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In this issue:
A Special Section on Time Spent at Work





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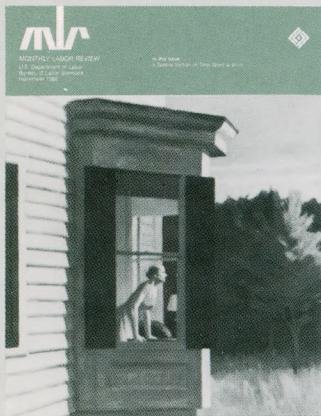
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MONTHLY LABOR REVIEW

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Henry Lowenstern, Editor-in-Chief

Robert W. Fisher, Executive Editor

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Labor Month In Review



SIC Revision. The Federal Office of Management and Budget announced that the Standard Industrial Classification system, which underlies all establishment-based economic statistics, is being revised, effective January 1, 1987. Here are excerpts from the OMB announcement, which appeared in the *Federal Register* for October 1, 1986, pages 35170 to 35188.

Background. The SIC system is revised periodically to reflect the economy's changing industrial composition and organization. Changes in the economy since the last major revision in 1972 require an updating of the standard. The revised SIC provides a more current classification structure with which to collect, disseminate, and analyze data on the industrial makeup of the U. S. economy. [Although the revision is effective January 1, 1987, full implementation of the new SIC will occur over several years, with some programs introducing the changes as early as 1988. Data series for years prior to implementation may not always be revised to reflect the 1987 SIC revision.]

Changes. The 1987 SIC revision has resulted in a net increase of 19 industries for Services (Division I), 8 for Wholesale Trade, and 7 for Manufacturing, with a net decrease of 34 for the other SIC Divisions. Deleted industries were merged into other industries and new industries were created by subdividing or restructuring existing industries. Various industries are also changed by transfers of individual activities, primarily to increase data classification accuracy, consistency, and usefulness, or by

renumbering to change the existing three-digit structure.

Most of the industries that are deleted no longer meet the economic significance criteria for continued recognition as a separate industry. However, a few are dropped because the number of companies represented by the establishments classified in the industry is now so small as to cause disclosure problems in publishing data or because the distinctions required cause difficulties in classification.

The revision process included a comprehensive review of Transportation (Major Groups 40-47), Communications (Major Group 48), and Finance (Major Groups 60-62, and 67) to identify revisions needed due to changes in technology and government regulation. Major revisions occurred in Water Transportation, now divided by freight and passengers, and in the structure and detail of Banking and Other Credit Agencies (Major Groups 60-61), in particular to recognize changes in depository regulations. In addition, the decisions include the recognition of new industries for Cable and Other Pay Television (from 4833 and 4899) and Radiotelephone Communications Services (from 4811).

The growth of computer-related activities has resulted in a number of new industries. Several new industries are recognized for computers and computer peripheral equipment in Manufacturing (from 3573). There are industries for the sale of Computers and Computer Peripheral Equipment and Software in Wholesale Trade (from 5081) and Retail Trade (from 5732). Computer establishments are classified in Wholesale Trade if they sell primarily for business or

government use and in Retail Trade if they sell primarily for household use. Additional detail is also added for computer services within current Group 737, including a separate industry for Prepackaged Computer Software.

Considerable emphasis was placed on improved detail for Services (Division I). There is a new Major Group 87 for selected professional and technical services, comprising elements of the current Business Services (Major Group 73) and Miscellaneous Services (Major Group 89). A number of changes are incorporated for Major Group 80, Health Services, to improve detail and data accuracy for this area of rapid growth. Other changes include the recognition of industries for Physical Fitness Facilities (from 7299, 7997, and 7999), Tax Return Preparation Services (from 7299) and Video Tape Rental (from 7394). Various other industries are also subdivided (for example, 7321, 7393, and 7539).

Subdivisions were created for some of the largest and fastest growing current industries in Manufacturing, including Miscellaneous Plastics Products (3079), Radio and Television Communications Equipment (3662), and Electronic Components, not elsewhere classified (3679).

SIC Manual. Clothbound copies of the "Standard Industrial Classification Manual 1987" may be ordered from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, \$24 before December 31, 1986, \$30 thereafter. The manual is also available on computer tape, \$175, and on diskettes upon request. For telephone orders, call (703) 487-4650. □

Work schedules of Americans: an overview of new findings

A group of eight articles examines data from a special 1985 household survey covering topics such as the number of workers who moonlight, who work at home, who have flexible hours, or who would prefer to work more or fewer hours per week

PAUL O. FLAIM

In recent years, we have become familiar with such “mega-trends” in the labor force as the rapidly increasing participation of women, the tendency toward earlier retirement among men, the maturing of the baby-boom cohorts, and the shift of workers out of the stagnant goods-producing sector of the economy and into the expanding services sector. Yet, we still have little data about the day-to-day and week-to-week working lives of American men and women. Among the most conspicuous gaps in our knowledge have been such unanswered (or only occasionally answered) questions as: How many Americans work at two jobs? How many work at night, or schedules other than the stereotypical daylight shifts? How many Americans work on weekends? How many have jobs entailing home-based work? And what proportions—if offered such a choice—would prefer to work either more or fewer hours per week at their current rates of pay?

Until recently, there was either no information at all concerning these questions or, at best, information which had been collected sporadically and which had become rather dated. Now, thanks to a special survey conducted in 1985, we have both up-to-date information with which to address some of the traditional questions on work schedules, as well

as entirely new information on work-schedule topics that had not previously been studied at the national level. The new information was collected in May 1985 through a special supplement to the Current Population Survey (CPS), the monthly survey which provides the basic measurements of the labor force and unemployment for the Nation. The new findings are discussed in detail, on a topic-by-topic basis, in the eight articles which follow. Here are some selected highlights.

- Multiple jobholders—persons working at more than one job—numbered about 5.7 million in May 1985. They accounted for 5.4 percent of all employed persons, up from 4.9 percent in 1980.
- Saturday work was the usual routine for one-fourth of all workers, while 1 in 8 reported they usually worked on Sunday.
- Work outside the typical daylight hours—usually in the evening—was the usual routine for about one-sixth of the full-time workers and one-half of the part-time workers.
- Home-based work of at least 8 hours a week was reported by over 8 million workers. However, most were full-time employees who did only a small part of their work at home.
- Flexitime or other schedules enabling workers to vary the start and end of their workday was available to about 12 percent of the wage and salary workers with full-time jobs.

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- A preference for a longer workweek (and thus “more money”) was expressed by about one-fourth of the workers. In contrast, fewer than 1 in 10 said they would opt for a cut in hours accompanied by a reduction in earnings.

These and other findings from the May 1985 survey—analyzed in great detail in the articles which follow—add considerably to our knowledge of the work routines and preferences of American workers. But before we focus our attention on these detailed findings, it may be worthwhile to briefly review those historical trends in the labor force which provide a useful background and help to set the stage for the study of these topics.

Background data

While addressing few of the specific questions highlighted above, the data regularly available from the CPS already tell us a lot about the basic trends in the labor force behavior and work patterns of Americans. Through these data, we can, for example, track the historical changes in the rate of labor force participation and in the length of the workweek for the principal population groups. We also have been able to estimate—at least in a rough way—how many persons flow into and out of the labor force over a given period and thus get a notion of the dynamics of the labor force. And when we add to the regularly available data those which have been obtained from time to time through special supplements to the CPS, we can gain yet further insights into the basic labor force behavior of Americans and their work/leisure choices. Let us look briefly at some of these background data.

The expanding labor market role of American women—which can actually be tracked on a month-by-month or year-by-year basis with the data from the CPS—can be illustrated here with some key numbers for 1965 and 1985. Over this 20-year period, the labor force participation rate for women (the proportion 16 years and over who are in the labor force) climbed from 39 to 55 percent. Over the same two decades, the comparable rate for men edged down gradually from 81 to 76 percent, reflecting primarily a tendency among them to retire at an earlier age.

It is also important to note that women did not achieve their spectacular increases in labor market penetration over this 20-year period by taking mostly part-time jobs. To the contrary, the proportion of women working full-time held fairly steady—at nearly 75 percent—during this entire period.

A different perspective on the divergent trends in the work patterns of American men and women comes to us from the “work experience” data collected each March. These data show what proportion of men and women did at least some work during the previous year and, among those with some employment, what proportion managed to work the entire year on a full-time basis.¹

Focusing again on the changes between 1965 and 1985,

we find that the proportion of women with at least some employment in these 2 years was respectively, 49 and 59 percent. And among the increasing number of women with some employment, the proportion actually working year round on a full-time basis posted an equally robust increase. It expanded from 39 percent in 1965 to 48 percent in 1985. This means that practically half of the women with any labor market involvement are now working full time over the entire year.

Further knowledge of the basic work patterns of Americans, particularly with regard to the dynamics of their labor force behavior, can be gained through the data obtained regularly from those not in the labor force. Because these data tell us how many of these persons left their jobs during the previous 12 months, they can be used to determine, by inference, how many entered the job market over the same period. In this regard, the data collected during 1985 show that, on average, 9.1 million of the persons outside the labor force had left the employment ranks over the previous 12 months.² Because there had been a net employment increase of 2.1 million, we can estimate that at least 11 million persons had to enter the job market over this period to replace the outgoing workers and to account for the additional growth.

The monthly data on “gross flows,” although subject to considerable bias and seldom used, point to even larger movements into and out of the labor force. They suggest, in fact, that several million persons may enter and leave the labor force each month.³

While this may leave us with the impression that labor mobility is widespread in the United States, that is not necessarily the case. In fact, there is evidence that the American labor force has a large core of workers who remain in their jobs, with most of the mobility occurring among other workers, especially youths. For example, the most recent CPS data on job tenure, collected in January 1983, show that among workers 25 and older (men and women combined), 1 in 3 had been with the same employer for 10 years or more and 1 in 8 had been with the same employer for 20 years or more.⁴ Here is the percent distribution of these workers by years of continuous employment with current employer:

	Total	1 year or less	2 to 9 years	10 to 19 years	20 years or more
Total	100.00	20.3	45.9	21.4	12.3
Men	100.00	18.0	42.2	23.2	16.7
Women	100.00	23.4	50.8	19.1	6.7

While the above data show women to be somewhat more concentrated in the lower tenure categories than are men, they also show that, even among women, more than one-fourth had been working continuously for the same employer for 10 years or more. It was from an analysis of these tenure data that some have concluded that, contrary to the conventional wisdom, lifetime jobs are not that uncommon for American workers.⁵

And how many years, altogether, can American workers expect to spend in the labor force over their lifetime? The answers to this question come to us in the form of "worklife" estimates, currently based on the observed labor force behavior over the course of a year of men and women at all specific ages. It has been estimated from these observations (also derived from the CPS) that a man age 25 may expect to work an additional 34 years, and that a working woman of the same age may expect to be in the labor force an additional 25 years.⁶

After this brief review of the basic patterns in the working life of Americans, as reflected in various series of data from the CPS, let us now turn back to the various analyses of the May 1985 data on the day-to-day and week-to-week routines of these workers.

Analyzing the May 1985 data

The broad picture which emerges from the various analyses of the May 1985 data is of workers with a generally strong attachment to their jobs. The great majority worked 40 hours a week, but many said they regularly worked well over that standard. As already noted, nearly 6 million held two jobs, an even larger number said they usually did some work at home, and weekend work, particularly on Saturday, was a fairly common occurrence. While most workers seemed satisfied with the length of their workweeks, the vast majority of those who would have opted for a change said that they would have preferred a longer workweek so they could earn more money. As a further indication of the relatively strong attachment to their jobs, fewer than 5 percent of the full-time workers reported an absence from work in the week preceding this special survey.

Of the articles that follow, Shirley J. Smith highlights the predominance of the 5-day 40-hour workweek. Although finding little change in recent years in the proportion of workers on 40-hour schedules, Smith notes that there have been some changes in work patterns, with a still small but growing group of workers on "compressed" full-time weeks of less than 5 days. Surprisingly, she also finds some growth in the proportion of workers on part-time schedules who seem to "stretch" their work out over 6 or 7 days.

Susan Shank examines the data on workweek preferences and finds only moderate support for the hypothesis underlying the "backward bending labor supply curve," according to which an increase in rates of pay past a certain point induces workers to reduce their hours of work. Although the proportion of workers choosing fewer hours of work does grow as earnings rise, the category remains very small. Even among workers earning \$750 or more per week, only about 10 percent of the men and 20 percent of the women were willing to trade hours of work—and the income linked to them—for additional leisure.

Earl Mellor focuses on the workday and finds that about 1 of 8 full-time workers were on flexitime or other schedules that allowed them to vary the start and end of their

What if you are your own employer?

In analyzing the May 1985 data on work schedules and related topics, we decided to make a small departure from the typology generally used in the display and analysis of data from the Current Population Survey. Specifically, we decided to focus mainly on wage and salary workers and, in doing so, to exclude from this universe those who are the nominal employees of corporations which they own. While "wage and salary workers" in a technical sense—and treated as such in the usual display of employment data from the CPS—these persons (numbering 2.8 million in May 1985) exhibit many of the traits and work patterns of the typical self-employed workers. For this reason, in most of the analyses which follow, these "incorporated self employed" are broken out of the total wage and salary universe and either shown separately or merged with the other self-employed. The smaller group of "unpaid family workers" (those 500,000 who, although unpaid, worked at least 15 hours a week in a family owned enterprise) are also either shown separately or merged with the self-employed workers (those not incorporated), with the combined group, totaling 9.8 million, generally shown as "all other workers." This allows the analyst to focus more clearly on the wage and salary workers who are truly working for someone else.

daily work. The great majority were on typical daylight schedules, with about one-fifth reporting 8:00 a.m. to 5:00 p.m. as their schedules. About 6 percent worked predominantly in the evening, 3 percent on the "night shift," and 4 percent on rotating shifts.

The data on multiple jobholders are examined by John Stinson. He finds a particularly sharp increase in the number of women with two jobs, which is another sign of the growing strength of their ties to the job market. Nearly 5 percent of working women are now multiple jobholders.

The new data on home-based work are analyzed by Francis Horvath, who observes that most of the persons reporting such work are full-time workers who, apparently, do only a small part of their work at home. Only one-tenth of these workers were engaged in manufacturing activities, an area of traditional concern in the field of labor legislation. Most prevalent were those employed in offices, sales, and miscellaneous services.

Bruce Klein uses the May 1985 data to construct measures of absences. He finds that the proportion of workers with an absence in the reference week for the survey was only 4.7 percent, a rate considerably lower than rates which had been computed for several years until 1980. He hypothesizes that this decline in absences, confirmed by other data, may reflect several factors such as: the job reduction in some industries, which is likely to have fallen most heavily on workers with high rates of absenteeism; the likely impact of such cuts on other workers, who might have reduced their rates of absenteeism so as not to jeopardize their jobs; and the positive measures adopted by some employers to reward the workers with few absences.

Wayne Howe examines the data on the characteristics of the workers employed by temporary help agencies. This has been a rapidly growing sector of employment in recent years. Howe finds that, relative to other workers, those who are employed by temporary help agencies are more likely to be younger and to work part time. Their group contains relatively large proportions of women and blacks, who are heavily concentrated in clerical work and in what might be called "industrial help" occupations.

Darrell Carr looks at the new data on workers receiving overtime pay. These cover not only the persons working more than 40 hours a week; they extend also to those receiving overtime premiums for some hours, even though the weekly total does not exceed 40. He notes that out of 10.5 million workers with some overtime pay for work performed during the reference week for the May 1985 survey, about 1.6 million had actually worked 40 hours or less.

Taken together, these articles improve our understanding of the work practices of American men and women. Of course, further analysis of the data on which the findings are based is still possible. Moreover, other issues could be addressed using these data. For example, where there are multiple workers in a family one might want to determine how the schedules of one member correspond to those of other members. The effect of the presence of children on the work schedules and workweek preferences of the parents might also be explored further. And a construction of a

bridge between the data on work schedules and preferences of workers and those on family income might also be undertaken. These are complex and time-consuming undertakings, but with potentially large payoffs in the form of further insights into the day-to-day work lives of American men and women. □

—FOOTNOTES—

¹ The work experience data are published annually. For the most recent data, see Shirley J. Smith, "Work experience profile, 1984: the effects of recovery continue," *Monthly Labor Review*, February 1986, pp. 37-42.

² The data on when the persons outside the labor force have last worked are not currently published and may be subject to significant bias, particularly because of a phenomenon known as "telescoping." This relates to a possible tendency among survey respondents to report certain events as having occurred in the recent past, when, in fact, they had occurred earlier. To the extent that some of the persons who have been outside the labor force more than 1 year report that they left their last job in the most recent year, there would be an overestimation of the number exiting the labor force and, by inference, of those entering it over the year in question.

³ While very revealing, the gross flow data are subject to serious statistical problems and may also overestimate the flows into and out of the labor force. See Paul O. Flaim and Carma R. Hogue, "Measuring labor force flows: a special conference examines the problems," *Monthly Labor Review*, July 1985, pp. 7-17.

⁴ See Ellen Sehgal, "Occupational mobility and job tenure in 1983," *Monthly Labor Review*, October 1984, pp. 18-24.

⁵ Robert E. Hall, "The Importance of Life Jobs in the U.S. Economy," *American Economic Review*, September 1982.

⁶ Shirley J. Smith, "Revised worklife tables reflect 1979-80 experience," *Monthly Labor Review*, August 1985, pp. 23-30.

The growing diversity of work schedules

While the 40-hour, 5-day workweek remains the schedule of choice for most employers and workers, a recent study shows evidence of the emergence of new forms of extended and compressed work schemes

SHIRLEY J. SMITH

During any given week, the composition of the active segment of the work force undergoes many changes. Each industry and occupation has its own cycle of activity and draws on a somewhat different labor pool. Most production occurs Monday through Friday (or Saturday), frequently with the aid of evening and night shifts on those days. However, some economic activities, such as continuous manufacturing processes, agriculture, transportation and communications, health and certain other services, and retail sales, extend beyond the Monday to Friday schedule. In fact, these activities predominate on Saturday and Sunday. Each demographic group establishes itself within this variable labor market according to the types of jobs its members can obtain and the work schedules they are able to accommodate in their personal lives.

This article, based on the May 1985 Current Population Survey (CPS) supplement, examines several of the work schemes adopted by U.S. workers on their principal jobs. The schedules discussed include the "standard workweek" (that is, 40 hours in 5 days); compressed and extended schedules; part-time, full-time, and long hours schemes; and variations in the number of days worked per week, and in the choice of specific days worked. Where possible, patterns observed in May 1985 are compared with those ob-

served previously to judge the nature and pace of change. The CPS surveys of May 1973 and May 1979 are used in this comparison to minimize distortions due to business cycle fluctuations.

The 'standard workweek'

It has been estimated that at the turn of the century the average worker spent about 53 hours per week on the job.¹ The passage of the Fair Labor Standards Act of 1938 (FLSA) established a standard workweek of 40 hours' duration for nonsupervisory employees of firms engaged in interstate commerce.² Over the ensuing years, concern about workers' health led to many Federal and State statutes and union contracts which stipulated a second standard: the 8-hour day. Under these provisions, many persons were guaranteed overtime pay for hours worked in excess of this daily standard. The logical outgrowth of these regulations was a third implicit standard, the 5-day workweek.

Persons who were teenagers when the Fair Labor Standards Act was passed had reached retirement age by 1985. In their lifetimes, the coverage of the act has been extended to nearly 60 percent of all wage and salary workers,³ and has become not only a matter of law, but a social norm. More than half of all nonfarm wage and salary workers and roughly two-thirds of those working full time report that they work exactly 40 hours per week, proportions which have changed little since the CPS began monitoring usual hours worked on principal jobs in 1973. (See table 1.)

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Because the 40-hour week is so popular, both with employers and employees, most work schedule data are so strongly unimodal that it is difficult to recognize the changes which occur. Measures of central tendency such as means and medians are totally dominated by the standard schedule, and thus reveal little variation over time. Yet closer examination of the data will show that the work schedules of American workers have been changing, and are becoming increasingly diverse.

Catalysts in this redistribution include the stagnation of employment in manufacturing industries and the rapid growth of certain services and retail trade. Despite a 27-percent expansion in all wage and salary employment since May 1973, employment in manufacturing in May 1985—20.4 million—was no larger than it had been 12 years before. Not only was the number of manufacturing jobs more or less frozen, but the work schedules of those holding jobs had even contracted.

Some of this change is apparent in employers' reports of scheduled hours. The Bureau of Labor Statistics' Area Wage Surveys indicate that the average workweek for full-time day-shift plant workers decreased by 0.8 hours between 1973 and 1985. Over the same period, the schedule of full-time office workers in the private sector rose by 0.2 hours, with the result that the workweek of these two large groups converged markedly.⁴ Whereas the average plant worker's 1973 workweek was scheduled to last 1.5 hours longer than that of his or her counterpart in the office, by 1985 the differential had narrowed to 0.5 hours.⁵

Despite the evident restructuring of plant schedules, CPS estimates of mean and median usual weekly hours for workers in all industries (38.4 and 40.4 respectively in 1985) have hardly changed since 1973. Similarly, the median

length of a full-time workweek has remained nearly fixed at 40.6 hours. For full-time workers, the mean rose slightly from 42.4 to 42.6 between 1973 and 1985, suggesting a slight increase in the number of hours routinely worked. In fact, this increase was due to a decline in the number of full-time workers reporting 35- through 39-hour schedules, rather than a rise in the numbers working 41 hours or more.

The median is cited to underscore the tremendous stability of these estimates. Whatever changes have occurred in the tails of the distribution, well over half of employed Americans work the standard schedule, and the remainder continue to be evenly spaced above and below that figure. It requires a fairly visible restructuring of the hours distribution to relocate the median. For this reason, the increase in median hours per week reported by part-time workers (from 20.2 in 1973 to 23.0 in 1985) is noteworthy.

Evidence of the increased diversity of work schedules can be seen in the following distributions for nonfarm wage and salary workers (including the incorporated self-employed):

	1973	1985	Change, 1973-85
Median usual hours	40.5	40.4	-.1
Mean usual hours	38.6	38.4	-.2
Total nonfarm wage and salary workers (in thousands) ⁶ . . .	69,971	94,879	24,908
Percent	100.0	100.0	-
1-24 hours	11.7	12.3	.6
25-29 hours	1.8	2.3	.5
30-34 hours	2.9	4.1	1.2
35-39 hours	7.5	7.4	-.1
40 hours	55.2	53.8	-1.4
41-48 hours	10.2	8.3	-1.9
49 or more hours	10.7	11.7	1.0

During intervening recessionary periods (1974-75 and 1980), May supplements showed the hours distribution to be shifted temporarily downward. A drop in overtime opportunities led to a temporary resurgence of the 40-hour scheme. However, a comparison of schedules during these periods of relative prosperity reveals that both part-time and the very extended hours schedules have gained proportionately to the more conventional schemes.⁷

It is no surprise that two separate trends were in evidence among those working long hours. The class working 41 to 48 hours, which is dominated by precision production, craft, and repair workers and operators, fabricators, and laborers—the "blue-collar" occupations most affected by the decline in manufacturing—registered relative contraction over the study period. Meanwhile, the group working 49 hours or more, in which "white-collar" occupations such as managers and persons in professional, technical, sales, and administrative support positions outnumber the "blue-collar" group, registered a slight gain.

