
Fabricated metal products.....	\$2.52	\$2.50	\$2.48	\$2.49	\$2.50	\$2.49	\$2.49	\$2.48	\$2.47	\$2.46	\$2.45	\$2.46	\$2.44	\$2.44	\$2.35
Metal cans.....	2.90	2.93	2.91	2.92	2.92	2.90	2.88	2.88	2.84	2.85	2.84	2.85	2.83	2.77	2.67
Cutlery, hand tools, and general hardware.....	2.42	2.38	2.29	2.35	2.34	2.36	2.36	2.33	2.33	2.31	2.33	2.35	2.34	2.32	2.20
Heating equipment and plumbing fixtures.....	2.43	2.42	2.42	2.40	2.39	2.40	2.40	2.39	2.39	2.38	2.39	2.38	2.35	2.34	2.28
Fabricated structural metal products.....	2.55	2.56	2.55	2.53	2.53	2.51	2.51	2.51	2.51	2.50	2.50	2.49	2.47	2.45	2.38
Screw machine products, bolts, etc.	2.46	2.46	2.45	2.43	2.43	2.43	2.41	2.39	2.39	2.39	2.38	2.37	2.36	2.36	2.30
Metal stampings.....	2.61	2.55	2.50	2.56	2.62	2.61	2.61	2.60	2.56	2.55	2.54	2.57	2.56	2.59	2.49
Coating, engraving, and allied services.....	2.24	2.26	2.27	2.23	2.24	2.23	2.21	2.21	2.21	2.19	2.18	2.15	2.12	2.15	2.06
Miscellaneous fabricated wire products.....	2.33	2.32	2.33	2.31	2.29	2.31	2.31	2.29	2.30	2.30	2.29	2.29	2.26	2.24	2.16
Miscellaneous fabricated metal products.....	2.50	2.51	2.49	2.49	2.48	2.48	2.48	2.45	2.45	2.45	2.45	2.45	2.44	2.43	2.36
Machinery.....	2.65	2.64	2.63	2.61	2.62	2.62	2.61	2.60	2.60	2.59	2.58	2.58	2.56	2.55	2.48
Engines and turbines.....	2.89	2.88	2.89	2.87	2.86	2.86	2.84	2.84	2.84	2.80	2.79	2.82	2.81	2.77	2.69
Farm machinery and equipment.....	2.57	2.55	2.56	2.52	2.58	2.58	2.58	2.60	2.59	2.59	2.58	2.57	2.54	2.49	2.45
Construction and related machinery.....	2.66	2.65	2.65	2.64	2.63	2.63	2.62	2.62	2.61	2.60	2.59	2.59	2.58	2.56	2.50
Metalworking machinery and equipment.....	2.81	2.80	2.78	2.78	2.79	2.80	2.79	2.79	2.78	2.77	2.75	2.74	2.71	2.74	2.66
Special industrial machinery.....	2.48	2.48	2.48	2.45	2.46	2.45	2.44	2.43	2.43	2.42	2.43	2.41	2.41	2.38	2.30
General industrial machinery.....	2.64	2.63	2.61	2.61	2.61	2.60	2.59	2.57	2.57	2.56	2.56	2.56	2.55	2.53	2.47
Office, computing and accounting machines.....	2.73	2.72	2.71	2.70	2.71	2.71	2.69	2.68	2.67	2.66	2.65	2.65	2.64	2.61	2.51
Service industry machines.....	2.42	2.41	2.41	2.36	2.39	2.36	2.38	2.38	2.38	2.38	2.36	2.37	2.35	2.33	2.28
Miscellaneous machinery.....	2.53	2.50	2.52	2.49	2.50	2.50	2.49	2.47	2.47	2.47	2.47	2.47	2.46	2.44	2.27

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. 212.

Industry	1961											1960		Annual average	
	Nov. ¹	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Electrical equipment and supplies.....	\$96.93	\$96.05	\$93.53	\$94.94	\$93.69	\$94.71	\$93.37	\$93.13	\$92.50	\$92.50	\$92.73	\$91.49	\$91.94	\$90.74	\$89.10
Electric distribution equipment.....	101.91	101.15	101.66	101.50	101.15	101.00	99.94	99.85	99.45	99.79	99.79	99.75	98.40	97.77	95.65
Electrical industrial apparatus.....	101.68	101.02	101.43	100.69	99.94	99.88	98.25	98.25	96.96	97.20	96.07	95.74	95.52	95.44	93.43
Household appliances.....	103.28	102.06	103.73	101.00	101.96	101.56	100.90	100.50	99.00	97.25	100.04	97.71	95.94	96.23	94.87
Electric lighting and wiring equipment.....	90.09	89.65	87.25	88.53	87.64	88.98	87.47	86.63	86.63	86.24	84.70	82.88	86.29	84.71	83.63
Radio and TV receiving sets.....	83.79	84.82	78.25	83.98	84.16	83.13	81.66	79.59	80.51	82.18	83.07	81.86	81.06	80.11	79.40
Communication equipment.....	105.32	103.98	104.81	102.87	100.19	102.72	100.00	100.25	99.60	99.94	100.69	98.95	100.86	98.82	97.41
Electronic components and accessories.....	83.02	82.62	81.61	80.40	77.39	80.20	79.80	79.60	79.60	80.00	79.40	76.03	77.81	76.24	74.00
Miscellaneous electrical equipment and supplies.....	103.17	100.70	77.05	98.90	97.20	99.31	97.04	93.77	93.77	93.06	94.47	94.95	94.49	93.93	92.34
Transportation equipment.....	124.70	117.29	106.22	112.96	113.00	112.87	112.87	110.95	109.85	108.74	108.19	111.60	111.91	111.52	107.45
Motor vehicles and equipment.....	132.61	119.52	96.84	113.94	115.43	116.57	116.00	112.24	107.80	105.46	105.00	112.35	114.62	115.21	111.38
Aircraft and parts.....	118.58	117.03	115.92	114.26	112.88	111.52	112.07	113.03	114.54	114.82	114.68	114.40	112.89	110.43	106.63
Ship and boat building and repairing.....	116.00	115.30	114.45	112.52	111.60	108.63	109.87	109.07	107.05	106.90	106.47	103.57	104.99	103.75	100.47
Railroad equipment.....	115.13	108.20	108.57	107.94	108.36	110.32	107.52	104.72	106.68	103.88	106.03	106.88	102.86	107.86	105.72
Other transportation equipment.....	84.10	86.24	88.78	87.08	84.74	86.22	83.13	83.71	81.66	78.38	78.12	79.63	81.06	80.13	80.40
Average weekly hours															
Electrical equipment and supplies.....	40.9	40.7	39.8	40.4	39.7	40.3	39.9	39.8	39.7	39.7	39.8	39.1	39.8	39.8	40.5
Electric distribution equipment.....	40.6	40.3	40.5	40.6	40.3	40.4	40.3	40.1	40.1	40.4	40.4	39.9	40.0	40.4	40.7
Electrical industrial apparatus.....	41.0	40.9	40.9	40.6	40.3	40.6	40.1	40.1	39.9	40.0	39.7	39.4	39.8	40.1	40.8
Household appliances.....	40.5	40.5	41.0	40.4	40.3	40.3	40.2	40.2	39.6	38.9	39.7	39.4	39.0	39.6	40.2
Electric lighting and wiring equipment.....	40.4	40.2	39.3	39.9	39.3	39.9	39.4	39.2	39.2	39.2	38.5	37.5	39.4	39.4	40.4
Radio and TV receiving sets.....	39.9	40.2	37.8	39.8	39.7	39.4	38.7	37.9	37.8	38.4	39.0	37.9	38.6	38.7	39.5
Communication equipment.....	41.3	41.1	41.1	40.5	39.6	40.6	40.0	40.1	40.0	40.3	40.6	39.9	41.0	40.5	41.1
Electronic components and accessories.....	41.1	40.9	40.6	40.2	38.5	40.1	39.9	40.0	40.0	40.2	40.1	38.4	39.7	39.5	40.0
Miscellaneous electrical equipment and supplies.....	41.6	41.1	33.5	40.7	40.0	40.7	40.1	39.4	39.4	39.1	39.2	39.4	39.7	39.8	40.5
Transportation equipment.....	43.0	41.3	37.8	40.2	40.5	40.6	40.6	40.2	39.8	39.4	39.2	40.0	40.4	40.7	40.7
Motor vehicles and equipment.....	44.5	41.5	34.1	39.7	40.5	40.9	40.7	39.8	38.5	37.8	37.5	39.7	40.5	41.0	41.1
Aircraft and parts.....	41.9	41.5	41.4	41.1	40.9	40.7	40.9	41.1	41.5	41.6	41.7	41.3	41.2	40.9	40.7
Ship and boat building and repairing.....	40.7	40.6	40.3	39.9	40.0	39.5	40.1	40.1	39.5	39.3	39.0	37.8	38.6	39.3	39.4
Railroad equipment.....	39.7	37.7	38.5	33.2	38.7	39.4	38.4	37.4	38.1	37.1	37.6	37.9	37.0	38.8	39.3
Other transportation equipment.....	39.3	40.3	41.1	40.5	39.6	40.1	39.4	39.3	38.7	37.5	37.2	38.1	38.6	38.9	40.4
Average hourly earnings															
Electrical equipment and supplies.....	\$2.37	\$2.36	\$2.35	\$2.35	\$2.36	\$2.35	\$2.34	\$2.34	\$2.33	\$2.33	\$2.33	\$2.34	\$2.31	\$2.28	\$2.20
Electric distribution equipment.....	2.51	2.51	2.51	2.50	2.51	2.50	2.48	2.49	2.48	2.47	2.47	2.50	2.46	2.42	2.35
Electrical industrial apparatus.....	2.48	2.47	2.48	2.48	2.48	2.46	2.45	2.45	2.43	2.43	2.42	2.43	2.40	2.38	2.29
Household appliances.....	2.55	2.52	2.53	2.50	2.53	2.52	2.51	2.50	2.50	2.50	2.52	2.48	2.46	2.43	2.36
Electric lighting and wiring equipment.....	2.23	2.23	2.20	2.22	2.23	2.23	2.22	2.21	2.21	2.20	2.20	2.21	2.19	2.15	2.07
Radio and TV receiving sets.....	2.10	2.11	2.07	2.11	2.12	2.11	2.11	2.10	2.13	2.14	2.13	2.16	2.10	2.07	2.01
Communication equipment.....	2.55	2.53	2.55	2.54	2.53	2.53	2.50	2.50	2.49	2.48	2.48	2.48	2.46	2.44	2.37
Electronic components and accessories.....	2.02	2.02	2.01	2.00	2.01	2.00	2.00	1.99	1.99	1.99	1.98	1.98	1.96	1.93	1.85
Miscellaneous electrical equipment and supplies.....	2.48	2.45	2.30	2.43	2.43	2.44	2.42	2.38	2.38	2.38	2.41	2.41	2.38	2.36	2.28
Transportation equipment.....	2.90	2.84	2.81	2.81	2.79	2.78	2.78	2.76	2.76	2.76	2.76	2.79	2.77	2.74	2.64
Motor vehicles and equipment.....	2.98	2.88	2.84	2.87	2.85	2.85	2.85	2.82	2.80	2.79	2.80	2.83	2.83	2.81	2.71
Aircraft and parts.....	2.83	2.82	2.80	2.78	2.76	2.74	2.74	2.75	2.76	2.76	2.75	2.77	2.74	2.70	2.62
Ship and boat building and repairing.....	2.85	2.84	2.84	2.82	2.79	2.75	2.74	2.72	2.71	2.72	2.73	2.74	2.72	2.64	2.55
Railroad equipment.....	2.90	2.87	2.82	2.81	2.80	2.80	2.80	2.80	2.80	2.82	2.82	2.82	2.78	2.78	2.69
Other transportation equipment.....	2.14	2.14	2.16	2.15	2.14	2.15	2.11	2.13	2.11	2.09	2.10	2.09	2.10	2.06	1.99

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. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Average weekly earnings															
Manufacturing—Continued															
Durable goods—Continued															
Instruments and related products.....	\$99.36	\$98.64	\$97.99	\$97.75	\$96.80	\$97.10	\$95.75	\$95.51	\$95.68	\$94.87	\$95.51	\$92.90	\$95.00	\$93.73	\$91.39
Engineering and scientific instruments.....	112.61	113.44	112.88	112.88	111.23	112.89	110.57	110.84	112.61	109.75	113.30	109.18	112.32	110.95	107.43
Mechanical measuring and control devices.....	98.09	96.72	96.80	96.56	95.27	97.27	95.04	95.44	94.80	93.77	93.77	90.32	93.67	92.00	91.84
Optical and ophthalmic goods.....	89.64	88.60	90.49	88.18	88.15	87.33	85.68	85.06	84.66	83.41	83.39	82.95	83.20	81.80	78.18
Surgical, medical, and dental equipment.....	84.05	83.43	83.03	82.82	81.60	81.61	81.00	80.80	79.80	81.20	80.60	77.00	81.41	80.40	78.79
Photographic equipment and supplies.....	115.78	113.63	112.94	113.05	112.52	112.36	109.30	107.98	106.92	107.04	107.59	107.83	107.49	106.14	102.01
Watches and clocks.....	85.08	85.90	81.39	79.59	78.54	76.58	79.59	78.98	79.76	79.40	78.19	73.68	76.44	76.83	76.63
Miscellaneous manufacturing industries.....	77.57	76.78	76.02	74.47	74.29	76.22	75.07	75.27	75.46	75.66	75.08	72.96	75.05	74.28	73.42
Jewelry, silverware, and plated ware.....	87.36	87.36	84.05	82.21	79.58	82.21	80.17	79.75	79.17	79.39	78.80	77.14	84.04	80.40	80.16
Toys, amusement, and sporting goods.....	70.27	70.93	69.87	69.56	68.92	69.78	69.81	70.20	70.80	71.00	70.82	66.04	68.46	67.73	66.98
Pens, pencils, and office and art materials.....	75.81	74.77	74.03	70.29	71.55	72.65	72.86	72.91	72.31	72.50	68.82	69.52	72.50	71.92	70.98
Costume jewelry, buttons, and notions.....	71.56	69.03	68.43	67.08	67.42	69.60	69.52	68.99	67.51	67.47	67.90	64.73	68.16	66.13	66.86
Other manufacturing industries.....	83.84	82.61	81.59	80.59	80.39	82.19	80.34	80.16	80.96	80.77	80.57	79.93	80.78	79.99	78.80
Average weekly hours															
Instruments and related products.....	41.4	41.1	41.0	40.9	40.5	40.8	40.4	40.3	40.2	40.2	40.3	39.2	40.6	40.4	40.8
Engineering and scientific instruments.....	41.1	41.1	40.9	40.9	40.3	41.2	40.5	40.6	40.8	40.2	41.5	39.7	41.6	41.4	41.8
Mechanical measuring and control devices.....	40.7	40.3	40.5	40.4	40.2	40.7	40.1	40.1	40.0	39.9	39.9	38.6	40.2	40.0	41.0
Optical and ophthalmic goods.....	41.5	41.4	41.7	41.4	41.0	41.0	40.8	40.7	40.7	40.1	39.9	39.5	40.0	40.1	40.3
Surgical, medical, and dental equipment.....	40.8	40.5	40.5	40.4	40.0	40.2	40.1	40.0	39.7	40.4	40.1	38.5	40.3	40.0	40.2
Photographic equipment and supplies.....	43.2	42.4	42.3	42.5	42.3	42.4	41.4	40.9	40.5	40.7	40.6	41.0	41.5	41.3	41.3
Watches and clocks.....	41.1	41.3	39.7	39.4	38.5	38.1	39.4	39.1	39.1	39.5	38.9	37.4	39.2	39.0	39.5
Miscellaneous manufacturing industries.....	40.4	40.2	39.8	39.4	39.1	39.7	39.1	39.0	39.1	39.2	38.9	38.0	39.5	39.3	39.9
Jewelry, silverware, and plated ware.....	42.0	41.8	40.8	40.3	39.2	40.3	39.3	38.9	39.0	39.3	39.4	38.0	41.4	40.2	40.9
Toys, amusement, and sporting goods.....	39.7	40.3	39.7	39.3	38.5	39.2	39.0	39.0	38.9	38.8	38.7	37.1	38.9	38.7	39.4
Pens, pencils, and office and art materials.....	41.2	40.2	39.8	38.2	39.1	39.7	39.6	39.2	39.3	39.4	37.2	38.2	39.4	39.3	40.1
Costume jewelry, buttons, and notions.....	40.2	39.0	39.1	39.0	39.2	40.0	39.5	39.2	38.8	39.0	38.8	37.2	39.4	38.9	39.8
Other manufacturing industries.....	40.5	40.1	39.8	39.7	39.6	39.9	39.0	39.1	39.3	39.4	39.3	38.8	39.6	39.6	40.0
Average hourly earnings															
Instruments and related products.....	\$2.40	\$2.40	\$2.39	\$2.39	\$2.39	\$2.38	\$2.37	\$2.37	\$2.38	\$2.36	\$2.37	\$2.37	\$2.34	\$2.32	\$2.24
Engineering and scientific instruments.....	2.74	2.76	2.76	2.76	2.76	2.74	2.73	2.73	2.76	2.73	2.73	2.75	2.70	2.68	2.57
Mechanical measuring and control devices.....	2.41	2.40	2.39	2.39	2.37	2.39	2.37	2.38	2.37	2.35	2.35	2.34	2.33	2.30	2.24
Optical and ophthalmic goods.....	2.16	2.14	2.17	2.13	2.15	2.13	2.10	2.09	2.08	2.08	2.09	2.10	2.08	2.04	1.94
Surgical, medical, and dental equipment.....	2.06	2.06	2.05	2.05	2.04	2.03	2.02	2.02	2.01	2.01	2.01	2.00	2.02	2.01	1.96
Photographic equipment and supplies.....	2.68	2.68	2.67	2.66	2.66	2.65	2.64	2.64	2.64	2.63	2.65	2.63	2.59	2.57	2.47
Watches and clocks.....	2.07	2.08	2.05	2.02	2.04	2.01	2.02	2.02	2.04	2.01	2.01	1.97	1.95	1.97	1.94
Miscellaneous manufacturing industries.....	1.92	1.91	1.91	1.89	1.90	1.92	1.92	1.93	1.93	1.93	1.93	1.92	1.90	1.89	1.84
Jewelry, silverware, and plated ware.....	2.08	2.09	2.06	2.04	2.03	2.04	2.04	2.05	2.03	2.02	2.00	2.03	2.03	2.00	1.96
Toys, amusement, and sporting goods.....	1.77	1.76	1.76	1.77	1.79	1.78	1.79	1.80	1.82	1.83	1.83	1.78	1.76	1.75	1.70
Pens, pencils, and office and art materials.....	1.84	1.86	1.86	1.84	1.83	1.83	1.84	1.86	1.84	1.84	1.85	1.82	1.84	1.83	1.77
Costume jewelry, buttons, and notions.....	1.78	1.77	1.75	1.70	1.72	1.74	1.76	1.76	1.74	1.73	1.75	1.74	1.73	1.70	1.68
Other manufacturing industries.....	2.07	2.06	2.05	2.03	2.03	2.06	2.06	2.05	2.06	2.05	2.05	2.06	2.04	2.02	1.97

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. 212.

Industry	1961												1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959	
Manufacturing—Continued																
Nondurable goods																
Average weekly earnings																
Food and kindred products.....	\$89.57	\$89.84	\$89.44	\$88.60	\$90.25	\$90.25	\$89.57	\$87.20	\$87.23	\$87.23	\$87.67	\$87.10	\$86.71	\$86.30	\$82.82	
Meat products.....	100.67	100.62	98.41	95.18	98.18	98.47	97.64	94.47	95.44	93.69	96.72	97.10	97.47	94.83	92.29	
Dairy products.....	93.46	93.26	95.46	92.44	94.61	93.53	92.44	91.36	91.15	90.52	90.94	90.73	90.73	89.68	86.50	
Canned and preserved food, except meats.....	68.08	72.34	74.48	74.30	70.10	70.31	72.20	68.38	68.45	68.63	67.34	66.25	63.54	68.71	65.28	
Grain mill products.....	102.58	102.15	102.83	102.08	100.25	98.26	95.27	95.26	95.48	96.36	97.90	96.79	96.80	94.15	90.85	
Bakery products.....	88.84	88.62	88.44	88.26	89.35	89.57	87.89	85.57	85.79	85.57	84.32	84.74	86.03	83.81	80.00	
Sugar.....	97.65	94.50	98.95	99.72	101.94	96.70	100.26	94.02	97.67	97.38	97.65	100.80	99.97	93.70	88.64	
Confectionery and related products.....	73.20	74.70	75.70	73.97	73.30	74.21	73.45	72.13	71.31	70.92	70.71	67.55	69.13	69.34	66.46	
Beverages.....	99.54	101.05	102.66	100.78	105.08	100.94	98.15	98.46	96.92	94.77	94.86	95.89	96.87	96.72	93.56	
Miscellaneous food and kindred products.....	89.18	88.74	87.78	87.35	88.18	87.13	86.51	84.25	84.23	85.85	85.65	83.80	85.34	83.95	81.79	
Tobacco manufactures.....	68.94	69.36	67.39	63.17	71.05	74.07	70.87	71.05	65.51	65.12	65.22	68.03	64.30	64.94	64.12	
Cigarettes.....	89.65	92.29	84.50	86.65	83.85	89.82	85.02	85.89	78.86	80.56	80.60	86.48	83.07	80.29	80.40	
Cigars.....	59.89	59.49	58.74	57.37	55.13	56.47	54.24	53.44	52.12	52.06	54.17	54.17	57.87	53.86	52.88	
Textile mill products.....	68.48	67.08	66.09	66.02	64.64	65.12	63.99	63.18	62.86	61.99	61.18	61.34	62.63	63.60	63.02	
Cotton broad woven fabrics.....	67.20	66.72	64.71	63.67	62.49	62.64	61.86	61.39	60.76	59.75	59.90	61.15	61.15	62.56	60.90	
Silk and synthetic broad woven fabrics.....	72.41	70.64	69.39	70.31	68.15	68.56	67.65	66.50	65.44	65.44	65.27	65.76	67.65	68.31	66.94	
Weaving and finishing broad wools.....	73.46	72.04	73.81	74.34	74.80	74.55	73.33	70.99	69.37	69.14	67.25	65.02	65.19	69.83	70.64	
Narrow fabrics and smallwares.....	71.21	69.32	69.83	68.91	67.94	68.95	67.94	67.20	66.23	66.23	64.24	64.01	65.57	66.07	65.69	
Knitting.....	62.96	61.94	60.29	60.37	59.60	59.60	58.37	57.13	57.29	56.61	54.93	54.26	57.53	56.93	57.13	
Finishing textiles, except wool and knit.....	77.11	75.84	73.21	73.93	72.90	76.32	75.06	74.52	74.52	75.30	70.88	71.06	72.67	71.73	72.14	
Floor covering.....	76.56	75.33	74.45	73.92	72.48	72.22	68.82	69.74	69.70	68.64	69.21	70.27	70.53	70.62	72.51	
Yarn and thread.....	63.23	61.61	62.02	61.16	59.85	60.15	58.71	57.51	56.92	56.02	54.83	55.35	57.07	58.05	58.40	
Miscellaneous textile goods.....	78.85	77.11	76.14	76.14	76.14	77.08	74.99	73.84	72.89	70.84	71.97	70.49	72.89	73.60	72.45	
Average weekly hours																
Food and kindred products.....	40.9	41.4	41.6	41.4	41.4	41.4	40.9	40.0	40.2	40.2	40.4	40.7	40.9	40.9	41.0	
Meat products.....	41.6	42.1	41.7	40.5	41.6	41.9	41.2	40.2	40.1	39.2	40.3	40.8	41.3	40.7	41.2	
Dairy products.....	42.1	42.2	43.0	42.6	43.4	43.1	42.6	42.1	42.2	42.1	42.1	42.2	42.2	42.3	42.4	
Canned and preserved food, except meats.....	37.0	39.1	40.7	40.6	38.1	37.6	38.2	35.8	36.8	37.3	37.0	36.6	36.1	38.6	38.4	
Grain mill products.....	44.6	45.4	45.7	46.4	46.2	45.7	43.7	43.3	43.4	43.8	44.5	44.4	44.0	44.2	44.1	
Bakery products.....	40.2	40.1	40.2	40.3	40.8	40.9	40.5	39.8	39.9	39.8	39.4	39.6	40.2	40.1	40.2	
Sugar.....	46.5	45.0	41.4	41.9	42.3	40.8	41.6	40.7	42.1	42.9	43.4	52.5	51.8	44.2	44.1	
Confectionery and related products.....	40.0	40.6	40.7	40.2	39.2	39.9	39.7	39.2	39.4	39.4	39.5	38.6	39.5	39.4	39.4	
Beverages.....	39.5	40.1	40.9	40.8	41.7	40.7	39.9	39.7	39.4	39.0	39.2	39.3	39.7	40.3	40.5	
Miscellaneous food and kindred products.....	43.5	43.5	42.2	42.2	42.6	42.5	42.2	41.5	41.7	42.5	42.4	41.9	43.1	42.4	42.6	
Tobacco manufactures.....	38.3	40.8	41.6	40.1	38.2	39.4	38.1	38.2	36.6	37.0	37.7	39.1	37.6	38.2	39.1	
Cigarettes.....	40.2	41.2	39.3	40.3	39.0	41.2	39.0	39.4	37.2	38.0	38.2	40.6	39.0	38.6	40.2	
Cigars.....	39.4	39.4	38.9	38.5	37.5	37.9	36.9	36.6	35.7	35.9	37.1	37.1	39.1	37.4	37.5	
Textile mill products.....	41.5	40.9	40.3	40.5	39.9	40.2	39.5	39.0	38.8	38.5	38.0	38.1	38.9	39.5	40.4	
Cotton broad woven fabrics.....	42.0	41.7	40.7	40.3	39.8	39.9	39.4	39.1	38.7	38.3	38.4	39.2	39.2	40.1	40.6	
Silk and synthetic broad woven fabrics.....	43.1	42.3	41.8	42.1	41.3	41.3	41.0	40.3	39.9	39.9	39.8	40.1	41.0	41.4	42.1	
Weaving and finishing broad wools.....	41.5	40.7	41.7	42.0	42.5	42.6	41.9	40.8	40.1	40.2	39.1	37.8	37.9	40.6	42.3	
Narrow fabrics and smallwares.....	41.4	40.3	40.6	40.3	40.2	40.8	40.2	40.0	39.9	39.9	38.7	38.1	38.8	39.8	40.8	
Knitting.....	39.6	39.2	38.4	39.2	38.7	38.7	37.9	37.1	37.2	37.0	35.9	35.7	37.6	37.7	38.6	
Finishing textiles, except wool and knit.....	42.6	41.9	40.9	41.3	40.5	42.4	41.7	41.4	41.4	41.6	39.6	39.7	40.6	40.3	41.7	
Floor covering.....	43.5	42.8	42.3	42.0	37.7	40.8	39.1	39.4	39.6	39.0	39.1	39.7	40.3	39.9	41.2	
Yarn and thread.....	41.6	40.8	40.8	40.5	39.9	40.1	39.4	38.6	38.2	37.6	36.8	37.4	38.3	38.7	40.0	
Miscellaneous textile goods.....	41.5	40.8	40.5	40.5	40.5	41.0	40.1	39.7	39.4	38.5	38.9	38.1	39.4	40.0	40.7	
Average hourly earnings																
Food and kindred products.....	\$2.19	\$2.17	\$2.15	\$2.14	\$2.18	\$2.18	\$2.19	\$2.18	\$2.17	\$2.17	\$2.17	\$2.14	\$2.12	\$2.11	\$2.02	
Meat products.....	2.42	2.39	2.36	2.35	2.36	2.35	2.37	2.35	2.38	2.39	2.40	2.38	2.36	2.33	2.24	
Dairy products.....	2.22	2.21	2.22	2.17	2.18	2.17	2.17	2.17	2.16	2.15	2.16	2.15	2.15	2.12	2.04	
Canned and preserved food, except meats.....	1.84	1.85	1.83	1.83	1.84	1.87	1.89	1.91	1.86	1.84	1.82	1.81	1.76	1.78	1.70	
Grain mill products.....	2.30	2.25	2.25	2.20	2.17	2.15	2.18	2.20	2.20	2.20	2.20	2.18	2.20	2.13	2.06	
Bakery products.....	2.21	2.21	2.20	2.19	2.19	2.19	2.17	2.15	2.15	2.15	2.14	2.14	2.14	2.09	1.99	
Sugar.....	2.10	2.10	2.39	2.38	2.41	2.37	2.41	2.31	2.32	2.27	2.25	1.92	1.93	2.12	2.01	
Confectionery and related products.....	1.83	1.84	1.86	1.84	1.87	1.86	1.85	1.84	1.81	1.80	1.79	1.75	1.75	1.76	1.69	
Beverages.....	2.52	2.52	2.51	2.47	2.52	2.48	2.46	2.48	2.46	2.43	2.42	2.44	2.44	2.40	2.31	
Miscellaneous food and kindred products.....	2.05	2.04	2.08	2.07	2.07	2.05	2.05	2.03	2.02	2.02	2.02	2.00	1.98	1.98	1.92	
Tobacco manufactures.....	1.80	1.70	1.62	1.70	1.86	1.88	1.86	1.86	1.79	1.76	1.73	1.74	1.71	1.70	1.64	
Cigarettes.....	2.23	2.24	2.15	2.15	2.15	2.18	2.18	2.18	2.12	2.12	2.11	2.13	2.13	2.08	2.00	
Cigars.....	1.52	1.51	1.51	1.49	1.47	1.49	1.47	1.46	1.46	1.45	1.46	1.46	1.48	1.44	1.41	
Textile mill products.....	1.65	1.64	1.64	1.63	1.62	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.61	1.61	1.56	
Cotton broad woven fabrics.....	1.60	1.60	1.59	1.58	1.57	1.57	1.57	1.57	1.57	1.56	1.56	1.56	1.56	1.56	1.50	
Silk and synthetic broad woven fabrics.....	1.68	1.67	1.66	1.67	1.65	1.66	1.65	1.65	1.64	1.64	1.64	1.64	1.65	1.65	1.59	
Weaving and finishing broad wools.....	1.77	1.77	1.77	1.77	1.76	1.75	1.75	1.74	1.73	1.72	1.72	1.72	1.72	1.72	1.67	
Narrow fabrics and smallwares.....	1.72	1.72	1.72	1.71	1.69	1.69	1.69	1.68	1.66	1.66	1.66	1.68	1.69	1.66	1.61	
Knitting.....	1.59	1.58	1.57	1.54	1.54	1.54	1.54	1.54	1.54	1.53	1.53	1.52	1.53	1.51	1.48	
Finishing textiles, except wool and knit.....	1.81	1.81	1.79	1.79	1.80	1.80	1.80	1.80	1.80	1.81	1.79	1.79	1.79	1.78	1.73	
Floor covering.....	1.76	1.76	1.76	1.76	1.79	1.77	1.76	1.77	1.76	1.76	1.77	1.77	1.75	1.77	1.76	
Yarn and thread.....	1.52	1.51	1.52	1.51	1.50	1.50	1.49	1.49	1.49	1.49	1.49	1.48	1.49	1.50	1.46	
Miscellaneous textile goods.....	1.90	1.89	1.88	1.88	1.88	1.88	1.87	1.86	1.85	1.84	1.85	1.85	1.85	1.84	1.78	

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. 112.

Industry	1961												1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959	
	Average weekly earnings															
Manufacturing—Continued																
Nondurable goods—Continued																
Apparel and related products.....	\$60.62	\$60.14	\$56.93	\$59.86	\$58.16	\$56.64	\$55.84	\$56.51	\$57.51	\$56.19	\$55.06	\$52.79	\$56.35	\$56.45	\$56.63	
Men's and boys' suits and coats.....	70.81	68.60	65.43	69.84	68.40	68.32	67.71	65.51	65.55	66.34	67.45	63.27	67.81	68.27	65.28	
Men's and boys' furnishings.....	52.97	52.97	51.52	50.92	49.08	48.91	47.75	47.30	48.06	46.90	46.71	46.15	47.03	48.55	49.14	
Women's, misses', and juniors' outerwear.....	63.54	63.88	58.66	65.05	63.61	58.86	58.21	61.54	63.14	59.94	57.28	54.16	59.40	58.76	59.68	
Women's and children's undergarments.....	57.99	57.15	54.90	54.31	52.64	52.35	52.33	53.14	53.21	52.04	51.16	49.20	53.14	51.91	51.97	
Hats, caps, and millinery.....	63.34	64.26	59.19	66.25	66.06	62.12	57.62	59.51	64.42	67.69	62.84	55.08	58.14	60.54	61.90	
Girls' and children's outerwear.....	54.96	54.47	49.53	53.49	53.72	53.87	51.39	50.66	52.69	54.09	52.10	46.51	51.41	51.54	50.84	
Fur goods and miscellaneous apparel.....	65.84	65.14	59.49	61.46	61.03	59.83	58.45	57.56	58.22	56.86	56.93	55.44	60.86	58.74	60.62	
Miscellaneous fabricated textile products.....	63.96	62.81	61.55	62.65	61.02	62.10	60.96	60.70	60.48	59.89	59.45	60.35	62.59	60.48	59.75	
Paper and allied products.....	102.15	101.91	102.15	101.05	100.58	100.39	97.90	97.90	96.14	95.68	95.22	94.30	95.72	95.37	93.30	
Paper and pulp.....	112.71	111.51	111.51	111.13	110.88	109.56	108.13	108.38	106.03	106.21	105.29	105.47	105.96	105.46	102.75	
Paperboard.....	111.25	113.28	113.28	110.38	112.52	110.88	108.50	107.57	105.40	103.25	105.90	105.25	105.65	105.16	102.90	
Converted paper and paperboard products.....	89.44	89.01	88.38	88.18	87.54	87.34	85.05	85.26	85.47	85.06	83.42	82.99	84.25	83.23	81.16	
Paperboard containers and boxes.....	93.93	93.93	95.00	93.06	92.18	91.98	88.75	88.34	87.08	86.24	85.39	83.10	86.30	86.10	85.27	
Printing, publishing, and allied industries.....	105.71	105.71	106.37	105.33	104.39	104.67	104.12	104.01	103.90	103.36	102.98	103.36	103.57	102.80	99.72	
Newspaper publishing and printing.....	109.43	108.77	107.74	107.02	106.07	106.95	107.68	106.36	105.05	104.69	104.11	103.00	107.75	105.33	101.84	
Periodical publishing and printing.....	110.04	115.75	119.48	113.93	109.30	107.29	105.65	104.99	107.80	108.23	109.14	105.81	109.85	109.18	105.60	
Books.....	99.38	100.04	100.78	101.52	100.04	99.88	100.12	97.36	96.96	97.28	96.24	93.14	96.08	95.82	92.34	
Commercial printing.....	106.47	107.25	107.92	106.98	106.04	105.65	104.99	105.03	106.35	104.61	104.76	103.30	104.01	103.88	100.86	
Bookbinding and related industries.....	82.19	82.51	82.73	82.82	81.58	82.39	81.53	81.15	81.15	81.62	82.13	79.61	80.22	78.87	77.16	
Other publishing and printing industries.....	108.25	108.08	108.67	108.19	107.80	108.19	108.30	108.39	108.57	107.80	107.42	104.90	106.43	106.37	104.06	
	Average weekly hours															
Apparel and related products.....	36.3	35.8	34.5	36.5	35.9	35.4	34.9	35.1	35.5	34.9	34.2	33.2	35.0	35.5	36.3	
Men's and boys' suits and coats.....	36.5	35.0	33.9	36.0	36.0	35.4	34.9	34.3	34.5	35.1	35.5	33.3	35.5	36.9	37.3	
Men's and boys' furnishings.....	37.3	37.3	36.8	38.0	36.9	36.5	35.9	35.3	35.6	35.0	34.6	34.7	35.1	36.5	37.8	
Women's, misses', and juniors' outerwear.....	33.8	33.1	31.2	34.6	34.2	32.7	32.7	34.0	34.5	33.3	32.0	30.6	33.0	33.2	34.1	
Women's and children's undergarments.....	37.9	37.6	36.6	37.2	36.3	36.1	35.6	36.4	36.2	35.4	34.8	33.7	36.4	35.8	36.6	
Hats, caps, and millinery.....	36.4	35.7	32.7	36.6	35.9	35.7	34.3	34.8	36.6	37.4	35.5	32.4	34.4	35.2	36.2	
Girls' and children's outerwear.....	36.4	35.6	32.8	35.9	36.3	36.4	35.2	34.7	35.6	36.3	35.2	32.3	35.7	35.3	35.8	
Fur goods and miscellaneous apparel.....	37.2	36.8	35.2	36.8	35.9	35.4	35.0	35.1	35.5	35.1	34.5	33.4	35.8	35.6	36.3	
Miscellaneous fabricated textile products.....	38.3	38.3	37.3	38.2	37.9	38.1	37.4	37.7	37.8	37.2	36.7	36.8	38.4	37.8	38.3	
Paper and allied products.....	43.1	43.0	43.1	43.0	42.8	42.9	42.2	42.2	41.8	41.6	41.4	41.0	41.8	42.2	42.8	
Paper and pulp.....	44.2	43.9	43.9	44.1	44.0	44.0	43.6	43.7	43.1	43.0	42.8	42.7	42.9	43.4	44.1	
Paperboard.....	43.8	44.6	44.6	43.8	44.3	44.0	43.4	43.2	42.5	41.8	42.7	42.1	42.6	43.1	43.6	
Converted paper and paperboard products.....	41.6	41.4	41.3	41.4	41.1	41.2	40.5	40.6	40.7	40.7	40.3	39.9	40.7	40.8	41.2	
Paperboard containers and boxes.....	42.5	42.5	42.6	42.3	41.9	42.0	40.9	40.9	40.5	40.3	39.9	39.2	40.9	41.0	41.8	
Printing, publishing, and allied industries.....	38.3	38.3	38.4	38.3	38.1	38.2	38.0	38.1	38.2	38.0	38.0	38.0	38.5	38.5	38.5	
Newspaper publishing and printing.....	36.6	36.5	36.4	36.4	36.2	36.5	36.5	36.3	36.1	36.1	35.9	37.2	36.9	36.7	36.5	
Periodical publishing and printing.....	39.3	40.9	41.2	40.4	39.6	39.3	38.7	38.6	39.2	39.5	39.4	38.9	39.8	39.7	39.7	
Books.....	40.4	40.5	40.8	41.1	41.0	40.6	41.2	40.4	40.4	40.2	40.1	39.3	40.2	40.6	40.5	
Commercial printing.....	39.0	39.0	39.1	38.9	38.7	38.7	38.6	38.9	39.1	38.6	38.8	38.4	39.1	39.2	39.4	
Bookbinding and related industries.....	37.7	38.2	38.3	38.7	38.3	38.5	38.1	38.1	38.1	38.5	38.2	37.2	38.2	38.1	38.2	
Other publishing and printing industries.....	38.8	38.6	38.4	38.5	38.5	38.5	38.0	38.3	38.5	38.5	38.5	37.6	38.7	38.4	38.4	
	Average hourly earnings															
Apparel and related products.....	1.67	\$1.68	\$1.65	\$1.64	\$1.62	\$1.60	\$1.60	\$1.61	\$1.62	\$1.61	\$1.59	\$1.61	\$1.59	\$1.56		
Men's and boys' suits and coats.....	1.94	1.96	1.93	1.94	1.90	1.93	1.94	1.91	1.90	1.89	1.90	1.91	1.91	1.85	1.75	
Men's and boys' furnishings.....	1.42	1.42	1.40	1.34	1.33	1.34	1.33	1.34	1.35	1.34	1.35	1.33	1.34	1.33	1.30	
Women's, misses', and juniors' outerwear.....	1.88	1.93	1.88	1.88	1.86	1.80	1.78	1.81	1.83	1.80	1.79	1.77	1.80	1.77	1.75	
Women's and children's undergarments.....	1.53	1.52	1.50	1.46	1.45	1.45	1.47	1.46	1.47	1.47	1.47	1.46	1.46	1.45	1.42	
Hats, caps, and millinery.....	1.74	1.80	1.81	1.81	1.84	1.74	1.68	1.71	1.76	1.81	1.77	1.70	1.69	1.72	1.71	
Girls' and children's outerwear.....	1.51	1.53	1.51	1.49	1.48	1.48	1.46	1.46	1.48	1.49	1.48	1.44	1.44	1.46	1.42	
Fur goods and miscellaneous apparel.....	1.77	1.77	1.69	1.67	1.70	1.69	1.67	1.64	1.64	1.62	1.65	1.66	1.70	1.65	1.67	
Miscellaneous fabricated textile products.....	1.67	1.64	1.65	1.64	1.61	1.63	1.63	1.61	1.60	1.61	1.62	1.64	1.63	1.60	1.56	
Paper and allied products.....	2.37	2.37	2.37	2.35	2.35	2.34	2.32	2.32	2.30	2.30	2.30	2.29	2.29	2.26	2.18	
Paper and pulp.....	2.55	2.54	2.54	2.52	2.52	2.49	2.48	2.48	2.46	2.47	2.46	2.47	2.47	2.43	2.33	
Paperboard.....	2.54	2.54	2.54	2.52	2.54	2.52	2.50	2.49	2.48	2.47	2.48	2.50	2.48	2.44	2.36	
Converted paper and paperboard products.....	2.15	2.15	2.14	2.13	2.13	2.12	2.10	2.10	2.10	2.09	2.07	2.08	2.07	2.04	1.97	
Paperboard containers and boxes.....	2.21	2.21	2.23	2.20	2.20	2.19	2.17	2.16	2.15	2.14	2.14	2.12	2.11	2.10	2.04	
Printing, publishing, and allied industries.....	2.76	2.76	2.77	2.75	2.74	2.74	2.74	2.73	2.72	2.72	2.71	2.72	2.69	2.67	2.59	
Newspaper publishing and printing.....	2.99	2.98	2.96	2.94	2.93	2.93	2.95	2.93	2.91	2.90	2.90	2.93	2.92	2.87	2.79	
Periodical publishing and printing.....	2.80	2.83	2.90	2.82	2.76	2.73	2.73	2.72	2.75	2.74	2.77	2.72	2.76	2.75	2.66	
Books.....	2.46	2.47	2.47	2.47	2.44	2.46	2.43	2.41	2.40	2.42	2.40	2.37	2.39	2.36	2.28	
Commercial printing.....	2.73	2.75	2.76	2.75	2.74	2.73	2.72	2.70	2.72	2.71	2.70	2.69	2.66	2.65	2.56	
Bookbinding and related industries.....	2.18	2.16	2.16	2.14	2.13	2.14	2.14	2.13	2.13	2.12	2.15	2.14	2.10	2.07	2.02	
Other publishing and printing industries.....	2.79	2.80	2.83	2.81	2.80	2.81	2.85	2.83	2.82	2.80	2.79	2.79	2.75	2.77	2.71	

See footnotes at end of table.