Usual days per week

The 5-day workweek is even more prevalent than is the 40-hour week. In 1985, nearly three-quarters of the work

Table 1. Prevalence of 40-hour, 5-day, and 40-hour/5-day workweeks among nonagricultural wage and salary workers, 1973, 1979, and 1985

Work schedule and year	Proportion of—					
	All nonagricultural workers			Full-time non-agricultural workers		
	Total	Men	Women	Total	Men	Women
40-hour week						
1973	55.3	(1)	(1)	66.1	(1)	(1)
1979	56.0	59.1	51.8	67.6	65.1	72.0
1985	53.7	56.8	50.1	66.2	63.6	70.1
5-day week						
1973	74.1	(1)	(1)	81.4	(1)	(1)
1979	75.4	75.4	75.4	83.5	79.4	90.4
1985	73.5	73.6	73.3	82.6	78.8	88.4
40-hour/5-day week						
1973	52.9	(1)	(1)	63.3	(1)	(1)
1979	53.3	56.1	49.6	64.4	61.7	69.0
1985	50.4	53.0	47.4	62.2	59.3	66.4

¹ Estimate not available.

NOTE: Estimates reflect data for wage and salary workers and the incorporated self-employed age 16 and over. Figures for May 1973 exclude private household workers.

force, and more than four-fifths of those employed full time reported schedules of 5 working days. (See table 1.) Both mean (4.9) and median (5.5) usual days per week have remained nearly constant since 1973.

Even so, the distribution of total workers by usual days of work corroborates the impression that schedules have become more diverse:

	1973	1985	Change, 1973-85
Total nonfarm wage and salary workers (in thousands) ⁶ ..	69,971	94,879	24,908
Percent	100.0	100.0	—
1-3 days	6.5	7.8	1.3
4 or fewer days	9.8	13.0	3.2
4.5 or fewer days	10.3	13.9	3.6
5 days	74.1	73.6	-.5
5.5 or more days	15.5	12.5	3.0
6 or more days	11.5	9.7	-1.8
7 days	1.7	2.2	.5

Observations made during recessions show the 5-day week to be particularly prevalent in unstable times. Yet, over the 12 years shown, both compressed and very extended workweeks made gains at the expense of the 5- to 6-day week.

Emergence of alternate schedules

The heavy clustering of reported schedules in standard patterns obscures our view of the unconventional schedules which have been gaining popularity in the workplace. One way to identify them is to determine which patterns have registered the highest rates of growth in recent years. Between May 1973 and May 1985, the number of nonfarm wage and salary workers for whom work schedules were tabulated rose by 36 percent. We have estimated the corresponding growth rates within various work schedule groupings, and from each subtracted this average rate of growth. The resulting figures (table 2) illustrate which schemes have gained in popularity (positive values) and which have lost (negative entries).

Several interesting patterns emerge from this computation. The growth of employment in the more conventional schemes has indeed been more sluggish than that in other schedules. For instance, the number of persons on a 40-hour/5-day week has lagged overall growth by 6 percentage points. Two other 5-day schemes (1- through 29-hour and 35- through 39-hour workweeks) have lagged even further behind.

Both the extended days and extended hours schemes registered net declines during this period, almost entirely due to the drop in the 41- through 48-hour/extended-week scheme. Between May 1973 and May 1985, the absolute number of workers registering this schedule dropped by more than a third.

Although this was a profound setback to the extended workweek (5½ days or more), lengthy workweeks appear to have gained some momentum among persons working 40 hours or less. The growing dispersion of work hours for

Table 2. Standardized percent change in the incidence of various weekly work schedules, May 1973 to May 1985

Usual hours worked per week	Usual days worked per week				
	Total	1-3 days	4-4.5 days	5 days	More than 5 days
Total, 16 years and over ¹	0	28	80	1	-27
Part-time					
Total	19	19	47	6	20
1 to 29 hours	10	16	42	-9	6
30 to 34 hours	59	9	58	54	58
Standard hours					
Total	-3	(2)	133	-6	12
35 to 39 hours	-1	(2)	76	-10	27
40 hours	-4	(2)	169	-6	8
Extended hours					
Total	-5	209	219	33	-39
41 to 48 hours	-24	(2)	185	20	-72
49 or more hours	13	(2)	262	48	-14

¹ The number of nonagricultural wage and salary workers reporting work schedules rose by 35.6 percent between May 1973 and May 1985. This figure has been subtracted from the observed growth rate for each cell so that negligible values signify growth in pace with the total, negative values a lag, and positive values relative expansion.

² Cell frequency is too small to warrant this computation.

NOTE: Estimates are for wage and salary workers and the incorporated self-employed age 16 and over. Figures for May 1973 exclude private household workers.

these individuals probably reflects the expansion of week-end employment in retail sales and services, both of which draw from pools of supplemental part-time help.

Among alternate schedules, the most familiar form is generally the "compressed workweek," normally defined as 40 hours' work completed in 4 to 4½ days. Employment in such schemes grew about 4.5 times as fast as did total employment during the 12 years preceding May 1985. But other forms of compression were also in evidence. For instance, those working long workweeks (41 hours or more) appeared increasingly likely to compress them into a span of 5 days—or even less—thereby reserving a block of time for other activities. There was even some evidence of a growth in "compressed part time," whereby persons working 30 to 34 hours did so in 3 days or less.

The small representation of most of these groups in the work force means that even rapid growth of these cells can have little impact on aggregate measures. It would probably take many years of accelerated growth for these schemes to become popular alternatives to those with which we are most familiar. Certain less dramatic changes (such as the rise in the 5-day/41-or-more-hour week—another "compressed long hours" scheme) are more easily spotted because they affect larger segments of today's work force.

When the interval is broken into phases before and after May 1979, similar computations show that three schedule groups have lagged throughout the full interval. In addition to the declining 41- through 48-hour extended week (5½ or more days) scheme, the two 5-day schemes mentioned earlier (light part time of 1 to 29 hours and light full time of 35 to 39 hours) have experienced contraction.

The incidence of the 40-hour/5-day workweek actually

kept pace with overall employment growth until 1979. The fact that it has not done so since that time is somewhat surprising, given the occurrence of two serious recessions in the early 1980's. The temporary effects of each must have been to force many overtime workers into this standard full-time pattern.

Since 1979, only one form of lengthy workweek has registered comparative gains: employment lasting 49 hours or more per week. Most of the gains noted have involved workers compressing these long hours into 5 or fewer days.

The conventional "compressed workweek" (full-time work completed in under 5 days) has been growing at an accelerated rate. While overall employment growth between 1979 and 1985 was 16 percent, this scheme grew more than four times as rapidly. The incidence of "dispersed" schedules, whereby relatively few hours of work occupy 5 1/2 or more days per week, seems to have evolved since 1979.

Differences by sex

Labor analysts often discuss the convergence between male and female work patterns. Table 3, based on changes between May 1979 and May 1985, shows how this convergence is taking place. Standardized rates for men and women are juxtaposed to highlight similarities and contrasts.

The decline of the extended (more than 5-day) week is largely a male phenomenon. With the exception of the 41-through 48-hour variant, which has contracted for both sexes, there has been a growing concentration of women in extended workweek schemes.

The net drop in 41- through 48-hour schedules also has occurred largely among men. Although women, too, have been affected by the contraction of the 41- through 48-hour/5-day scheme, they seem to have more than offset its effects by compressing 41- through 48-hour schedules into 5 working days. Indeed, women appear to be pressing into long hour schemes, while men—who traditionally dominated those schemes—increasingly find themselves working compact and compressed schedules. It is difficult to determine how much of this shift has been voluntary, and how much the result of the changes in labor demand.

Both sexes report a declining concentration within standard schedules, and an increased likelihood of working 40 hours within 4 to 4 1/2 days. Women seem to be moving up from light (1- through 29-hour) to more intense (30- through 34-hour) part-time schedules, and from light (35- through 39-hour) to more intense (41 or more hours) full-time schemes. At the same time, men are increasingly represented within the lighter hours schedules. There has been surprising growth in the number of men reporting part-time and light full-time schedules. The movement away from standard and extended workweeks to a compressed (4-through 4 1/2-day) schedule is heavily dominated by men. Even for persons working long hours, this change effectively lightens the workweek by holding a block of time free

for other activities. Men also seem largely responsible for the emergence of the "compressed part-time" schedule, perhaps because of growth in the number of protective service jobs.

Mean hours per day

With more than half of all wage and salary workers and more than 60 percent of those working full time still reporting a 40-hour/5-day schedule, it is no surprise that the average workday is approximately 8 hours in length. However, as workers begin to compress their hours into fewer days, this variable should begin to show those effects. This change is most evident among part-time workers, where the length of the average workday has increased by a full hour (from 4.2 to 5.2 hours) since 1973.

In addition to compression, some of the change is attributable to distributional factors. The work force (including the part-time component) aged over the study period,

Table 3. Standardized percent change in the incidence of various weekly work schedules, by sex, May 1979 to May 1985

Usual hours worked per week	Usual days worked per week				
	Total	1-3 days	4-4.5 days	5 days	More than 5 days
Total					
Total ¹	0	10	36	-1	-3
Men ²	0	29	62	-2	-7
Women ³	0	-4	16	-3	27
Part-time					
1 to 29 hours:					
Total	5	3	14	-4	59
Men	10	14	28	-11	39
Women	-2	-7	4	-6	82
30 to 34 hours:					
Total	19	51	19	8	64
Men	27	109	25	15	36
Women	10	20	10	0	82
Standard hours					
35 to 39 hours:					
Total	3	(4)	39	-4	48
Men	20	(4)	80	6	107
Women	-10	(4)	14	-14	16
40 hours:					
Total	-4	(4)	67	-6	1
Men	-4	(4)	81	-6	-4
Women	-4	(4)	46	-5	15
Extended hours					
41 to 48 hours:					
Total	-5	(4)	121	10	-35
Men	-10	(4)	85	3	-34
Women	26	(4)	(4)	43	-19
49 or more hours:					
Total	12	59	181	22	0
Men	10	53	178	21	-1
Women	51	(4)	(4)	47	47

¹ Overall growth rate for the period May 1979 to May 1985 was 16.0 percent. This figure has been subtracted from the observed growth rate for each 1979-85 cell of the table to derive the standardized values shown. Thus, for example, the growth of schemes involving 40 hours of work in 4 to 4.5 days was about five times that of all nonagricultural wage and salary employment.

² Overall growth of male nonfarm payroll employment from May 1979 to May 1985 was 10.3 percent. This figure has been subtracted from the growth rate of male employment in each work schedule to derive the standardized values shown.

³ Overall growth of female nonfarm payroll employment from May 1979 to May 1985 was 23.5 percent. This figure has been subtracted from the growth rate of female employment in each work schedule to derive the standardized values shown.

⁴ Cell frequency is too small to justify computation.

with its members becoming more committed to labor force involvement. The strengthening of the labor force attachment of women also contributed to this upward movement.

Variations by class of worker

The category of workers we have been discussing to this point, denoted "wage and salary workers," includes those who are nominal employees of corporations which they own. While this classification is consistent with other data series published by the Bureau, it hinders the analysis of the work practices of persons who truly work for someone else as distinguished from those who work for themselves, even if their firms are incorporated and they are on the payroll. Whether or not the business is incorporated, its owner faces a different set of risks and responsibilities than does the typical wage and salary worker. Work schedules reflect this difference. For instance, although wage and salary workers average just 38 hours of work per week, the unincorporated self-employed report an average of about 43 hours, and the incorporated, more than 48. Wage and salary workers claim to work an average of 4.8 days per week, as compared with 5.2 for each of the self-employed groups (which are treated jointly below). Unpaid family workers helping in family businesses often maintain even more erratic schedules tied to periods of peak need. Table 4 illustrates differences between the average work schedules of these groups of workers by sex.

In the past, work schedule reports have devoted little attention to the self-employed and their unpaid family workers. It is relatively difficult for these individuals to summarize their "usual" work patterns by answering a few simple questions. Recognizing that the estimates for these groups may be less robust than for wage and salary workers, we still regard them as important enough to discuss. Each class of worker maintains its own "niche" in the total employment picture. The industries within which entrepreneurs find it easiest to become established (including agriculture, retail trade, and certain services) by their very nature demand long hours and extended workweeks. Certain types of businesses are largely or predominantly self-employed operations. Certain groups of workers (for example, white men) are particularly likely to open their own family businesses. Recognition of these patterns helps to explain why work schedules of these groups differ so dramatically from the norm.

It should be noted that men are twice as likely as women to report self-employment (with the associated longer hours and workweeks). White men are almost three times as likely as blacks to do so. Women are four times as likely as men to supply unpaid family services, but in the aggregate, women are also more likely to be employed for a wage or salary.

Men who are self-employed average more days and many more hours of work per week than do their counterparts who are wage and salary workers. For women, the difference is much less pronounced. Overall, the self-employed are four

Table 4. Incidence of selected work schedules, by class of worker and sex, May 1985

Work schedules and sex	Class of worker			
	Total employed	Wage and salary ¹	Self-employed ²	Unpaid family workers
Total, 16 years and over				
(in thousands)	106,878	94,280	12,107	491
Percent of total employed	100.0	88.2	11.3	.5
Average hours per week	38.7	38.0	44.2	35.4
Full-time	43.3	42.3	51.0	48.7
Part-time	19.7	19.8	18.8	21.3
Average days per week	4.9	4.8	5.2	5.5
Full-time	5.1	5.1	5.1	(3)
Part-time	3.9	3.8	4.1	5.1
Average hours per day	7.9	7.8	48.4	(4)
Proportion working:				
Weekends	29.3	26.1	53.5	52.3
6 to 7 days	12.6	9.3	36.2	48.8
Men, 16 years and over (in thousands)	60,015	51,106	8,802	106
Percent of employed men	100.0	85.2	14.7	.2
Average hours per week	41.6	40.6	47.2	36.6
Full-time	44.6	43.4	51.7	51.6
Part-time	19.1	19.1	19.1	22.8
Average days per week	5.0	5.0	5.4	6.0
Full-time	5.2	5.1	5.1	(3)
Average hours per day	8.3	8.2	48.8	(4)
Proportion working:				
Weekends	32.2	27.9	56.7	74.5
6 to 7 days	16.1	11.8	39.6	75.6
Women, 16 years and over				
(in thousands)	46,864	43,173	3,305	385
Percent of employed women	100.0	92.1	7.1	.8
Average hours per week	35.0	34.9	36.0	35.1
Full-time	41.3	40.8	48.2	47.9
Part-time	20.0	20.2	18.5	20.8
Average days per week	4.7	4.7	4.9	5.3
Full-time	5.1	5.1	5.1	(3)
Average hours per day	7.4	7.4	47.1	(4)
Proportion working:				
Weekends	25.6	23.9	44.8	46.5
6 to 7 days	8.0	6.2	37.2	41.4

¹ Excludes the incorporated self-employed.

² Includes both incorporated and unincorporated self-employed.

³ Not available.

⁴ Data are available only for the self-employed and unpaid family workers combined.

times as likely as wage and salary workers to average 6 or more days of work per week. The evidence suggests that—at least for men—they also work more hours per day.

Who works weekends?

The class-of-worker variable is particularly relevant to the discussion of specific days of work. The level and character of economic activity is quite different on weekends than during the week. It is even different on Sunday than on Saturday. During the week, about 20 percent of all workers hold primary jobs in manufacturing, and another 20 percent work in professional service jobs. On weekends, these industries account for about 10 percent and 14 percent of all primary jobs, respectively. Retail sales workers, who represent only about 17 percent of the weekday work force, account for more than 34 percent of the population active in their main job on weekends.

The self-employed (whether incorporated or not), and the unpaid working members of their families, often operate businesses which serve active weekend markets. They also bear a greater responsibility for the continued operation of their businesses than do individual wage and salary workers,

and their risks associated with taking time off are necessarily greater. Consequently, whereas fewer than 1 in 10 wage and salary workers maintain an extended (6- or 7-day) work-week, this is the usual schedule reported by more than 1 of every 3 self-employed persons and nearly half of all unpaid family workers.

Table 5 is a "snapshot" of the characteristics of persons who usually report to their primary job on various days of the week. (The categories are not mutually exclusive: some who work Monday to Friday are also included in weekend distributions, and so forth.) As the largest segment of the work force, wage and salary workers dominate each of the groups detailed in the table. However, their share drops from 88 percent during the week to 77 percent on Saturday and to 58 percent among those who work continuously.

On Saturday, the number of persons working at their primary job contracts to 28.9 million, about a quarter (27 percent) of its weekday size. Because fewer than 1 percent of those who work do so exclusively on weekends,

the composition of weekend employment tells us as much about who has taken a break as about who is reporting to work. On Saturday, the percentage of overall employment accounted for by prime-aged men holds steady. That of prime-aged women drops sharply, but the proportionate decline is offset by greater work effort among teens, young adults, and men age 65 and over. On Saturday, the representation of the self-employed and unpaid family workers is roughly twice what it is during the week. Of the wage and salary workers who report to work, a disproportionate share hold part-time jobs.

The primary work force contracts still further on Sunday, to 13.2 million—about an eighth of its weekday size. This is the day when prime-aged men are most likely to be taking a break from their main job. (We have no way of judging what share devote the day to secondary employment.) The group normally reporting to their main job on Sunday includes still larger shares of teens and young adults, more older men, and proportionately more prime-aged women. Although there is a slight drop in the activity of the self-employed (largely men), unpaid family workers (largely women, teens, and young adults) continue to be relatively active.

Of those who normally work at the same job 7 days per week, more than half are prime-aged men; 3 of 10 are women; and 4 of 10 are self-employed. Sixteen percent maintain extended part-time ("dispersed") schedules, mostly as wage and salary employees. The representation of blacks and Hispanics, which drops on weekends, is particularly low among those working 7-day weeks. Undoubtedly, one reason is the lower probability that they own or operate family businesses.

Work schedules by industry and occupation

We have already noted that the industrial composition of the work force varies during the week, and that the timing of labor demands within each industry affects the labor pool upon which it may draw. Table 6 summarizes, for major industries and occupational groupings, several of the work schedule features previously mentioned. Each category reflects a differing level of labor demand, both with regard to total hours and to scheduling within the week. For illustrative purposes, the groups have been ranked according to the mean number of hours their employees report working each week.

The association between hours requirements, days of work, and female participation in the industry or occupation is fairly strong. The more time the activity involves, the less attraction it seems to hold for women. Although the relationship to weekend work is less pronounced, a similar pattern is evident there as well.

Multiple jobholding

A separate discussion of multiple jobholding appears elsewhere in this issue, but it is worth taking a brief look at

Table 5. Employed persons who usually work on specific days of the week, by selected characteristics, May 1985

[In percent]

Worker characteristic	Total	Persons who usually work—			
		Monday to Friday	Saturday	Sunday	7 days per week
Total, 16 years and over (in thousands) ¹	106,878	106,343	28,949	13,246	4,666
Sex and age					
Total	100.0	100.0	100.0	100.0	100.0
16 to 24	18.9	18.6	26.3	29.7	16.3
25 to 54	67.7	67.9	60.9	57.7	65.1
55 to 64	10.8	10.8	9.7	9.3	13.1
65 or more years	2.6	2.6	3.1	3.3	5.5
Men	56.2	56.2	62.3	58.5	69.9
16 to 24	10.0	9.9	14.4	15.6	10.8
25 to 64	44.5	44.7	45.8	40.5	54.6
65 or more years	1.6	1.6	2.1	2.4	4.5
Women	43.8	43.8	37.7	41.5	30.1
16 to 24	8.8	8.7	12.0	14.1	5.5
25 to 64	34.0	34.1	24.8	26.5	23.6
65 or more years	1.0	1.0	1.0	.9	1.0
Class and work status					
Total	100.0	100.0	100.0	100.0	100.0
Full-time	80.4	80.7	74.6	69.7	83.8
Part-time	19.6	19.3	25.4	30.3	16.2
Wage and salary workers ²	88.2	88.2	77.2	81.7	58.0
Full-time	71.2	71.5	55.3	54.6	47.3
Part-time	17.0	16.6	22.0	27.2	10.7
Self-employed workers ³	11.3	11.4	21.9	17.4	39.8
Full-time	8.9	9.0	18.8	14.6	35.0
Part-time	2.4	2.4	3.1	2.8	4.8
Unpaid family workers	.5	.4	.9	.9	2.2
Full-time	.2	.2	.5	.6	1.5
Part-time	.2	.2	.4	.3	.7
Race and Hispanic origin⁴					
Total	100.0	100.0	100.0	100.0	100.0
White	87.5	87.5	89.1	89.0	91.4
Black	9.7	9.8	8.1	8.3	6.2
Hispanic origin	6.1	6.1	5.7	5.6	4.9

¹ Data are not additive, as persons working on any or all weekdays may also work on weekends.

² Excludes the incorporated self-employed.

³ Includes both the incorporated and the unincorporated self-employed.

⁴ Detail will not add to 100 percent because Hispanics are included in both the white and black populations and because data for the "other races" group are not presented.

the effect of this practice on aggregate estimates of time spent at work.

The information in this article relates to the worker's primary job. For the small group of workers (5.4 percent) who held two or more jobs in the May 1985 reference week, the total hours and days reported will understate the actual amount of time spent at work. Because dual jobholding can be a functional equivalent to working long hours on a single job, there are many applications in which we might like to see the data tabulated for all jobs combined. A reestimation on this basis increases the share of the work force shown to be working more than 40 hours, and reduces the share working 40 hours or less. Overall, it expands the share working more than 40 hours by 12.3 percent, with still greater impact on the estimates for women (19.7 percent), blacks (17.0 percent), and men and women ages 16 to 24 (14.7 percent and 28.5 percent respectively).⁸

DESPITE THE FACT that the majority of workers still report maintaining a 40-hour/5-day workweek, there is evidence that this scheme has been declining in popularity. Employment in such schedules has lagged behind total employment growth since 1979. Throughout the 1973-85 period, long-hour/long-day schemes have been contracting, both for men

and for women.

In their place, three other schemes are emerging. Both sexes have demonstrated increased readiness to work a simple compressed workweek, wherein 40 hours of work are completed in under 5 days. Those working more than 40 hours per week appear to be working more compact schedules within the confines of a 5-day week (or less), holding two or more days free for other activities. Among those working 40 hours or less, some appear to be adopting "work spreading" schemes, which distribute their hours over 5¹/₂ or more days per week. The result is a diversification of schedules which has occurred without much corresponding change in the mean or median estimates of usual hours or days worked per week.

In the aggregate, men continue to work more hours per week, more hours per day, and more days per week than do women, and they are also more likely to work on weekends. Elements of the standard workweek thus continue to dominate overall work schedule distributions. Nonetheless, the growth of the female work force has been most rapid in long hours schedules and those involving 5¹/₂ or more days per week, while the expansion of the male labor force has occurred primarily in shorter, more compact schedule groupings. □

— FOOTNOTES —

¹ For a discussion of past trends, see Janice Neipert Hedges and Daniel E. Taylor, "Recent trends in worktime: hours edge downward," *Monthly Labor Review*, March 1980, p. 4.

² The Fair Labor Standards Act became effective in 1940.

³ See Employment Standards Administration, *Minimum Wage and Maximum Hours: Standards Under the Fair Labor Standards Act—1984 Report* (U.S. Department of Labor, 1984).

⁴ These data exclude workers in contract construction; all governmental establishments and government-owned and operated businesses (such as water utilities, transit authorities, and so forth); medical and educational services; and administrative, executive, professional, and part-time employees. Also excluded are persons who are self-employed, or who work anything other than the day shift. See *Area Wage Surveys: Metropolitan Areas, United States and Regional Summaries, 1973-1974 and 1985* (Bureau of Labor Statistics).

⁵ The May 1985 supplement to the Current Population Survey (CPS) requested information on usual rather than scheduled hours. As such, it picks up the added effects of routine overtime and uncompensated long hours. In addition, the CPS information has been collected from household respondents, rather than employers' records as in the Area Wage Survey. Results of the two surveys are not directly comparable, but should normally reinforce one another's findings.

⁶ Figures for 1973 exclude private household workers, and those not reporting work schedules. Figures for 1985 have been adjusted to distribute nonresponse.

⁷ If private household workers had been included in distributions for both years, it is likely that the drop of the 40-hour week and the rise of the 49-or-more-hour week would both have been somewhat less pronounced.

⁸ There may still be some omissions, because no hours details were collected for tertiary jobs.

Shift work and flexitime: how prevalent are they?

New data reveal that shift work and flexitime are not widespread; only 1 of 10 full-time wage and salary workers is on an evening or night shift, and only 1 of 8 has a flexible schedule

EARL F. MELLOR

Although the needs of society require a diversity of work schedules, most Americans have traditional morning to late-afternoon hours. The great majority of full-time wage and salary earners begin work between 7 and 9 in the morning. The proportion who work in the evening or at night, or who are on flexible schedules, is rather small. In contrast, almost half of all part-time employees work schedules other than regular day shifts, and nearly one-fifth have some type of flexible scheduling. The incidence of shift work and flexitime varies by sex, race, age, and other characteristics, but differences are more apparent by occupation and industry.

These patterns are revealed in newly available data from the Current Population Survey (CPS), which asked questions on beginning and ending hours of work, shift work, and the availability of flexitime, to name a few. The information relates to people who were at work during the week of May 12-18, 1985, and was collected in a special supplement to the May 1985 CPS.¹

Workday, from start to finish

Nearly 8 of 10 full-time wage and salary workers began their workdays between 7 and 9 a.m. during the survey reference week, with 8 a.m., by far, the most reported time. (See table 1.) With so many workers starting at these hours, it is not surprising that the most frequent quitting times were between 4 and 6 p.m., with 5 p.m. leading. Thus, tradi-

tional daytime shifts predominate, with 8-to-5, 7-to-4, 8-to-4, and 9-to-5 schedules being the most popular. Of the top 10 work schedules (of a possible 576) only one—the tenth ranked 3-to-11 p.m. shift—included a substantial number of hours outside the normal daylight span. (The times actually reported are rounded to the nearest hour when they are entered on the CPS questionnaire. For example, 8 a.m. refers to any reported time between 7:30 and 8:29. See appendix for further details.)

For part-time workers, 7 to 9 a.m. were the most frequently reported starting times, accounting for 45 percent of the total. The most popular quitting times were in the 3-to-5 p.m. span. As was the case for full-time workers, part-timers most often reported an 8 a.m. to 5 p.m. work day—but these hours accounted for only 4 percent of the part-time schedules. Part-time jobs—in terms of starting time, quitting time, and the overall schedule—were far less concentrated within the top 10 rankings. Whereas the top 10 schedules were reported by 71 percent of all full-time workers, they fit the pattern for only 29 percent of part-time workers.

Shift work

There are two ways to determine a worker's shift. One is based on the time the person begins and ends the workday;² the other is based on responses to a question regarding which shift persons considered themselves to usually work. The former method permits a precise definition (for example, a day shift is one in which half or more hours worked are between 8:00 a.m. and 4:00 p.m.), and thus a shift work definition can be tailored to the user's particular needs.

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Table 1. Most prevalent beginning and ending hours of work and overall schedules of wage and salary workers, by usual full- and part-time status, May 1985

[Numbers in thousands]

Rank	Beginning time			Ending time			Overall daily schedule		
	Time	Number of workers	Percent of all workers	Time	Number of workers	Percent of all workers	Schedule	Number of workers	Percent of all workers
Full-time workers									
1	8 a.m.	29,116	39.7	5 p.m.	25,807	35.2	8 a.m. to 5 p.m.	16,025	21.8
2	7 a.m.	17,532	23.9	4 p.m.	16,750	22.8	7 a.m. to 4 p.m.	7,947	10.8
3	9 a.m.	11,004	15.0	6 p.m.	8,440	11.5	8 a.m. to 4 p.m.	7,256	9.9
4	6 a.m.	3,864	5.3	3 p.m.	6,645	9.1	9 a.m. to 5 p.m.	6,172	8.4
5	3 p.m.	2,043	2.8	7 p.m.	2,896	3.9	7 a.m. to 3 p.m.	4,087	5.6
6	10 a.m.	1,597	2.2	12 midnight	1,927	2.6	8 a.m. to 6 p.m.	2,902	4.0
7	4 p.m.	1,526	2.1	11 p.m.	1,816	2.5	9 a.m. to 6 p.m.	2,726	3.7
8	11 p.m.	1,110	1.5	8 p.m.	1,355	1.8	7 a.m. to 5 p.m.	2,585	3.5
9	5 a.m.	814	1.1	2 p.m.	1,256	1.7	7 a.m. to 6 p.m.	1,477	2.0
10	12 midnight	634	.9	7 a.m.	1,142	1.6	3 p.m. to 11 p.m.	1,238	1.7
Part-time workers									
1	9 a.m.	3,179	18.2	5 p.m.	2,481	14.2	8 a.m. to 5 p.m.	703	4.0
2	8 a.m.	3,111	17.8	4 p.m.	2,192	12.5	9 a.m. to 5 p.m.	651	3.7
3	7 a.m.	1,605	9.2	3 p.m.	1,962	11.2	9 a.m. to 3 p.m.	602	3.4
4	10 a.m.	1,517	8.7	2 p.m.	1,480	8.5	8 a.m. to 4 p.m.	550	3.1
5	4 p.m.	1,328	7.6	6 a.m.	1,311	7.5	7 a.m. to 4 p.m.	494	2.8
6	5 p.m.	1,318	7.5	9 p.m.	1,238	7.1	5 p.m. to 9 p.m.	449	2.6
7	3 p.m.	993	5.7	10 p.m.	1,106	6.3	9 a.m. to 4 p.m.	421	2.4
8	11 a.m.	782	4.5	1 p.m.	979	5.6	8 a.m. to 3 p.m.	409	2.3
9	12 noon	637	3.6	12 noon	967	5.5	8 a.m. to 12 noon	405	2.3
10	1 p.m.	605	3.5	8 p.m.	767	4.4	8 a.m. to 2 p.m. ¹	398	2.3

¹ There were also 398,000 workers on a 9 a.m. to 2 p.m. schedule.

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who

were at work during the reference week. Times refer to beginning and ending hours most days of the week and are rounded to the nearest whole hour.

However, this makes no allowance for split or rotating shifts. The latter method allows the respondents to say what they consider is the shift usually worked. This concept permits the incorporation of split and rotating shifts as well as reduces the reporting of deviations from the usual work schedule which may have occurred in a given week. It is the self-identified notion of shift which is the focus of the analysis in this article.³

Generally speaking, shift work is a great advantage to employers who need to match production with demand, accommodate the nature of certain production processes, and reduce the cost of capital per employee. However, except for those who cannot work at a regular daytime job (for instance, students) and those who prefer evening or night hours, shift work often does not benefit workers or their families. In fact, the effects of shift work—particularly night and rotating shifts—can be quite disruptive, with such consequences as sleeping, digestive, and nervous disorders and interference with family relationships.⁴

Of the 73.4 million full-time wage and salary workers who were at work during the survey reference week, 61.7 million, or 84 percent, described their usual work period as a "regular daytime schedule." Of the remaining 11.6 million—called "shift workers"⁵—most worked an evening shift (4.6 million), followed by rotating (3.1 million), night (2.0 million), and split shifts (about 540,000). A substantial number (1.4 million) worked some other schedule; presumably, this would include daytime workers who felt their schedules were not "regular," and may include some on flexitime who vary their beginning and ending times.

Men were more likely than women to be shift workers.

This was the case also in each age group, except for teenagers. (See table 2.) More than one-quarter of the teens who worked full time were not on a regular daytime schedule. Among adult men, the incidence of shift work decreased with age, reaching 15 percent for the 45 and over age groups. For adult women, the incidence fell with age to 11 percent for 35- to 44-year-olds, and then rose slightly in the upper ages, reaching 13 percent for those 65 and older. The evening shift accounted for one-third to one-half of all shift workers, except men age 65 and over.

Blacks were more likely than whites or Hispanics to be shift workers. Hispanic men were as likely as white men, but considerably less likely than black men, to work other than a regular daytime schedule. Hispanic women, however, were less likely than both white and black women to be shift workers. Married (spouse present) persons had much smaller proportions working shifts than either singles or those of other marital status. Given that single workers are usually younger than married workers, the higher incidence is probably the result of age differences. Younger workers have less seniority on the job—hence, less choice in shift selection. In addition, youths tend to be in the types of jobs that are more likely to require shift work. Another consideration is that married workers may be less willing to work other than day schedules.

Among occupational and industry groups, shift work is associated with skill and product demands which cannot be satisfied by daytime schedules alone. These include businesses whose customers wish to shop until 9 or 10 at night, or even around the clock; the need for police and fire protection and health care 24 hours a day; and the overnight

delivery of goods. On the supply side, some production processes requires continuous operation, as it would be too costly to shut down each evening and restart each morning. In other cases, high capital costs necessitate around-the-clock utilization.

The incidence of shift work was 10 percent or less among full-time workers in managerial and professional jobs; administrative support, including clerical jobs; and farming, forestry, and fishing occupations. However, within some of these occupations, there were groups with an incidence of shift work of 20 percent or higher—for example, health diagnosing, assessment, and treating occupations among professional workers, and mail and message distributing workers within the administrative support category. (See table 3.) Protective service workers (61 percent) were most likely to work shifts (in fact, 22 percent worked rotating shifts), followed by workers in food (43 percent) and health services (36 percent). Other occupational groups traditionally associated with shift work—the operators, fabricators, and laborers group, and salesworkers in retail trade and personal services—had about one-quarter on shift work.

For most occupations, the evening shift was the most frequent departure from a regular day schedule. The exceptions were health professionals, retail and personal salesworkers, protective service workers, and motor vehicle operators, who reported rotating shifts more frequently than evening shifts. Night shifts were the least common, accounting for about 3 percent of all full-time workers. But, the incidence of night shifts was well above average for some in the groups noted for the likelihood of rotating shifts.

Shift work was more prevalent in the private sector (16.5 percent) than the public sector (12.8 percent). Among goods-producing industries in the private sector, shift work was highest in mining and lowest in construction. (See table 3.) In manufacturing, it was most frequent in areas requiring continuous production (because startup and shutdown costs are high), such as primary metals, automobiles, paper products, chemicals, and rubber and plastics. In the service-producing sector, shift work was most often reported in transportation, retail trade (particularly in eating and drinking places), personal services, entertainment and recreation, and hospitals—all activities for which product demand goes

Table 2. Shift usually worked by full-time wage and salary workers, by selected characteristics, May 1985

[Percent distribution]

Characteristic	Total employed (in thousands)	Regular daytime schedule	Shift workers					
			Total	Evening shift	Night shift	Rotating shift	Split shift	Other shift
Total, 16 years and over	73,395	84.1	15.9	6.3	2.7	4.3	0.7	1.9
Age								
Men, 16 years and over	43,779	82.2	17.8	6.8	3.0	4.9	.8	2.3
16 to 19	1,139	72.6	27.4	11.8	4.7	7.0	1.6	2.3
20 to 24	5,567	80.0	20.0	8.5	3.5	5.0	.9	2.1
25 to 34	14,281	80.0	20.0	7.8	3.3	5.6	.8	2.5
35 to 44	10,630	83.6	16.4	5.7	2.7	5.0	.7	2.3
45 to 54	7,094	85.4	14.6	5.3	2.7	3.9	.5	2.2
55 to 64	4,594	85.5	14.5	5.6	2.1	3.8	1.0	2.0
65 and over	474	85.4	14.6	2.8	2.5	4.0	1.0	4.5
Women, 16 years and over	29,616	87.0	13.0	5.5	2.3	3.3	.6	1.2
16 to 19	777	71.1	28.9	12.8	4.0	9.4	.6	2.1
20 to 24	4,346	84.0	16.0	6.7	2.0	5.1	.9	1.3
25 to 34	9,510	87.5	12.5	5.3	2.2	3.3	.6	1.0
35 to 44	7,080	88.9	11.1	4.8	2.3	2.2	.4	1.3
45 to 54	4,753	88.4	11.6	4.6	2.2	2.8	.8	1.2
55 to 64	2,838	87.3	12.7	5.3	2.6	3.2	.6	1.0
65 and over	311	85.8	14.2	7.3	3.8	-	.8	2.3
Race and Hispanic origin								
White	63,523	84.7	15.3	5.8	2.6	4.3	.7	1.9
Men	38,588	82.7	17.3	6.3	2.9	5.0	.8	2.3
Women	24,935	87.7	12.3	5.0	2.1	3.3	.6	1.2
Black	7,847	80.1	19.9	9.8	3.5	4.3	.7	1.7
Men	4,054	77.4	22.6	10.6	3.7	5.3	.7	2.3
Women	3,793	83.0	17.0	8.9	3.2	3.2	.7	1.1
Hispanic origin	4,911	84.6	15.4	7.1	2.5	3.3	1.0	1.6
Men	3,184	82.3	17.7	7.7	2.8	4.0	1.2	1.9
Women	1,727	88.8	11.2	5.8	1.9	2.0	.6	.9
Marital status								
Men:								
Single, never married	9,703	78.9	21.1	9.3	3.6	5.0	1.1	2.2
Married spouse present	29,666	83.5	16.5	5.7	2.7	5.1	.6	2.3
Widowed, divorced, or separated	4,410	80.4	19.6	8.5	3.6	4.0	1.1	2.3
Women:								
Single, never married	7,109	83.6	16.4	6.8	2.3	5.2	.6	1.3
Married, spouse present	15,679	89.9	10.1	4.3	1.9	2.3	.6	1.0
Widowed, divorced, or separated	6,828	83.7	16.3	7.0	3.3	3.6	.8	1.5

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week. Dash indicates fewer than 0.05 percent.

Table 3. Shift usually worked by full-time wage and salary workers, by occupation and industry, May 1985

[Percent distribution]

Occupation or industry	Total employed (in thousands)	Regular daytime schedule	Shift workers					
			Total	Evening shift	Night shift	Rotating shift	Split shift	Other shift
Total, 16 years and over	73,395	84.1	15.9	6.3	2.7	4.3	0.7	1.9
Occupation								
Managerial and professional specialty	18,944	91.4	8.6	2.0	1.2	2.7	.6	2.1
Executive, administrative, and managerial	9,079	92.6	7.4	1.8	.8	2.6	.5	1.8
Professional specialty	9,866	90.3	9.7	2.3	1.5	2.8	.8	2.3
Health diagnosing occupations	212	77.6	22.4	1.7	-	13.6	-	7.2
Health assessment and treating occupations	1,257	68.7	31.3	8.3	8.3	12.1	.1	2.6
Technical, sales, and administrative support	21,961	88.3	11.7	4.2	2.1	3.5	.5	1.3
Technicians and related support	2,548	84.5	15.5	6.5	3.3	4.6	.1	1.0
Health technologists and technicians	761	70.1	29.9	12.5	9.0	7.6	.2	.6
Sales occupations	6,730	82.8	17.2	4.1	2.2	6.9	1.1	2.9
Supervisors	1,957	84.0	16.0	2.8	2.1	7.4	1.3	2.4
Salesworkers, retail and personal services	2,400	72.3	27.7	8.3	3.6	11.5	1.1	3.2
Administrative support, including clerical	12,684	92.0	8.0	3.7	1.7	1.6	.3	.6
Computer equipment operators	673	81.2	18.8	11.0	2.7	4.1	-	1.0
Mail and message distributing	613	76.2	23.8	12.7	9.1	.4	.6	1.1
Service occupations	7,268	61.6	38.4	16.9	6.1	8.7	2.4	4.3
Private household	275	83.0	17.0	7.3	1.9	-	1.0	6.8
Protective service	1,286	39.2	60.8	19.8	7.2	23.8	.7	9.4
Service, except private household and protective	5,707	65.6	34.4	16.7	6.1	5.7	2.8	3.0
Food service	2,194	56.9	43.1	21.2	5.3	8.2	5.0	3.4
Health service	1,076	63.9	36.1	14.8	10.3	6.8	.6	3.6
Cleaning and building service	1,719	74.4	25.6	16.1	5.4	1.7	1.3	1.1
Personal service	718	73.9	26.1	7.5	3.7	6.2	3.0	5.7
Precision production, craft, and repair	10,477	87.0	13.0	6.3	2.2	3.7	.1	.7
Mechanics and repairers	3,582	87.3	12.7	6.0	2.3	3.6	.1	.8
Construction trades	3,282	94.1	5.9	3.4	1.0	1.2	.1	.3
Other precision production, craft, and repair	3,614	80.3	19.7	9.3	3.2	6.1	.2	.9
Operators, fabricators, and laborers	13,326	76.3	23.7	10.5	4.6	6.2	.5	1.9
Machine operators, assemblers, and inspectors	6,748	76.3	23.7	13.2	3.7	6.2	.1	.5
Transportation and material moving occupations	3,448	73.8	26.2	5.8	6.0	7.4	1.5	5.5
Motor vehicle operators	2,392	74.5	25.5	4.3	6.9	5.9	1.9	6.5
Handlers, equipment cleaners, helpers, and laborers	3,130	78.9	21.1	9.9	5.2	4.9	.2	.9
Farming, forestry, and fishing	1,418	89.9	10.1	1.5	1.4	.7	3.5	3.0
Industry								
Private sector	60,127	83.5	16.5	6.6	2.9	4.4	.8	1.9
Goods-producing industries	24,626	85.0	15.0	7.4	2.6	3.9	.3	.8
Agriculture	1,154	89.4	10.6	.9	2.2	.2	4.3	3.0
Mining	885	78.1	21.9	6.0	1.6	12.1	-	2.2
Construction	4,279	97.5	2.5	1.3	.4	.4	-	.4
Manufacturing	18,309	82.1	17.9	9.3	3.2	4.5	.1	.7
Durable goods	11,277	84.0	16.0	10.0	2.5	2.8	.1	.5
Nondurable goods	7,033	79.1	20.9	8.2	4.4	7.2	.2	1.0
Service-producing industries	35,501	82.4	17.6	6.1	3.0	4.8	1.1	2.6
Transportation and public utilities	4,958	79.4	20.6	6.1	3.5	6.4	1.2	3.5
Wholesale trade	3,222	91.9	8.1	2.9	2.1	.9	.4	1.7
Retail trade	9,111	73.7	26.3	9.1	3.7	8.6	1.9	3.0
Eating and drinking places	2,242	52.4	47.6	21.0	5.3	12.5	4.5	4.2
Finance, insurance, and real estate	5,003	93.9	6.1	1.9	1.0	1.1	.5	1.6
Services ¹	13,207	82.9	17.1	6.4	3.3	3.9	1.0	2.6
Private households	345	80.8	19.2	7.3	1.5	.7	.8	9.0
Business and repair	3,242	87.4	12.6	5.8	2.4	3.1	.1	1.0
Personal, except private household	1,379	74.0	26.0	10.1	3.8	6.6	2.1	3.4
Entertainment and recreation	529	66.6	33.4	13.8	2.2	7.3	4.1	6.1
Professional services	7,682	83.8	16.2	5.4	3.7	3.6	.9	2.5
Hospitals	2,303	73.0	27.0	10.5	6.6	8.5	.2	1.3
Public sector	13,268	87.2	12.8	4.6	2.0	3.7	.6	1.9
Federal Government	2,901	86.2	13.8	6.1	3.4	2.8	.2	1.2
State government	3,320	88.2	11.8	4.3	2.3	3.0	.5	1.7
Local government	7,047	87.1	12.9	4.2	1.3	4.5	.7	2.2

¹ Includes forestry and fisheries, not shown separately.

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week. Dash indicates fewer than 0.05 percent.

beyond traditional daytime hours.

The incidence of shifts was much higher for those who did not usually work 5 days a week. Almost two-thirds of those working full-time on a 3-day-a-week schedule and just over a third of those on 4-day schedules considered themselves shift workers. Half of the 3-day workers reported

working "other shifts." This should be expected, because each day's work would average at least 12 hours and would not be considered by many as a regular daytime shift, even if most of the hours fell during daytime hours. About 29 percent of those working a 6-day week and 38 percent of 7-day workers considered themselves shift workers.

Of those who reported a reason for not working a regular daytime schedule, 28 percent cited voluntary reasons, including better arrangements for child care or care of other family members, better pay, or time for school. Of the 72 percent giving "involuntary" reasons, 9 of 10 cited the schedule as a requirement of the job; most of the remainder reported they worked shifts because they could not find any other job.

Part-timers were about three times as likely as full-time workers to work other than a regular daytime schedule. Employers often hire part-time help to cover periods of peak demand, which may be as short as 3 or 4 hours on weekdays and may require nonconventional working hours. This is the case, particularly in retail sales and in entertainment and recreation. Many seeking part-time work, especially students, are able to work only evenings or weekends. Nearly half of all part-time workers and four-fifths of the 16- to 19-year-olds were shift workers. About one-quarter of the part-timers worked in the evening. (See table 4.) Employees in sales, service (particularly protective service), transportation and material moving, and in handler, equipment cleaner, helper, and laborer jobs were most likely to work other than a regular daytime schedule. Seven of ten part-time workers in protective service jobs were on shifts.

Flexible schedules

Under flexitime, employees can vary the times their workdays begin and end. The arrangements vary among establishments, and even among units within an establishment, depending on such factors as production, customer, and other coverage requirements; public laws and collective bargaining agreements; and the attitudes of individual managers and supervisors.