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TABLE C-1. Gross hours and earnings of production workers,¹ by industry—Continued

Revised series; see box, p. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
	Average weekly earnings														
Manufacturing—Continued															
<i>Nondurable goods—Continued</i>															
Chemicals and allied products.....	\$109.52	\$108.58	\$107.53	\$107.49	\$107.90	\$108.00	\$105.06	\$104.24	\$104.24	\$103.89	\$104.14	\$103.38	\$103.98	\$103.25	\$99.36
Industrial chemicals.....	123.35	123.19	121.60	121.51	122.06	121.80	119.81	119.11	118.53	117.83	118.40	117.55	118.28	117.31	113.15
Plastics and synthetics, except glass.....	111.09	109.52	108.05	107.90	108.94	109.72	105.88	105.32	104.65	103.89	103.38	104.04	103.98	104.17	100.50
Drugs.....	96.52	95.88	95.18	93.96	93.43	94.77	93.26	92.46	92.97	92.62	92.34	89.89	92.29	90.68	87.51
Soap, cleaners, and toilet goods.....	100.04	102.58	100.28	100.60	99.22	101.02	97.68	97.68	96.32	96.08	96.32	94.64	95.99	94.77	90.54
Paints, varnishes, and allied products.....	100.37	98.58	98.42	99.39	100.12	100.43	99.05	97.68	96.48	95.04	94.33	94.64	95.91	95.65	92.70
Agricultural chemicals.....	85.48	85.87	84.04	84.66	85.07	84.00	82.68	81.46	84.29	83.50	84.12	83.75	83.50	82.37	80.17
Other chemical products.....	104.33	103.09	103.34	102.75	102.51	101.26	99.46	98.98	98.57	98.09	99.53	98.40	98.71	97.06	94.16
Petroleum refining and related industries															
Petroleum refining.....	126.16	125.93	126.88	122.59	126.42	126.24	123.30	124.42	121.80	121.00	123.90	118.73	119.02	118.78	117.42
Other petroleum and coal products.....	131.75	129.65	131.29	126.95	131.24	130.38	128.21	129.56	127.17	126.45	129.58	123.62	124.23	123.22	121.99
Other petroleum and coal products.....	101.76	110.74	107.93	103.81	105.70	109.66	101.24	99.41	95.17	91.80	96.12	95.88	95.24	99.26	97.61
Rubber and miscellaneous plastic products															
Tires and inner tubes.....	100.36	98.49	98.74	97.85	98.90	97.03	95.04	93.69	91.89	91.49	92.51	91.96	92.43	92.97	94.16
Other rubber products.....	131.57	126.14	127.70	125.96	128.86	121.88	115.20	114.82	110.56	110.11	113.24	117.21	113.92	116.33	120.64
Miscellaneous plastic products.....	94.76	92.80	92.57	91.30	91.53	91.35	91.58	90.27	88.13	87.91	87.91	86.30	88.18	87.82	85.38
Miscellaneous plastic products.....	83.64	83.64	84.26	83.44	83.03	84.67	83.03	81.20	80.80	80.20	79.99	78.56	79.60	79.40	78.53
Leather and leather products															
Leather tanning and finishing.....	64.81	62.76	61.88	62.79	63.58	63.29	61.46	59.95	61.62	61.55	62.75	58.35	60.06	60.52	60.26
Footwear, except rubber.....	86.40	85.57	85.57	85.39	84.77	85.41	83.92	84.77	82.68	80.85	81.06	81.66	83.10	81.74	79.39
Other leather products.....	61.75	58.93	59.24	60.64	61.66	61.07	58.97	56.86	59.33	59.73	60.86	56.25	56.64	58.04	58.28
Other leather products.....	64.35	63.53	59.33	61.40	60.86	60.75	59.62	59.09	60.16	60.00	60.38	55.81	60.80	58.62	57.99
	Average weekly hours														
Chemicals and allied products.....	41.8	41.6	41.2	41.5	41.5	41.7	41.2	41.2	41.2	40.9	41.0	40.7	41.1	41.3	41.4
Industrial chemicals.....	42.1	41.9	41.5	41.9	41.8	42.0	41.6	41.5	41.3	41.2	41.4	41.1	41.5	41.6	41.6
Plastics and synthetics, except glass.....	42.4	41.8	41.4	41.5	41.9	42.2	41.2	41.3	41.2	40.9	40.7	40.8	41.1	41.5	41.7
Drugs.....	40.9	40.8	40.5	40.5	40.1	40.5	40.2	40.2	40.6	40.4	40.5	39.6	40.3	40.3	40.7
Soap, cleaners, and toilet goods.....	41.0	41.7	41.1	41.4	41.0	41.4	40.7	40.7	40.3	40.2	40.3	39.6	40.5	40.5	40.6
Paints, varnishes, and allied products.....	40.8	40.4	40.5	40.9	41.2	41.5	41.1	40.7	40.2	39.6	39.8	39.6	40.3	40.7	41.2
Agricultural chemicals.....	41.9	42.3	41.4	41.5	41.7	42.0	42.4	43.1	44.6	42.6	42.7	42.3	42.6	42.9	43.1
Other chemical products.....	41.9	41.4	41.5	41.6	41.5	41.5	41.1	40.9	40.9	40.7	41.3	41.0	41.3	41.3	41.3
Petroleum refining and related industries															
Petroleum refining.....	41.5	41.7	41.6	41.0	42.0	41.8	41.1	41.2	40.6	40.2	41.3	40.8	40.9	41.1	41.2
Other petroleum and coal products.....	41.3	40.9	40.9	40.3	41.4	41.0	40.7	41.0	40.5	40.4	41.4	40.8	41.0	40.8	40.8
Other petroleum and coal products.....	42.4	45.2	44.6	43.8	44.6	45.5	42.9	42.3	41.2	39.4	40.9	40.8	40.7	42.6	43.0
Rubber and miscellaneous plastic products															
Tires and inner tubes.....	41.3	40.7	40.8	40.6	40.7	40.6	40.1	39.7	39.1	39.1	39.2	38.8	39.5	39.9	41.3
Other rubber products.....	41.9	40.3	40.8	40.5	41.3	39.7	38.4	38.4	37.1	37.2	38.0	39.2	38.1	39.3	41.6
Miscellaneous plastic products.....	41.2	40.7	40.6	40.4	40.5	40.6	40.7	40.3	39.7	39.6	39.6	38.7	39.9	40.1	41.3
Miscellaneous plastic products.....	41.0	41.0	41.1	40.9	40.5	41.3	40.7	40.2	40.0	39.9	39.6	38.7	40.0	40.1	40.9
Leather and leather products															
Leather tanning and finishing.....	37.9	36.7	36.4	37.6	38.3	37.9	36.8	35.9	36.9	37.3	37.8	35.8	36.4	36.9	37.9
Footwear, except rubber.....	40.0	39.8	39.8	39.9	39.8	40.1	39.4	39.8	39.0	38.5	38.6	38.7	39.2	39.3	39.3
Other leather products.....	37.2	35.5	35.9	37.2	38.3	37.7	36.4	35.1	36.4	37.1	37.8	35.6	35.4	36.5	37.6
Other leather products.....	39.0	38.5	36.4	37.9	37.8	37.5	36.8	36.7	37.6	37.5	37.5	35.1	38.0	37.1	37.9
	Average hourly earnings														
Chemicals and allied products.....	\$2.62	\$2.61	\$2.61	\$2.59	\$2.60	\$2.59	\$2.55	\$2.53	\$2.53	\$2.54	\$2.54	\$2.54	\$2.53	\$2.50	\$2.40
Industrial chemicals.....	2.93	2.94	2.93	2.90	2.92	2.90	2.88	2.87	2.87	2.86	2.86	2.86	2.85	2.82	2.72
Plastics and synthetics, except glass.....	2.62	2.62	2.61	2.60	2.60	2.60	2.57	2.55	2.54	2.54	2.54	2.55	2.53	2.51	2.41
Drugs.....	2.36	2.35	2.35	2.32	2.33	2.34	2.32	2.30	2.29	2.29	2.28	2.27	2.29	2.25	2.15
Soap, cleaners, and toilet goods.....	2.44	2.46	2.44	2.43	2.42	2.44	2.40	2.40	2.39	2.39	2.39	2.39	2.37	2.34	2.23
Paints, varnishes, and allied products.....	2.46	2.44	2.43	2.43	2.43	2.42	2.41	2.40	2.40	2.40	2.37	2.39	2.38	2.35	2.25
Agricultural chemicals.....	2.04	2.03	2.03	2.04	2.04	2.00	1.95	1.89	1.89	1.96	1.97	1.98	1.96	1.92	1.86
Other chemical products.....	2.49	2.49	2.49	2.47	2.47	2.44	2.42	2.42	2.41	2.41	2.41	2.40	2.39	2.35	2.28
Petroleum refining and related industries															
Petroleum refining.....	3.04	3.02	3.05	2.99	3.01	3.02	3.00	3.02	3.00	3.01	3.00	2.91	2.91	2.89	2.85
Other petroleum and coal products.....	3.19	3.17	3.21	3.15	3.17	3.18	3.15	3.16	3.14	3.13	3.13	3.03	3.03	3.02	2.99
Other petroleum and coal products.....	2.40	2.45	2.42	2.37	2.37	2.41	2.36	2.35	2.31	2.33	2.35	2.35	2.34	2.33	2.27
Rubber and miscellaneous plastic products															
Tires and inner tubes.....	2.43	2.42	2.42	2.41	2.43	2.39	2.37	2.36	2.35	2.34	2.36	2.37	2.34	2.33	2.28
Other rubber products.....	3.14	3.13	3.12	3.11	3.12	3.07	3.00	2.99	2.98	2.96	2.96	2.99	2.99	2.96	2.90
Miscellaneous plastic products.....	2.30	2.28	2.28	2.26	2.26	2.25	2.25	2.24	2.22	2.22	2.22	2.23	2.21	2.19	2.14
Miscellaneous plastic products.....	2.04	2.04	2.05	2.04	2.05	2.05	2.04	2.02	2.02	2.01	2.02	2.03	1.99	1.98	1.92
Leather and leather products															
Leather tanning and finishing.....	1.71	1.71	1.70	1.67	1.66	1.67	1.67	1.67	1.67	1.65	1.66	1.63	1.65	1.64	1.59
Footwear, except rubber.....	2.16	2.15	2.15	2.14	2.13	2.13	2.13	2.13	2.12	2.10	2.10	2.11	2.12	2.08	2.02
Other leather products.....	1.66	1.66	1.65	1.63	1.61	1.62	1.62	1.62	1.63	1.61	1.61	1.58	1.60	1.59	1.55
Other leather products.....	1.65	1.65	1.63	1.62	1.61	1.62	1.62	1.61	1.60	1.60	1.61	1.59	1.60	1.58	1.53

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. 212.

Industry	1961											1960		Annual average	
	Nov. ¹	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Average weekly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ²		\$112.41	\$112.71	\$114.48	\$111.49	\$114.38	\$113.95	\$108.27	\$111.41	\$115.02	\$108.92	\$111.04	\$106.92	\$108.84	\$101.84
Local and interurban passenger transit:															
Local and suburban transportation	\$99.99	98.24	98.67	99.16	98.47	99.41	98.06	97.16	97.13	97.16	95.34	98.31	96.11	94.82	91.57
Intercity and rural bus lines	111.34	111.57	119.97	116.77	117.13	112.49	108.94	112.58	106.14	108.03	107.68	104.33	104.00	105.22	100.01
Motor freight transportation and storage	110.35	111.67	111.14	111.19	108.42	109.30	106.55	104.45	103.53	103.63	102.06	103.73	103.82	104.17	102.12
Pipeline transportation	130.73	133.80	133.50	130.33	137.03	124.42	128.95	133.06	128.16	129.03	135.29	127.08	124.12	124.53	124.14
Communication:															
Telephone communication	95.35	96.64	97.53	93.62	93.46	92.12	91.03	90.17	90.02	90.71	90.48	91.64	92.92	89.50	85.46
Telegraph communication ⁴	102.92	104.33	105.25	104.33	104.90	105.33	106.00	102.51	103.17	102.01	103.00	100.77	100.98	100.01	95.99
Radio and television broadcasting	118.94	121.59	122.29	119.27	118.81	117.50	117.66	119.58	118.04	118.80	120.51	121.28	122.61	121.13	115.50
Electric, gas, and sanitary services:															
Electric companies and systems	115.64	114.95	114.26	112.07	112.34	110.98	110.70	110.43	110.30	110.84	110.84	112.06	111.24	108.65	103.73
Gas companies and systems	115.36	114.39	114.54	113.44	113.71	112.20	111.52	110.84	110.98	110.57	110.84	111.79	111.51	109.45	104.81
Combined utility systems	107.94	108.32	105.26	103.12	103.94	102.36	102.36	102.77	102.31	103.63	103.63	105.16	104.08	100.69	97.51
Water, steam, and sanitary systems	126.05	125.14	124.01	121.88	121.25	120.66	119.48	119.07	119.54	121.42	120.13	121.84	120.83	117.26	110.70
	94.48	93.61	94.35	94.16	93.43	92.84	92.89	92.16	91.08	92.80	91.53	90.58	91.62	89.84	86.11
Average weekly hours															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ²		42.1	41.9	43.2	41.6	43.0	43.0	40.4	42.2	42.6	41.1	41.9	40.5	41.7	41.4
Local and interurban passenger transit:															
Local and suburban transportation	43.1	42.9	42.9	43.3	43.0	43.6	43.2	42.8	42.6	42.8	42.0	43.5	43.1	43.1	43.4
Intercity and rural bus lines	41.7	42.1	44.6	43.9	44.2	43.1	41.9	43.3	41.3	42.7	41.9	41.9	41.6	42.6	42.2
Motor freight transportation and storage	41.8	42.3	42.1	42.6	41.7	42.2	41.3	40.8	40.6	40.8	40.5	41.0	41.2	41.5	42.2
Pipeline transportation	40.1	40.3	40.7	40.1	41.4	38.4	39.8	40.2	39.8	39.7	41.5	40.6	40.3	40.3	40.7
Communication:															
Telephone communication	39.4	40.1	40.3	39.5	39.6	39.2	38.9	38.7	38.8	39.1	39.0	39.5	40.4	39.6	39.2
Telegraph communication ⁴	41.5	41.9	42.1	41.9	42.3	42.3	42.4	41.5	41.6	41.3	41.7	41.3	41.9	42.2	42.1
Radio and television broadcasting	38.0	38.6	38.7	38.6	38.7	38.4	38.2	38.7	38.2	38.2	38.5	38.5	38.8	38.7	38.5
Electric, gas, and sanitary services:															
Electric companies and systems	41.3	41.2	41.1	40.9	41.0	40.8	40.7	40.6	40.7	40.9	40.9	41.2	41.2	41.0	41.0
Gas companies and systems	41.2	41.0	41.2	41.1	41.2	41.1	41.0	40.9	40.8	40.8	40.9	41.1	41.3	41.3	41.1
Combined utility systems	41.2	41.5	40.8	40.6	40.6	40.3	40.3	40.3	40.6	40.8	40.8	41.4	41.3	40.6	40.8
Water, steam, and sanitary systems	41.6	41.3	41.2	40.9	41.1	40.9	40.5	40.5	40.8	41.3	41.0	41.3	41.1	41.0	41.0
	40.9	40.7	41.2	41.3	40.8	40.9	41.1	40.6	40.3	40.7	40.5	40.8	40.9	41.4	41.6
Average hourly earnings															
Transportation and public utilities:															
Railroad transportation:															
Class I railroads ²		\$2.67	\$2.69	\$2.65	\$2.68	\$2.66	\$2.65	\$2.68	\$2.64	\$2.70	\$2.65	\$2.65	\$2.64	\$2.61	\$2.46
Local and interurban passenger transit:															
Local and suburban transportation	\$2.32	2.29	2.30	2.29	2.29	2.28	2.27	2.27	2.28	2.27	2.27	2.26	2.23	2.20	2.11
Intercity and rural bus lines	2.67	2.65	2.69	2.66	2.65	2.61	2.60	2.60	2.57	2.53	2.57	2.49	2.50	2.47	2.37
Motor freight transportation and storage	2.64	2.64	2.64	2.61	2.60	2.59	2.58	2.56	2.55	2.54	2.52	2.53	2.52	2.51	2.42
Pipeline transportation	3.26	3.32	3.28	3.25	3.31	3.24	3.24	3.31	3.22	3.25	3.26	3.13	3.08	3.09	3.05
Communication:															
Telephone communication	2.42	2.41	2.42	2.37	2.36	2.35	2.34	2.33	2.32	2.32	2.32	2.32	2.30	2.26	2.18
Telegraph communication ⁴	2.48	2.49	2.50	2.49	2.48	2.49	2.50	2.47	2.48	2.47	2.47	2.44	2.41	2.37	2.28
Radio and television broadcasting	3.13	3.15	3.16	3.09	3.07	3.06	3.08	3.09	3.09	3.11	3.13	3.15	3.16	3.13	3.00
Electric, gas, and sanitary services:															
Electric companies and systems	2.80	2.79	2.78	2.74	2.74	2.72	2.72	2.72	2.71	2.71	2.71	2.72	2.70	2.65	2.53
Gas companies and systems	2.80	2.79	2.78	2.76	2.76	2.73	2.72	2.71	2.72	2.71	2.71	2.72	2.70	2.65	2.55
Combined utility systems	2.62	2.61	2.58	2.54	2.56	2.54	2.54	2.55	2.52	2.54	2.54	2.54	2.52	2.48	2.39
Water, steam, and sanitary systems	3.03	3.03	3.01	2.98	2.95	2.95	2.95	2.94	2.93	2.94	2.93	2.95	2.94	2.86	2.70
	2.31	2.30	2.29	2.28	2.29	2.27	2.26	2.27	2.26	2.28	2.26	2.22	2.24	2.17	2.07