The amount of flexibility made possible by flexitime arrangements varies—ranging from as little as 30 minutes to 3 hours or more. Some plans permit variation in the number of hours worked per day, and in some cases, even the total number of hours worked each week, or pay period, and provide for the accumulation of "credit hours." Nearly all plans have a "core-time" requirement: all employees must work during the core time every day, or in some cases, on specified days of the week. A flexitime plan may be a formal document with detailed definitions, rules, and procedures, or it may be so informal that it is not explicitly identified as a flexible work schedule.⁶

Some potential advantages of a flexitime program are decreased tardiness, added hours of service to the public, smoothing rush-hour traffic peaks, larger blocks of employee leisure time, facilitating child care, and better

Table 4. Shift usually worked by part-time wage and salary workers, by selected characteristics, May 1985

[Percent distribution]

Characteristic	Total employed (in thousands)	Regular daytime schedule	Shift workers					
			Total	Evening shift	Night shift	Rotating shift	Split shift	Other shift
Age								
Total, 16 years and over	17,497	52.5	47.5	25.1	5.0	7.1	2.3	8.0
Men, 16 years and over	5,670	43.5	56.5	30.3	5.4	7.3	2.5	11.0
16 to 19	2,008	21.0	79.0	53.6	4.4	7.7	1.6	11.8
20 to 24	1,228	41.2	58.8	31.8	7.5	8.6	1.4	9.5
25 and over	2,434	63.2	36.8	10.4	5.2	6.3	3.8	11.1
Women, 16 years and over	11,826	56.8	43.2	22.6	4.8	7.0	2.3	6.6
16 to 19	2,006	20.9	79.1	52.1	4.3	12.5	1.2	9.0
20 to 24	1,798	46.0	54.0	27.2	6.5	11.4	1.5	7.3
25 and over	8,022	68.2	31.8	14.1	4.6	4.6	2.7	5.8
Occupation								
Managerial and professional specialty	2,321	65.1	34.9	14.4	4.3	5.0	2.2	9.1
Executive, administrative, and managerial	516	71.8	28.2	10.4	3.6	3.6	1.8	8.9
Professional specialty	1,805	63.2	36.8	15.5	4.5	5.4	2.3	9.1
Technical, sales, and administrative support	6,460	54.1	45.9	24.4	4.7	8.6	.9	7.2
Technicians and related support	389	50.8	49.2	23.0	7.0	12.8	1.2	5.1
Sales occupations	2,902	40.8	59.2	31.8	4.8	14.0	.9	7.7
Administrative support, including clerical	3,169	66.7	33.3	17.8	4.3	3.1	.9	7.1
Service occupations	5,339	44.1	55.9	33.5	6.0	7.0	2.1	7.2
Private household	648	64.2	35.8	15.4	2.3	2.9	1.4	13.9
Protective service	235	29.1	70.9	27.6	12.5	8.8	12.0	10.1
Service, except private household and protective	4,457	42.0	58.0	36.4	6.2	7.5	1.7	6.1
Precision production, craft, and repair	653	75.7	24.3	9.5	3.3	2.6	.8	8.1
Mechanics and repairers	158	63.0	37.0	24.6	3.9	1.3	—	7.1
Construction trades	303	85.5	14.5	4.2	.7	1.1	—	8.5
Other precision production, craft, and repair	192	70.7	29.3	5.5	6.9	6.2	2.6	8.2
Operators, fabricators, and laborers	2,148	47.8	52.2	23.6	5.2	7.4	7.1	8.9
Machine operators, assemblers, and inspectors	555	68.8	31.2	16.6	3.5	4.5	—	6.7
Transportation and material moving occupations	550	39.9	60.1	11.5	6.3	6.0	26.5	9.7
Handlers, equipment cleaners, helpers, and laborers	1,043	40.7	59.3	33.7	5.5	9.7	.8	9.6
Farming, forestry, and fishing	577	51.9	48.2	21.0	3.5	3.5	4.8	15.4

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week. Dash indicates fewer than 0.05 percent.

Table 5. Full-time wage and salary workers on flexible work schedules, by selected characteristics, May 1985

[Numbers in thousands]

Characteristic	Total		Men		Women	
	With flexible schedules	Percent of all workers	With flexible schedules	Percent of all workers	With flexible schedules	Percent of all workers
Age						
Total, 16 years and over	9,061	12.3	5,760	13.2	3,300	11.1
16 to 19	178	9.3	115	10.1	63	8.1
20 to 24	1,070	10.8	625	11.2	445	10.2
25 to 34	3,127	13.1	1,916	13.4	1,211	12.7
35 to 44	2,468	13.9	1,597	15.0	872	12.3
45 to 54	1,372	11.6	932	13.1	440	9.3
55 to 64	737	9.9	495	10.8	242	8.5
65 and over	108	13.8	80	16.9	28	9.2
Race and Hispanic origin						
White	8,105	12.8	5,270	13.7	2,835	11.4
Black	707	9.0	332	8.2	375	9.9
Hispanic origin	425	8.6	286	9.0	139	8.0
Occupation						
Managerial and professional specialty	3,448	18.2	2,340	21.5	1,109	13.8
Executive, administrative, and managerial	1,785	19.7	1,183	20.6	601	18.0
Professional specialty	1,664	16.9	1,156	22.4	507	10.8
Technical, sales, and administrative support	3,215	14.6	1,540	18.5	1,675	12.3
Technicians and related support	480	18.8	327	22.6	153	13.9
Sales occupations	1,340	19.9	940	23.1	400	15.1
Administrative support, including clerical	1,395	11.0	273	9.7	1,122	11.4
Service occupations	619	8.5	302	8.5	317	8.5
Private household	30	11.1	1	(1)	30	11.0
Protective service	109	8.5	101	8.7	8	6.6
Service, except private household and protective	479	8.4	200	8.4	279	8.4
Precision production, craft, and repair	717	6.8	658	6.8	59	7.3
Mechanics and repairers	255	7.1	246	7.1	9	7.0
Construction trades	232	7.1	229	7.1	3	(1)
Other precision production, craft, and repair	230	6.4	183	6.1	47	7.3
Operators, fabricators, and laborers	847	6.4	728	7.2	120	3.7
Machine operators, assemblers, and inspectors	273	4.0	187	4.5	85	3.3
Transportation and material moving occupations	397	11.5	389	11.8	8	5.6
Handlers, equipment cleaners, helpers, and laborers	178	5.7	151	5.7	26	5.4
Farming, forestry, and fishing	214	15.1	192	15.4	22	12.6

¹ Data not shown where base is less than 75,000.

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week.

scheduling of the work force to coincide with variations in the workload. Potential problem areas include the added need for managers and supervisors to schedule and plan the work flow and ensure the coverage of critical functions, the possible lack of supervision at some hours, added timekeeping needs, and nonlabor costs associated with more hours of operation (for example, heating and cooling).⁷

About 9.1 million full-time wage and salary workers (excluding the incorporated self-employed) who worked during the survey reference week in May 1985 were reported as having a work schedule which permitted them to vary their beginning and ending hours of work. (See table 5.) This was 12.3 percent of the covered workers. The incidence of flexible scheduling was lowest for teenagers (9.3 percent) and highest for the 35 to 44 and 65 and over age groups. Men were more likely than women to have flexibility in their work day, as were whites, compared with their black or Hispanic counterparts.

Among occupational groups, the ability to vary work hours ranged from 4 percent for machine operators, assemblers, and inspectors to 20 percent for those in sales occupations. For some more detailed classifications, the incidence

was more than 30 percent, such as mathematical and computer scientists; natural scientists; technicians, except health, engineering, and science; and sales representatives (commodities except retail). The incidence was higher for men than for women for each occupational, age, and race or Hispanic category.

The likelihood of flexible scheduling was slightly higher in the private sector (12.6 percent) than in the public sector (11.3 percent). However, it was 20 percent in the Federal Government, where many agencies have formal flexitime programs. Within the private sector, those in service-producing industries (at 14.5 percent) had higher proportions with the freedom to vary work times than those in goods-producing industries (9.8 percent). Among industry groups, the incidence ranged from under 5 percent in furniture and fixtures, textiles, and apparel, to 15 percent or more in agriculture, printing and publishing, wholesale trade, finance, insurance, and real estate, business and repair services, personal services, entertainment and recreation, and the "other" professional services category, which includes legal services, membership organizations, and engineering, architectural, and surveying services.

Employees on regular daytime schedules were more likely to have the ability to vary their starting and ending hours (12.7 percent) than those on evening shifts (6.6 percent), night shifts (8.2 percent), or rotating shifts (10.8 percent). Nearly one-quarter of those on split shifts had either flexitime or some other scheduling arrangement permitting flexibility.

Part-time workers were more likely than their full-time counterparts to have flexibility in the scheduling of their work, with 3.3 million (18.6 percent) being able to do so. As with full-time workers, the proportion of men reporting flexibility was higher than that of women (19.8 versus 18.0 percent.)

—FOOTNOTES—

¹ Statistics on wage and salary workers usually include self-employed workers whose businesses are incorporated because from a legal standpoint they are the paid employees of a corporation. However, they are excluded from the analysis here, as the primary interest in the scheduling of work lies in a universe of workers limited to those who work for someone else. To have a consistent universe throughout the article, data are limited to those who actually worked during the survey reference week, because some of the data were collected only for this group.

² Information on beginning and ending hours should not be used to indicate the number of hours worked per day—a statistic available through another question in the May 1985 survey. As previously mentioned, the times are rounded. For example, a 9:00 to 5:30 schedule would appear as 9:00 to 6:00. Because most workers usually arrive at work a few minutes before the required start time, someone who has a 7:30 to 4:00 work requirement, but actually arrives at 7:25 most days (and “punches in”

accordingly), would be tallied as 7:00 to 4:00 if that earlier time was reported as the starting time. Both factors may combine to partially explain the large number of those with such 10-hour spans as 8-to-6 and 7-to-5 schedules. Accordingly, an 8-hour work requirement of 8:30 to 5:30 (less an hour for lunch) may appear as 8 to 6. In addition, proxy respondents may not know precise starting and ending times and may report the times an employee departs from and returns home. The span also includes any time not worked, such as lunch and other breaks and the time between the work periods of split shifts—which vary in length among workers.

³ See *Workers on Late Shifts*, Summary 81–13 (Bureau of Labor Statistics, 1981); and Janice N. Hedges and Edward Sekscenski, “Workers on late shifts in a changing economy,” *Monthly Labor Review*, September 1979, pp. 14–22, for previously published data on shift work. Data published in this article are not comparable to those previously published on the subject.

⁴ See Hedges and Sekscenski, “Workers on late shifts”; and Peter Finn, “The effects of shift work on the lives of employees,” *Monthly Labor Review*, October 1981, pp. 31–35.

⁵ Although a regular daytime schedule is, strictly speaking, a “shift,” the term shift work is used here to describe only those schedules other than a “regular daytime schedule.”

⁶ Some of the variations of flexitime used among the plans covering Federal Government employees are flexitour, gliding time, variable day, variable week, and maxiflex. See *The Federal Employees Flexible and Compressed Work Schedules Act of 1978: An Overview of the Experimental Program for Federal Agencies* (Washington, U.S. Office of Personnel Management, 1979).

⁷ See John D. Owen, *Working Hours* (Lexington, MA, Lexington Books, 1979), which has a thorough discussion of alternative work schedules, including the practicality of flexitime in different work situations. For testimony which cites both the merits and limitations of flexitime, see *Flexible and Compressed Work Schedules and Federal Employees Flexible and Compressed Work Schedules Act*, hearings before the Subcommittee on Human Resources of the Committee on Post Office and Civil Service, U.S. House of Representatives (Washington, Government Printing Office, 1982 and 1985, respectively).

APPENDIX: Notes on the data

Unless otherwise indicated, information in this article covers wage and salary workers, excluding the incorporated self-employed, who reported having worked during the week of May 12–18, 1985. Coverage includes both the private and public sectors and workers both in and out of agricultural industries. The data were collected for the Bureau of Labor Statistics by the Bureau of the Census as part of the May 1985 Current Population Survey (CPS). The CPS employs a scientifically selected sample of about 59,500 households in all 50 States and the District of Columbia.

Information on beginning and ending hours of work were obtained from responses to the following questions:

- 34. LAST WEEK at what time of day did . . . begin work on this job most days?
- 35. LAST WEEK at what time of day did . . . end work on this job most days?

Answers were coded in 1-hour increments, centered on the hour. For example, answers ranging between 4:30 and 5:29 p.m. were coded as 5:00 p.m.

Information for most of the data on shift work was obtained from the following:

- 36. Which of the following best describes the hours . . . usually works at this job?
 - A regular daytime schedule
 - A regular evening shift
 - A regular night shift
 - A rotating shift—one that changes periodically from days to evenings or nights
 - A split shift—one consisting of two distinct periods each day
 - Other

The May 1985 data on shift work are not comparable to those which were published for the 1973–80 period. The earlier data were based on beginning and ending hours of work questions (as in 34 and 35 above). At that time, the day shift was defined as one at which the majority of hours

worked was between 8 a.m. and 4 p.m.; the evening shift had a majority of its hours between 4 p.m. and midnight; and the night shift had a majority of its hours worked between midnight and 8 a.m. In the event of a tie (for example, 12 noon to 8 p.m.), day took precedence over evening, and evening took precedence over night. "Shifts" were limited to 6- to 12-hour periods; those shorter or longer were classified as "miscellaneous" shifts. In addition, the 1973-80 data excluded farm workers but included any self-employed workers whose businesses were incorporated. The 1985 data are based on the self-identification of usual shift; the data include farm workers and exclude self-employed workers.

A limited amount of the 1985 shift work data was cross-tabulated according to the old definition of shifts. Of those reporting a regular daytime schedule, 97 percent would have been classified as working a day shift based on beginning and ending hours. There is far less conformity among those tabulated as working evening (90 percent) or night (63 percent) shifts, as many of these would have fallen into the miscellaneous category based on the "old" way of tabulating shifts. As expected, those reporting that they usually work a rotating shift were distributed among each of the categories based on beginning and ending hours; and many of

those reporting that they usually work a split or "other" shift would have fallen into the previous "miscellaneous" category.

The data on the presence of flexitime were obtained from the question:

40. Is . . . on flexitime or some other schedule that allows workers to vary the time they begin and end work?

Yes

No

Don't know . . .

The May 1985 data on flexitime are not comparable to those collected in May 1980, because of a difference in coverage. The earlier survey included self-employed workers whose businesses were incorporated (most of whom—by definition—can vary their work hours) and excluded farm workers, while the 1985 survey did not ask the flexitime question to the incorporated self-employed, but did include farm workers. Even though the 1985 data indicated only a small rise in the incidence of flexible work times—from 11.9 percent to 12.3 percent for full-time workers—the rise would have been larger if the incorporated self-employed had been included.

A note on communications

The *Monthly Labor Review* welcomes communications that supplement, challenge, or expand on research published in its pages. To be considered for publication, communications should be factual and analytical, not polemical in tone. Communications should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

Moonlighting by women jumped to record highs

An important, but small, proportion of Americans work at two jobs or more; they do so principally for financial reasons such as meeting regular expenses or paying off debts and also to explore new careers while still holding on to their primary jobs

JOHN F. STINSON, JR.

According to a survey conducted in May 1985, multiple jobholders totaled 5.7 million, 5.4 percent of all employed workers. This was up from 4.9 percent in 1980 and was the highest level in more than 20 years. Data from the same survey confirm the continuance of two long-term trends: an increasing number of women among the moonlighters and a decline in the proportion of multiple jobholders with at least one job in agriculture.

These findings are from a special survey of work patterns of American workers.¹ Multiple jobholders, as identified in this survey, are those employed persons who, during the survey reference week, either (1) had jobs as wage or salary workers with two employers or more; (2) were self-employed and also held a wage and salary job; or (3) were unpaid family workers on their primary jobs but also held wage and salary jobs.² The primary job is the one at which the greatest number of hours were worked.

Demographic characteristics

The survey revealed that between 1980 and 1985, the number of women with two jobs or more rose by almost 40 percent to 2.2 million. Over the same period, the multiple jobholding or "moonlighting" rate for women (percent of employed with more than one job) jumped from 3.8 to

4.7 percent. In 1985, women made up nearly two-fifths of all moonlighters.

Moonlighting among women has actually been rising steadily since 1970, paralleling their continued increase in overall labor force participation. Over the decade and a half, the number of women holding at least two jobs has more than tripled and their moonlighting rate has risen from 2.2 to 4.7 percent. (See table 1.)

The moonlighting rate for men, which had undergone a long-term decline before stabilizing during the 1970's at around 6 percent, continued to hold steady at 5.9 percent in May 1985. While men are still more likely than women to be working at two jobs or more, the gender difference in the incidence of multiple jobholding has been sharply reduced over time. As recently as 1970, the moonlighting rate for men exceeded that for women by 5 percentage points; by 1975, the gap had shrunk to 3 percentage points; by 1980, it had declined to 2 points; and, as shown above, by 1985, it barely exceeded 1 point.

Significant differences still persist, however, in the types of jobs held by the men and women who moonlight. In 1985, about 40 percent of the women were working at multiple part-time jobs, while more than four-fifths of the male moonlighters usually worked full time at their primary jobs and part time on their secondary jobs.

Among men, the proportion holding more than one job increases progressively in each age group, reaching a peak of 7.1 percent in the 35 to 44 years interval and declining

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steadily thereafter. Among women the pattern was much different. The proportion holding multiple jobs was 5 percent in all age groups below 45 years and then dropped off progressively. (See table 2.)

While married men were more apt to moonlight than either single men or those who were widowed, divorced, or separated, married women were somewhat less likely to work at more than one job than were those without a spouse.

Whites continued to be much more likely than blacks to work at two jobs or more. In fact, the moonlighting rate for whites increased from 5.1 to 5.7 percent between 1980 and 1985, while the black rate was unchanged at 3.2 percent. The increase for whites was principally among women, whose moonlighting rate rose a full percentage point to 4.9 percent; the rate for white men edged up slightly to 6.2 percent. Hispanic women had a moonlighting rate of 2.8 percent, about the same as that for black women, while the rate for Hispanic men was below that of blacks and only half the rate of white men.

Reasons for working at more than one job

Economic factors predominate among the reasons for moonlighting. About 41 percent of persons working more than one job in May 1985 reported that they did so in order to meet regular expenses or pay off debts, and 13 percent cited a desire to save for the future. Another 17 percent indicated that their principal reason for moonlighting was to get experience or build up a business, while 29 percent reported various other reasons. Women were slightly more likely than men to indicate the desire to get experience in a different field of work. (See table 3.)

Marital status had a clear effect on the reasons reported for moonlighting. Single men and women were more likely than other groups to moonlight in order to accumulate savings for the future. Current financial considerations

played a much more important role in the decision to moonlight for widowed, divorced, and separated workers. More than two-thirds of the women and almost half of the men in that category cited either the need to meet regular expenses or to pay off debts as their reason for working at more than one job.

There was also a sharp divergence in the distribution of the reasons for multiple jobholding reported by blacks and whites. Blacks of both sexes were much more likely than whites to say they moonlighted in order to help with regular expenses and paying off debts and much less likely to say they did so to get experience or to build up a business.

Class of worker, industry, and occupation

The proportion of multiple jobholders engaged in farming in either their primary or secondary job—a prominent activity among dual jobholders in the past—declined to fewer than one-tenth in May 1985. In most cases, these workers had primary jobs as wage and salary workers in nonagricultural industries but did some farming on their own. (See table 4.) While the proportion of such workers had been edging down as shown in the following tabulation, the drop between 1980 and 1985 was particularly sharp, undoubtedly reflecting the myriad problems encountered by the farm sector in recent years:

	Total multiple jobholders (thousands)	With at least one job in agriculture	
		Total (thousands)	Proportion
1970	4,048	943	23.3
1975	3,918	890	22.7
1977	4,558	922	20.2
1979	4,724	871	18.4
1980	4,759	835	17.5
1985	5,730	532	9.3

Table 1. Employed persons 16 years and over holding two jobs or more and multiple jobholding rates by selected characteristics, May 1970 to May 1985

[Numbers in thousands]

Year	Total employed	Multiple jobholders				Multiple jobholding rate ¹				
		Total	Men	Women		Total	Men	Women	White	Black ²
				Number	Percent of all multiple jobholders					
1970	78,358	4,048	3,412	636	15.7	5.2	7.0	2.2	5.3	4.4
1971	78,708	4,035	3,270	765	19.0	5.1	6.7	2.6	5.3	3.8
1972	81,224	3,770	3,035	735	19.5	4.6	6.0	2.4	4.8	3.7
1973	83,758	4,262	3,393	869	20.3	5.1	6.6	2.7	5.1	4.7
1974	85,786	3,889	3,022	867	22.3	4.5	5.8	2.6	4.6	3.8
1975	84,146	3,918	2,962	956	24.4	4.7	5.8	2.9	4.8	3.7
1976	87,278	3,948	3,037	911	23.1	4.5	5.8	2.6	4.7	2.8
1977	90,482	4,558	3,317	1,241	27.2	5.0	6.2	3.4	5.3	2.6
1978	93,904	4,493	3,212	1,281	28.5	4.8	5.8	3.3	5.0	3.1
1979	96,327	4,724	3,317	1,407	29.8	4.9	5.9	3.5	5.1	3.0
1980	96,809	4,759	3,210	1,549	32.5	4.9	5.8	3.8	5.1	3.2
1985	106,878	5,730	3,537	2,192	38.3	5.4	5.9	4.7	5.7	3.2

¹ Multiple jobholders as a percent of all employed persons.

² Beginning in 1977, data refer to black workers only; data for prior years refer to the black-and-other-population group.

NOTE: Data for 1970-1980 have not been adjusted to reflect 1980 census population controls.

Table 2. Employed persons with two jobs or more by age, marital status, race, and Hispanic origin, May 1985

[Numbers in thousands]

Characteristic	Total			Men			Women		
	Total employed	Multiple jobholders		Total employed	Multiple jobholders		Total employed	Multiple jobholders	
		Number	Percent		Number	Percent		Number	Percent
Age									
Total, 16 years and over	106,878	5,730	5.4	60,015	3,537	5.9	46,864	2,192	4.7
16 to 19	6,289	289	4.6	3,370	134	4.0	2,919	156	5.3
20 to 24	13,857	777	5.6	7,345	436	5.9	6,512	340	5.2
25 to 34	31,246	1,771	5.7	17,641	1,090	6.2	13,605	682	5.0
35 to 44	24,446	1,522	6.2	13,698	967	7.1	10,478	556	5.2
45 to 54	16,682	847	5.1	9,526	558	5.9	7,156	290	4.1
55 to 64	11,545	433	3.8	6,739	294	4.4	4,806	139	2.9
65 and over	2,813	90	3.2	1,696	59	3.5	1,117	31	2.7
Marital status									
Single	26,167	1,448	5.5	14,768	767	5.2	11,399	681	6.0
Married, spouse present	65,443	3,448	5.3	39,444	2,447	6.2	25,999	1,001	3.8
Widowed, divorced, or separated	15,268	834	5.5	5,803	323	5.6	9,465	510	5.4
Race and Hispanic origin									
White	93,555	5,286	5.7	53,222	3,291	6.2	40,333	1,995	4.9
Black	10,416	338	3.2	5,240	187	3.6	5,176	151	2.9
Hispanic origin	6,489	194	3.0	3,984	125	3.1	2,505	69	2.8

NOTE: Detail for race and Hispanic-origin groups will not add to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

Table 3. Multiple jobholders by sex, marital status, race and the reason for working at more than one job, May 1985

Characteristic	Total (thousands)	Percent distribution by reason					
		Total	To meet regular household expenses	To pay off debts	To save for the future	To get experience or build up a business	Other reason
Total, 16 years and over	5,730	100.0	31.6	9.3	13.0	17.0	29.2
Men, 16 years and over	3,537	100.0	30.3	9.0	12.9	18.1	29.7
Single	767	100.0	20.7	10.4	21.5	19.5	27.9
Married, spouse present	2,447	100.0	33.4	7.6	11.0	18.0	30.1
Widowed, divorced, or separated	323	100.0	29.2	17.0	7.2	15.4	31.1
White	3,291	100.0	29.4	9.1	12.8	18.4	30.3
Black	187	100.0	45.6	10.6	12.8	11.1	20.0
Women, 16 years and over	2,192	100.0	33.7	9.7	13.1	15.3	28.2
Single	681	100.0	28.5	8.7	22.1	14.1	26.6
Married, spouse present	1,001	100.0	27.2	7.8	10.6	20.1	34.2
Widowed, divorced, or separated	510	100.0	53.5	14.8	6.0	7.0	18.8
White	1,995	100.0	33.3	8.9	12.9	15.7	29.2
Black	151	100.0	40.1	19.7	16.3	5.4	18.4

Table 4. Multiple jobholders by industry and class of worker of primary and second job, May 1985

[Numbers in thousands]

Primary job	Total employed	Multiple jobholders		Second job in agriculture			Second job in nonagricultural industries		
		Number	As a percent of total employed	Total	Wage and salary job	Self-employed	Total	Wage and salary job	Self-employed
Total, 16 years and over	106,878	5,730	5.4	382	81	300	5,348	3,866	1,482
Agriculture	3,524	186	5.3	36	13	22	150	137	13
Wage and salary workers	1,731	103	6.0	32	10	21	71	58	13
Self-employed workers	1,582	74	4.7	3	3	(1)	71	71	(1)
Unpaid family workers	211	8	4.0	-	-	(2)	8	8	(2)
Nonagricultural industries	103,354	5,544	5.4	346	67	279	5,198	3,728	1,469
Wage and salary workers	95,379	5,266	5.5	342	64	278	4,924	3,459	1,469
Self-employed workers	7,694	269	3.5	3	3	(1)	266	266	(1)
Unpaid family workers	280	9	3.2	-	-	(2)	9	9	(2)

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

² Persons whose primary job was as an unpaid family worker are counted as multiple jobholders only if they also had a wage and salary job.

Among the other multiple jobholders—that is, the vast majority who did not engage in any agricultural work—about one-third were self-employed in at least one job, usually the second job. The rest worked as wage and salary employees in both jobs.

The workers whose primary jobs were in industries such as entertainment and recreation services; professional services, especially educational services; and public administration were the most likely to engage in moonlighting. In terms of specific occupations, the men most likely to moonlight were those employed as teachers, both at and below the college level, or as health technologists and technicians. Between 16 and 19 percent of them held a second job. A high proportion of dual jobholders (13.9 percent) was also found among male protective service workers, a group which includes police, who frequently moonlight as guards and security personnel. There were no occupations for women with such high rates of multiple jobholding. The highest rates for women were among officials and administrators in public administration, with a moonlighting rate of 7.5 percent, and health diagnosing occupations; teachers at all levels; and engineering and science technicians, all with rates around 7 percent.

Hours of work and earnings

Multiple jobholders usually worked an average of about 14 hours per week on their secondary jobs. Almost two-thirds worked less than 16 hours, while about 15 percent reported 25 hours or more of moonlighting work. Although blacks are much less likely than whites to hold more than one job, about 20 percent of black moonlighters reported usually working more than 25 hours per week at their second job, compared with about 15 percent of whites.

Combining all jobs, moonlighters worked an average of 51 hours per week in May 1985. The average for men, at 55 hours per week, exceeded by 10 hours that usually worked by women with two jobs or more.

The median usual weekly earnings from all jobs of multiple jobholders (who were wage and salary workers on their primary job)⁴ was \$343 in May 1985. For women who moonlighted, total weekly earnings from all jobs (\$241) were equal to little more than half of the earnings of multiple-jobholding men (\$450). The total weekly earnings for black multiple jobholders were \$305, slightly below the

\$344 average for whites.

Looking only at the second jobs, the earnings reported by multiple jobholders yielded a median of \$70 in May 1985. Just over three-fifths of the moonlighters reported earnings of below \$100 per week for their second job; one-fourth reported between \$100 and \$200; and about 13 percent reported earnings of over \$200 per week. As was generally the case with regard to the principal job, men earned considerably more on the second job—\$85 per week—than did women—\$57 per week. Three quarters of the women reported weekly earnings of less than \$100 on their second job, compared with a little more than half of the men.

Consistent with their greater hours worked, blacks reported earning more on their second jobs than did white moonlighters; the medians for the two groups were, respectively, \$81 and \$69 per week. Because black workers tend to earn much less in their primary jobs than do white workers, the earnings from secondary jobs help to narrow the income gap between whites and blacks who engage in multiple jobholding. □

FOOTNOTES

¹ The data were obtained through special questions asked in conjunction with the May 1985 Current Population Survey (CPS), the monthly survey of about 59,500 households which provides the basic labor force and unemployment data for the Nation. Data on multiple jobholders used to be collected each May in a supplement to the CPS until the supplement was ended after 1980. For the most recently published report on multiple jobholders, see Daniel E. Taylor and Edward S. Sekscenski, "Workers on long schedules, single and multiple jobholders," *Monthly Labor Review*, May 1982, pp. 47–53.

² Also included as multiple jobholders are a small number of persons who had two jobs because they changed jobs during the survey week. Persons employed only in private households (such as housekeepers, laundresses, gardeners, babysitters, and so forth) who worked for two employers or more during the survey week, are not counted as multiple jobholders because working for several employers is considered an inherent characteristic of private household work rather than an indication of multiple jobholding. Also excluded are self-employed persons with additional farms or businesses and persons with secondary jobs as unpaid family workers.

³ Included among the wage and salary workers are the incorporated self-employed (individuals who worked for corporations which they owned). The number of dual jobholders in this category is very small (58,000, or 1 percent of all moonlighters) and their inclusion among the wage and salary workers should have a minimal impact on the analysis of the data.

⁴ Data on wage and salary earnings only were collected for the primary job. Data on earnings from all sources were collected for the second job.

Missed work and lost hours, May 1985

Absences were lower in 1985 than at any time since 1973; for the first time, absence rates in the goods-producing industries were lower than the rates in the service-producing industries

BRUCE W. KLEIN

On any given day, some people do not show up at work for one reason or another. These unscheduled absences can disrupt the work flow and raise costs such as sick pay and the hiring of temporary help. Absences may also result in a reduction in product quality and low morale among the workers who get additional duties passed onto them.

According to data collected in May 1985 from the Current Population Survey (CPS), about 4.7 percent of the full-time nonfarm workers had an absence in a typical week caused by illness, injury, civic duties, or personal reasons. The proportion of hours lost was 2.6 percent of the potential that would have been worked during the survey's reference week. These absence figures were substantially lower than those last obtained in a 1980 survey. In fact, they showed the first decline since the Bureau of Labor Statistics began estimating absences in 1973.

The proportion of full-time wage and salary workers who had an absence which kept them from working at least 35 hours per week declined by more than 20 percent between May 1980 and May 1985. An absence measure computed by the Bureau of National Affairs from entirely different data has also shown a similar decline over the same period.¹ In addition to a decline in the percent of workers absent from

work, the CPS shows that the percent of total worktime lost because of absences also declined by more than 20 percent during the period mentioned.² (See table 1.)

The drop in absences during this 5-year period may have stemmed from the aftereffects of the 1981-82 recession. There appear to be two primary reasons for a drop in absences: (1) workers laid off during the recession are likely to have included many of the frequent absentees, and (2) remaining workers were less likely to be absent from their jobs in the aftermath of a recession or during a period of business uncertainty for fear of job loss.³ In addition, absence rates may have remained low during the economic recovery because of explicit personnel policies on absences. In some cases, various penalties and incentives were put into place to keep them down.⁴

Although there has been a substantial reduction in the frequency of absences and in the proportion of time lost, the number of hours lost per individual worker with an absence increased slightly between 1980 and 1985. Reasons other than illness or injury were responsible for most of the increase.

Absence concepts

The term "absences," as used here, relates to generally unscheduled periods of leave from work. Reasons for absences include illnesses, injuries, personal and civic commitments, and mishaps. For example, car failure is some-

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times an excuse for an absence. The data presented here relate only to full-time wage and salary workers, those who usually work more than 35 hours per week and who hold only one job. They are deemed to have been absent by reporting that they worked less than 35 hours per week because of illness, injury, or other reasons.

Absences are measured by rates which identify (1) the proportion of workers with an absence; (2) the proportion of hours lost relative to all scheduled hours; or (3) relative to the hours usually worked by those with an absence. Specifically, the incidence rate is the number of workers absent divided by the total employed times 100 or,

$$\frac{\text{Number of workers absent}}{\text{Total employed}} \times 100 .$$

The inactivity rate is the number of hours absent divided by the total number of hours usually worked times 100 or,

$$\frac{\text{Numbers of hours absent}}{\text{Number of hours usually worked}} \times 100 .$$

A third measure, the severity rate, indicates the proportion of hours lost by workers with an absence relative to the hours they usually work, also expressed in percentage terms, or

$$\frac{\text{Number of hours lost by absent workers}}{\text{Number of hours usually worked by absent workers}} \times 100 .$$

Annual rates and comparisons

Extrapolating from the data gathered for May, it is estimated that because of absences, an average worker lost 7.2 days in 1985, compared with an estimate of 9.7 days in 1980. It is estimated that a typical worker had absences in 3 of 52 weeks during 1985, down from 4 of 52 weeks in 1980.

The absence rate for the United States—4.7 percent—compares favorably with recent percentage rates of the following countries: England (11.8), Canada (11.6), Denmark (7.7), France (5.9), the Netherlands (5.4), Belgium (3.8), Greece (3.1), Germany (3.0), Sweden (3.0), Italy (2.9), and Japan (2.5). The rates for Australia and Ireland are similar to the U.S. rate—4.3 and 5.2, respectively.⁵

Variation by industry and occupation

Differences in absence rates between the various industries and occupations were also significant, as were their trends. In May 1985, for the first time, the absence rates in goods-producing industries were lower than those in service-producing industries. This was true both for the incidence of absences and the measurement of hours lost because of absences. This reversal could reflect a new attitude in goods-producing industries regarding the costs associated with unscheduled work absences. Many companies have instituted various policies to reduce absences, using

both “the carrot and the stick.” In some instances, they have introduced the practice of giving bonuses to workers with high attendance. They have also counseled workers who are frequently absent before taking more serious steps against them. In part because of these new policies and the other factors cited above, the durable goods industry has achieved especially low absence rates. (See table 2.)

Public administrations have the highest percentage of workers with absences, which may be the result of liberal leave policies towards Federal, State, and local government employees. Businesses which supply professional services also have relatively high rates of absences, both in terms of incidence and inactivity. Within the professional services sector, educational and medical service providers have the highest absence rates. This may reflect the fact that teachers, who make up a large component of this group, usually have an allotment of personal days off which are filled by substitute teachers. Absences are not easily explained for employees of hospitals and other health service providers.

In terms of occupation, the absence rate reported by persons in executive and administrative positions, and those in management-related occupations was relatively low—3.2 percent. This contrasts sharply with the higher incidence of absences for professional specialists, 5.2 percent. These differences, which are also reflected in the proportion of time lost, could be caused by the high degree of competition and visibility among executives and also the fact that some of the professionals, such as teachers, have contracts which allow for a certain number of absences during the year. (See table 3.)

The precision production, craft, and repair occupations

Table 1. Absence rates for full-time nonagricultural wage and salary workers, by reason, May 1980 and May 1985

[Numbers in thousands]

Measure	1980	1985	• 1980-85 change	
			Number	Percent
Absent workers				
Total number of workers ¹	64,043	77,698	13,655	21.3
Total absent	3,926	3,683	-243	-6.2
Total incidence rate ²	6.1	4.7	-1.4	-23.0
Illnesses and injuries	3.6	2.6	-1.4	-27.8
Miscellaneous reasons	2.6	2.1	-.5	-19.2
Hours lost				
Weekly hours usually worked	2,693,930	3,276,410	582,480	21.6
Weekly hours lost	89,823	86,279	-3,544	-3.9
Total inactivity rate ³	3.3	2.6	-.7	-21.2
Illnesses and injuries	2.1	1.6	-.5	-23.8
Miscellaneous reasons	1.2	1.1	-.1	8.3
Hours lost per absent worker				
Usual weekly hours per worker	42.1	42.2	.1	.2
Total severity rate ⁴	56.1	57.2	1.1	2.0
Illnesses and injuries	61.4	61.9	.5	.8
Miscellaneous reasons	48.9	51.6	2.7	5.5

¹ Includes incorporated self-employed workers.

² Number of workers absent as a percent of the total working.

³ Number of hours absent as a percent of the total number of hours usually worked.

⁴ Number of hours absent as a percent of the number of hours usually worked by absent workers.

Table 2. Absence rates for full-time wage and salary workers, by industry, May 1985

[Numbers in thousands]

Industry	Total number of workers ¹	Incidence rate (Percent of workers absent)			Inactivity rate (Percent of time lost)		
		Total	Illnesses and injuries	Miscellaneous reasons	Total	Illnesses and injuries	Miscellaneous reasons
Total, 16 years and over	76,093	4.8	2.6	2.2	2.7	1.6	1.1
Total nonagricultural wage and salary workers	74,908	4.8	2.6	2.2	2.7	1.6	1.1
Goods-producing industries	24,854	4.4	2.7	1.6	2.5	1.7	.8
Mining	929	4.0	2.8	1.2	3.6	2.4	1.1
Construction	4,817	4.3	2.4	1.9	2.5	1.5	.9
Manufacturing	19,108	4.4	2.8	1.6	2.4	1.7	.8
Durable goods	11,778	4.0	2.6	1.4	2.2	1.5	.6
Nondurable goods	7,330	5.1	3.2	2.0	2.9	1.9	1.0
Service-producing industries	50,054	5.1	2.6	2.4	2.8	1.5	1.3
Transportation and public utilities	6,477	4.8	2.6	2.2	3.2	1.8	1.4
Wholesale and retail trade	12,835	4.7	2.8	1.9	2.7	1.8	.9
Wholesale trade	3,322	3.8	2.2	1.6	2.4	1.6	.8
Retail trade	9,513	5.0	3.0	2.0	2.8	1.9	.9
Finance, insurance, and real estate	5,326	4.1	2.1	2.0	2.0	1.0	1.0
Services ²	20,757	5.4	2.5	2.9	2.9	1.4	1.4
Professional services	14,858	5.8	2.7	3.1	3.1	1.5	1.6
Educational services	6,283	6.2	2.5	3.7	3.3	1.5	1.8
Health services, including hospitals	5,373	5.9	3.2	2.7	4.2	1.7	2.5
Other professional services	2,682	4.6	2.4	2.2	2.7	1.3	1.5
All other services	5,899	4.5	2.1	2.5	2.3	1.2	1.1
Public administration	4,659	5.9	3.1	2.8	3.0	1.6	1.3

¹ Excludes incorporated self-employed workers.

² Includes industries, not shown separately.

NOTE: Detail may not add to totals because of rounding.

have a relatively low incidence rate (4.3 percent). The less skilled group of operators, fabricators, and laborers have a higher incidence rate (5.5 percent). Among the lower skilled workers, handlers, equipment cleaners, helpers, and laborers have the highest absence rate (6.7 percent). These lowest skilled, low-paying jobs are often hazardous and have unpleasant working conditions, for example, fumes, noise, dirt, and heat. Given the gradual shift in technology, a substitution of high skilled manual workers for low skilled may have contributed to the reduction in absence rates.

Variation by personal characteristics

Teenagers have the highest absence rate of any age group, as shown below in the incidence rates for men and women in various age groups:

Percent of workers with an absence in the reference week, May 1985

	Total	Men	Women
All ages	4.8	3.7	6.3
16-19 years	7.0	6.7	7.4
20-24 years	4.8	3.9	5.9
25-54 years	4.6	3.4	6.3
55 years and over	5.7	5.0	6.8

Teenagers may have a higher absence rate because they attach more importance to nonwork activities than do older workers. As workers get into their early twenties, their

absence rates decline and approach that of workers age 25 to 54. Past age 55, the absence rate rises again for both men and women. Health problems and health maintenance needs may affect this increase.

For women, the absence rate increases in their prime years, while for men, the rate falls. Understandably, women have a higher incidence of absences during their childbearing years, especially women with children under age 6. However, men with children have a relatively low absence rate. (See table 4.) Marital responsibilities seem to induce men toward a firmer commitment to their jobs, so that they spend less time away from work. For most women, the proportion of time lost increased with the presence of children, especially young ones. Women maintaining families alone who have three children or more have the highest absence rate. This may be because these women have no one to fall back on when their children need care during their working hours. Other family-related responsibilities, such as care of other family members, may be another factor in their relatively high absence rates.

ABSENCE RATES DROPPED considerably between 1980 and 1985. This is probably caused by the fallout from the recession of 1981-82 when workers with attendance problems may have been dismissed in greater numbers. This, in turn, may have induced fear of job dismissal in other workers who kept their absences low. Cost-cutting measures have also

Table 3. Absence rates for full-time wage and salary workers, by occupation, May 1985

[Numbers in thousands]

Occupation	Total number of workers ¹	Incidence rate (Percent of workers absent)			Inactivity rate (Percent of time lost)		
		Total	Illnesses and injuries	Miscellaneous reasons	Total	Illnesses and injuries	Miscellaneous reasons
Total, 16 years and over	76,093	4.8	2.6	2.2	2.7	1.6	1.1
Managerial and professional specialty	19,598	4.2	1.9	2.3	2.3	1.0	1.2
Executive, administrative, and managerial	9,381	3.2	1.6	1.6	1.7	.9	.8
Professional specialty	10,217	5.2	2.2	3.0	2.8	1.1	1.6
Technical, sales, and administrative support	22,745	4.9	2.7	2.2	2.5	1.5	1.1
Technicians and related support	2,624	3.0	2.1	1.7	1.8	1.0	.8
Sales occupations	6,934	3.9	2.3	1.6	2.2	1.4	.7
Administrative support, including clerical	6,477	4.8	2.6	2.2	3.2	1.8	1.4
	13,186	5.6	3.0	2.6	2.9	1.6	1.3
Service occupations	7,554	5.7	3.0	2.7	3.1	1.8	1.4
Private household	279	3.6	1.1	2.5	2.2	.2	1.9
Protective service	1,345	4.7	1.8	2.9	2.5	1.2	1.2
Service, except private household and protective	5,930	6.0	3.3	2.7	3.4	2.0	1.4
Precision production, craft, and repair	10,855	4.3	2.8	1.6	2.6	1.8	.8
Operators, fabricators, and laborers	13,897	5.5	3.4	2.1	3.4	2.3	1.1
Machine operators, assemblers, and inspectors	7,006	5.3	3.3	2.0	3.0	2.2	.8
Transportation and material moving occupations	3,619	4.8	3.0	1.8	3.4	2.3	1.3
Handlers, equipment cleaners, helpers, and laborers	3,272	6.7	4.1	2.6	4.1	2.8	1.3
Farming, forestry, and fisheries	1,444	3.1	1.3	1.8	1.6	.7	.9

¹ Excludes incorporated self-employed workers.

NOTE: Detail may not add to totals because of rounding.

Table 4. Absence rates for full-time wage and salary workers, by marital status, sex, presence and age of children, May 1985

[Numbers in thousands]

Marital status and sex	Total number of workers ¹	Incidence rate (Percent of workers absent)			Inactivity rate (Percent of time lost)		
		Total	Illnesses and injuries	Miscellaneous reasons	Total	Illnesses and injuries	Miscellaneous reasons
Women who maintain families							
With no children under 18 years old	1,475	5.4	3.8	1.6	3.3	2.7	0.6
With one child under 18 years old:							
Youngest child 6 to 17	1,386	5.6	3.2	2.4	2.8	1.9	.9
Youngest child under 6	360	8.4	4.9	3.5	3.8	2.1	1.7
With two children under 18 years old:							
Youngest child 6 to 17	622	5.9	2.9	3.0	3.1	1.6	1.5
Youngest child under 6	311	11.0	5.4	5.7	5.8	2.3	3.5
With three children or more under 18 years old:							
Youngest child 6 to 17	208	9.8	6.2	3.5	4.5	3.7	.8
Youngest child under 6	120	17.7	5.2	12.5	6.2	2.7	3.5
Married women, spouse present							
With no children under 18 years old	7,971	5.8	3.2	2.7	3.1	1.9	1.2
With one child under 18 years old:							
Youngest child 6 to 17	2,350	6.7	3.7	3.0	3.8	2.4	1.4
Youngest child under 6	1,506	12.8	3.6	9.2	9.3	2.1	7.3
With two children under 18 years old:							
Youngest child 6 to 17	1,833	6.4	2.8	3.6	3.0	1.5	1.5
Youngest child under 6	1,251	10.9	3.5	7.4	7.0	2.0	5.0
With three children or more under 18 years old:							
Youngest child 6 to 17	612	2.6	1.4	1.2	.8	.6	.2
Youngest child under 6	635	9.2	3.7	5.5	4.0	1.5	2.5
Married men, spouse present							
With no children under 18 years old	11,669	4.0	2.6	1.4	2.5	1.7	.8
With one child under 18 years old:							
Youngest child 6 to 17	4,204	4.0	2.4	1.6	2.5	1.6	.9
Youngest child under 6	3,188	3.5	1.8	1.8	1.9	1.0	1.0
With two children under 18 years old:							
Youngest child 6 to 17	3,711	2.3	1.5	.7	1.4	.9	.4
Youngest child under 6	3,601	3.4	1.9	1.5	1.7	1.0	.7
With three children or more under 18 years old:							
Youngest child 6 to 17	1,507	3.1	1.7	1.4	2.0	1.3	.7
Youngest child under 6	2,383	3.5	2.3	1.2	1.9	1.4	.5

¹ Excludes incorporated self-employed workers.