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. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Average weekly earnings															
Wholesale and retail trade ¹	\$72.96	\$73.34	\$73.72	\$73.88	\$74.07	\$73.51	\$72.37	\$71.98	\$71.41	\$71.60	\$71.60	\$70.20	\$71.00	\$70.98	\$69.17
Wholesale trade.....	94.60	94.60	94.77	93.79	94.42	94.19	92.69	92.69	91.66	91.43	91.88	91.30	91.13	91.13	88.91
Motor vehicles and automotive equipment.....	91.57	90.72	89.87	89.25	89.25	88.83	88.41	88.41	87.36	87.36	87.99	87.36	87.57	86.53	84.22
Drugs, chemicals, and allied products.....	95.51	95.44	95.34	93.83	95.11	93.83	93.37	93.13	93.37	92.97	92.80	91.94	92.40	91.20	87.38
Dry goods and apparel.....	94.25	95.88	94.88	93.62	92.72	90.62	90.99	92.10	91.99	91.20	93.65	89.68	90.06	90.68	89.68
Groceries and related products.....	88.82	88.18	89.44	88.61	89.46	87.78	86.31	86.10	84.86	84.66	84.66	85.90	85.28	84.67	81.56
Electrical goods.....	100.45	99.55	99.55	97.28	97.28	97.12	95.76	96.07	95.12	95.76	96.88	95.51	96.63	95.11	93.73
Hardware, plumbing, and heating goods.....	91.94	91.80	91.17	90.32	89.69	89.91	88.66	88.88	88.48	86.83	87.91	87.89	87.89	86.86	84.45
Machinery, equipment, and supplies.....	102.91	103.07	104.30	101.68	101.84	102.41	101.18	100.78	99.88	99.72	99.55	102.16	98.98	99.80	97.99
Retail trade ¹	64.13	64.64	64.60	65.23	65.57	64.90	63.84	63.46	62.70	62.87	63.25	61.82	62.48	62.37	60.76
General merchandise stores.....	49.88	50.66	51.11	51.25	51.39	51.16	50.22	49.74	49.39	49.39	49.74	49.62	48.08	48.58	47.60
Department stores.....	53.78	55.60	56.25	56.03	56.19	55.71	55.55	54.19	53.69	53.51	54.22	53.96	52.86	53.09	52.15
Limited price variety stores.....	37.21	37.67	37.79	38.08	38.53	37.18	35.95	36.27	36.92	36.82	36.51	35.49	35.53	35.53	34.22
Food stores.....	63.37	63.55	63.90	64.59	64.40	63.36	61.95	61.60	61.24	61.42	61.06	61.39	61.92	60.98	58.72
Grocery, meat, and vegetable stores.....	65.15	64.79	65.70	66.05	66.23	65.34	63.90	63.37	63.01	62.83	62.83	63.18	63.71	62.95	60.15
Apparel and accessories stores.....	52.02	52.67	52.10	52.60	52.80	52.55	51.60	51.11	50.42	51.60	51.94	52.24	50.91	51.30	50.40
Men's and boys' apparel stores.....	63.84	64.67	63.54	66.53	66.64	65.05	63.38	62.63	62.12	63.75	66.00	64.47	63.61	63.29	62.54
Women's ready-to-wear stores.....	46.90	47.04	46.31	45.75	46.10	45.83	45.50	45.90	45.16	45.02	45.36	45.89	44.69	44.41	43.31
Family clothing stores.....	51.89	51.54	51.55	52.42	51.77	52.13	51.47	51.10	50.96	51.94	51.05	52.26	50.78	51.01	50.78
Shoe stores.....	51.52	52.80	53.46	54.32	53.88	53.46	52.64	50.88	51.04	52.10	52.16	52.96	51.68	52.33	51.51
Average weekly hours															
Wholesale and retail trade ¹	38.4	38.6	38.8	39.3	39.4	39.1	38.7	38.7	38.6	38.7	38.7	39.0	38.8	39.0	39.3
Wholesale trade.....	40.6	40.6	40.5	40.6	40.7	40.6	40.3	40.3	40.2	40.1	40.3	40.4	40.5	40.5	40.6
Motor vehicles and automotive equipment.....	42.2	42.0	41.8	42.1	42.3	42.1	41.9	41.9	41.6	41.6	41.7	41.6	41.7	41.8	41.9
Drugs, chemicals, and allied products.....	40.3	40.1	40.4	40.1	40.3	40.1	39.9	39.8	39.9	39.9	40.0	39.8	40.0	40.0	39.9
Dry goods and apparel.....	37.7	38.2	37.8	37.6	38.0	37.6	37.6	37.9	37.7	38.0	38.7	38.0	38.0	38.1	38.0
Groceries and related products.....	41.7	41.4	41.6	41.6	42.0	41.6	41.1	41.0	40.8	40.7	40.9	41.9	41.2	41.3	41.4
Electrical goods.....	41.0	40.8	40.8	40.2	40.2	40.3	39.9	39.7	39.8	39.9	40.2	40.3	40.6	40.3	40.4
Hardware, plumbing, and heating goods.....	40.5	40.8	40.7	40.5	40.4	40.5	40.3	40.4	40.4	40.2	40.7	40.5	40.5	40.4	40.6
Machinery, equipment, and supplies.....	41.0	40.9	40.9	41.0	40.9	40.8	40.8	40.8	40.6	40.7	40.8	40.7	40.9	40.9	41.0
Retail trade ¹	37.5	37.8	38.0	38.6	38.8	38.4	38.0	38.0	38.0	38.1	38.1	38.4	38.1	38.5	38.7
General merchandise stores.....	33.7	34.0	34.3	35.1	35.2	34.8	34.4	34.3	34.3	34.3	34.3	34.3	35.7	34.1	34.7
Department stores.....	33.2	33.9	34.3	34.8	34.9	34.6	34.5	34.3	34.2	34.3	34.1	35.5	34.1	34.7	35.0
Limited price variety stores.....	31.8	32.2	32.3	33.4	33.8	32.0	32.1	32.1	32.1	32.3	32.6	33.8	32.3	32.6	32.9
Food stores.....	35.4	35.5	35.9	36.7	36.8	36.0	35.4	35.4	35.4	35.5	35.5	35.9	36.0	36.3	36.7
Grocery, meat, and vegetable stores.....	35.6	35.6	36.1	36.9	37.0	36.3	35.7	35.6	35.6	35.7	35.7	36.1	36.2	36.6	36.9
Apparel and accessories stores.....	34.0	34.2	34.5	35.3	35.2	34.8	34.4	34.3	34.3	34.8	34.4	35.3	34.4	34.9	35.0
Men's and boys' apparel stores.....	36.9	37.6	37.6	37.8	38.3	37.6	37.5	37.5	37.2	37.5	37.5	37.7	37.2	37.9	37.9
Women's ready-to-wear stores.....	33.5	33.6	33.8	34.4	34.4	34.2	33.7	33.5	33.7	33.6	33.6	34.5	33.6	33.9	34.1
Family clothing stores.....	35.3	35.3	35.8	36.4	35.7	36.2	36.5	36.5	36.7	37.1	35.7	37.6	36.8	36.7	36.8
Shoe stores.....	32.0	32.0	32.6	34.6	34.1	32.8	31.9	32.0	32.1	33.4	32.2	33.1	32.3	32.5	32.6
Average hourly earnings															
Wholesale and retail trade ¹	\$1.90	\$1.90	\$1.90	\$1.88	\$1.88	\$1.88	\$1.87	\$1.86	\$1.85	\$1.85	\$1.85	\$1.80	\$1.83	\$1.82	\$1.76
Wholesale trade.....	2.33	2.33	2.34	2.31	2.32	2.32	2.30	2.30	2.28	2.28	2.28	2.26	2.25	2.25	2.19
Motor vehicles and automotive equipment.....	2.17	2.16	2.15	2.12	2.11	2.11	2.11	2.11	2.10	2.10	2.11	2.10	2.10	2.07	2.01
Drugs, chemicals, and allied products.....	2.37	2.38	2.36	2.34	2.36	2.34	2.34	2.34	2.34	2.33	2.32	2.31	2.31	2.28	2.19
Dry goods and apparel.....	2.50	2.51	2.51	2.49	2.44	2.41	2.42	2.43	2.44	2.40	2.42	2.36	2.37	2.38	2.36
Groceries and related products.....	2.13	2.13	2.15	2.13	2.13	2.11	2.10	2.10	2.08	2.08	2.07	2.05	2.07	2.05	1.97
Electrical goods.....	2.45	2.44	2.44	2.42	2.42	2.41	2.40	2.42	2.39	2.40	2.41	2.37	2.38	2.36	2.32
Hardware, plumbing, and heating goods.....	2.27	2.25	2.25	2.23	2.22	2.22	2.20	2.20	2.19	2.16	2.16	2.17	2.17	2.15	2.08
Machinery, equipment, and supplies.....	2.51	2.52	2.55	2.48	2.49	2.51	2.48	2.47	2.46	2.45	2.44	2.51	2.42	2.44	2.39
Retail trade ¹	1.71	1.71	1.70	1.69	1.69	1.69	1.68	1.67	1.65	1.65	1.66	1.61	1.64	1.62	1.57
General merchandise stores.....	1.48	1.49	1.49	1.46	1.46	1.47	1.46	1.45	1.44	1.44	1.45	1.39	1.41	1.40	1.36
Department stores.....	1.62	1.64	1.64	1.61	1.61	1.61	1.61	1.58	1.57	1.56	1.59	1.52	1.55	1.53	1.49
Limited price variety stores.....	1.17	1.17	1.17	1.14	1.14	1.13	1.12	1.13	1.15	1.14	1.12	1.05	1.10	1.09	1.04
Food stores.....	1.79	1.79	1.78	1.76	1.75	1.76	1.75	1.74	1.73	1.73	1.72	1.71	1.72	1.68	1.60
Grocery, meat, and vegetable stores.....	1.83	1.82	1.82	1.79	1.79	1.80	1.79	1.78	1.77	1.76	1.76	1.75	1.76	1.72	1.63
Apparel and accessories stores.....	1.53	1.54	1.51	1.49	1.50	1.51	1.50	1.49	1.47	1.48	1.51	1.48	1.48	1.47	1.44
Men's and boys' apparel stores.....	1.73	1.72	1.69	1.76	1.74	1.73	1.69	1.67	1.67	1.70	1.76	1.71	1.71	1.67	1.65
Women's ready-to-wear stores.....	1.40	1.40	1.37	1.33	1.34	1.34	1.35	1.37	1.34	1.34	1.35	1.33	1.33	1.31	1.27
Family clothing stores.....	1.47	1.46	1.44	1.44	1.45	1.44	1.41	1.40	1.40	1.40	1.43	1.39	1.38	1.39	1.38
Shoe stores.....	1.61	1.65	1.64	1.57	1.58	1.63	1.65	1.59	1.59	1.56	1.62	1.60	1.60	1.61	1.58

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. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Average weekly earnings															
Wholesale and retail trade ⁴ —Continued															
Retail trade ⁴ —Continued															
Furniture and appliance stores.....	\$78.50	\$78.50	\$78.06	\$78.25	\$77.23	\$77.79	\$76.22	\$76.04	\$75.81	\$74.62	\$76.67	\$77.38	\$76.04	\$74.98	\$73.87
Other retail trade.....	73.93	73.87	73.46	74.27	74.69	74.10	72.98	72.56	71.72	71.90	72.07	71.99	71.99	71.57	70.22
Motor vehicle dealers.....	90.25	88.97	87.23	89.49	90.17	90.78	89.04	87.96	86.39	84.67	85.31	86.63	87.91	87.91	86.08
Other vehicle and accessory dealers.....	77.70	78.41	78.77	79.20	79.47	79.39	78.94	77.88	77.53	77.79	77.35	76.64	77.16	77.26	74.36
Drug stores.....	56.30	55.94	56.24	56.93	57.00	56.17	55.13	54.46	54.39	54.02	54.31	54.81	53.86	53.34	51.14
Finance, insurance, and real estate:															
Banking.....	70.31	70.12	69.37	69.19	69.56	68.82	68.63	68.82	69.01	69.01	68.45	67.52	67.53	67.15	65.10
Security dealers and exchanges.....	124.94	124.71	125.36	125.04	127.42	143.45	151.10	152.16	139.38	129.37	119.93	118.08	110.87	117.12	124.07
Insurance carriers.....	90.43	90.35	90.26	90.34	90.05	89.57	89.50	89.08	88.80	88.74	88.90	88.07	87.85	87.41	85.29
Life insurance.....	95.34	95.81	95.61	96.10	95.56	94.90	94.74	93.71	93.93	93.89	94.34	93.60	93.38	93.32	91.52
Accident and health insurance.....	75.72	76.47	75.09	73.68	74.14	73.47	72.92	73.88	73.85	73.27	73.16	72.74	71.83	71.33	68.48
Fire, marine, and casualty insurance.....	86.28	85.16	85.46	85.11	85.11	85.01	85.02	85.27	84.24	84.19	83.99	83.12	82.90	81.96	79.36
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁶	46.36	47.08	45.31	45.21	44.88	44.75	45.20	44.85	45.08	44.97	45.08	45.31	44.57	43.89	42.40
Personal services:															
Laundries, cleaning and dyeing plants.....	49.79	50.05	49.15	48.76	49.66	50.42	50.17	48.51	48.25	47.75	48.13	47.63	48.50	48.11	46.80
Motion pictures:															
Motion picture filming and distributing.....	115.10	114.80	116.00	116.31	119.93	119.50	114.94	115.43	119.48	117.66	115.82	118.94	120.28	113.69	111.79
Average weekly hours															
Wholesale and retail trade ⁴ —Continued															
Retail trade ⁴ —Continued															
Furniture and appliance stores.....	41.1	41.1	41.3	41.4	41.3	41.6	41.2	41.1	41.2	41.0	41.0	41.6	41.1	41.2	41.5
Other retail trade.....	41.3	41.5	41.5	42.2	42.2	42.1	41.7	41.7	41.7	41.8	41.9	42.1	42.1	42.1	42.3
Motor vehicle dealers.....	43.6	43.4	43.4	44.3	44.2	44.5	44.3	44.2	44.3	44.1	44.2	44.2	44.4	44.4	44.6
Other vehicle and accessory dealers.....	43.9	44.3	44.5	45.0	44.9	44.6	44.6	44.5	44.3	44.2	44.2	44.3	44.6	44.4	44.0
Drug stores.....	36.8	36.8	37.0	37.7	38.0	37.7	37.0	36.8	37.0	37.0	37.2	37.8	37.4	37.3	37.6
Finance, insurance, and real estate:															
Banking.....	37.2	37.1	36.9	37.0	37.0	36.8	36.9	37.0	37.1	37.1	37.2	37.1	36.9	37.1	37.2
Security dealers and exchanges.....															
Insurance carriers.....															
Life insurance.....															
Accident and health insurance.....															
Fire, marine, and casualty insurance.....															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁶	38.6	39.9	39.4	41.1	40.8	39.6	39.3	39.0	39.2	39.1	39.2	39.4	39.1	39.9	40.0
Personal services:															
Laundries, cleaning and dyeing plants.....	38.9	39.1	38.7	38.7	39.1	39.7	39.5	38.5	38.6	38.2	38.5	38.1	38.8	38.8	39.0
Motion pictures:															
Motion picture filming and distributing.....															
Average hourly earnings															
Wholesale and retail trade ⁴ —Continued															
Retail trade ⁴ —Continued															
Furniture and appliance stores.....	\$1.91	\$1.91	\$1.89	\$1.89	\$1.87	\$1.87	\$1.85	\$1.85	\$1.84	\$1.82	\$1.87	\$1.86	\$1.85	\$1.82	\$1.78
Other retail trade.....	1.79	1.78	1.77	1.76	1.77	1.76	1.75	1.74	1.72	1.72	1.72	1.71	1.71	1.70	1.66
Motor vehicle dealers.....	2.07	2.05	2.01	2.02	2.04	2.04	2.01	1.99	1.95	1.92	1.93	1.96	1.98	1.98	1.93
Other vehicle and accessory dealers.....	1.77	1.77	1.77	1.76	1.77	1.78	1.77	1.75	1.75	1.76	1.75	1.73	1.73	1.74	1.69
Drug stores.....	1.53	1.52	1.52	1.51	1.50	1.49	1.49	1.48	1.47	1.46	1.46	1.45	1.44	1.43	1.36
Finance, insurance, and real estate:															
Banking.....	1.89	1.89	1.88	1.87	1.88	1.87	1.86	1.86	1.86	1.84	1.84	1.82	1.83	1.81	1.75
Security dealers and exchanges.....															
Insurance carriers.....															
Life insurance.....															
Accident and health insurance.....															
Fire, marine, and casualty insurance.....															
Services and miscellaneous:															
Hotels and lodging places:															
Hotels, tourist courts, and motels ⁶	1.20	1.18	1.15	1.10	1.10	1.13	1.15	1.15	1.15	1.15	1.15	1.15	1.14	1.10	1.06
Personal services:															
Laundries, cleaning and dyeing plants.....	1.28	1.28	1.27	1.26	1.27	1.27	1.27	1.26	1.25	1.25	1.25	1.25	1.25	1.24	1.20
Motion pictures:															
Motion picture filming and distributing.....															

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2.² For employees covered, see footnote 1, table A-3.³ Preliminary.⁴ 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).⁵ Data relate to nonsupervisory employees except messengers.⁶ Excludes eating and drinking places.⁷ Money payments only; additional value of board, room, uniforms, and tips not included.

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. 212.

Industry division and group	1961											1960	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.
Mining.....	41.3	41.5	40.8	40.7	41.6	40.5	40.3	39.9	39.3	40.2	40.4	39.3	39.9
Contract construction.....	37.5	37.2	36.7	37.1	36.9	36.8	36.3	35.7	36.9	38.1	37.5	34.8	36.8
Manufacturing.....	40.6	40.2	39.6	40.0	40.0	39.9	39.8	39.7	39.3	39.3	39.0	38.5	39.3
Durable goods.....	41.2	40.6	39.8	40.5	40.5	40.4	40.2	40.0	39.7	39.6	39.3	39.0	39.7
Ordinance and accessories.....	41.6	41.3	40.9	41.1	40.4	40.7	40.4	40.7	40.7	40.4	40.4	39.7	40.6
Lumber and wood products, except furniture.....	39.5	39.9	39.5	39.6	39.5	39.7	39.5	39.0	38.9	39.2	39.3	38.1	38.4
Furniture and fixtures.....	40.9	40.3	40.4	40.1	40.1	40.1	39.6	39.5	39.0	38.9	38.6	38.9	39.2
Stone, clay, and glass products.....	40.7	40.8	41.0	41.0	41.1	40.9	40.4	40.3	40.4	40.2	40.2	39.7	40.4
Primary metal industries.....	40.6	40.5	40.1	40.2	40.5	39.7	39.5	38.9	38.1	38.0	37.5	37.1	37.7
Fabricated metal products.....	41.5	40.9	39.6	40.8	40.9	40.7	40.5	40.5	40.0	39.8	39.7	38.9	40.2
Machinery.....	41.7	41.4	41.1	41.1	41.0	40.8	40.7	40.7	40.2	40.6	40.4	40.0	40.7
Electrical equipment and supplies.....	40.8	40.5	39.4	40.4	40.1	40.1	39.9	40.2	39.9	39.9	39.8	38.6	39.7
Transportation equipment.....	43.0	40.9	38.0	40.6	40.7	40.6	40.6	40.5	39.8	39.6	38.9	39.3	40.4
Instruments and related products.....	41.1	40.9	40.9	40.9	40.5	40.7	40.6	40.5	40.3	40.4	40.3	39.2	40.3
Miscellaneous manufacturing industries.....	40.1	39.7	39.7	39.4	39.6	39.7	39.3	39.3	39.1	39.4	39.1	37.8	39.2
Nondurable goods.....	39.7	39.6	39.2	39.3	39.5	39.5	39.3	39.3	39.1	38.8	38.7	38.1	38.7
Food and kindred products.....	40.7	41.2	40.9	40.9	41.0	41.3	41.1	40.7	40.9	40.9	40.6	40.5	40.7
Tobacco manufactures.....	38.8	39.4	39.5	39.6	38.0	38.9	38.3	39.8	38.4	38.3	37.7	38.1	38.1
Textile mill products.....	40.9	40.4	40.4	40.2	40.0	40.1	39.9	39.8	38.9	38.6	38.2	37.8	38.4
Apparel and related products.....	36.1	35.7	34.4	35.6	35.7	35.4	35.0	35.7	35.6	34.8	34.4	33.6	34.8
Paper and allied products.....	43.1	42.7	42.7	42.6	42.7	42.8	42.4	42.6	42.0	42.0	41.6	40.9	41.8
Printing, publishing, and allied industries.....	38.2	38.1	38.1	38.2	38.2	38.3	38.0	38.3	38.2	38.2	38.2	37.7	38.4
Chemicals and allied products.....	41.8	41.7	41.2	41.6	41.5	41.5	41.1	41.2	41.3	41.1	41.0	40.4	41.1
Petroleum refining and related industries.....	41.5	41.8	41.0	41.0	41.4	41.6	41.1	41.2	40.8	40.7	41.5	41.2	40.9
Rubber and miscellaneous plastic products.....	41.3	40.4	40.6	40.2	40.3	40.1	40.3	40.5	39.5	39.5	39.4	38.6	39.5
Leather and leather products.....	38.0	37.4	37.0	37.0	37.4	37.6	37.6	37.4	36.8	36.7	36.9	35.6	36.5
Wholesale and retail trade ³	38.7	38.7	38.7	38.8	38.9	38.9	38.9	38.9	38.8	39.0	38.9	38.8	39.1
Wholesale trade.....	40.6	40.5	40.4	40.5	40.5	40.6	40.4	40.5	40.4	40.3	40.3	40.2	40.5
Retail trade ³	37.9	38.0	38.0	37.9	38.2	38.1	38.3	38.2	38.2	38.4	38.3	38.2	38.5

¹ For employees covered, see footnote 1, table A-3.

² Preliminary.

³ Excludes eating and drinking places.

NOTE: The seasonal adjustment method used is described in "New Seasonal Adjustment Factors for Labor Force Components," *Monthly Labor Review*, August 1960, pp. 822-827.

TABLE C-3. Average hourly earnings excluding overtime of production workers in manufacturing, by major industry group¹

Revised series; see box, p. 212.

Major industry group	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Manufacturing.....	\$2.28	\$2.26	\$2.25	\$2.24	\$2.26	\$2.25	\$2.25	\$2.25	\$2.24	\$2.23	\$2.24	\$2.23	\$2.21	\$2.20	\$2.12
Durable goods.....	2.45	2.43	2.41	2.41	2.42	2.42	2.42	2.41	2.40	2.39	2.39	2.40	2.37	2.36	2.28
Ordinance and accessories.....	2.73	2.73	2.72	2.72	2.73	2.72	2.72	2.70	2.69	2.69	2.68	2.67	2.64	2.60	2.52
Lumber and wood products, except furniture.....	1.91	1.93	1.95	1.90	1.91	1.90	1.88	1.87	1.79	1.77	1.78	1.81	1.80	1.82	1.79
Furniture and fixtures.....	1.87	1.86	1.86	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.85	1.84	1.83	1.82	1.77
Stone, clay, and glass products.....	2.28	2.27	2.26	2.26	2.25	2.26	2.25	2.24	2.23	2.23	2.23	2.23	2.22	2.20	2.13
Primary metal industries.....	2.89	2.88	2.85	2.84	2.84	2.83	2.83	2.81	2.79	2.78	2.78	2.77	2.73	2.75	2.68
Fabricated metal products.....	2.43	2.42	2.39	2.41	2.42	2.42	2.42	2.42	2.41	2.41	2.40	2.40	2.38	2.36	2.27
Machinery.....	2.57	2.55	2.55	2.54	2.54	2.54	2.54	2.54	2.53	2.53	2.52	2.51	2.50	2.47	2.40
Electrical equipment and supplies.....	2.30	2.29	2.28	2.29	2.31	2.30	2.30	2.29	2.29	2.28	2.28	2.28	2.26	2.23	2.14
Transportation equipment.....	2.77	2.74	2.71	2.73	2.72	2.72	2.71	2.70	2.70	2.70	2.70	2.71	2.69	2.65	2.56
Instruments and related products.....	2.32	2.32	2.32	2.32	2.33	2.33	2.32	2.32	2.33	2.31	2.32	2.31	2.28	2.26	2.18
Miscellaneous manufacturing industries.....	1.86	1.85	1.86	1.84	1.86	1.87	1.88	1.88	1.89	1.88	1.89	1.87	1.85	1.84	1.79
Nondurable goods.....	2.06	2.06	2.05	2.03	2.05	2.04	2.05	2.05	2.04	2.03	2.04	2.03	2.01	1.99	1.91
Food and kindred products.....	2.11	2.08	2.06	2.05	2.09	2.09	2.11	2.11	2.10	2.09	2.09	2.06	2.04	2.02	1.94
Tobacco manufactures.....	1.78	1.67	1.59	1.67	1.83	1.85	1.84	1.83	1.77	1.74	1.72	1.72	1.68	1.67	1.62
Textile mill products.....	1.58	1.58	1.58	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.56	1.50
Apparel and related products.....	1.64	1.65	1.62	1.61	1.60	1.58	1.58	1.59	1.60	1.59	1.60	1.58	1.58	1.56	1.53
Paper and allied products.....	2.25	2.24	2.24	2.23	2.23	2.22	2.22	2.21	2.21	2.21	2.20	2.20	2.19	2.15	2.07
Printing, publishing, and allied industries.....	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Chemicals and allied products.....	2.54	2.54	2.53	2.52	2.52	2.51	2.48	2.47	2.46	2.48	2.48	2.48	2.47	2.43	2.33
Petroleum refining and related industries.....	2.96	2.94	2.95	2.92	2.92	2.93	2.93	2.95	2.95	2.96	2.94	2.86	2.84	2.82	2.79
Rubber and miscellaneous plastic products.....	2.34	2.33	2.33	2.32	2.34	2.32	2.30	2.30	2.30	2.29	2.31	2.32	2.29	2.26	2.18
Leather and leather products.....	1.67	1.67	1.67	1.64	1.63	1.64	1.64	1.64	1.64	1.62	1.62	1.61	1.63	1.61	1.56

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3. 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 overtime hours of production workers in manufacturing, by industry¹
Revised series; see box, p. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Manufacturing.....	2.8	2.8	2.8	2.6	2.5	2.4	2.2	2.1	2.0	1.9	1.9	2.1	2.2	2.4	2.7
Durable goods.....	2.9	2.7	2.7	2.5	2.3	2.3	2.1	2.0	1.8	1.8	1.8	2.0	2.1	2.4	2.7
Nondurable goods.....	2.8	2.9	2.9	2.8	2.6	2.6	2.3	2.2	2.2	2.1	2.1	2.2	2.3	2.5	2.7
<i>Durable goods</i>															
Ordinance and accessories.....	2.3	2.3	2.0	1.8	1.4	1.5	1.5	2.0	2.0	1.9	1.8	2.1	2.0	2.0	2.1
Ammunition, except for small arms.....	1.4	1.5	1.3	1.3	1.2	1.2	1.3	2.4	2.3	1.8	1.8	1.8	2.1	1.7	2.0
Sighting and fire control equipment.....	3.0	3.0	2.7	2.4	1.8	2.0	2.0	1.7	1.7	1.5	1.4	2.1	2.0	2.7	2.5
Other ordinance and accessories.....	2.8	2.8	2.4	2.1	1.5	1.4	1.4	1.6	2.0	2.3	2.0	2.4	2.0	1.8	1.8
Lumber and wood products, except furniture.....	2.9	3.2	3.2	3.3	3.2	3.2	2.9	2.7	2.4	2.4	2.5	2.3	2.6	2.9	3.2
Sawmills and planing mills.....	2.9	3.1	3.1	3.3	3.3	3.3	3.0	2.6	2.4	2.4	2.6	2.2	2.8	3.0	3.3
Millwork, plywood, and related products.....	2.7	2.9	3.1	3.4	3.1	3.1	2.8	2.9	2.3	1.8	1.9	2.2	2.4	2.6	3.3
Wooden containers.....	2.2	2.5	2.5	2.7	3.2	2.6	2.7	2.4	2.1	2.2	2.0	1.9	2.2	2.6	2.8
Miscellaneous wood products.....	3.0	3.1	2.7	2.6	2.7	2.7	2.6	2.6	2.4	2.3	2.2	2.4	2.5	2.7	2.9
Furniture and fixtures.....	3.1	3.3	3.2	2.8	2.2	2.1	1.6	1.7	1.6	1.5	1.6	2.3	2.2	2.5	2.8
Household furniture.....	3.3	3.4	3.3	2.7	2.1	2.1	1.6	1.7	1.5	1.4	1.5	2.5	2.2	2.5	2.8
Office furniture.....	2.3	2.4	2.4	2.3	2.0	1.8	1.5	1.3	1.7	1.8	1.8	1.9	1.7	2.3	2.4
Partitions; office and store fixtures.....	3.1	4.3	4.1	3.1	2.3	2.0	1.6	1.4	1.1	1.2	1.2	1.3	2.0	2.3	2.6
Other furniture and fixtures.....	2.7	2.7	2.9	3.7	2.8	2.4	1.9	2.1	2.3	1.8	1.9	2.6	2.4	2.7	2.8
Stone, clay, and glass products.....	3.3	3.6	3.7	3.6	3.6	3.5	3.1	2.8	2.6	2.5	2.4	2.5	3.1	3.1	3.6
Flat glass.....	1.4	2.1	2.7	2.2	2.3	2.2	2.2	1.8	1.5	1.9	2.0	2.5	3.5	2.4	3.7
Glass and glassware, pressed or blown.....	4.0	3.8	3.8	3.7	3.7	3.6	3.3	3.2	3.5	3.4	3.2	3.2	3.7	3.6	3.7
Cement, hydraulic.....	1.6	1.6	1.9	1.7	1.9	1.8	1.6	1.3	1.1	1.2	1.1	1.2	1.5	1.6	1.8
Structural clay products.....	2.6	2.9	3.0	3.0	3.1	3.1	2.7	2.6	2.3	2.0	2.2	2.3	2.5	2.7	3.0
Pottery and related products.....	1.9	1.8	1.7	1.6	1.6	1.6	1.2	1.2	1.2	1.0	1.2	1.2	1.5	1.5	1.7
Concrete, gypsum, and plaster products.....	5.0	6.0	5.9	6.0	5.9	5.6	5.0	4.5	3.9	3.6	3.3	3.1	4.7	4.8	5.5
Other stone and mineral products.....	2.3	2.5	2.9	2.7	2.5	2.5	2.3	2.2	1.8	1.8	1.9	1.9	2.0	2.4	3.0
Primary metal industries.....	2.1	2.2	2.5	2.1	2.1	2.1	1.6	1.4	1.3	1.2	1.4	1.3	1.3	1.8	2.6
Blast furnace and basic steel products.....	1.3	1.5	2.1	1.5	1.7	1.6	1.0	.9	.7	.7	.9	.7	.6	1.3	2.2
Iron and steel foundries.....	2.5	2.4	2.2	2.3	2.3	2.2	1.9	1.7	1.4	1.4	1.4	1.6	1.6	2.1	2.7
Nonferrous smelting and refining.....	2.5	2.5	2.7	2.6	2.8	2.6	2.3	2.2	2.1	2.3	2.5	2.9	2.7	3.0	3.2
Nonferrous rolling, drawing, and extruding.....	3.6	3.7	3.8	3.8	3.2	3.5	2.8	2.3	2.1	1.9	2.0	2.2	2.3	2.4	3.4
Nonferrous foundries.....	2.8	2.8	2.5	2.1	2.1	2.2	2.0	2.0	1.8	2.0	1.7	2.0	1.8	2.3	2.7
Miscellaneous primary metal industries.....	2.8	2.9	2.8	2.1	2.0	2.3	2.1	1.9	1.7	1.8	1.9	2.2	1.8	2.3	2.6
Fabricated metal products.....	2.8	2.8	3.0	2.8	2.6	2.5	2.2	2.0	1.8	1.7	1.7	1.9	2.1	2.6	2.8
Metal cans.....	2.4	3.0	4.0	4.4	4.2	3.6	3.0	2.8	2.1	2.4	2.3	2.2	2.1	2.8	3.4
Cutlery, handtools, and general hardware.....	3.0	2.2	2.5	2.0	1.6	1.7	1.9	1.7	1.5	1.4	1.3	1.8	2.1	2.1	2.2
Heating equipment and plumbing fixtures.....	1.7	2.1	1.9	1.9	1.7	1.5	1.3	1.0	1.0	1.1	1.2	1.4	1.2	1.4	2.1
Fabricated structural metal products.....	2.4	2.8	2.8	3.0	2.5	2.5	2.1	1.9	1.8	1.7	1.8	2.2	2.5	2.4	2.2
Screw machine products, bolts, etc.....	3.4	3.1	3.0	2.7	2.5	2.5	2.1	1.6	1.9	1.6	1.8	1.7	1.9	2.5	3.6
Metal stampings.....	3.4	3.3	3.5	3.2	3.3	2.9	2.7	2.4	1.9	1.8	1.7	2.0	2.1	3.7	3.8
Coating, engraving, and allied services.....	3.4	3.3	3.5	2.6	2.6	2.8	2.6	2.3	2.2	2.3	2.2	2.3	2.6	2.7	3.1
Miscellaneous fabricated wire products.....	3.3	3.1	3.2	3.1	2.8	2.6	2.3	2.0	2.0	2.4	2.2	2.2	2.1	2.6	3.2
Miscellaneous fabricated metal products.....	2.6	2.7	2.7	2.6	2.4	2.4	2.2	1.9	1.8	1.6	1.6	1.4	1.8	1.9	2.5
Machinery.....	2.6	2.8	2.7	2.5	2.4	2.5	2.3	2.3	2.2	2.1	2.0	2.2	2.1	2.7	2.9
Engines and turbines.....	1.5	1.7	1.9	1.6	1.4	1.5	1.7	2.2	2.1	1.5	1.1	1.7	1.3	1.8	2.6
Farm machinery and equipment.....	1.6	1.6	1.5	1.3	1.3	1.4	1.4	2.0	2.0	1.6	1.3	1.3	1.5	1.9	2.2
Construction and related machinery.....	1.9	2.3	2.3	2.2	2.1	1.9	1.8	1.7	1.4	1.4	1.3	1.5	1.4	1.8	2.7
Metalworking machinery and equipment.....	3.6	3.8	3.4	3.4	3.5	3.5	3.3	3.2	3.1	3.0	3.0	2.9	2.7	4.3	4.0
Special industry machinery.....	3.2	3.3	3.1	2.8	2.7	2.8	2.5	2.4	2.3	2.4	2.5	2.8	2.8	3.3	3.1
General industrial machinery.....	2.5	2.6	2.2	2.2	1.9	2.1	1.8	1.4	1.4	1.4	1.2	1.6	1.5	2.1	2.8
Office, computing and accounting machines.....	2.4	2.3	2.5	1.9	2.4	2.3	1.9	1.8	1.7	1.9	2.0	1.9	2.2	1.9	1.5
Service industry machines.....	1.5	1.9	1.9	1.7	1.8	1.7	1.4	1.5	1.5	1.4	1.3	1.1	1.2	1.9	2.2
Miscellaneous machinery.....	3.6	3.8	3.7	3.5	3.3	3.4	3.2	3.4	3.2	3.1	2.9	3.4	3.1	3.4	3.8
Electrical equipment and supplies.....	2.4	2.3	2.3	2.0	1.7	1.8	1.5	1.5	1.5	1.6	1.6	1.9	1.7	1.9	2.2
Electric distribution equipment.....	2.0	1.9	2.0	2.0	1.9	2.0	1.5	1.6	1.6	1.6	1.6	2.0	1.7	1.9	2.2
Electrical industrial apparatus.....	2.2	2.2	2.2	2.2	2.0	2.0	1.5	1.6	1.5	1.5	1.4	1.4	1.4	1.8	2.2
Household appliances.....	2.3	2.1	2.5	1.8	1.7	2.0	1.7	1.6	1.6	1.5	1.7	1.5	1.5	1.6	2.0
Electric lighting and wiring equipment.....	2.0	2.2	2.2	1.7	1.5	1.5	1.3	1.2	1.3	1.2	1.1	1.3	1.4	1.7	2.3
Radio and TV receiving sets.....	2.0	2.5	2.1	1.8	1.7	1.4	1.0	.8	1.0	1.3	1.3	1.7	1.2	1.4	1.9
Communication equipment.....	2.9	2.5	2.8	2.2	1.6	2.0	1.4	1.5	1.5	1.9	2.1	2.9	2.6	2.5	2.5
Electronic components and accessories.....	2.5	2.4	2.0	1.7	1.6	1.6	1.4	1.7	1.6	1.7	1.8	1.5	1.5	1.6	2.0
Miscellaneous electrical equipment and supplies.....	3.2	2.8	2.2	2.4	1.7	2.1	1.7	1.3	1.2	1.4	1.6	1.9	1.9	1.9	2.5
Transportation equipment.....	4.2	2.8	2.7	2.3	2.2	2.0	2.1	1.9	1.6	1.7	1.6	2.2	2.4	2.7	2.6
Motor vehicles and equipment.....	5.5	3.1	2.9	2.5	2.3	2.1	2.2	1.5	.8	.9	.9	1.8	2.6	3.2	3.1
Aircraft and parts.....	2.8	2.5	2.4	2.2	2.0	1.9	2.0	2.2	2.6	2.6	2.6	2.9	2.4	2.2	2.1
Ship and boat building and repairing.....	3.1	3.3	2.9	2.4	2.4	2.0	2.2	2.6	1.9	2.3	2.2	2.2	2.3	2.4	2.3
Railroad equipment.....	1.8	1.1	1.0	1.1	.5	1.3	.9	.6	.5	.6	.6	.8	.9	1.2	1.6
Other transportation equipment.....	1.8	2.4	2.9	2.4	2.0	2.2	1.9	1.7	1.3	.7	.8	1.1	1.3	1.7	2.8
Instruments and related products.....	2.6	2.6	2.6	2.3	2.0	1.9	1.8	1.8	1.6	1.8	1.8	2.0	2.0	2.1	2.3
Engineering and scientific instruments.....	2.7	2.5	2.3	1.9	1.5	1.9	1.9	2.0	2.1	2.1	2.5	3.4	2.5	2.8	2.8
Mechanical measuring and control devices.....	2.1	2.0	2.5	2.2	1.9	1.7	1.4	1.6	1.4	1.6	1.5	1.5	1.9	1.9	2.4
Optical and ophthalmic goods.....	1.9	2.4	2.9	2.3	2.2	2.1	2.0	2.1	1.2	1.4	1.3	1.4	1.8	1.8	1.7
Surgical, medical, and dental equipment.....	2.3	2.5	2.3	2.1	2.0	2.0	2.0	1.9	1.7	2.0	1.8	1.8	2.3	2.2	2.2
Photographic equipment and supplies.....	4.4	3.6	3.4	3.2	3.1	2.8	2.4	2.2	2.1	2.0	2.2	2.4	2.3	2.5	2.5
Watches and clocks.....	2.5	2.9	1.6	1.4	1.0	.8	1.5	.7	1.0	1.2	1.0	.9	.8	1.0	1.7

See footnotes at end of table.

TABLE C-4. Average overtime hours of production workers in manufacturing, by industry ¹—Continued
Revised series; see box, p. 212.

Industry	1961											1960		Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
Manufacturing—Continued															
<i>Durable goods—Continued</i>															
Miscellaneous manufacturing industries	2.7	2.6	2.4	2.1	1.7	2.0	1.9	1.9	1.9	1.8	1.8	2.0	2.3	2.1	2.4
Jewelry, silverware, and plated ware	4.0	4.2	3.3	3.0	2.0	2.6	2.3	2.1	1.9	2.2	2.2	2.8	3.6	2.8	3.1
Toys, amusement, and sporting goods	2.2	2.4	2.4	2.1	1.5	1.6	1.6	1.7	1.8	1.9	1.7	1.8	1.9	1.9	2.1
Pens, pencils, office and art materials	2.7	2.0	2.0	1.7	1.6	1.5	1.5	1.4	1.3	1.4	1.2	1.1	1.6	1.5	1.9
Costume jewelry, buttons, and notions	2.5	2.0	1.8	1.9	1.9	2.2	2.0	1.9	1.5	1.7	1.6	1.6	1.9	1.7	2.2
Other manufacturing industries	2.9	2.7	2.4	2.1	1.8	2.1	2.0	2.0	2.1	1.9	1.9	2.3	2.4	2.3	2.5
<i>Nondurable goods</i>															
Food and kindred products	3.3	3.6	3.8	3.6	3.7	3.6	3.2	2.8	2.9	2.9	3.0	3.3	3.3	3.3	3.3
Meat products	3.9	4.4	4.1	3.5	3.9	4.0	3.6	3.1	3.2	2.8	3.2	3.8	4.0	3.7	3.9
Dairy products	3.0	3.1	3.7	3.7	3.3	3.7	3.1	2.6	3.1	2.8	2.1	3.0	2.9	2.9	2.9
Canned and preserved food, except meats	2.0	2.5	3.3	2.8	2.4	2.1	2.1	1.8	1.8	2.2	2.1	1.8	1.7	2.3	2.4
Grain mill products	6.2	6.9	7.3	7.6	7.4	6.7	5.3	4.9	5.0	5.4	5.9	5.9	5.7	6.0	5.9
Bakery products	2.9	3.0	3.1	3.1	3.3	3.3	2.9	2.5	2.6	2.6	2.3	2.8	2.9	2.9	2.9
Sugar	6.3	5.3	4.0	3.8	4.3	3.2	3.3	2.6	3.6	3.9	6.7	5.7	5.8	4.2	4.2
Confectionery and related products	2.5	3.0	3.3	2.8	2.1	2.5	2.5	2.0	2.2	2.2	2.5	2.3	2.5	2.4	2.3
Beverages	2.1	2.9	3.5	3.1	3.9	3.2	2.4	2.5	2.3	2.2	2.2	2.3	2.5	2.8	2.8
Miscellaneous food and kindred products	4.2	4.3	4.2	3.8	4.1	4.0	3.7	3.5	3.6	4.1	3.9	3.9	4.0	3.9	3.9
Tobacco manufactures	1.1	1.5	1.7	1.3	1.1	1.2	1.1	1.0	.6	.6	.7	1.1	1.1	1.0	1.2
Cigarettes	1.2	1.9	1.0	1.2	1.3	1.7	1.4	1.4	.5	.5	.6	1.2	1.1	1.1	1.5
Cigars	1.7	1.5	1.2	1.1	.7	.8	.8	.7	.6	.7	.8	1.0	1.8	1.0	.9
Textile mill products	3.7	3.4	3.0	3.0	2.6	2.8	2.5	2.2	2.1	2.0	1.9	2.1	2.3	2.6	3.1
Cotton broad woven fabrics	4.1	3.7	3.1	2.8	2.2	2.5	2.4	2.2	2.0	1.9	1.9	2.1	2.1	2.8	3.1
Silk and synthetic broad woven fabrics	4.5	3.9	3.7	3.8	3.3	3.2	2.8	2.3	2.1	2.1	2.3	2.6	2.9	3.3	3.7
Weaving and finishing broad woolsens	3.5	3.6	3.4	3.6	4.0	4.2	3.6	2.9	2.4	2.7	2.3	2.0	1.7	3.1	4.2
Narrow fabrics and smallwares	3.5	3.4	3.2	2.9	2.7	2.9	2.7	2.5	2.5	2.4	2.3	2.1	2.2	2.4	2.9
Knitting	2.6	2.6	2.1	2.6	2.2	2.3	1.9	1.6	1.6	1.4	1.2	1.4	2.0	1.9	2.2
Finishing textiles, except wool and knit	4.3	4.2	3.5	3.6	3.2	4.2	3.8	3.5	3.4	3.6	2.6	3.1	3.2	3.2	3.9
Floor covering	5.0	4.4	3.9	3.6	2.0	2.9	2.2	2.8	2.7	2.6	2.4	3.1	2.9	2.8	3.5
Yarn and thread	3.7	3.4	3.4	3.2	2.8	2.9	2.5	2.1	1.8	1.8	1.8	1.7	2.1	2.4	2.9
Miscellaneous textile goods	3.5	3.4	3.0	3.1	3.3	3.3	2.5	2.4	2.3	1.9	2.0	2.3	2.3	2.8	3.3
Apparel and related products	1.4	1.3	1.1	1.4	1.1	1.0	.9	1.0	1.2	1.0	.8	.8	1.1	1.2	1.3
Men's and boys' suits and coats	.9	1.0	.8	.9	.5	.7	.7	.6	.7	.9	.7	.7	.9	1.4	1.3
Men's and boys' furnishings	1.2	1.1	1.1	1.4	.9	1.0	.7	.6	.7	.6	.5	.6	.7	1.0	1.2
Women's, misses', and juniors' outerwear	1.2	1.1	.9	1.3	1.2	.9	.9	1.3	1.5	1.1	.8	.6	1.1	1.1	1.2
Women's and children's undergarments	2.0	1.9	1.5	1.6	1.1	1.1	1.1	1.3	1.2	1.1	.9	.7	1.4	1.1	1.3
Hats, caps, and millinery	1.2	1.7	1.5	1.6	1.2	1.1	.8	1.0	2.3	2.4	1.6	.6	.8	1.3	1.6
Girls' and children's outerwear	1.5	1.4	1.0	1.8	1.5	1.4	1.2	1.0	1.4	1.6	1.2	.8	1.3	1.3	1.3
Fur goods and miscellaneous apparel	1.8	1.6	1.1	1.5	1.1	.8	.8	.9	1.0	.8	.6	.9	1.3	1.1	1.3
Miscellaneous fabricated textile products	1.8	1.9	2.0	1.9	1.6	1.6	1.4	1.4	1.4	1.4	1.2	1.6	1.8	1.7	1.9
Paper and allied products	4.6	4.8	4.9	4.5	4.6	4.3	3.9	3.9	3.7	3.7	3.6	3.6	3.8	4.1	4.5
Paper and pulp	5.3	5.3	5.3	5.2	5.3	5.1	4.9	5.0	4.6	4.7	4.6	4.5	4.6	5.1	5.5
Paperboard	5.5	6.3	6.3	5.6	6.4	6.0	5.2	5.2	4.9	4.8	5.3	4.7	5.0	5.1	5.6
Converted paper and paperboard products	3.2	3.4	3.3	3.2	3.1	2.7	2.4	2.6	2.7	2.6	2.3	2.6	2.5	2.8	3.1
Paperboard containers and boxes	4.3	4.6	4.8	4.2	4.0	3.7	3.1	3.0	2.6	2.6	2.4	2.7	3.0	3.3	4.0
Printing, publishing, and allied industries	2.6	2.9	3.1	3.0	2.6	2.5	2.5	2.5	2.6	2.5	2.4	2.8	3.0	2.9	2.8
Newspaper publishing and printing	2.5	2.5	2.4	2.3	2.2	2.3	2.5	2.4	2.1	2.0	2.0	2.9	3.0	2.7	2.6
Periodical publishing and printing	3.0	4.4	4.8	3.0	2.8	2.5	2.2	2.5	2.9	3.2	3.2	3.6	3.6	3.6	3.4
Books	3.3	3.6	4.4	4.4	3.9	3.8	4.2	3.4	3.4	3.5	3.4	2.9	3.6	3.7	3.4
Commercial printing	2.7	3.2	3.3	3.3	2.7	2.6	2.5	2.7	3.0	2.7	2.7	3.0	3.1	3.1	3.2
Bookbinding and related industries	1.6	2.1	2.6	2.4	2.2	2.0	1.9	1.8	1.9	1.8	2.2	2.0	2.0	2.1	2.0
Other publishing and printing industries	2.5	2.7	2.9	2.7	2.6	2.3	2.2	2.3	2.3	2.3	2.1	2.4	2.5	2.6	2.5
Chemicals and allied products	2.5	2.6	2.5	2.4	2.4	2.4	2.2	2.2	2.2	2.0	2.0	2.0	2.1	2.3	2.5
Industrial chemicals	2.4	2.6	2.6	2.5	2.6	2.3	2.1	1.9	2.0	2.0	2.1	2.0	2.2	2.5	2.5
Plastics and synthetics, except glass	2.4	2.3	2.2	2.0	2.2	2.3	1.9	1.7	1.5	1.5	1.4	1.6	1.6	2.0	2.2
Drugs	2.3	2.2	2.1	2.0	1.7	2.0	1.7	1.7	1.9	2.0	1.8	1.6	1.7	1.9	2.0
Soap, cleaners, and toilet goods	3.0	3.5	2.9	2.9	2.5	2.9	2.2	2.1	2.0	2.1	2.0	2.3	2.6	2.3	2.2
Paints, varnishes, and allied products	1.8	1.7	2.0	2.2	2.5	2.6	2.3	1.8	1.5	1.2	1.2	1.3	1.4	1.9	2.3
Agricultural chemicals	2.8	3.4	2.9	2.7	2.8	2.8	4.6	5.2	6.0	3.8	3.6	3.2	3.2	4.3	4.5
Other chemical products	3.0	2.8	2.8	2.7	2.7	2.6	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.5	2.6
Petroleum refining and related industries	2.3	2.3	2.9	1.9	2.5	2.6	1.9	1.8	1.5	1.3	1.7	1.6	2.1	2.0	1.9
Petroleum refining	1.9	1.4	2.2	1.2	1.8	1.7	1.4	1.3	1.2	1.1	1.5	1.3	1.7	1.4	1.4
Other petroleum and coal products	4.1	6.5	6.0	4.9	5.4	6.5	4.2	4.2	2.9	2.5	2.8	3.1	3.6	4.5	4.8
Rubber and miscellaneous plastic products	3.2	3.0	3.1	3.1	3.0	2.6	2.4	2.1	1.7	1.8	1.8	1.8	1.8	2.4	3.5
Tires and inner tubes	3.9	3.1	3.3	3.5	3.6	2.2	1.8	1.6	1.3	1.4	1.7	1.6	1.1	2.3	4.5
Other rubber products	2.8	2.7	2.8	2.6	2.6	2.6	2.5	2.1	1.6	1.8	1.6	1.7	2.0	2.2	3.3
Miscellaneous plastic products	3.2	3.2	3.5	3.3	2.9	3.1	2.9	2.5	2.2	2.2	2.0	2.1	2.3	2.5	3.0
Leather and leather products	1.5	1.5	1.3	1.4	1.4	1.4	1.1	1.1	1.3	1.4	1.4	1.2	1.2	1.2	1.4
Leather tanning and finishing	2.6	2.5	2.4	2.5	2.2	2.4	2.1	2.2	2.0	1.8	1.8	2.1	2.3	2.1	2.1
Footwear, except rubber	1.0	1.0	1.0	1.1	1.2	1.2	1.0	.9	1.1	1.3	1.3	1.0	.8	1.1	1.3
Other leather products	2.4	2.4	1.9	1.8	1.6	1.5	1.1	1.2	1.5	1.7	1.7	1.4	1.9	1.4	1.6