NOTE: Detail may not add to totals because of rounding.

caused employers, particularly in manufacturing, to institute various means to hold absences down, both through incentives and disciplinary action. Reflecting these trends, the absence rates in the goods-producing sector were lower in 1985 than those in the service-producing sector, a situation that has not been observed before, at least not since 1973. □

—FOOTNOTES—

¹ *Quarterly Report on Job Absence and Turnover, 2d Quarter 1985* (Washington, The Bureau of National Affairs, Inc., Sept. 5, 1985).

² The situation in these 2 particular months (May 1980 and May 1985) may not be totally representative of the trend in absences over this 5-year

period. However, separate estimates of absences based on CPS data for the 12 months of 1980 and 1985, showed declines well in excess of 10 percent.

³ J. Paul Leigh, "The Effects of Unemployment and the Business Cycle on Absenteeism," *Journal of Economics and Business*, May 1985, pp. 159-70.

⁴ Peter Perl, "Work Place Conflicts Arise Over Rules on Absenteeism," *The Washington Post*, June 23, 1986, p. A1.

⁵ *Labour Force Sample Survey, 1983* (Luxembourg City, Luxembourg, Statistical Office of the European Communities, 1985), p. 114; *Report on the Special Survey of the Labour Force Survey, February 1984* (Tokyo, Japan, Statistics Bureau, Management and Coordination Agency, 1984), pp. 58-59; *The Labour Force Australia, February 1986* (Canberra, Australian Bureau of Statistics, April 1986), p. 21; *The Labor Force, December 1985* (Ottawa, Statistics Canada, January 1986), p. 118; *Arbetskraftsundersökningar, Arsmetdel 1985* (Stockholm, Sweden, Statistiska Centralbyran, 1985), p. 121.

Measures to increase incomes

The vital role of women in agriculture in many parts of the developing world means that they should be assisted in rural development programs, for example, by the introduction of appropriate technology and simple farm tools to reduce the burden of their work on the land and in the home. Technological innovation and appropriate training aimed at peasant and small-holder farmers should be organized as part of extension services which are easily accessible to even the poorer segments of the rural population. The adoption of appropriate technologies will be crucial to the attainment of food self-sufficiency in the coming decade, and here again is a field in which the ILO has an important role to play in the coming years, building on experience gained so far. Other policy measures to increase agricultural production deserving of consideration include the provision of infrastructural facilities and essential public services (for example, roads, irrigation, health centers, schools); improved access to credit; and pricing and marketing policies appropriate to the maximization of the growth of output and employment in rural areas.

—*The Changing World of Work: Major Issues Ahead*
(Report of the Director-General (Part I),
 International Labour Conference, 72d sess.
 (Washington, International Labour Organization,
 1986), p. 18.

Work at home: new findings from the Current Population Survey

In May 1985, more than 8 million Americans reported at least 8 hours per week of home-based work; services, ranging from consulting to child care, were the most common pursuits of persons working substantial numbers of hours at home

FRANCIS W. HORVATH

For some Americans, there is no separation of gainful work between the home and the workplace. A large number of persons regularly squeeze extra hours into their workweek by performing job-related chores at home. Others have completely eliminated the trip to work by setting up businesses or performing work-for-hire while at home.

In May 1985, the Bureau of Labor Statistics made its first attempt to determine the size of the home-based work force. Along with other questions on work practices, the respondents to the May survey were asked whether: "As part of . . . (the worker)'s regularly scheduled work, does . . . (he/she) do any of (his/her) work for . . . (the principal employer) at home?" Persons answering affirmatively were asked to estimate the number of hours of work done at home.

While more than 18 million people responded affirmatively, almost half of them worked at home for less than 8 hours a week. Another 770,000 were farmers or farm laborers. The remainder, nearly 8.4 million persons, had worked at home for 8 hours or more in the reference week, as part of a nonfarm job. They are the focus of most of the analysis which follows.

It should be noted that persons working at home on a second job or business were not counted among home-based

workers. "Work-at-home" as defined here pertains only to work done as part, or as an extension, of one's primary job. Of course, given this definition, it is possible that persons who regularly bring work home, such as managers reading or writing memos at home, or teachers grading papers, might consider such work to be "regularly scheduled," and will report it as home-based work.

Earlier studies

The May survey was the first specific attempt to estimate the size of the home-based work force. Other estimates had been available from secondary sources and private studies.¹ For example, in response to a special congressional request, the Census Bureau had produced a tabulation on persons working at home from the data gathered as part of the 1980 census.² The specific source for the study was a question on methods of travel to work, to which one possible response was "worked at home." According to the data, about 2.2 million persons were identified as home-based workers. More than half (1.2 million) of homeworkers were self employed.

More recently, a privately conducted study was designed to study work-at-home styles. In a telephone survey, respondents were asked questions about work hours, job satisfaction, and computer usage in the home. Nearly 60 percent of the respondents cited working part-time at home as the "ideal work arrangement."³

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Who are 'homeworkers'?

Of the 17.3 million persons with any home-based work in nonfarm occupations (regardless of the number of hours reported), about 9.6 million (55 percent) were men. (See table 1.) While men outnumbered women in the general classification of home-based work, women who worked at home had a stronger commitment to the home as a workplace. For example, women averaged 11.1 hours per week on home-based work, while men put in 9.3 hours. About 8 percent of the women worked 35 hours or more at home, compared with 4 percent of the men. Overall, there were 60 percent more women than men who worked the equivalent of a full-time week at home.

Work at home appears to be a particularly attractive option for older persons, for whom the daily commute to work can be very tiring. Nearly one fifth of all nonfarm home-based workers working 35 hours or more weekly consisted of persons over 55 years of age, a group that accounts for only 1 in 8 of all employed workers.

The distribution of home-based work by race also showed slightly higher percentages of white workers than are found in the overall labor force. There were about 660,000 black and Hispanic workers with 8 hours or more of home-based work.

Industrial and occupational comparisons

Much of the interest in home-based work has centered around a few key industries and occupations. For example, it is believed that a growing number of clerical workers are opting to establish their own businesses at home, having been attracted by the idea of "being one's own boss."⁴

Table 2. Employed persons in nonagricultural industries with 8 hours or more of home-based work, by industry and sex, May 1985
[In thousands]

Industry	Men		Women	
	8 hours or more	35 hours or more	8 hours or more	35 hours or more
Nonagricultural industries	4,565	368	3,790	585
Mining	53	5	25	5
Construction	391	11	93	19
Manufacturing	676	42	258	40
Durable goods	451	21	102	12
Nondurable goods	225	21	156	29
Transportation and public utilities	247	16	115	20
Wholesale and retail trade	799	45	494	51
Finance, insurance, and real estate	465	49	310	35
Services ¹	1,757	193	2,375	413
Public administration	161	3	120	2

¹ Excludes forestry and fisheries.

Clerical workers such as secretaries, typists, forms processors, and data entry personnel have seen a drop in the cost of capital equipment that has enabled them to set up shop at home. Declining prices for personal computers and other electronic equipment have given many persons in professional service industries, such as financial records processing and bookkeeping, an opportunity to begin a business with very low startup costs.

Table 2 presents counts of home-based workers who worked for 8 hours or more at home by major nonagricultural industry group and sex. By far the largest industry group of home-based workers is in services. This category includes educational, professional, and business and repair services, as well as such social services as child care. Nearly 60 percent of women who worked 8 hours or more at home were in the services industry, compared with only 35 percent of the men.

The longer an individual's weekly hours of home-based work, the more likely he or she is to be engaged in a services industry. More than half of men and two-thirds of women in nonagricultural industries with long hours of home-based work were in service industries.

A more detailed look at home-based work in services is presented in table 3. Business and repair services accounted for nearly 100,000 of the persons working full-time workweeks at home. This category includes a variety of establishments, such as business management and consulting services and computer and data processing services. Social services, which encompass child care, accounted for 110,000 full-time home-based workers. Another 90,000 home-based workers were in "other professional services," covering legal services, architectural services, religious organizations, and others.

Table 3 also presents counts by class of worker. It shows that among the universe of persons with 8 hours or more of home-based work in the reference week, the majority were private wage and salary workers, who may simply be bringing work home on a regular basis. However, among those

Table 1. Employed persons working at home, by age, sex, and hours worked at home, May 1985

[Numbers in thousands]

Age and sex	Total	Number reporting hours worked at home ¹			Mean hours
		Total	8 hours or more	35 hours or more	
Total, 16 years and over	18,082	17,477	8,978	1,287	11.0
Total nonfarm workers,					
16 and over	17,313	16,748	8,404	965	10.1
25 years and over	16,236	15,700	7,943	925	10.2
25 to 34	5,158	4,984	2,364	243	9.3
35 to 44	5,506	5,374	2,660	271	9.9
45 to 54	3,199	3,094	1,637	215	10.8
55 and over	2,373	2,248	1,282	195	12.2
Men, 16 years and over	9,559	9,277	4,580	369	9.3
25 and over	9,071	8,799	4,385	365	9.4
25 to 34	2,727	2,655	1,220	63	8.2
35 to 44	3,102	3,023	1,471	117	9.2
45 to 54	1,794	1,744	925	92	10.0
55 and over	1,448	1,377	769	93	11.3
Women, 16 years and over	7,754	7,471	3,824	596	11.1
25 and over	7,164	6,900	3,559	560	11.3
25 to 34	2,431	2,329	1,144	181	10.5
35 to 44	2,404	2,350	1,189	155	10.7
45 to 54	1,405	1,350	712	123	11.8
55 and over	925	871	513	103	13.8

¹ Some workers who reported working at home did not provide numbers of hours actually worked. Estimates below relate only to those reporting actual hours worked.

Table 3. Employed persons in the services industry with 8 hours or more of home-based work, by class of worker, May 1985

[In thousands]

Industry	8 hours or more				35 hours or more			
	Total	Wage and salary workers		All other workers ¹	Total	Wage and salary workers		All other workers ¹
		Incorporated self-employed	All other wage and salary workers			Incorporated self-employed	All other wage and salary workers	
Services ²	4,132	192	2,653	1,287	606	39	149	418
Private households	117	—	117	—	63	—	63	—
Business and repair services	679	67	255	357	97	11	10	76
Personal services, except private household	428	7	52	369	177	6	3	168
Entertainment and recreational services	111	9	35	67	20	2	4	14
Professional services	2,796	108	2,194	494	250	20	70	161
Hospitals	115	—	115	—	2	—	2	—
Health services, except hospitals	198	39	100	59	26	4	11	10
Educational services	1,545	—	1,510	35	19	—	15	4
Social services	234	11	108	115	110	6	19	85
Other professional services	705	58	363	284	92	9	22	61

¹ Includes the self-employed (unincorporated) and unpaid family workers.

NOTE: Dash indicates zero or rounds to zero.

² Excludes forestry and fisheries.

who worked 35 hours or more, close to 70 percent were self-employed in home-based, unincorporated businesses. Fewer than 10 percent of all full-time home-based workers were self-employed but incorporated.

It is not possible to determine from the May 1985 data how many persons working at home use a computer in their work, or how many persons “telecommute” to their jobs.⁵ No specific questions on this topic were asked as part of the survey supplement. However, some insight about the effects of technological change on work practices can be gained by examining the distribution of home-based work by occupation. (See table 4.) One of the largest occupational groups of home-based workers is in “financial records processing.” This category includes bookkeepers, accountants, and audi-

tors, as well as persons operating billing, posting, and calculating machines.

The ranking of some occupations by incidence of home-based work might be surprising. This may be related to the fact that the May 1985 survey measured those who bring work home as well as those who have formally set up a home-based workplace. The difference between merely bringing some work home and doing all or most of one’s work at home is often reflected in the number of hours worked at home. For example, teachers, who might grade papers or prepare lectures at home, accounted for 1.3 million of the 8.4 million nonfarm workers with 8 or more hours of such work, but virtually none of the teachers accumulated 35 or more hours at home. Similarly, while almost 40 percent of all employed managerial and professional specialty workers reported regular homework, only 270,000 of them accumulated full-time workweeks while at home. As noted earlier, a very large proportion of those with 35 or more hours of home-based work were in service occupations, and in particular, personal services.

Formalized arrangements rare

In standard classifications, the Bureau of Labor Statistics divides employed workers into three class-of-worker categories—wage and salary, self-employed, and unpaid family workers. For purposes of comparability with the Bureau’s establishment data, those workers who are the nominal employees of corporations which they own—the “self-employed incorporated”—are treated as wage and salary workers. In our analysis, however, these workers are displayed separately, leaving an “all other wage and salary workers” category that consists entirely of persons employed by someone else.

Table 5 displays a breakdown of home-based workers according to this classification. It suggests that formalized business arrangements are rare for the typical home-based worker. Fewer than 7 percent of those working full time at

Table 4. Employed persons working at home, by major and selected nonfarm occupations and hours worked at home, May 1985

[Numbers in thousands]

Occupation	Total	Number reporting hours worked at home ¹			
		Total	8 hours or more	35 hours or more	Mean hours
Major occupation					
Total	17,313	16,748	8,404	965	10.1
Managerial and professional speciality	9,468	9,182	4,373	272	8.8
Technical, sales, and administrative support	4,979	4,827	2,427	256	9.9
Service occupations	1,074	1,025	715	326	21.7
Precision production, craft, and repair	1,186	1,138	578	60	9.9
Operators, fabricators, and laborers	582	552	287	50	11.2
Selected occupations					
Engineers	371	351	158	9	7.5
Mathematical and computer scientists	185	183	94	3	7.8
Teachers	2,949	2,866	1,301	14	7.9
Secretaries, stenographers, and typists	406	397	246	35	11.5
Financial records processing	498	485	293	55	13.4
Private household	141	128	109	63	28.9
Personal services	592	569	462	243	27.3

¹ See footnote 1, table 1.

Table 5. Percent distribution of employed persons with 8 hours or more of home-based work, by class of worker and sex, May 1985

Class of worker	Total		Men		Women	
	8 hours or more	35 hours or more	8 hours or more	35 hours or more	8 hours or more	35 hours or more
Total (in thousands) . . .	8,978	1,287	5,019	634	3,959	653
Percent distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	6.9	25.9	90.5	41.8	4.2	10.4
Self-employed unincorporated . . .	5.1	21.5	7.4	37.4	2.2	6.1
Nonagriculture	93.1	74.0	91.0	58.0	95.7	89.6
Wage and salary	66.2	26.4	65.6	23.8	67.0	29.1
Self-employed incorporated . . .	7.4	6.4	9.9	8.5	4.1	4.4
Private wage and salary	40.6	17.8	42.6	13.4	38.1	22.1
Government	18.3	2.2	13.1	1.7	24.9	2.5
Self-employed unincorporated . . .	25.8	46.2	25.2	34.2	26.5	57.9
Unpaid family workers	1.1	1.4	.2	-	2.2	2.8

NOTE: Dash indicates zero or rounds to zero

home in nonagricultural jobs were incorporated. For agriculture and nonagriculture combined, about 2 of every 3 home-based workers who worked 35 hours or more were operating as unincorporated self-employed businesspersons.

Children and home-based work

Home-based work offers a chance for some persons with children to more effectively combine the roles of parent and worker. Elimination of commuting and child-care expenses can be a strong incentive for households with young children to experiment with home-based work. About 600,000 married mothers of children under 6 years of age reported some home-based work. (See table 6.) More than one-fifth of such women worked at home for 35 or more hours as part of their contribution to the job market.

In general, there were slight differences between women and men working in homes with young children. However, among nonfarm workers with 35 hours or more of home-based work, there were three times as many women with very young children as there were men.

Working exclusively at home

Using responses from the regular portion of the Current Population Survey as well as those from the May supplement, it is possible to compare the hours worked at home with all work hours during the previous week and thus identify persons working “entirely” at home. The classification showed 2.2 million persons working exclusively at home in May 1985. (See table 7.) About 390,000 of those working exclusively at home were in farming occupations, leaving almost 1.9 million persons as the home-based work force. About two-thirds of these were women.

As might be expected, the hours of persons working solely at home were far higher than the overall averages for

home-based work. Where work was conducted exclusively within (or from) one’s home, men averaged 41.1 hours, while women totaled 27.7 hours. About half of the persons whose work was entirely home based were in service industries, such as professional services, business and repair services, and personal services. Only about 100,000 of the persons with home-based work in professional specialty occupations, which includes computer programming as a subset, worked entirely at home.

Restricted industries

In the 1940’s, following a series of public hearings, the Labor Department moved to restrict home-based work in a number of narrowly defined industries. This recently criticized and reevaluated “patchwork” of regulations was directed toward those activities which had been found to be in violation of the Fair Labor Standards Act. The seven industries were: women’s apparel, jewelry, gloves and mittens, knitted outerwear, buttons and buckles, handkerchiefs, and embroidery. Homework in those industries was permitted for individuals meeting specific certificate requirements. The recent arguments surrounding home-based work have crystalized around these apparel and accessory industries.⁶

The May 1985 data do not allow an accurate determination of the number of persons whose home-based work is in the various restricted industries. The industrial classification used in tabulating these data no longer coincides with the 1940’s-based industry definitions upon which the restrictions were based. Some of the restricted industries extend across multiple classifications in the current data, or fall into a highly aggregated “all other” category, which includes industries in addition to the restricted one. However, it is possible to create an upper-bound estimate of the total number of persons affected by the restrictions by adding up workers in every detailed industry classification which overlaps with the restricted industries. Using the finest available breakdown of industries,⁷ it was estimated that the maximum number of persons working 8 hours or more at home in restricted industries could not exceed 125,000, and the number working 35 hours or more was below 20,000. About

Table 6. Employed married persons with 8 hours or more of home-based work, by presence and age of children, and sex, May 1985

[Numbers in thousands]

Presence and age of children	Men		Women	
	8 hours or more	35 hours or more	8 hours or more	35 hours or more
Total	3,868	505	2,658	504
Total nonfarm	3,514	277	2,549	457
Without children under age 18	1,519	142	1,162	198
With children under age 18	1,995	135	1,387	259
Children age 6 to 17, none younger . . .	1,153	90	794	128
Children age 14 to 17, none younger	372	26	272	52
Children age 6 to 13	781	64	522	76
Children under age 6	842	45	594	132

Table 7. Employed persons working entirely at home by sex, occupation, industry, and hours worked at home, May 1985

[Numbers in thousands]

Sex, occupation, and industry	Total	8 hours or more	35 hours or more	Mean hours
Total, 16 years and over	2,243	1,992	1,067	32.1
Men	749	709	476	41.1
Women	1,494	1,284	591	27.7
Occupation				
Managerial and professional specialty	553	451	211	28.5
Technical, sales, and administrative support	593	482	210	25.4
Service occupations	504	478	288	34.0
Precision production, craft, and repair	142	121	55	27.0
Operators, fabricators, and laborers	82	76	38	28.5
Farming, forestry, and fishing	390	385	266	47.6
Industry				
Agriculture	421	403	277	45.7
Nonagricultural industries	1,823	1,589	790	29.0
Mining	16	14	5	(1)
Construction	81	66	24	25.0
Manufacturing	151	140	65	28.5
Durable goods	67	64	28	(1)
Nondurable goods	83	76	37	25.9
Transportation and public utilities	54	48	33	(1)
Wholesale trade	49	42	14	(1)
Retail trade	202	151	63	23.5
Finance, insurance, and real estate	111	102	64	34.0
Services	1,128	1,000	514	29.9
Public administration	25	22	3	(1)

¹ Data not shown where base is less than 75,000.

90,000 of these persons were in either the apparel industry—which includes both restricted and unrestricted work—or the jewelry industry. The total was evenly divided among

men and women. Because this was the first time this survey has been conducted, it is not possible to determine if this number of homeworkers has been increasing or decreasing. □

—FOOTNOTES—

¹ Margrethe Olson, *Overview of Work-at-Home Trends in the United States* (New York, New York University, August 1983.)

² U.S. Bureau of the Census, unpublished data prepared for the House Subcommittee on Employment and Housing, April 1986.

³ Electronic Services Unlimited, New York, NY, conducted a National Work-at-Home telephone survey in 1986 to determine work habits, buying needs, and preferences of home-based workers.

⁴ For a thorough review of home-based clerical work, see chapter 7, "Home Based Office Work," *Automation of America's Offices*, OTA-CIT-287 (Washington, Office of Technology Assessment, December 1985); or National Research Council, *Office Workstations in the Home* (Washington, National Academy Press, 1985).

⁵ Joanne H. Pratt, "Home Teleworking: A Study of its Pioneers," *Technological Forecasting and Social Change*, vol. 25, 1984, pp. 1-14.

⁶ For a complete listing of Federal restrictions, see *Federal Register* "Department of Labor 29 CFR Part 530, Employment of Homeworkers in Certain Industries, Final Rule, November 5, 1984," and "Regulations, Part 530: Employment of Homeworkers in Certain Industries (U.S. Department of Labor, Wage and Hour Division, WH Publication 1026, March 1980). For a viewpoint of organized labor on the issue of computer homework, see "AFL-CIO Resolution on Computer Homework" in *Office Workstations in the Home*.

⁷ The estimate was created using a list matching restricted industries with census detailed industry codes, provided by Mike Ginley, Wage and Hour Division, U.S. Department of Labor.

Overtime work: an expanded view

More comprehensive survey covers overtime hours even of persons who do not exceed the traditional 40-hour week; 1.6 million of them received premium pay in 1985

DARRELL E. CARR

About 10 percent of all American workers received overtime pay for hours worked in a typical week in May 1985. The great majority of them worked more than the traditional 40 hours that week; however, some received overtime pay even though their workweek did not exceed 40 hours.

Prior to 1985, data on overtime work were limited to employees who worked more than 40 hours a week at a single job.¹ In addition to these data, the May 1985 Current Population Survey also collected information on overtime work performed by persons with 40 or fewer hours of work in the reference week. An additional feature of the 1985 data is that they are not limited to persons holding only one job.

There were several reasons for extending the survey questions on overtime to workers with 40 or fewer hours of work in a week. First, these workers constitute a majority of those in wage and salary jobs.² The following tabulation shows the distribution of wage and salary workers, by hours, May 1985 (numbers in thousands):

Total, all schedules	90,892
41 hours or more	24,386
40 hours or fewer	66,506
40 hours	38,477
39 hours or fewer	28,028

Second, in some jobs, by custom or agreement, the standard full-time workweek is well below 40 hours. Finally, regardless of the length of the workweek, some workers receive

overtime pay for working more than a set number of hours per day. The inclusion of these additional workers in the analysis of overtime pay sheds new light on the topic.

Why use overtime?

There were 10.5 million persons with some overtime work in the reference week for the May 1985 survey. They labored an average of 9 hours at premium rates (generally time-and-one-half), for a total of about 94 million hours. Thus, the total dollar costs of such premiums to employers ran into millions. Why would employers incur these additional expenses?

Over the very short term, employers use overtime hours to fill rush orders, to meet seasonal peaks in demand, and to maintain production schedules despite employee absences and mechanical failures. But overtime work is also used when employers are unable to hire workers with critical skills, or when they are simply reluctant to hire new workers because of uncertainties over future product demand and the labor requirements that go with it.