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3.

² These series cover premium overtime hours of production and related workers during the pay period ending nearest the 15th 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.

³ 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. 212.

Activity	1961												1960	Annual average	
	Dec. ²	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	Man-hours														
Total.....	96.5	99.3	100.4	99.2	100.0	97.4	97.7	93.7	90.6	89.0	88.0	89.4	90.8	99.0	101.2
Mining.....	84.5	86.3	87.9	87.3	87.5	87.6	87.8	84.4	81.4	79.5	81.4	83.8	84.9	91.1	94.7
Contract construction.....	82.1	95.9	106.9	105.9	111.4	107.4	104.7	94.4	85.8	79.6	75.9	81.0	82.5	98.3	102.3
Manufacturing.....	99.7	100.6	99.9	98.6	98.5	96.1	96.9	94.1	92.0	91.2	90.6	91.2	92.7	99.6	101.3
Durable goods.....	99.6	100.1	97.8	95.4	95.0	94.1	95.7	93.3	90.3	88.6	88.2	89.4	91.2	99.4	101.0
Ordnance and accessories.....	126.7	125.6	124.6	121.0	117.0	115.7	115.8	115.3	113.2	115.3	113.2	114.6	112.8	111.7	106.6
Lumber and wood products, except furniture.....	90.5	94.9	100.1	100.9	101.8	99.0	101.8	94.9	88.8	84.4	83.9	86.1	86.8	99.2	105.1
Furniture and fixtures.....	105.1	104.7	105.5	103.9	102.3	96.0	96.5	92.2	92.4	91.6	91.2	90.3	96.5	102.6	105.0
Stone, clay, and glass products.....	92.1	97.3	99.4	101.0	101.8	99.5	99.6	95.6	91.3	88.0	85.1	87.0	90.3	100.4	104.3
Primary metal industries.....	97.8	97.0	96.9	97.3	95.0	94.6	94.4	90.6	86.0	83.2	82.5	82.8	82.9	98.0	97.7
Fabricated metal products.....	100.0	100.5	98.8	95.5	96.7	93.9	96.0	93.8	89.7	87.7	87.5	90.0	92.0	99.9	100.6
Machinery.....	96.3	94.2	93.0	92.9	91.6	92.3	93.9	93.7	93.6	92.4	92.8	92.2	92.0	99.7	100.4
Electrical equipment and supplies.....	113.1	111.3	109.3	105.3	105.2	100.7	103.0	101.2	99.7	99.6	100.4	101.4	100.2	105.8	105.3
Transportation equipment.....	96.7	96.6	84.3	76.6	77.3	83.7	85.2	84.8	80.9	79.4	78.7	82.1	88.1	92.1	96.0
Instruments and related products.....	102.6	102.9	101.7	101.4	99.7	96.6	98.6	97.0	95.7	95.9	95.7	97.6	96.3	102.8	103.0
Miscellaneous manufacturing industries.....	99.7	109.0	109.6	106.0	102.2	96.1	100.5	96.3	93.5	92.1	91.6	88.9	92.1	101.4	102.1
Nondurable goods.....	99.8	101.4	102.5	102.7	103.2	98.6	98.5	95.0	94.2	94.6	93.8	93.6	94.6	99.8	101.6
Food and kindred products.....	93.6	98.5	105.5	110.0	107.9	100.6	97.0	90.9	88.3	88.0	87.6	89.7	94.2	98.0	99.2
Tobacco manufactures.....	90.2	96.3	119.8	135.0	108.4	75.6	80.7	77.1	79.2	80.7	87.3	93.5	101.5	97.1	99.9
Textile mill products.....	97.7	98.7	97.5	96.0	96.0	92.9	95.2	92.5	90.5	89.4	88.6	87.3	89.2	96.5	102.2
Apparel and related products.....	102.3	104.0	102.2	97.8	105.3	97.5	97.4	94.5	96.3	100.6	98.2	93.3	91.9	101.8	103.8
Paper and allied products.....	104.8	105.3	104.9	104.8	104.3	102.3	103.7	100.0	99.6	98.4	97.6	98.0	97.8	102.1	102.8
Printing, publishing, and allied industries.....	107.5	106.1	106.1	105.7	104.6	104.0	104.2	103.2	103.6	104.2	103.3	103.2	104.4	104.4	101.7
Chemicals and allied products.....	102.4	102.6	102.1	101.1	101.7	101.0	101.8	101.1	101.0	99.6	97.4	98.0	97.8	101.6	101.0
Petroleum refining and related industries.....	83.2	85.4	90.6	91.2	91.2	91.4	92.8	89.7	89.2	87.0	86.0	89.4	89.3	93.5	95.0
Rubber and miscellaneous plastic products.....	108.5	107.6	105.5	104.8	101.6	99.4	99.6	96.6	93.7	91.4	91.5	93.5	94.6	101.5	104.9
Leather and leather products.....	100.7	99.4	95.1	94.8	100.5	99.6	99.8	93.7	91.4	96.1	98.2	98.3	92.9	97.5	103.2
	Payrolls														
Mining.....	92.3	93.9	93.2	92.2	93.0	92.6	88.3	85.6	82.9	85.8	89.0	89.3	95.2	97.1	
Contract construction.....	110.0	121.8	120.7	125.0	120.3	117.1	105.6	95.9	88.6	85.0	91.0	92.4	106.9	106.1	
Manufacturing.....	111.7	112.3	110.5	108.5	107.6	105.7	106.4	103.0	100.3	98.9	98.0	98.9	100.5	106.6	105.1

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2.
For mining and manufacturing, data refer to production and related workers

and for contract construction, to construction workers, as defined in footnote 1, table A-3.

² Preliminary.

TABLE C-6. Gross and spendable average weekly earnings of production workers in manufacturing¹
[In current and 1957-59 dollars]

Revised series; see box, p. 212.

Item	1961												1960	Annual average	
	Nov. ²	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	1960	1959
	Manufacturing														
Gross average weekly earnings:															
Current dollars.....	\$95.82	\$94.54	\$92.73	\$92.86	\$93.20	\$93.03	\$92.10	\$90.78	\$89.54	\$89.31	\$89.08	\$88.62	\$89.21	\$89.72	\$88.26
1957-59 dollars.....	91.61	90.38	88.65	89.03	89.27	89.45	88.73	87.37	86.18	85.96	85.82	85.29	85.94	87.02	86.96
Spendable average weekly earnings:															
Worker with no dependents:															
Current dollars.....	77.39	76.36	74.91	75.01	75.29	75.15	74.41	73.39	72.43	72.26	72.08	71.72	72.18	72.57	71.89
1957-59 dollars.....	73.99	73.00	71.62	71.92	72.12	72.26	71.69	70.64	69.71	69.55	69.44	69.03	69.54	70.39	70.83
Worker with 3 dependents:															
Current dollars.....	85.03	83.98	82.50	82.61	82.88	82.74	81.99	80.95	79.97	79.78	79.60	79.24	79.71	80.11	79.40
1957-59 dollars.....	81.29	80.29	78.87	79.20	79.39	79.56	78.99	77.91	76.97	76.79	76.69	76.27	76.79	77.70	78.23

¹ For comparability of data with those published in issues prior to December 1961, see footnote 1, table A-2. For employees covered, see footnote 1, table A-3.

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 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 the Spendable Earnings Series," *Monthly Labor Review*, January 1959, pp. 50-54.

D.—Consumer and Wholesale Prices

TABLE D-1. Consumer Price Index¹—All-city average: All items, groups, subgroups, and special groups of items

[1947-49=100]

Group	1961												1960	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1961	1960
All items.....	128.2	128.3	128.4	128.3	128.0	128.1	127.6	127.4	127.5	127.5	127.5	127.4	127.5	127.8	126.5
Food ²	120.4	120.3	120.9	121.1	121.2	122.0	120.9	120.7	121.2	121.2	121.4	121.3	121.4	121.1	119.7
Food at home.....	116.9	116.8	117.6	117.8	118.2	119.0	117.8	117.7	118.3	118.3	118.6	118.5	118.7	118.0	116.9
Cereals and bakery products.....	140.9	140.9	140.2	139.7	139.6	139.4	139.7	139.7	139.7	139.6	139.4	139.1	139.0	139.8	136.8
Meats, poultry, and fish.....	108.7	108.6	109.7	109.4	108.4	107.8	107.4	108.7	110.5	111.4	111.8	111.6	110.5	109.5	109.3
Dairy products.....	119.5	119.4	119.0	119.0	118.5	118.0	117.3	117.5	117.9	118.5	119.0	119.1	119.3	118.6	116.8
Fruits and vegetables.....	123.4	121.6	122.9	126.5	132.4	138.2	135.4	132.2	131.4	127.8	127.2	126.1	126.3	128.8	128.3
Other foods at home ³	107.3	108.2	109.8	108.9	107.6	107.9	106.0	105.8	106.4	107.6	108.5	109.5	111.6	107.8	106.8
Housing ⁴	133.1	132.9	132.7	132.6	132.3	132.4	132.4	132.2	132.3	132.5	132.4	132.3	132.3	132.5	131.5
Rent.....	144.4	144.2	144.1	143.9	143.6	143.6	143.5	143.4	143.3	143.1	143.1	142.9	142.8	143.6	141.8
Gas and electricity.....	125.7	125.7	125.7	125.7	125.6	125.6	126.3	126.2	125.8	125.9	125.9	125.9	125.6	125.8	124.8
Solid and petroleum fuels.....	140.1	139.2	138.4	137.2	136.9	135.9	135.6	136.5	139.9	141.3	141.3	139.6	137.0	138.5	135.6
Housefurnishings.....	103.3	103.4	103.6	103.8	103.2	103.6	103.9	103.5	103.8	103.9	103.7	103.6	103.9	103.6	104.2
Household operation.....	139.5	139.5	139.2	138.9	138.8	139.1	138.9	138.7	138.7	138.5	138.3	138.3	138.3	138.9	137.4
Apparel.....	111.0	111.2	111.4	111.1	109.9	109.9	109.6	109.6	109.5	109.8	109.6	109.4	110.6	110.2	109.4
Men's and boys.....	112.1	112.3	112.2	111.9	111.1	111.5	111.4	111.7	111.7	111.4	111.3	111.4	112.0	111.7	110.4
Women's and girls.....	101.3	101.7	102.4	102.1	100.2	100.0	99.4	99.3	99.1	99.9	99.5	99.1	101.1	100.3	100.0
Footwear.....	142.5	142.3	141.7	141.5	141.2	141.0	140.8	140.8	140.8	140.9	140.9	140.3	140.7	141.2	139.9
Other apparel ⁵	93.1	93.0	93.1	93.4	92.9	92.9	92.6	92.8	92.8	92.6	92.9	93.0	94.0	92.9	93.3
Transportation.....	149.3	150.5	150.3	149.4	149.3	148.3	147.7	146.6	145.8	145.7	146.2	146.2	146.5	147.9	146.2
Private.....	136.7	138.0	137.9	136.9	136.8	135.9	135.3	134.2	133.4	133.4	133.9	134.0	134.5	135.5	134.5
Public.....	210.9	209.9	209.4	209.4	209.1	208.5	207.3	206.5	206.5	205.7	205.7	205.5	202.9	207.9	199.3
Medical care.....	162.6	162.4	162.3	161.7	161.4	161.2	160.9	160.4	159.9	159.6	159.4	158.5	158.0	160.9	156.2
Personal care.....	134.8	134.3	134.0	134.3	134.2	134.3	133.9	133.8	133.8	133.6	133.8	133.7	133.7	134.0	133.3
Reading and recreation.....	125.3	125.2	125.4	125.0	124.4	124.1	123.5	123.9	124.1	123.4	122.7	122.2	122.3	124.1	121.5
Other goods and services.....	133.7	133.8	133.8	133.8	133.6	133.6	133.1	133.1	132.6	132.6	132.6	132.6	132.7	133.2	132.2
Special groups:															
All items less food.....	132.3	132.4	132.3	132.0	131.6	131.4	131.2	131.0	130.8	130.9	130.8	130.6	130.8	131.4	130.0
All items less shelter.....	125.7	125.8	126.0	125.8	125.6	125.7	125.2	124.9	125.0	125.0	125.0	124.8	125.0	125.4	124.0
All commodities less food.....	116.5	116.9	117.0	116.6	116.1	116.0	115.6	115.3	115.2	115.4	115.5	115.4	115.9	116.0	115.7
All commodities.....	118.3	118.5	118.8	118.7	118.4	118.7	118.0	117.7	117.9	118.0	118.1	118.0	118.4	118.3	117.5
Nondurables ⁶	120.5	120.6	120.9	121.0	120.8	121.1	120.4	120.2	120.4	120.7	120.8	120.7	121.0	120.7	119.6
Nondurables less food.....	121.3	121.5	121.5	121.5	120.7	120.6	120.3	120.0	120.0	120.7	120.6	120.5	121.0	120.8	120.1
Nondurables less food and apparel.....	130.2	130.5	130.3	130.4	130.0	129.9	129.5	129.0	129.0	130.0	130.1	130.0	130.0	129.9	129.2
Durables ⁷	112.0	112.6	112.7	111.9	111.9	111.5	111.2	110.8	110.7	109.9	110.3	110.2	110.8	111.3	111.6
Durables less cars.....	101.9	102.0	102.1	102.1	102.1	102.1	101.8	101.8	101.9	102.0	102.1	102.4	102.8	102.0	103.2
All services ⁸	154.0	153.7	153.4	153.2	153.0	152.8	152.7	152.5	152.3	152.2	151.9	151.7	151.4	152.8	150.0
All services less rent.....	156.4	156.1	155.8	155.6	155.4	155.2	155.0	154.9	154.7	154.6	154.2	154.0	153.6	155.2	152.1
Household operation services, gas, and electricity.....	141.3	141.2	141.0	140.8	140.6	140.7	140.8	140.7	140.5	140.4	140.2	140.1	140.0	140.7	139.0
Transportation services.....	190.7	190.3	190.0	189.9	189.8	189.4	189.3	188.8	188.5	188.2	187.7	187.6	186.8	189.2	184.9
Medical care services.....	171.1	170.8	170.5	169.8	169.5	169.3	168.8	168.2	167.7	167.3	167.1	165.9	165.3	168.8	162.8
Other services.....	139.0	138.6	138.3	138.2	137.9	137.7	137.6	137.6	137.5	137.6	137.1	137.2	136.8	137.9	135.6

¹ The Consumer Price Index measures the average change in prices of goods and services purchased by urban wage-earner and clerical-worker families. Data for 46 large, medium-size, and small cities are combined for the all-city average.

² In addition to subgroups shown here, total food includes restaurant meals and other food bought and eaten away from home.

³ Includes eggs, fats and oils, sugar and sweets, beverages (nonalcoholic), and other miscellaneous foods.

⁴ In addition to subgroups shown here, total housing includes the purchase price of homes and other homeowner costs.

⁵ Includes yard goods, diapers, and miscellaneous items.

⁶ Revised.

⁷ Includes food, house paint, solid fuels, fuel oil, textile housefurnishings, household paper, electric light bulbs, laundry soap and detergents, apparel

(except shoe repairs), gasoline, motor oil, prescriptions and drugs, toilet goods, nondurable toys, newspapers, cigarettes, cigars, beer, and whiskey.

⁸ Includes water heaters, central heating furnaces, kitchen sinks, sink faucets, porch flooring, household appliances, furniture and bedding, floor coverings, dinnerware, automobiles, tires, radio and television sets, durable toys, and sporting goods.

⁹ Includes rent, home purchase, real estate taxes, mortgage interest, property insurance, repainting garage, repainting rooms, reshingling roof, refinishing floors, gas, electricity, dry cleaning, laundry service, domestic service, telephone, water, postage, shoe repairs, auto repairs, auto insurance, auto registration, transit fares, railroad fares, professional medical services, hospital services, hospitalization and surgical insurance, barber and beauty shop services, television repairs, and motion picture admissions.

TABLE D-2. Consumer Price Index ¹—All items and food indexes, by city

[1947-49=100]

City	1961												1960	Annual average	
	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960	1959
	All items														
All-city average ¹	128.2	128.3	128.4	128.3	128.0	128.1	127.6	127.4	127.5	127.5	127.5	127.4	127.5	126.5	124.6
Atlanta, Ga.....	128.0	(²)	(²)	128.3	(²)	(²)	127.4	(²)	(²)	127.7	(²)	(²)	127.7	127.2	125.4
Baltimore, Md.....	129.6	(²)	(²)	129.6	(²)	(²)	129.8	(²)	(²)	129.5	(²)	(²)	129.3	128.3	126.8
Boston, Mass.....	(²)	(²)	130.6	(²)	(²)	130.4	(²)	(²)	130.0	(²)	(²)	129.3	(²)	128.4	125.8
Chicago, Ill.....	130.9	130.9	131.3	131.1	130.8	130.9	129.7	129.9	130.1	130.2	130.5	130.4	130.6	129.9	128.1
Cincinnati, Ohio.....	124.9	(²)	(²)	125.4	(²)	(²)	124.6	(²)	(²)	124.8	(²)	(²)	125.0	124.4	123.1
Cleveland, Ohio.....	(²)	128.1	(²)	(²)	128.7	(²)	(²)	127.9	(²)	(²)	128.3	(²)	(²)	127.1	125.6
Detroit, Mich.....	124.4	125.1	125.4	124.9	125.8	125.5	125.8	125.6	125.6	125.8	126.4	126.3	125.8	124.9	123.8
Houston, Tex.....	(²)	128.0	(²)	(²)	126.3	(²)	(²)	126.1	(²)	(²)	125.1	(²)	(²)	125.8	124.6
Kansas City, Mo.....	(²)	(²)	129.4	(²)	(²)	129.8	(²)	(²)	129.5	(²)	(²)	127.6	(²)	127.5	125.9
Los Angeles, Calif.....	131.9	131.9	131.6	131.3	131.1	131.4	131.4	131.0	131.1	130.9	131.4	131.2	131.0	129.8	127.4
Minneapolis, Minn.....	(²)	(²)	129.2	(²)	(²)	129.2	(²)	(²)	129.0	(²)	(²)	127.8	(²)	127.5	125.6
New York, N.Y.....	126.9	126.8	126.9	126.8	126.4	126.4	125.8	125.6	125.8	126.1	126.2	126.1	126.3	125.2	122.8
Philadelphia, Pa.....	128.7	128.8	128.7	128.4	128.0	128.3	127.8	127.9	128.0	127.7	127.9	127.8	128.0	126.7	124.5
Pittsburgh, Pa.....	(²)	(²)	129.4	(²)	(²)	129.6	(²)	(²)	129.2	(²)	(²)	129.2	(²)	128.3	125.5
Portland, Ore.....	(²)	(²)	129.6	(²)	(²)	129.3	(²)	(²)	128.3	(²)	(²)	128.8	(²)	127.5	125.7
St. Louis, Mo.....	129.6	(²)	(²)	129.2	(²)	(²)	129.0	(²)	(²)	128.9	(²)	(²)	127.9	127.1	126.3
San Francisco, Calif.....	135.2	(²)	(²)	134.9	(²)	(²)	133.8	(²)	(²)	133.8	(²)	(²)	133.9	132.6	130.0
Seranton, Pa.....	(²)	124.8	(²)	(²)	124.3	(²)	(²)	124.1	(²)	(²)	123.5	(²)	(²)	122.3	120.8
Seattle, Wash.....	(²)	132.9	(²)	(²)	131.8	(²)	(²)	131.7	(²)	(²)	130.8	(²)	(²)	129.8	128.2
Washington, D.C.....	(²)	125.4	(²)	(²)	125.2	(²)	(²)	124.3	(²)	(²)	124.5	(²)	(²)	123.0	121.7
Food															
All-city average ¹	120.4	120.3	120.9	121.1	121.2	122.0	120.9	120.7	121.2	121.2	121.4	121.3	121.4	119.7	118.3
Atlanta, Ga.....	117.2	117.3	119.2	119.1	118.5	118.9	116.6	116.2	117.0	117.4	117.9	118.1	118.2	117.0	115.7
Baltimore, Md.....	121.0	121.2	122.2	121.6	122.3	122.9	121.7	120.8	121.2	121.0	120.9	121.0	121.2	119.8	118.0
Boston, Mass.....	120.7	120.4	120.5	120.6	121.4	122.0	119.6	119.8	120.5	120.3	121.0	120.5	121.0	119.4	118.7
Chicago, Ill.....	118.6	118.3	118.8	119.3	119.5	120.1	118.4	118.6	118.8	118.7	119.3	119.2	119.1	117.5	115.8
Cincinnati, Ohio.....	120.4	120.1	121.2	120.8	122.0	123.2	121.1	121.5	121.7	121.5	122.1	122.4	122.2	120.5	118.8
Cleveland, Ohio.....	113.8	114.1	115.6	116.5	116.6	116.9	116.0	115.7	116.3	115.9	116.9	116.8	116.8	115.8	114.1
Detroit, Mich.....	118.4	118.5	119.2	118.7	120.7	121.8	121.0	121.1	121.3	121.1	121.3	120.9	120.1	118.7	117.5
Houston, Tex.....	116.6	116.6	116.8	117.0	117.0	116.3	115.8	116.1	116.7	116.0	116.3	116.2	116.2	115.0	114.7
Kansas City, Mo.....	113.8	114.2	114.3	114.6	115.0	116.2	115.5	114.7	115.3	115.5	113.9	114.6	114.8	112.9	112.3
Los Angeles, Calif.....	126.9	126.8	126.8	125.8	125.3	126.0	126.6	127.5	128.3	128.1	128.2	128.4	128.1	126.1	123.8
Minneapolis, Minn.....	116.8	116.7	117.9	117.5	117.5	119.2	118.7	118.6	118.6	119.0	119.2	119.4	119.7	118.4	118.0
New York, N.Y.....	122.3	122.1	122.3	122.7	122.2	122.6	121.2	121.0	121.6	122.5	122.8	122.7	122.8	122.0	120.3
Philadelphia, Pa.....	122.5	122.7	123.1	122.8	123.4	124.3	122.4	122.6	123.0	123.3	123.8	123.5	123.9	122.1	120.9
Pittsburgh, Pa.....	120.7	121.3	121.8	122.1	122.9	123.6	122.6	121.8	122.4	122.6	123.2	123.0	122.2	121.2	119.8
Portland, Ore.....	122.4	123.2	123.8	124.2	123.7	123.5	122.9	122.5	123.7	122.7	122.0	122.4	122.2	121.0	120.7
St. Louis, Mo.....	120.7	119.9	120.8	121.0	121.0	121.3	121.7	121.5	121.7	121.4	121.3	121.3	121.8	119.0	118.7
San Francisco, Calif.....	126.1	125.1	126.3	126.2	125.0	126.1	126.2	126.2	126.2	126.6	126.5	126.1	126.2	124.4	122.6
Seranton, Pa.....	116.5	116.5	116.3	116.6	116.7	118.5	116.9	116.7	116.9	117.7	117.7	117.1	117.4	115.5	115.4
Seattle, Wash.....	125.3	124.5	125.2	125.1	124.9	125.6	125.6	125.4	125.4	124.7	124.7	124.4	124.6	122.7	120.8
Washington, D.C.....	119.6	120.5	120.3	121.5	121.9	122.2	121.2	120.7	121.4	121.3	121.1	121.4	121.7	120.0	119.0

¹ See footnote 1, table D-1. Indexes measure time-to-time changes in prices of goods and services purchased by urban wage-earner and clerical-worker families. They do not indicate whether it costs more to live in one city than in another.

² Average of 46 cities.

³ All items indexes are computed monthly for 5 cities and once every 3 months on a rotating cycle for 16 other cities.

TABLE D-3. Indexes of wholesale prices,¹ by group and subgroup of commodities

[1947-49=100, unless otherwise specified]

Commodity group	1961												1960	Annual average	
	Dec. 2	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960 2	1959
All commodities.....	119.2	118.8	118.7	118.8	118.9	118.6	118.2	118.7	119.4	119.9	120.0	119.9	119.5	119.6	119.5
Farm products and processed foods.....	98.6	98.0	98.0	97.9	98.6	97.5	96.2	97.4	98.8	100.0	100.5	100.0	99.2	98.5	98.2
Farm products.....	87.9	87.6	87.1	87.2	88.6	87.1	85.1	86.8	88.5	89.9	90.0	89.7	88.7	88.8	89.1
Fresh and dried fruits and vegetables.....	92.5	95.4	94.5	94.9	97.3	104.3	103.3	101.4	100.2	105.9	99.8	103.7	99.5	106.7	102.7
Grains.....	79.0	79.3	77.9	78.0	78.1	77.8	74.2	74.8	73.8	76.1	76.0	75.2	72.7	75.7	77.3
Livestock and live poultry.....	79.5	76.9	76.9	77.6	80.3	75.5	75.4	78.2	82.0	83.1	85.3	84.7	82.8	82.6	85.1
Plant and animal fibers.....	99.3	99.3	99.4	98.7	98.4	96.7	96.2	95.2	93.4	92.8	91.2	90.7	90.7	94.2	98.2
Fluid milk.....	100.5	100.6	100.5	99.6	98.4	98.1	94.9	95.6	97.0	98.7	99.6	101.1	102.3	98.0	94.4
Eggs.....	71.9	80.1	79.5	76.6	80.7	75.5	63.3	63.3	66.5	75.7	81.2	75.2	87.7	77.3	65.6
Hay, hayseeds, and oilseeds.....	81.6	81.3	79.9	80.0	82.9	83.7	83.6	92.1	96.4	87.5	81.3	79.5	74.1	74.7	76.6
Other farm products.....	131.5	129.4	130.1	131.2	129.3	129.3	129.0	129.5	129.4	129.6	129.6	128.3	130.4	128.5	132.6
Processed foods.....	108.8	107.9	108.3	108.1	108.1	107.5	106.7	107.5	108.7	109.6	110.5	109.9	109.2	107.7	107.0
Cereal and bakery products.....	125.2	125.2	125.1	124.3	123.9	123.9	123.7	123.6	123.6	123.6	123.6	123.5	123.5	121.8	119.3
Meats, poultry, and fish.....	94.9	92.6	93.7	94.3	94.8	92.5	89.9	91.8	94.3	96.1	99.5	98.3	97.3	96.7	98.2
Dairy products and ice cream.....	124.4	123.8	123.6	121.9	121.0	120.4	119.7	119.5	119.9	120.7	119.8	121.3	122.0	118.5	114.3
Canned and frozen fruits and vegetables.....	107.9	108.1	108.0	107.3	107.4	109.2	108.7	109.0	111.1	111.5	112.0	111.8	110.1	107.0	109.0
Sugar and confectionery.....	114.5	113.0	112.6	112.8	113.0	114.8	116.3	115.8	114.9	115.1	115.8	116.2	116.3	115.5	115.1
Packaged beverage materials.....	136.4	136.4	136.0	138.6	138.6	139.1	139.1	139.1	139.1	139.1	139.1	139.1	140.9	143.3	146.5
Animal fats and oils.....	57.0	58.1	58.0	59.8	59.7	57.6	57.2	65.0	72.2	76.8	77.4	65.0	62.4	58.4	54.6
Crude vegetable oils.....	57.3	56.6	57.2	58.2	59.9	59.6	61.9	66.9	69.4	66.7	63.2	57.1	52.4	49.1	53.1
Refined vegetable oils.....	73.9	77.7	77.7	70.1	68.3	67.7	68.0	71.8	71.9	70.5	67.5	64.4	61.2	56.7	58.0
Vegetable oil end products.....	83.7	83.7	83.3	82.3	82.4	83.8	84.8	85.9	85.0	84.4	80.4	77.9	77.4	73.2	74.0
Other processed foods.....	98.5	99.6	101.4	102.3	102.1	102.5	103.1	102.6	102.4	103.3	102.2	102.5	100.8	102.2	96.7
All commodities except farm products.....	124.4	124.0	124.0	124.1	124.0	123.9	123.8	124.0	124.6	124.9	125.0	124.9	124.6	124.7	124.5
All commodities except farm and foods.....	127.7	127.5	127.3	127.5	127.4	127.4	127.4	127.6	128.0	128.2	128.1	128.1	127.9	128.3	128.2
Textile products and apparel.....	94.8	94.8	94.7	94.4	94.2	93.9	93.7	94.0	94.1	94.4	94.7	94.8	95.2	96.1	95.0
Cotton products.....	91.9	91.8	91.6	91.0	90.4	89.7	89.5	89.9	89.9	90.2	90.2	90.8	91.2	94.2	91.7
Wool products.....	101.6	101.6	101.6	102.1	101.7	101.2	101.0	100.9	100.1	99.5	99.9	100.1	100.8	102.1	101.6
Manmade fiber textile products.....	75.6	75.5	75.1	75.1	75.1	75.1	75.1	75.4	75.8	76.3	77.2	77.3	77.8	79.1	81.1
Silk products.....	129.6	132.9	133.3	136.2	136.2	131.2	130.8	131.5	129.5	129.5	129.3	130.9	125.7	122.9	113.5
Apparel.....	100.8	100.8	100.8	100.7	100.6	100.4	100.4	100.3	100.4	100.4	100.5	101.0	101.0	100.9	100.0
Other textile products.....	93.9	93.5	94.7	90.5	91.0	90.7	85.7	92.8	93.6	100.3	101.3	99.2	92.6	85.2	76.8
Hides, skins, leather, and leather products.....	113.4	113.8	114.1	113.5	113.1	111.1	110.1	110.7	109.9	109.5	108.0	108.3	108.8	110.3	114.3
Hides and skins.....	76.3	79.6	82.2	82.5	82.9	76.2	68.1	71.0	68.0	68.8	60.5	61.7	64.9	68.1	90.7
Leather.....	108.4	108.6	109.3	107.6	106.3	102.6	102.6	104.1	102.2	100.2	97.3	97.8	99.4	101.5	111.8
Footwear.....	134.8	134.8	134.7	133.9	133.5	132.9	132.8	132.8	132.7	132.7	132.7	132.7	132.5	133.0	129.5
Other leather products.....	105.9	105.9	105.2	105.4	105.1	104.3	104.5	104.6	104.3	103.6	103.7	104.2	103.9	105.8	109.0
Fuel and related products, and power.....	114.9	114.0	113.0	113.7	114.4	114.6	114.3	113.6	115.2	117.5	117.7	117.2	116.2	113.8	112.7
Coal.....	121.6	121.2	120.8	120.1	119.2	118.7	117.7	117.4	119.6	122.8	123.4	123.4	123.1	121.8	122.6
Coke.....	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	170.4	169.8
Gas fuels.....	118.4	119.3	119.4	116.9	116.6	115.6	115.4	118.7	118.3	121.8	122.3	121.1	120.9	116.6	110.9
Electric power.....	102.5	102.6	102.5	102.4	102.4	102.5	102.3	102.4	102.5	102.4	102.2	102.3	102.3	101.9	100.8
Crude petroleum and natural gasoline.....	127.4	127.4	127.4	127.2	127.2	127.2	127.2	127.2	127.2	126.8	126.8	126.8	126.8	126.8	127.4
Petroleum products, refined.....	117.0	115.0	113.3	115.1	116.8	117.4	117.0	115.0	117.9	121.5	121.9	121.1	119.3	115.4	114.2
Chemicals and allied products.....	107.9	107.9	108.0	108.1	108.4	108.9	109.3	109.9	110.2	110.1	110.0	109.7	110.2	110.2	109.9
Industrial chemicals.....	120.1	120.3	120.3	120.6	120.8	121.1	122.2	122.8	123.2	123.2	123.2	123.0	123.6	124.2	123.8
Prepared paint.....	132.2	132.2	132.2	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	131.7	130.3	128.5	128.3
Paint materials.....	99.0	99.3	100.0	99.9	101.1	101.0	101.0	101.5	103.5	104.6	104.1	104.8	104.4	103.8	101.9
Drugs and pharmaceuticals.....	91.0	91.0	90.8	90.7	91.3	92.5	92.4	92.4	92.6	92.6	92.7	92.7	92.8	93.6	93.2
Fats and oils, inedible.....	46.9	46.0	47.0	48.7	51.1	52.2	54.1	61.4	62.1	57.7	54.7	50.2	48.5	49.0	56.7
Mixed fertilizer.....	113.9	114.2	113.6	114.4	113.6	113.0	112.3	112.3	112.3	111.9	111.9	111.6	111.8	111.0	109.5
Fertilizer materials.....	112.3	112.3	111.9	110.2	110.0	111.7	112.3	112.3	112.3	112.3	112.4	112.4	111.9	109.6	106.9
Other chemicals and allied products.....	105.4	105.3	105.3	105.3	105.3	105.8	105.8	105.8	105.6	105.6	105.5	105.4	107.2	106.7	106.6
Rubber and rubber products.....	137.0	138.4	139.4	139.6	139.4	139.0	139.6	140.2	140.1	139.9	139.6	139.7	141.2	144.7	144.5
Crude rubber.....	134.4	134.7	137.8	139.1	137.9	136.2	137.4	140.8	138.2	138.0	136.2	135.7	136.5	155.7	152.0
Tires and tubes.....	133.8	137.0	138.3	138.3	138.3	138.3	138.5	138.4	138.4	137.1	137.1	137.2	137.1	138.4	143.4
Other rubber products.....	141.1	141.1	141.0	141.0	141.1	140.9	141.6	141.6	142.5	143.3	143.3	143.6	146.8	145.6	142.2
Lumber and wood products.....	114.5	114.7	114.7	115.7	115.9	117.2	117.8	117.6	118.0	115.4	114.7	115.7	116.5	121.3	125.8
Lumber.....	114.1	114.3	114.5	115.3	115.8	116.8	117.0	117.0	116.5	114.4	113.5	114.5	115.0	121.4	127.1
Millwork.....	132.0	132.2	132.4	132.4	130.7	132.0	134.0	133.4	134.8	134.7	134.9	135.8	135.5	136.6	135.9
Plywood.....	91.1	91.6	90.9	93.7	95.3	97.2	97.2	97.2	99.1	92.0	90.8	91.7	95.1	96.1	101.2
Pulp, paper, and allied products.....	130.4	129.9	130.4	129.5	126.3	126.4	126.5	126.1	131.0	131.5	132.2	132.2	132.3	133.2	132.2
Woodpulp.....	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.5	114.5	114.5	114.5	120.6	121.2
Wastepaper.....	86.9	86.9	100.2	76.6	76.6	76.6	65.0	62.1	62.1	62.1	72.4	67.8	67.8	83.7	112.5
Paper.....	145.4	145.4	145.4	145.3	145.9	145.9	145.9	145.9	145.4	145.7	145.7	145.7	145.7	145.4	143.4
Paperboard.....	122.1	122.4	122.4	122.4	122.8	123.0	128.9	128.9	129.1	129.9	130.1	132.4	132.4	135.3	136.1
Converted paper and paperboard products.....	128.3	127.3	127.3	127.3	121.2	121.2	121.2	120.9	129.7	130.3	130.9	130.9	131.1	130.6	127.5
Building paper and board.....	143.6	143.9	144.8	144.8	144.8	144.9	144.9	144.6	145.8	145.8	146.0	145.6	145.4	145.7	146.4

See footnotes at end of table.