Some employers may even schedule overtime work on a regular basis, rather than hire additional workers, even when workers are readily available and product demand is fairly constant. Employers tend to use this approach, according to Ronald G. Ehrenberg, when they perceive the costs of overtime premiums to compare favorably with the quasi-fixed employee-related expenses—such as sick leave, annual vacations, paid holidays, health insurance, and pension funding—which they would incur if they expanded their payrolls.³

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Does the use of overtime keep unemployment higher than it would otherwise be? In this regard, it should be noted that the framers of the Fair Labor Standards Act of 1938 believed that overtime work reduced the number of new hires, thereby keeping individuals jobless and general unemployment levels high. Therefore, they incorporated a provision into the Act which required time-and-one-half pay for all hours worked in excess of 40 a week in covered jobs. This measure was clearly designed to discourage the use of overtime, to encourage the hiring of more workers, and thus to reduce unemployment.⁴

During the early sixties, the causal relationship between overtime and unemployment was asserted again. The *1964 Economic Report of the President* linked the heavy use of overtime in some industries with curtailed job opportunities, and proposed legislation that would increase the premium rate for overtime work from time-and-one-half to double-time.⁵ However, the proposed legislation was not enacted.

Some economists, in the meantime, have played down the impact of overtime work on unemployment. For example, Ehrenberg found, first of all, that an overtime rate of time-and-one-half was not a sufficient penalty to deter employers from using overtime instead of hiring new workers, particularly where the fringe benefit costs (fixed costs not related to hours worked) are comparably high. Second, he calculated that while an increase in overtime rates to double-time would further reduce overtime hours, the reduction would not translate into a significant decline in the level of unemployment.⁶

In a 1977 followup study, which expanded upon Ehrenberg's earlier work on the effect of overtime on unemployment, Joyce Nussbaum and Donald Wise concluded: "Both theoretical and statistical analysis confirmed the hypothesis that an increase in the overtime premium would cause a reduction in average annual overtime hours. However, the hypothesis that this reduction in overtime hours would be compensated for by a commensurate increase in employment was not supported."⁷

These researchers also concluded that the increase in the number of jobs that would result from lifting the overtime rates from time-and-one-half to double-time would be small. They noted that the increase in the potential gains in jobs must be weighed against other consequences—lower income for the persons previously working overtime, a possible reduction in output, and a rise in prices.⁸

Who works overtime?

Men, 25 to 34 years of age, are the workers most likely to put in extra hours at overtime rates. Nearly one-fifth of them, regardless of the total number of hours they reported, had been paid some overtime premiums for work performed in the reference week. (See table 1.) Women were about half as likely as men to report paid overtime work.

Age and marital status also play a role in one's probability of working at overtime rates. Among both men and women, the likelihood of working overtime was relatively low for workers in the 16- to 24-year-old group, increased for the 25- to 34-year-old group, and declined progressively thereafter for each age group. The effect of marital status on the probability of working overtime was different for men and women. Married men were more likely to work overtime than single men. For women, the situation was reversed: married women, probably because of their household responsibilities, were less likely to work overtime than single women. Actually, the women most likely to work overtime were those in the "divorced, widowed, or separated" group. (See table 1.)

Table 1. Total wage and salary workers, those who received overtime pay, and the rate of pay received, by selected characteristics, May 1985

[Numbers in thousands]

Characteristic	Total wage and salary workers ¹	Received overtime pay		Percent distribution by rate of pay received	
		Number ²	Percent	Time-and-one-half	Other rates
Age and marital status					
Total, 16 years and over	90,892	10,528	11.6	91.8	8.2
16 to 24	18,869	2,137	11.3	93.3	6.7
25 to 34	27,345	3,893	14.2	91.6	8.4
35 to 44	20,354	2,310	11.3	91.1	8.9
45 to 54	13,451	1,339	10.0	91.3	8.7
55 and over	10,873	850	7.8	91.9	8.1
Men, 16 years and over					
16 to 24	49,449	7,420	15.0	91.6	8.4
25 to 34	9,942	1,412	14.2	93.0	7.0
35 to 44	15,164	2,833	18.7	91.7	8.3
45 to 54	11,021	1,578	14.3	90.9	9.1
55 and over	7,381	949	12.9	90.1	9.9
Single	5,942	647	10.9	91.7	8.3
Married, spouse present	13,308	1,599	12.0	92.2	7.8
Widowed, divorced, and separated	31,658	5,089	16.1	91.5	8.5
Women, 16 years and over	4,484	732	16.3	91.2	8.8
16 to 24	41,443	3,107	7.5	92.4	7.6
25 to 34	8,927	724	8.1	93.6	6.4
35 to 44	12,181	1,059	8.7	91.4	8.6
45 to 54	9,333	732	7.8	91.5	8.5
55 and over	6,071	389	6.4	94.3	5.7
Single	4,931	202	4.1	92.5	7.5
Married, spouse present	10,777	783	7.3	91.6	8.4
Widowed, divorced, and separated	22,314	1,486	6.7	92.3	7.7
Race and Hispanic origin					
White, 16 years and over	8,352	839	10.0	93.2	6.8
Men	78,765	9,381	11.9	91.9	8.1
Women	43,352	6,672	15.4	91.4	8.6
Black, 16 years and over	35,413	2,709	7.6	93.2	6.8
Men	9,640	944	9.8	90.6	9.4
Women	4,771	622	13.0	92.9	7.1
Hispanic origin, 16 years and over	4,869	322	6.6	86.2	13.8
Men	5,842	628	10.7	94.8	5.2
Women	3,528	473	13.4	95.6	4.4
	2,314	155	6.7	92.7	7.3

¹ Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the survey week.

² Includes a small number of persons who did not report the number of overtime hours paid or the rate of pay received.

NOTE: Detail for race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

Table 2. Total wage and salary workers, those who received overtime pay, and the number of overtime hours paid, by occupation and industry, May 1985

[Numbers in thousands]

Occupation and industry	Total wage and salary workers ¹	Received overtime pay		Percent receiving overtime pay for —		
		Number ²	Percent	1 to 8 hours	9 to 15 hours	16 hours and over
Total, 16 years and over	90,892	10,528	11.6	63.8	21.8	14.3
Occupation						
Managerial and professional specialty	21,265	1,268	6.0	62.7	25.9	11.4
Technical, sales, and administrative support	28,421	2,709	9.5	75.3	17.0	7.8
Service occupations	12,607	785	6.2	71.2	15.3	13.5
Precision production, craft, and repair	11,130	2,441	21.9	57.6	22.9	19.5
Operators, fabricators, and laborers	15,474	3,201	20.7	58.0	24.5	17.5
Farming, forestry, and fishing	1,995	124	6.2	51.6	38.7	9.7
Industry						
Agriculture	1,557	88	5.7	43.2	40.9	15.9
Private nonagricultural industries	73,544	9,447	12.8	63.5	21.9	14.7
Mining	913	254	27.8	42.2	20.1	37.8
Construction	4,789	755	15.8	53.0	25.8	21.2
Manufacturing	19,407	3,887	20.0	60.8	23.7	15.5
Transportation and public utilities	5,458	873	16.0	57.3	25.7	17.0
Wholesale and retail trade	18,611	1,978	10.6	70.6	19.2	10.2
Finance, insurance, and real estate	5,708	386	6.8	78.4	13.9	7.7
Services	18,620	1,313	7.1	71.1	18.2	10.8
Government	15,791	993	6.3	69.0	19.6	11.4

¹ Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the survey week.

² Includes a small number of persons who did not report the number of overtime hours paid.

Whites were somewhat more likely to work at overtime rates than blacks or Hispanic origin workers. But, regardless of race or Hispanic origin, women were only half as likely as men to work overtime.

Occupation and industry. Among the various occupational groups, the highest proportion of workers reporting some work at overtime rates was in the precision production, craft, and repair group. About 22 percent of the 11.1 million members of this group had received premium rates for some of the hours worked during the May 1985 survey week. (See table 2.) Following closely behind at 20.7 percent were operators, fabricators, and laborers. Together, these two occupational groups accounted for more

than half of the 10.5 million workers with some overtime earnings.

The proportion of workers with overtime earnings was much smaller among other occupational groups. For example, of the workers in the managerial and professional specialty occupations, only 6 percent reported paid overtime work. For the most part, these occupations are exempt from the overtime pay provisions of the Fair Labor Standards Act which, as of 1983, applied to an estimated 56 million non-supervisory jobs.

In terms of industry concentration, overtime work was most common in mining, where 27 percent of the workers reported receiving premium pay in May 1985. In manufacturing, the proportion was 20 percent. Although fewer than

Table 3. Total wage and salary workers, those who received overtime pay, and the number of overtime hours paid, by length of the workweek, May 1985

[Numbers in thousands]

Length of the workweek	Total wage and salary workers ¹	Received overtime pay		Percent receiving overtime pay for —			Mean overtime hours paid
		Number ²	Percent	1 to 8 hours	9 to 15 hours	16 hours and over	
Total, 16 years and over	90,892	10,528	11.6	63.8	21.8	14.3	9.0
Worked 41 hours or more	24,386	8,926	36.6	60.4	23.6	16.0	9.6
On one job	21,421	8,416	39.3	60.3	23.5	16.2	9.6
On two jobs or more	2,965	510	17.2	62.1	25.6	12.4	9.6
Worked 40 hours or fewer	66,506	1,601	2.4	83.3	11.7	5.0	6.0
Worked 40 hours	38,477	880	2.3	79.4	14.6	6.0	(3)
Worked 39 hours or fewer	28,028	722	2.6	87.8	8.2	4.0	(3)

¹ Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the survey week.

² Includes a small number of persons who did not report the number of overtime hours paid.

³ Not available.

one-fifth of all workers are now employed in manufacturing, the industry accounted for about two-fifths of those with paid overtime work in May 1985. The construction industry also had a relatively high proportion of workers (15.8 percent) reporting some overtime earnings. In contrast, in agriculture and such industries as finance, insurance, and real estate, government, and services, the proportion of employees with overtime work did not exceed 10 percent, and was generally much lower.

Hours worked. As might be expected, the great majority of persons receiving some overtime pay worked more than the 40-hour standard workweek. The following tabulation shows the number of wage and salary workers by hours worked and by the number and proportion receiving some overtime pay, May 1985 (numbers in thousands):

	At work	Received overtime pay	
		Number	Percent
Total, all schedules	90,892	10,528	11.6
Worked 41 hours or more	24,386	8,926	36.6
Had one job only	21,421	8,416	39.3
Had two jobs or more	2,965	510	17.2
Worked 40 hours or fewer	66,506	1,601	2.4

About 24.4 million persons reported having worked more than 40 hours in the May 1985 survey week. The great majority of these workers (21.4 million) worked at only one job. Our major interest—and the concern of the Fair Labor Standards Act—lies with this group. About two-fifths of

them reported they had received overtime pay. This is about equal to the percentage of workers with overtime pay found in previous surveys of workers on long workweeks. As for the other three-fifths—those working more than 40 hours but not receiving any overtime pay—they appear to be largely in jobs which did not fall under the provisions of the Act. They were concentrated in managerial, professional, technical, sales, and administrative support jobs, where the payment of overtime premiums for hours worked in excess of 40 is not widely practiced.

The workers receiving premium pay for having labored beyond the 40-hour standard reported an average of 9.6 hours of overtime work. (See table 3.) Nearly two-thirds of them had put in 8 hours or fewer of overtime work. Of the remainder, most reported 9 to 15 hours of overtime; only a small minority—16 percent—reported 16 hours or more.

Even fewer hours of overtime were put in by those reporting the receipt of overtime pay even though their workweek had not exceeded the 40-hour standard. These persons worked an average of 6 hours at overtime premiums. More than four-fifths of them reported 8 or fewer hours for which they had collected overtime pay.

Time-and-one-half was by far the predominant rate of pay for overtime work in 1985. In fact, of the 10.5 million workers with some overtime earnings in the May survey, about 9.5 million, or more than 90 percent, said they were paid “time-and-one-half.” Only about 200,000 reported receiving “double-time.” Of the remainder, some reported a “graduated rate,” but most responses were combined into an “all other” category. □

—FOOTNOTES—

¹ Daniel E. Taylor and Edward S. Sekscenski, “Workers on long schedules, single and multiple jobholders,” *Monthly Labor Review*, May 1982, pp. 47–53.

² Data refer to wage and salary workers at work during the May 1985 survey week (May 12–18). Excluded are those who were employees of corporations which they owned.

³ Ronald G. Ehrenberg, *Fringe Benefits and Overtime Behavior* (Lexington, MA, D.C. Heath and Co., 1971), p. 1.

⁴ Charles H. Livengood, Jr., *The Federal Wage and Hour Law* (Philadelphia, PA, American Law Association collaborating with the

American Bar Association, 1951), p. 6.

⁵ T. Aldrich Finegan, “Can a Case Be Made for Discouraging Overtime?” in William G. Bowen, ed., *Labor and the National Economy* (New York, W.W. Norton and Co., Inc., 1965), p. 174.

⁶ Ehrenberg, *Fringe Benefits*, p. 1.

⁷ Joyce M. Nussbaum and Donald E. Wise, “The Employment Impact of the Overtime Provisions of the FLSA” (U.S. Department of Labor, 1977), Bibliographic Data Sheet.

⁸ Nussbaum and Wise, “The Employment Impact,” p. 123.

Preferred hours of work and corresponding earnings

Most workers are satisfied with the number of hours they currently work, although about 1 of 4—especially young people and low earners—would prefer more hours and more money; very few would trade income for leisure time

SUSAN E. SHANK

If given a choice of working the same, fewer, or more hours at the same rate of pay, most employees would prefer the same number of hours. An additional one-fourth would prefer to work more hours and earn more money, while 8 percent would choose to work fewer hours and earn proportionately less money. This finding that well over half of all workers are satisfied with their present hours and pay is based on information obtained from a new question on the May 1985 supplement to the Current Population Survey (CPS), and is consistent with results obtained from similar questions asked by Katona and others in 1966 and by Louis Harris and Associates in 1978.¹

The degree of satisfaction with current hours and pay rises steadily with age. It is also positively related to the number of hours worked and the weekly earnings level. The "more hours and more money" option appeals especially to young people, many of whom are working only part time, and its popularity declines steadily with age. A large proportion of minority workers, especially men, would also prefer to work more hours and earn more money.

Very few employed persons wanted to work fewer hours and earn correspondingly less money. However, women were more likely than men to prefer reduced hours, even

though it meant lower earnings. Also, the proportion choosing this alternative increased with age to a peak in the 35- to 44-age group.

The new CPS question asked for employee preferences on hours of work and corresponding earnings—given the same rate of pay. This question was last on the supplement because it differs significantly from other labor force questions, which focus on a person's activity and emphasize much more objective behavior. The question asked:

- If you had a choice, would you prefer to work:
- The same number of hours and earn the same money?
 - Fewer hours at the same rate of pay and earn less money?
 - More hours at the same rate of pay and earn more money?

Interviewers asked this question directly of the respondent—unlike other questions where a responsible person in the household could respond for all other household members. Self-response was required because preference is inherently individual and subjective. As a result, information was not obtained for approximately 22 percent of all employed persons. Nonresponse was higher for men than for women, and was substantially higher for teenagers and young adults than for persons age 25 and over. These were

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the persons less apt to be at home during the day and early evening hours when most interviews are conducted.

In spite of the difficulty in contacting individual respondents, answers were obtained from 8 of 10 wage and salary workers age 25 and over. In this article, distributions of persons wanting the same, fewer, or more hours and corresponding pay are based on the total who reported such preferences. Also, the data pertain only to wage and salary workers (excluding incorporated self-employed persons).

Although the following sections analyze workweek preferences separately by various demographic and job characteristics, it is important to note that many of these characteristics tend to occur simultaneously. For example, young people often work relatively few hours at low rates of pay and express a strong preference for more hours and more money. It should also be noted that preferences about work hours are already reflected, to some degree, in the jobs workers currently hold. This is particularly true for experienced adult workers who presumably have more control over their work schedules than do young people. The analysis of preferences by actual hours at work and by earnings focuses on the 25- to 54-age group in order to exclude those age categories where transition into and out of the labor market have a major impact on hours.

Effect of worker and job characteristics

Preferences about hours and pay differed by age and gender, as well as by present earnings level and actual hours worked. Correlations between workweek preferences and various worker and job characteristics were generally in the expected direction, although some of the magnitudes were surprising. For example, as weekly earnings rose, so did both the proportion of workers expressing satisfaction with their current schedules and the proportion opting for fewer hours and less money. However, it is noteworthy that relatively few men expressed a preference for fewer hours and less pay. Even among those who earned \$1,000 or more per week, only 10 percent selected this alternative.

Age and gender. Almost two-thirds of all workers expressed satisfaction with their present hours and pay. This proportion rose steadily with age—from about 40 percent in the teen years to 80 percent for workers 55 and over. (See table 1.) Many older workers, especially those age 65 and over, voluntarily work part time, which contributes to the high degree of satisfaction with their present workweek.

While the proportion wanting to work the same hours increased with age, the percentage desiring more hours moved in the opposite direction. Slightly more than half of

Table 1. Workweek and pay preference of employed persons by selected characteristics, May 1985

[Numbers in thousands]

Characteristics	Total	Reported preference			Did not report preference	
		Total	Same hours, same money (percent)	Fewer hours, less money (percent)		More hours, more money (percent)
Total, 16 years and over	106,878	83,699	64.9	7.6	27.5	23,180
Wage and salary workers	97,110	76,195	64.8	7.5	27.7	20,915
Incorporated self-employed	2,831	1,963	75.0	11.4	13.7	868
All other wage and salary workers	94,280	74,232	64.6	7.3	28.1	20,048
Men, 16 years and over	51,106	37,400	63.5	5.9	30.6	13,706
16 to 19	3,208	1,950	39.7	2.6	57.8	1,257
20 to 24	6,980	4,883	48.5	3.9	47.7	2,097
25 to 34	15,583	11,957	60.4	6.0	33.6	3,625
35 to 44	11,387	8,376	66.8	6.7	26.5	3,012
45 to 54	7,684	5,521	72.6	6.7	20.6	2,163
55 to 64	5,236	3,932	79.5	6.8	13.7	1,304
65 and over	1,029	780	81.9	7.4	10.7	249
Women, 16 years and over	43,173	36,832	65.7	8.8	25.5	6,341
16 to 19	2,875	1,867	42.8	3.4	53.8	1,008
20 to 24	6,363	5,079	57.4	6.1	36.6	1,284
25 to 34	12,704	11,153	65.5	9.7	24.8	1,551
35 to 44	9,642	8,528	65.6	10.7	23.6	1,114
45 to 54	6,362	5,574	71.2	9.4	19.4	778
55 to 64	4,300	3,802	77.3	7.5	15.2	498
65 and over	927	829	81.3	6.9	11.8	98
White	81,699	64,419	65.5	7.7	26.8	17,280
Men	44,808	32,806	64.5	6.2	29.3	12,002
Women	36,891	31,613	66.5	9.4	24.2	5,278
Black	9,991	7,744	56.6	4.4	39.0	2,247
Men	4,934	3,537	54.0	3.8	42.2	1,398
Women	5,057	4,207	58.8	4.9	36.3	850
Hispanic origin	6,040	4,782	60.4	3.8	35.8	1,258
Men	3,663	2,816	58.0	2.6	39.3	848
Women	2,376	1,966	63.7	5.6	30.7	410
All other workers ¹	9,768	7,504	66.1	8.9	25.0	2,264

¹Includes the self-employed (unincorporated) and unpaid family workers.

NOTE: Detail for the above race/Hispanic-origin groups will not sum to totals because data for the "other races" group are not shown and Hispanics are included in both the white and black groups.

the teenagers—many of whom work part time at low wages—said they wanted more hours and pay, but relatively few older workers wanted more hours. These differences reflect factors such as older persons' greater control over their work schedules, their higher earnings, and less desire for change.

The proportion preferring fewer hours and less pay was small in all age groups. Of the minority who wanted to change their schedules, more hours were preferred 4 to 1 over fewer hours. Only 4 percent of all workers under age 25 would like the fewer hours alternative. Even in the central age groups, where this option was most popular, fewer than 10 percent preferred it.

Women were more likely than men to prefer fewer hours and less pay. In the 25- to 54-age group, where child care and other household responsibilities are greatest, about 10 percent of the women and 6 percent of the men wanted fewer hours. The proportion of women preferring this option then declined to about 7 percent in the 55 and over age group. In contrast, the proportion of men wishing to work fewer hours rose with age until the mid-thirties, but then held steady at about 7 percent for subsequent age groups.

Men preferred to work longer hours somewhat more frequently than women. This difference was most evident in the young adult years, when household formation and spending for consumer goods is high. However, the proportions preferring to work more hours declined with age, and in the 45 and over age groups were virtually the same for women and men. In fact, for older workers there was little difference between the preferences of men and women. Approximately 80 percent of all workers 55 years and over were satisfied with their hours; about 13 percent preferred longer workweeks, while 7 percent opted for fewer hours.

Whites, blacks and Hispanics. Satisfaction with current hours and pay was greater for whites than minorities, with this difference most apparent among men. (See table 1.) The relatively low satisfaction level for both blacks and Hispanics is associated with high proportions wanting more hours and more money. Approximately 4 of 10 black and Hispanic

Table 3. Workweek and pay preference of wage and salary workers, by occupation and industry, May 1985

[Percent distribution]

Occupation or industry	Same hours, same money	Fewer hours, less money	More hours, more money
Occupation			
Managerial and professional specialty	72.3	9.7	18.0
Technical, sales, and administrative support	66.1	8.3	25.6
Service occupations	56.6	4.5	38.9
Precision production, craft, and repair	63.5	6.4	30.1
Operators, fabricators, and laborers	59.4	5.6	35.0
Farming, forestry, and fishing	49.4	5.0	45.6
Industry			
Agriculture	49.4	7.3	43.3
Nonagriculture	64.8	7.3	27.8
Mining	66.3	8.0	25.6
Construction	58.6	5.3	36.1
Manufacturing	66.7	7.5	25.8
Transportation and public utilities ..	68.7	7.8	23.5
Wholesale trade	66.3	7.4	26.3
Retail trade	56.3	6.4	37.3
Finance, insurance, and real estate	68.6	8.0	23.5
Services	65.6	7.8	26.5
Public administration	72.3	7.2	20.5

NOTE: Data exclude incorporated self employed workers.

men said they would prefer more hours, compared with about 3 of 10 white men. The fewer hours and related payout option was selected by only 4 percent of all black and Hispanic workers, whereas about 8 percent of whites made this choice.