TABLE D-3. Indexes of wholesale prices,¹ by group and subgroup of commodities—Continued

[1947-49=100, unless otherwise specified]

Commodity group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960 ³	1959
All commodities except farm and foods—Con.															
Metals and metal products.....	152.7	¹ 152.4	153.2	153.7	153.6	153.2	153.1	153.0	152.7	152.4	152.3	152.2	152.2	153.8	153.6
Iron and steel.....	169.3	169.2	170.5	170.8	170.5	170.1	170.3	170.2	170.8	170.4	169.7	169.4	168.6	170.0	172.0
Nonferrous metals.....	134.8	134.0	134.9	136.3	136.2	135.8	135.2	134.4	132.4	132.3	132.2	132.1	133.9	139.0	136.1
Metal containers.....	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	156.6	153.9	153.7
Hardware.....	177.1	176.7	176.7	176.7	176.4	176.3	176.3	176.3	175.2	175.0	175.1	174.9	174.7	174.3	173.0
Plumbing fixtures and brass fittings.....	133.7	133.8	133.8	133.5	133.5	132.8	132.2	131.3	130.9	130.9	130.9	130.9	130.8	132.1	130.1
Heating equipment.....	114.8	114.3	114.8	115.2	115.6	115.5	115.4	115.4	115.2	114.5	114.8	114.9	116.8	119.4	121.7
Fabricated structural metal products.....	131.7	¹ 131.7	131.9	131.8	132.3	132.3	132.1	132.4	132.8	132.8	133.5	133.6	133.9	134.7	133.4
Fabricated nonstructural metal products.....	150.0	150.0	150.4	150.8	150.4	149.2	149.6	150.0	150.1	149.6	149.6	149.6	148.6	146.4	146.0
Machinery and motive products.....	153.1	152.9	152.8	152.7	152.7	153.0	153.2	153.1	153.1	153.4	153.4	153.5	153.1	153.4	153.0
Agricultural machinery and equipment.....	150.2	¹ 149.5	149.0	148.7	148.9	148.8	148.8	148.6	148.6	148.5	148.5	148.5	148.0	146.1	143.4
Construction machinery and equipment.....	178.6	178.6	178.5	178.5	178.5	178.3	178.2	178.5	178.6	178.2	178.2	177.6	177.0	175.6	171.9
Metalworking machinery and equipment.....	184.2	183.6	183.1	182.1	181.7	181.7	181.5	181.7	181.8	183.3	182.7	182.7	182.3	179.9	174.5
General purpose machinery and equipment.....	166.6	165.9	165.5	166.3	166.1	166.3	166.5	166.3	166.2	166.1	166.2	166.1	166.1	167.1	165.3
Miscellaneous machinery.....	152.4	¹ 152.3	152.0	152.0	152.0	151.8	151.4	151.4	151.4	151.2	151.2	151.3	150.9	159.2	148.4
Special industry machinery and equipment.....	101.0	100.7	100.7	100.6	100.5	100.5	100.5	100.4	100.3	100.1	100.0	100.0	100.1	(⁴)	(⁴)
Electrical machinery and equipment.....	151.1	151.1	151.1	150.4	150.5	151.8	151.7	151.7	151.9	153.5	153.6	153.7	152.4	154.2	154.4
Motor vehicles.....	140.0	139.9	140.0	140.3	140.5	140.5	140.4	140.3	140.3	140.2	140.4	140.8	140.7	140.8	142.8
Transportation equipment, railroad rolling stock.....	100.5	100.5	100.5	100.3	100.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁵)	(⁵)
Furniture and other household durables.....															
Household furniture.....	122.2	122.3	122.2	122.2	122.1	122.3	122.4	122.4	122.5	122.2	122.2	122.3	122.6	123.1	123.4
Commercial furniture.....	127.3	¹ 127.5	127.0	126.7	126.4	126.4	126.4	126.4	126.3	126.2	126.2	126.1	125.7	125.1	124.1
Floor coverings.....	156.7	156.7	156.7	156.7	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	157.1	156.8	155.2
Household appliances.....	128.7	129.1	129.0	129.3	129.3	129.3	128.6	128.6	128.6	128.6	128.6	128.7	130.2	130.4	128.1
Television, radio receivers, and phonographs.....	99.6	99.8	99.9	99.8	99.8	99.8	99.8	99.9	100.0	100.0	100.2	100.2	100.4	101.9	104.7
Other household durable goods.....	88.0	88.0	87.9	88.3	88.7	90.0	90.0	89.8	90.7	90.7	90.5	90.9	91.2	91.3	92.8
Nonmetallic mineral products.....	157.4	157.4	157.3	157.2	157.2	156.9	157.8	157.8	157.8	156.0	156.0	156.2	156.6	157.4	156.4
Flat glass.....	138.5	138.6	138.9	138.5	138.5	138.4	138.3	138.5	138.6	138.6	138.4	138.5	137.9	138.0	137.7
Concrete ingredients.....	130.3	130.3	130.3	130.3	130.3	130.3	130.3	132.4	132.4	132.4	132.4	132.4	132.4	132.7	135.3
Concrete products.....	141.6	141.6	142.5	142.4	142.4	142.6	142.6	142.6	142.6	142.6	142.3	142.2	142.0	142.1	140.3
Structural clay products.....	131.1	131.2	131.5	131.4	131.3	131.3	131.3	131.3	131.3	131.3	131.1	131.2	131.1	131.0	129.7
Gypsum products.....	162.1	162.0	162.1	161.9	161.7	161.6	161.6	161.5	162.1	162.1	162.1	162.1	162.3	161.8	160.2
Prepared asphalt roofing.....	137.3	137.3	137.3	137.3	137.3	134.6	134.6	134.6	134.6	134.6	134.6	134.6	133.2	133.2	133.1
Other nonmetallic minerals.....	120.4	120.4	120.4	114.2	114.2	114.2	112.9	112.9	114.2	114.2	114.2	114.2	106.6	107.3	116.4
Tobacco products and bottled beverages.....	132.8	133.1	133.2	133.2	133.7	133.7	133.7	133.7	133.7	133.6	132.9	133.5	133.6	134.2	132.4
Tobacco products.....	133.4	133.5	133.4	133.4	132.8	132.6	132.1	132.1	132.0	132.1	132.1	132.1	132.1	131.8	131.4
Alcoholic beverages.....	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.8	130.8	130.8	130.8	130.8	130.8	130.5
Nonalcoholic beverages.....	121.1	¹ 121.2	121.1	121.2	121.1	121.1	121.2	121.2	121.1	121.3	121.3	121.2	121.2	120.8	121.3
Miscellaneous products.....	180.5	180.5	180.5	180.5	176.3	174.8	171.6	171.6	171.6	171.6	171.6	171.6	171.6	171.3	167.4
Toys, sporting goods, small arms, ammunition.....	98.6	97.5	93.4	95.6	95.6	95.6	95.9	99.5	97.7	96.8	95.2	95.6	92.4	92.1	94.5
Manufactured animal feeds.....	119.1	119.9	119.9	119.6	119.7	119.0	118.9	118.9	119.0	118.9	118.3	118.4	118.6	118.3	117.5
Notions and accessories.....	78.5	76.8	71.0	74.2	74.3	74.6	75.0	80.3	77.5	76.2	74.1	74.6	70.0	69.6	75.1
Jewelry, watches, and photographic equipment.....	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.4	96.4	96.4	96.4	96.4	96.9	97.3
Other miscellaneous products.....	112.3	¹ 112.3	112.0	111.9	111.7	111.0	111.0	111.0	111.2	111.3	111.3	111.2	111.0	110.7	108.2
	132.3	133.3	133.0	132.8	133.1	132.3	132.2	131.8	131.7	132.3	132.8	132.8	132.4	132.2	132.3

¹ As of January 1961, new weights reflecting 1958 values were introduced into the index. Technical details furnished upon request to the Bureau.

² Preliminary.

³ Revised.

⁴ Formerly titled Fuel, power, and lighting materials.

⁵ January 1958=100.

⁶ New series. January 1961=100.

⁷ Formerly titled Nonmetallic minerals—structural.

TABLE D-4. Indexes of wholesale prices for special commodity groupings¹

[1947-49=100, unless otherwise specified]

Commodity group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960 ³	1959
All foods.....	105.6	105.4	105.6	105.4	105.8	105.6	104.2	104.7	105.8	107.5	108.0	107.5	107.3	106.0	104.4
All fish.....	143.6	141.1	138.1	136.9	137.1	129.2	129.5	128.6	126.2	132.0	133.3	131.3	133.2	126.7	124.5
All commodities except farm products.....	124.4	³ 124.0	124.0	124.1	124.0	123.9	123.8	124.0	124.6	124.9	125.0	124.9	124.6	124.7	124.5
Textile products, excluding hard fiber products.....	89.5	89.5	89.2	88.9	88.6	88.1	88.1	88.4	88.4	88.7	89.2	89.5	90.0	92.2	91.4
Refined petroleum products: ⁴															
East Coast petroleum products, refined.....	115.9	114.6	114.6	114.6	114.6	113.4	113.4	113.4	114.8	116.1	116.6	114.3	111.4	111.0	108.9
Midcontinent petroleum products, refined.....	117.2	108.9	102.2	108.2	115.0	121.7	121.7	116.0	124.2	125.3	126.0	126.0	125.2	117.0	115.7
Gulf Coast petroleum products, refined.....	124.0	122.8	122.2	122.2	122.2	121.3	119.8	119.8	122.1	127.3	127.3	125.6	122.9	120.4	118.4
Pacific Coast petroleum products, refined.....	106.1	107.0	107.0	108.5	110.1	107.0	107.9	109.1	104.3	105.5	106.1	107.3	105.5	105.8	108.2
Midwest petroleum products, refined ⁵	90.3	90.3	88.7	91.3	92.6	93.9	93.9	88.7	93.5	99.3	99.9	100.0	100.0	(⁶)	(⁶)
Bituminous coal—domestic sizes.....	125.6	125.6	124.4	123.1	121.7	120.1	118.3	117.3	117.7	126.4	127.9	127.9	127.7	124.7	124.9
Soaps.....	109.6	109.6	109.6	109.6	109.6	109.6	109.6	109.6	107.5	107.5	107.4	107.4	107.6	107.6	109.5
Synthetic detergents.....	100.3	100.3	100.3	100.3	100.3	102.0	102.0	102.0	102.0	102.0	102.0	102.0	102.9	101.7	101.4
Pharmaceutical preparations.....	101.2	101.2	100.9	100.8	100.8	102.2	102.1	102.1	102.0	102.0	102.2	102.1	102.1	103.3	103.0
Ethical preparations ¹	98.6	98.6	98.2	98.0	98.0	98.0	99.9	99.9	99.9	99.9	99.9	100.1	100.0	(⁶)	(⁶)
Anti-infectives ¹	99.7	99.7	99.7	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	100.0	100.1	(⁶)	(⁶)
Anti-arthritis ¹	100.6	100.6	100.6	100.6	100.6	100.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Sedatives and hypnotics ¹	112.5	112.5	101.9	101.9	101.9	101.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Ataractics ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Anti-spasmodics and anti-cholinergics ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Cardiovascular and anti-hypertensives ¹	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Diabetics ¹	103.8	103.8	103.8	103.8	103.8	103.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Hormones ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Diuretics ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Dermatologicals ¹	100.6	100.6	100.5	100.5	100.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Hermatins ¹	108.5	108.5	108.5	108.5	108.5	108.5	104.5	104.5	104.5	104.5	104.5	104.5	100.0	(⁶)	(⁶)
Analgesics ¹	101.8	101.8	101.8	101.8	101.8	101.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Anti-obesity preparations ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Cough and cold preparations ¹	98.8	98.8	98.8	98.8	98.8	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Vitamins ¹	88.1	88.1	88.1	88.1	88.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Proprietary preparations ¹	100.2	100.2	100.2	100.1	100.1	100.1	100.2	100.2	100.0	100.0	100.0	100.0	99.8	(⁶)	(⁶)
Vitamins ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Cough and cold preparations ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Laxatives and elimination aids ¹	99.5	99.5	99.5	99.5	99.5	99.5	100.5	100.5	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Internal analgesics ¹	100.9	100.9	100.6	100.6	100.6	100.6	100.3	100.3	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Tonics and alteratives ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.8	(⁶)	(⁶)
External analgesics ¹	100.2	100.2	100.2	100.2	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	98.8	(⁶)	(⁶)
Antiseptics ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Antacids ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(⁶)	(⁶)
Lumber and wood products (excluding millwork).....	111.7	111.9	111.9	113.2	114.0	115.3	115.4	115.4	115.6	112.1	111.1	112.1	113.3	118.9	124.5
Softwood lumber.....	112.9	³ 113.0	113.2	114.2	114.9	115.9	116.1	116.1	115.6	113.0	111.6	112.4	112.7	120.4	128.1
Pulp, paper, and products (excluding building paper).....	130.0	129.5	130.0	129.1	125.8	125.8	126.0	125.6	130.6	131.1	131.8	131.9	132.0	132.9	131.8
Special metals and metal products.....	149.7	149.5	150.0	150.4	150.4	150.1	150.1	149.9	149.7	149.5	149.5	149.5	149.6	150.5	150.8
Steel mill products.....	186.9	186.9	186.9	186.9	186.9	187.0	187.0	187.5	187.5	187.6	187.6	187.6	187.6	187.9	188.2
Machinery and equipment.....	159.9	159.6	159.4	159.1	159.1	159.6	159.5	159.5	159.6	160.3	160.2	160.2	159.6	160.0	158.5
Agricultural machinery (including tractors).....	152.3	³ 151.5	151.0	150.7	150.8	150.8	150.8	150.5	150.5	150.5	150.4	150.4	150.0	147.9	144.8
Metalworking machinery.....	192.1	³ 192.0	191.4	190.6	190.0	189.9	189.5	189.5	189.5	189.2	189.9	189.9	189.6	186.7	181.8
Total tractors.....	160.3	³ 159.7	159.3	159.3	159.3	159.1	159.0	159.2	159.2	159.2	159.2	159.1	158.9	156.4	153.3
Industrial valves.....	201.3	199.5	197.5	200.8	201.9	202.3	202.5	202.5	202.5	202.1	201.1	201.6	201.2	205.1	196.9
Industrial fittings.....	125.5	120.1	120.1	120.1	119.4	119.4	121.7	121.7	121.7	121.7	122.0	121.4	121.7	132.2	139.0
Antifriction bearings and components.....	130.8	130.8	130.6	131.8	130.5	130.6	130.6	130.6	130.6	130.6	131.4	131.4	131.4	133.6	136.1
Abrasive grinding wheels.....	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	147.5	152.5
Construction materials.....	129.5	129.6	129.7	130.0	130.1	130.5	130.5	130.6	130.7	129.9	129.8	130.1	130.0	132.6	134.6

¹ See footnote 1, table D-3.² Preliminary.³ Revised.⁴ The special index for refined petroleum products is now being published as a subgroup index in table D-3.⁵ New series. January 1961=100.

TABLE D-5. Indexes of wholesale prices,¹ by stage of processing and durability of product
(1947-49=100)

Commodity group	1961												1960	Annual average	
	Dec. ²	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	1960 ³	1959
All commodities.....	119.2	118.8	118.7	118.8	118.9	118.6	118.2	118.7	119.4	119.9	120.0	119.9	119.6	119.6	119.5
<i>Stage of processing</i>															
Crude materials for further processing.....	94.3	93.3	*93.7	93.8	94.8	92.7	91.6	93.2	94.6	95.2	95.1	94.7	93.3	94.5	96.7
Crude foodstuffs and feedstuffs.....	84.7	83.5	*83.1	83.4	85.1	82.8	81.5	83.6	85.7	86.9	87.5	87.3	85.5	85.7	86.8
Crude nonfood materials except fuel.....	109.7	109.3	111.5	111.3	110.6	109.2	108.5	108.7	108.6	107.2	105.4	104.4	104.1	107.6	112.2
Crude nonfood materials, except fuel, for manufacturing.....	108.0	107.5	109.9	109.6	108.9	107.4	106.7	106.9	106.7	105.2	103.3	102.2	101.8	105.5	110.8
Crude nonfood materials, except fuel, for construction.....	141.6	141.6	142.5	142.4	142.4	142.6	142.6	142.6	142.6	142.6	142.3	142.2	142.0	142.1	140.3
Crude fuel.....	124.7	124.9	124.7	123.2	122.6	121.9	121.2	122.3	123.3	126.8	127.4	126.9	126.3	124.4	123.4
Crude fuel for manufacturing.....	124.3	124.5	124.2	122.8	122.2	121.5	120.9	121.9	122.7	126.2	126.8	126.3	125.8	123.9	122.9
Crude fuel for nonmanufacturing.....	125.5	*125.6	125.4	123.9	123.2	122.5	121.8	123.0	124.2	127.7	128.2	127.7	127.1	125.2	124.1
Intermediate materials, supplies, and components.....	126.1	125.8	125.4	125.7	125.5	125.6	125.8	126.3	126.9	126.9	126.7	126.7	126.4	127.0	127.0
Intermediate materials and components for manufacturing.....	127.0	126.9	*127.0	127.0	127.1	127.1	127.4	127.8	127.9	127.9	127.8	127.8	127.9	128.9	129.0
Intermediate materials for food manufacturing.....	101.8	101.4	101.7	101.3	101.4	101.6	102.0	103.0	103.7	103.9	103.6	102.4	101.3	99.3	98.5
Intermediate materials for nondurable manufacturing.....	103.6	103.6	103.6	103.5	103.7	103.6	104.1	104.5	104.8	104.8	104.8	104.9	105.2	106.4	106.4
Intermediate materials for durable manufacturing.....	155.9	155.8	156.0	156.4	156.4	156.2	156.0	156.0	155.6	155.4	155.5	155.5	156.6	158.1	157.9
Components for manufacturing.....	148.8	148.5	*148.5	148.4	148.5	*149.1	149.1	*149.2	*149.3	150.0	150.1	150.0	149.3	150.7	151.5
Materials and components for construction.....	133.1	133.1	133.2	133.5	133.6	134.0	134.1	134.1	134.3	133.5	133.5	133.7	133.7	135.5	136.6
Processed fuels and lubricants.....	109.8	109.2	108.3	109.2	110.0	110.5	110.2	109.4	110.3	111.9	111.9	111.9	111.6	108.9	108.0
Processed fuels and lubricants for manufacturing.....	109.9	109.5	108.9	109.4	110.0	110.3	110.1	109.6	110.3	111.6	111.6	111.5	111.3	108.9	105.6
Processed fuels and lubricants for nonmanufacturing.....	109.6	108.6	107.5	108.9	110.1	110.9	110.6	109.1	110.4	112.5	112.5	112.7	112.3	109.1	106.8
Containers, nonreturnable.....	138.9	138.2	138.2	137.6	133.3	133.3	133.1	133.7	139.9	140.6	141.1	140.9	139.4	138.6	136.7
Supplies.....	119.1	118.1	*115.5	116.8	115.6	115.8	115.9	118.3	119.2	118.7	117.6	117.8	116.1	115.8	116.6
Supplies for manufacturing.....	147.4	*147.1	*147.1	147.0	147.1	147.2	147.6	147.6	148.1	149.0	148.4	148.6	149.6	149.3	143.5
Supplies for nonmanufacturing.....	105.7	*104.6	101.3	102.9	101.4	101.8	101.7	104.7	105.6	104.8	103.6	103.7	101.2	101.0	104.1
Manufactured animal feeds.....	73.4	71.6	65.2	68.4	68.3	68.7	69.2	74.8	72.3	70.7	68.3	68.9	64.2	63.8	74.7
Other supplies.....	122.6	122.2	122.2	122.2	119.5	119.4	119.2	119.5	123.5	123.4	123.4	123.2	123.0	122.9	121.3
Finished goods (goods to users, including raw foods and fuels).....	121.6	121.4	121.3	121.3	121.4	121.2	120.6	120.7	121.3	122.2	122.6	122.4	122.2	121.5	120.6
Consumer finished goods.....	113.5	*113.2	113.2	113.2	113.3	113.1	112.4	112.5	113.3	114.3	114.8	114.5	114.4	113.6	112.5
Consumer foods.....	107.1	106.8	107.1	106.9	107.2	106.8	105.0	105.7	106.8	108.6	109.5	109.1	109.0	107.7	105.5
Consumer crude foods.....	90.7	94.4	*93.8	92.7	94.8	95.7	90.5	89.9	90.6	97.2	96.8	96.8	96.8	98.0	91.9
Consumer processed foods.....	110.4	*109.4	109.9	109.8	109.8	109.1	108.0	108.9	110.1	111.0	112.1	111.7	111.0	109.7	108.4
Consumer other nondurable goods.....	114.5	*114.1	113.8	113.9	114.0	113.9	113.8	113.5	114.2	115.0	115.2	114.9	114.7	114.1	113.4
Consumer durable goods.....	125.4	125.4	*125.3	125.5	125.5	125.6	125.6	125.5	125.5	125.6	125.6	125.8	125.8	126.1	126.5
Producer finished goods.....	154.3	*154.1	154.0	153.8	153.8	153.8	153.9	153.7	153.7	153.8	153.9	154.0	153.8	153.8	153.2
Producer finished goods for manufacturing.....	161.0	160.9	*160.8	160.6	160.6	160.6	160.7	160.6	160.6	160.6	160.6	160.8	160.6	160.0	158.1
Producer finished goods for nonmanufacturing.....	148.4	148.3	148.1	147.9	147.8	147.9	147.9	147.7	147.6	147.9	147.9	147.9	147.8	148.4	149.1
<i>Durability of product</i>															
Total durable goods.....	145.0	144.9	145.0	145.2	145.2	145.3	145.4	145.3	145.3	145.1	145.0	145.1	145.0	145.7	145.9
Total nondurable goods.....	105.1	104.7	104.4	104.5	104.6	104.2	103.5	104.3	105.3	106.2	106.3	106.1	105.6	105.3	105.0
Total manufactures.....	125.3	125.0	124.8	125.0	124.9	124.9	124.8	125.1	125.7	126.0	126.1	126.1	125.7	125.8	125.5
Durable manufactures.....	146.2	146.2	146.2	146.3	146.3	146.4	146.5	146.5	146.5	146.3	146.3	146.5	146.4	147.0	147.0
Nondurable manufactures.....	108.7	108.2	107.9	108.2	108.1	107.9	107.7	108.3	109.3	109.9	110.1	109.9	109.4	108.9	108.5
Total raw or slightly processed goods.....	98.5	98.1	98.2	97.8	98.6	97.3	95.8	97.0	98.0	99.3	99.3	98.9	98.3	98.6	98.9
Durable raw or slightly processed goods.....	107.2	106.4	111.7	114.2	112.7	110.8	111.9	109.7	110.7	108.6	105.1	103.5	101.8	107.4	114.1
Nondurable raw or slightly processed goods.....	98.1	97.7	97.5	97.0	97.9	96.6	95.0	96.3	97.4	98.8	99.0	98.6	98.1	98.1	98.1

¹ See footnote 1, table D-3.² Preliminary.³ Revised.

NOTE: For description of the series by stage of processing, see New BLS Economic Sector Indexes of Wholesale Prices (in Monthly Labor Review, December 1955, pp. 1448-1453); and by durability of product and data beginning with 1947, see Wholesale Prices and Price Indexes, 1957, BLS Bull. 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.....	4,760	-----	3,470,000	-----	38,000,000	.47
1946.....	4,985	-----	4,600,000	-----	116,000,000	1.43
1947.....	3,693	-----	2,170,000	-----	24,600,000	.41
1948.....	3,419	-----	1,960,000	-----	24,100,000	.37
1949.....	3,646	-----	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	.28
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
1960: December.....	110	250	27,500	53,200	458,000	.08
1961: January ¹	170	300	80,000	100,000	700,000	.08
February ¹	210	330	120,000	150,000	940,000	.11
March ¹	220	350	55,000	75,000	610,000	.06
April ¹	320	460	94,000	126,000	1,180,000	.14
May ¹	430	620	120,000	165,000	1,530,000	.16
June ¹	330	570	140,000	211,000	1,760,000	.18
July ¹	330	560	95,000	183,000	1,690,000	.19
August ¹	325	550	95,000	180,000	1,320,000	.13
September ¹	310	530	334,000	390,000	3,150,000	.35
October ¹	300	510	223,000	277,000	2,380,000	.23
November ¹	225	430	83,000	156,000	1,000,000	.10
December ²	100	250	27,000	75,000	500,000	.05

¹ The data include all known strikes or lockouts involving 5 or more workers 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.

³ Revised preliminary.

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