Hours worked. The proportion preferring the same hours and the same money increased steadily with hours actually worked up through 40 hours; it then turned downward. (See table 2.) As would be expected, the fraction wanting more hours and more money fell as hours worked rose—but again only through 40 hours. The changes in preference patterns at the 40-hour and 41- to 48-hours categories are somewhat surprising. The peak in satisfaction at 40 hours may reflect widespread acceptance of the traditional 40-hour workweek, while the monetary influence of the initial hours paid at premium rates, which many workers receive after 40 hours, may explain the small increase in the more hours response. In any case, the proportion wanting more hours declined again when actual hours reached 49 to 59 per week, and fell further (to about 20 percent) for those working 60 hours and over. In contrast, the fraction preferring fewer hours rose with actual worktime up to 35 to 39 hours; it then dipped at 40 hours before resuming its uptrend. However, even when the workweek was 60 hours or more, the proportion preferring more hours was larger than that preferring fewer hours.

Occupation and industry. The pattern of workweek preferences differed sharply across occupations, but variations were smaller among industry groups. (See table 3.) As would be expected, satisfaction was greatest among highly educated

Table 2. Workweek and pay preference of 25- to 54-year-old wage and salary workers, by actual hours at work, May 1985

[Percent distribution]

Hours at work	Reported preference		
	Same hours, same money	Fewer hours, less money	More hours, more money
1 to 14	50.9	4.6	44.5
15 to 29	57.3	5.6	37.1
30 to 34	58.6	8.0	33.4
35 to 39	65.0	8.1	26.9
40	70.5	7.1	22.5
41 to 48	65.3	8.1	26.6
49 to 59	66.5	10.8	22.7
60 and over	63.9	16.3	19.8

NOTE: Data exclude incorporated self-employed workers.

and well paid managerial and professional workers. These occupations also scored relatively high on the fewer hours choice and low on the more hours option.

Satisfaction with the current workweek and pay was less common among semi- and low-skilled manual workers and in the service occupations. Only about half of the helpers and laborers, and farming, forestry, and fishing workers wanted to keep the same hours. Here again, low satisfaction with the status quo correlated with a high preference for more hours. The latter alternative was picked by between 40 and 45 percent of the service workers, helpers and laborers, and those in farming, forestry, and fishing occupations.

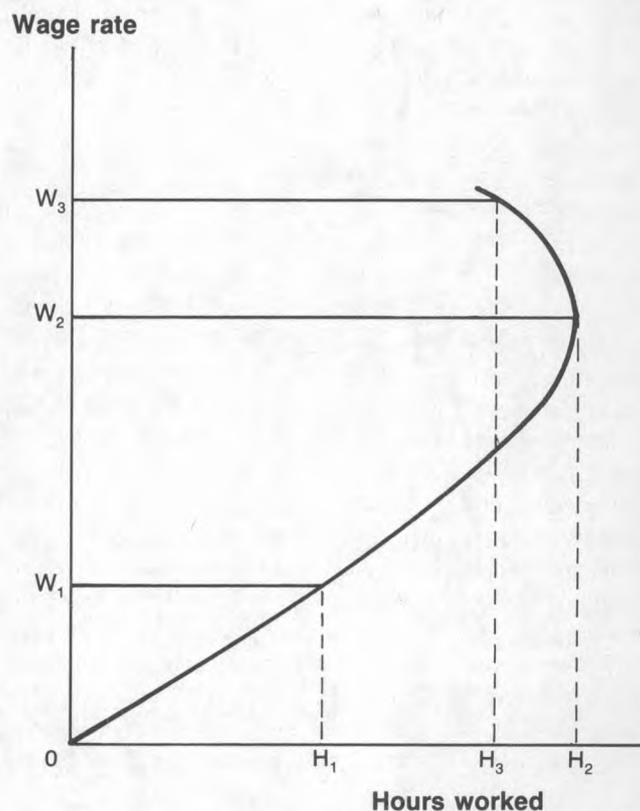
Public administration was the industry with the highest proportion of workers preferring their current hours, and agriculture was the lowest. Satisfaction was also relatively low in retail trade, where the average workweek is short, and in construction, where hours of work are often irregular. Approximately 4 of 10 workers in retail trade, construction, and agriculture wanted more hours. However, in public administration only 2 of 10 preferred a longer workweek.

Work-leisure tradeoffs

The data on preferred hours of work may be used to examine the effect of income on tradeoffs people make between work and leisure.² According to labor supply theory, individuals decide how many hours to work based on their preferences for leisure versus all other goods and services. The wage rate represents the amount of consumption goods that can be obtained per hour worked. As the wage rate rises, two opposing effects are brought to bear on the leisure decision.³ The *substitution effect* leads to a decrease in leisure consumed and an increase in hours worked because leisure time costs more in terms of earnings forgone. In

contrast, the *income effect* causes hours of work to fall because at the higher income associated with the higher wage rate, individuals will want to purchase more goods generally, including leisure.

The interaction of these two effects determines whether more or fewer hours of labor will be supplied when the wage rate rises. Both the substitution and income effects are evident in the backward-bending labor supply curve illustrated below:



The lower part of the curve is positively sloped, meaning that at lower wages, labor hours supplied increase as the wage rises. However, above a certain wage rate (W_2), the curve may begin to bend backward, as the income effect dominates.

May 1985 data on preferred hours by earnings suggest some indirect support for the backward-bending supply curve theory.⁴ As earnings rise to high levels for prime working-age adults, smaller proportions want to increase their workweeks and larger fractions prefer to decrease their hours of work.⁵ (See table 4.) This finding could reflect a strong income effect—causing workers with the highest earnings to want to reduce their work hours—as occurs on the negatively sloped part of the backward-bending supply curve. It could also indicate that workers with lower weekly earnings also have shorter workweeks and are more likely to want to increase, rather than decrease, their hours. Moreover, it is important to note that for men—even men earning \$750 or more per week—the proportion wanting more hours of work exceeded that wanting fewer hours.

Table 4. Workweek and pay preference of 25- to 54-year-old wage and salary workers, by sex and earnings, May 1985

[Percent distribution]

Weekly earnings	Same hours, same money	Fewer hours, less money	More hours, more money
Men, total	65.5	6.5	28.0
Less than \$150	39.3	3.9	56.7
\$150 to \$199	43.9	3.4	52.7
200 to 249	55.6	4.2	40.2
250 to 299	60.8	2.9	36.3
300 to 399	62.6	7.0	30.5
400 to 499	66.6	6.5	26.9
500 to 599	71.9	7.9	20.3
600 to 749	73.0	7.8	19.1
750 and over	76.6	8.9	14.5
Women, total	67.2	10.9	21.9
Less than \$150	55.6	5.0	39.4
\$150 to \$199	66.6	7.4	25.9
200 to 249	66.6	12.2	21.2
250 to 299	66.2	14.1	19.7
300 to 399	72.6	11.9	15.5
400 to 499	75.7	12.4	11.9
500 to 599	72.0	15.2	12.8
600 to 749	73.2	13.9	12.9
750 and over	63.6	22.0	14.6

NOTE: Data exclude incorporated self-employed workers.

Women are more willing than men to forgo income for leisure. This was evident at virtually all earnings levels—especially in the prime working-age groups. (See table 4.) About 1 of 8 women earning \$200–\$499 per week would prefer to work fewer hours. Moreover, when weekly earnings reached \$500 or more, the proportion preferring fewer hours was greater than that wanting more hours. No other worker group studied displayed this preference pattern. In the highest earnings category, about one-fifth of the women expressed a preference for shorter hours (more leisure), while only one-seventh wanted longer workweeks (more income). It is also interesting to note that women’s satisfaction with their current hours increased as earnings rose only up to a point. Once earnings reached \$300 or more per week, the proportion satisfied leveled off, and it then fell in the highest earnings category.

The preference pattern for prime working-age men differed sharply from that for women. At all earnings levels, the proportion of men wanting more hours was substantially larger than the proportion preferring more leisure. In the \$300 to \$499 earnings range, men preferred more hours 4 to 1 over fewer hours. Even at weekly earnings of \$500 and over, only about 8 percent of prime working-age men were

willing to trade income for leisure, whereas 15 to 20 percent wanted more hours and more money. Also, the proportion of men satisfied with the length of their workweek continued to rise as earnings increased. The substitution effect seems to outweigh the income effect for prime working-age men—even when earnings are extremely high.

IN SUM, two of three employed persons in May 1985 said they would prefer to work the number of hours they currently work and earn the same money. An additional one-fourth wanted to work more hours and earn more money. Only 8 percent would choose a shorter workweek and less money. As might be expected, the degree of satisfaction with present hours rose with age and with weekly earnings. In contrast, the proportion wanting to work more hours and earn more money, which was high for young people and low earners, fell sharply as age and earnings increased. Women were more likely than men to prefer fewer hours and a proportionate reduction in pay. Although the proportion of men and women willing to forgo income for leisure time was generally small, it rose steadily as weekly earnings increased. This suggests that at very high earnings, the labor supply curve may bend backward. □

—FOOTNOTES—

¹ See G. Katona, B. Strumpel and E. Zahn, *Aspirations and Affluence* (New York, McGraw-Hill, 1971), pp. 128–33; and Fred Best, “Exchanging Earnings for Leisure: Findings of an Exploratory National Survey on Work Time Preferences” (U.S. Department of Labor, Employment and Training Administration), R&D Monograph 79. The Katona and others questions were asked of a nationally representative sample of household heads. The Harris survey was based on a national sample of employed civilians 17 years of age and over. These two surveys obtained the following results:

	Percent preferring:		
	Same	Fewer	More
Katona and others, 1966	56	10	34
Louis Harris and Associates, 1978	61	11	28

² Leisure in this context represents all time except paid worktime. In other words, it includes time spent on housework, child care, school attendance and numerous other activities that are not commonly defined as leisure.

³ Economists have argued about the relationship between the wage rate

and the quantity of labor supplied since the English mercantilists in the 1600’s. The landmark twentieth century work in this field is Lionel Robbins’ “On the Elasticity of Demand for Income in Terms of Effort,” *Economica*, June 1930, pp. 123–29. After pointing out that the demand for income can also be viewed as the supply of effort, Robbins says there is no *a priori* way to predict how a change in the wage rate will affect hours of work. Rather, one must observe how individuals vary the amount of work done when the wage rate changes. The same point is addressed in terms of income versus substitution effects by Paul A. Samuelson in *Economics*, 3d ed. (New York, McGraw-Hill, 1955), pp. 535–36.

⁴ Cross-sectional data on preferences for more and fewer hours of work by weekly earnings are used as proxies for substitution and income effects. Data on hours that individuals chose to work at different pay rates are not available.

⁵ Because only one-quarter of the wage and salary workers in the sample are asked the earnings questions, the standard errors of earnings estimates are relatively large. For this reason, percentages are not shown where the base is less than 100,000.

Temporary help workers: who they are, what jobs they hold

These workers are disproportionately female, young, and black; they are more likely to work part time and in clerical and industrial help jobs

WAYNE J. HOWE

Much attention, of late, has been given to the rapid employment growth in the temporary help supply service industry. This industry consists of businesses supplying temporary help to other establishments on a contractual basis.

For the most part, the focus has been on the conditions under which employers prefer to use temporary labor supplied by a temporary help supply agency.¹ For example, an employer with a fluctuating workload, particularly when unpredictable peakloads allow little time to recruit and hire directly, is likely to utilize this service. Also, if a need for additional workers is expected to be short term, a firm might find the costs involved in hiring, particularly those related to recruiting and training, to be excessive. The purchase of temporary help services allows the employer to incur labor costs for only the period the services are required, and to avoid any severance costs. In contrast to the employer-demand focus of earlier analyses, this article provides information about the composition of the temporary help supply service work force and the circumstances under which individuals are attracted to temporary employment.

Data on wage and salary employment in the temporary help supply service industry used in this article are obtained from the May 1985 supplement to the Current Population Survey (CPS), a monthly sample survey of households. This supplement included questions specifically designed to

identify workers who viewed their jobs as temporary and whose salaries were being paid by a temporary help supply agency. The characteristics of such workers could then be examined through the information normally collected for all persons in the CPS in terms of their age, sex, race, marital status, full- or part-time employment, and occupation.

It should be noted that the temporary help supply employment industry level derived from the CPS is not strictly comparable to that obtained from the Current Employment Statistics (CES) program. The monthly CES survey derives its estimates from the payroll records of a sample of establishments. In the case of temporary help workers, the CES estimates relate to the total number of jobs in the industry, including those of the personnel who operate the temporary help agencies. By contrast, the new CPS data relate only to those workers who view their jobs as temporary. Thus, these data exclude not only the permanent employees who staff the many agencies, but may also exclude many of the workers who do not view their jobs as temporary, as they have a fairly continuous attachment to the temporary help agency. This explains at least part of the reason the number of temporary help workers identified in the CPS in May 1985—455,000—was much lower than the number of jobs in the temporary help industry as measured through the CES—689,000. The CPS data, while not representative of all the employees in the industry, are representative of the preponderance of them, particularly of those whose jobs are truly temporary. And, the CPS supplies the only information available on the characteristics of these workers.

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Who are these workers?

Just as employer demand for temporary workers increases during times of uncertainty, many workers seek temporary employment due to transitory or uncertain circumstances. Such workers might include teachers and students out of school for the summer or other vacation periods, or persons entering or leaving the labor force gradually. Women and young persons are more likely than others to experience these transitory conditions. Therefore, it should not be surprising that there was a disproportionately high concentration of both groups employed by temporary help supply agencies in May 1985. Almost two-thirds of the industry's work force were women, in contrast to their 2 of 5 proportion of all wage and salary jobs. (See table 1.) This difference clearly reflects the benefits offered to many women by the temporary help supply service industry, particularly the combination of flexible work schedules and the opportunity to acquire needed experience and job market exposure. In addition, the industry has a large number of administrative support jobs, and a disproportionate number of women are traditionally employed in such clerical positions.

Women with family responsibilities are particularly attracted to temporary employment because it provides the flexible work schedules that allow them to reconcile work outside the home with family commitments. Women who reenter the labor force after a long absence may prefer temporary jobs until they are able to find suitable permanent

Table 1. Employed wage and salary workers in all industries and in the temporary help supply industry, by selected characteristics, May 1985

[Percent distribution]

Characteristic	All industries	Temporary help supply industry
Age		
Total, 16 years and over	100.0	100.0
16 to 24	20.1	32.7
25 to 54	67.4	57.6
55 and over	12.5	9.7
Sex and race		
Men	55.0	35.8
Women	45.0	64.2
White	86.9	75.4
Black	10.4	20.2
White	100.0	100.0
Men	55.7	32.2
Women	44.3	66.8
Black	100.0	100.0
Men	49.4	48.9
Women	50.6	51.1
Occupations		
Managerial and professional specialty	24.0	11.0
Technical, sales, and administrative support	31.6	52.1
Administrative support, including clerical	17.3	43.3
Service occupations	13.7	10.8
Precision production, craft, and repair	12.1	4.6
Operators, fabricators, and laborers	16.6	16.9
Farming, forestry, and fishing	2.1	4.4

Table 2. Employed full- and part-time wage and salary workers in the temporary help supply industry, by selected characteristics, May 1985

[Percent distribution]

Characteristic	Full-time workers	Part-time workers
Age		
Total, 16 years and over	60.0	40.0
16 to 24	55.7	44.3
25 to 54	66.8	33.2
55 and over	(1)	(1)
Sex and race		
Men	64.4	35.6
Women ²	57.5	42.5
Single	64.9	35.1
Married, spouse present	50.7	49.3
White	62.7	37.3
Men	71.0	29.0
Women	58.5	41.5
Black	44.6	55.3
Men	(1)	(1)
Women	(1)	(1)
Occupations		
Technical sales, and administrative support	66.1	33.9
Administrative support, including clerical	66.6	33.4
Operators, fabricators, and laborers	55.3	44.7
All other occupations	51.8	48.2

¹ Data not shown where base is less than 75,000.

² Includes widowed, divorced, and separated women, not shown separately.

employment. Employment through a temporary help supply agency enables them to test the market by sampling a range of work environments until they find the right employment situation. At the same time, temporary employment allows these workers to acquire needed skills and experience while building confidence and increasing their marketability. Such skills and confidence can be lost during years outside the labor force. Some women prefer the flexibility of the temporary help environment for the long term. In either case, the increasing tendency among firms to contract out for temporary employees, particularly to staff administrative support positions, has provided a growing temporary job market for women.

Temporary employment is also appealing to young workers (16–24 years old) who want flexible schedules, allowing time to attend school, or the opportunity to work during vacations. Young workers held 1 of 3 temporary help supply service jobs in May 1985, compared with 1 of 5 wage and salary jobs in all industries. (See table 1.) The representation of young workers in this industry increases during the summer months, when many working mothers leave the labor force to care for school age children and students step in to take their places.²

Young persons who have little work experience may also be attracted to employment in temporary help agencies as a means of attaining higher paying permanent positions. Job search costs, in terms of both time and money, can be reduced by allowing a temporary help agency to establish contact with potential employers. However, contracts

between employers and temporary help supply agencies may sometimes limit this type of job-switching.

In addition to the large concentration of women and youth, there is also a relatively high proportion of black temporary help workers. About 1 of 5 such workers is black, nearly twice the proportion found among all industries. (See table 1.) Only about half of the black workers in this industry were women, similar to the distribution of the black work force found in all industries. In contrast, among white workers, women accounted for two-thirds of the temporary help work force, but only 44 percent of wage and salary employment in all industries.

While the majority of temporary help supply employees work full time, a very large proportion, 2 of 5, work part time. (See table 2.) This was more than twice the average for all wage and salary workers. Women were less likely than men in this industry to work full time, but this depended largely on their marital status. Almost two-thirds of the single women in temporary help jobs worked full time, while only about half of the married women (with spouse present) did so. As would be expected, young people were less likely to work full time. Only 56 percent of youth age 16 to 24 were employed full time, while 67 percent of the temporary help work force age 25 to 54 were full-time workers.

What jobs do they hold?

Temporary help workers perform a variety of jobs, from service workers earning the minimum wage to highly paid technicians or administrators working as temporary specialists on specific projects. When compared with all industries, however, a particularly large concentration of temporary help workers were in the administrative support and industrial help occupations: indeed, 43 percent held clerical positions such as general office clerks, secretaries, typists, and receptionists—2 1/2 times their proportion in all industries. (See table 1.)

More than 9 of 10 clerical jobs in the temporary help industry were filled by women. Skill requirements for many of these clerical positions are relatively low, but more highly

skilled clerical workers, particularly those with word-processing skills, are much in demand; consequently, pay for them is relatively high compared with other clericals. Overall, the demand for temporary workers in clerical positions is less sensitive to seasonal and cyclical changes than is the demand for workers in other occupations. Future job growth is expected to be particularly strong for highly skilled workers who can operate the latest office equipment.³

When compared with workers in other occupations within the industry, persons in clerical positions are more likely to work full time—two-thirds of them in May 1985. (See table 2.) Although many clerical workers fill in only for short assignments or for workers who are ill, it is not unusual to work in the same temporary job for weeks or even months. Some stay with the temporary agency until they find permanent employment.

The second largest occupational market in this industry is for industrial help workers—helpers, laborers, handlers, and equipment cleaners. Little work experience is required for many of these jobs, and the demand for these workers is both seasonal and cyclical.⁴ Many are employed as fill-ins to handle temporary work overloads or to step in when regular employees are ill or on vacation. Only 55 percent of the workers in these occupations were full time, somewhat lower than the proportion for administrative support workers. Moreover, just as women dominated the administrative support occupation, almost 90 percent of the operators, fabricators, and laborers were men. Finally, there are a large number of low skill, low paying laborer jobs in the temporary help industry, which may be responsible for the high concentration of black workers. Black men in particular are much more likely than their white counterparts to be employed in these jobs.⁵

IN SUMMARY, data from the May 1985 supplement to the CPS show that those temporary workers whose salaries are paid by temporary help firms are disproportionately female, young, and black. They are more likely than workers in other industries to work part time, and they are heavily concentrated in clerical and industrial help occupations. □

—FOOTNOTES—

¹ For a discussion of these issues, see Max L. Cary and Kim L. Hazelbaker, "Employment growth in the temporary help industry," *Monthly Labor Review*, April 1986, pp. 29–36; and "Temporary Help Services—Who Uses Them and Why," *The Office*, May 1984, pp. 135–40.

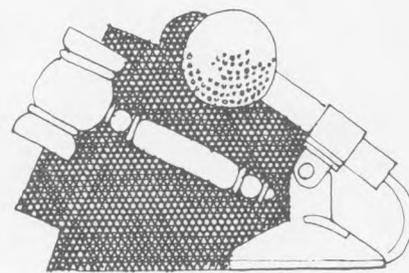
² David Schwartz, "Life in the Temp Lane," *City Paper*, Vol. 6, no. 28, July 11–17, 1986, pp. 12–13.

³ See Carey and Hazelbaker, "Employment growth," p. 38.

⁴ *Ibid.*, p. 40.

⁵ "Employment Conditions Among Black Americans," a paper prepared by the Division of Employment and Unemployment Analysis, Office of Employment and Unemployment Statistics (Bureau of Labor Statistics, February, 1986), p. 16.

Conventions



Steelworkers press organizing and coordinated bargaining

JOY K. REYNOLDS

The United Steelworkers of America (AFL-CIO, CLC) held its 23rd constitutional convention in Las Vegas, NV, August 25-29, 1986. Some 2,800 delegates took action to implement the two major themes of the convention: celebrating the union's 50th anniversary (the Steel Workers Organizing Committee was formed in June 1936) and addressing future challenges. Delegates enacted constitutional changes that, among other things, broadened the categories of persons eligible for membership and clarified the power to merge small locals. They elected five international tellers to 4-year terms to perform duties in connection with the 1989 referendum election of international officers and passed resolutions dealing with numerous topics, including collective bargaining, plant closings, and employee stock ownership plans. The convention heard speeches from Steelworkers International President Lynn Williams, AFL-CIO President Lane Kirkland, former Steelworkers President I.W. Abel, Amalgamated Clothing and Textile Workers Union President Murray Finley, Canadian Labour Congress (CLC) President Shirley Carr, and numerous national and State or provincial politicians from both the United States and Canada.

Speech highlights

In the keynote address, Steelworkers President Williams, who was reelected to that post in a November 1985 referendum, outlined the results of this year's bargaining in major industries, including containers, aluminum, nonferrous metals, and steel. Williams emphasized that the union intends to maintain its coordinated approach to bargaining despite the breakdown of coordinated strategies on the employer side. He admitted that the steel agreements reached with LTV, Bethlehem, National, and Inland involve sacrifices, but praised the employment security guarantees and profit-sharing aspects of those settlements. He charged that the union's high priority on preserving jobs and limiting contracting out was one major reason that USX (formerly U.S. Steel Corp.) locked out more than 22,000 workers on August 1. Williams thanked the AFL-CIO for its recently

formed committee to support the USX workers, about whose efforts Clothing and Textile Workers President Murray Finley later addressed the convention. Williams criticized the trade policies of the U.S. and Canadian governments, arguing that "there is no such thing as free trade"; the union seeks "managed" trade, aimed at raising the standard of living in both seller and buyer nations.

Regarding developments within the Steelworkers "family," Williams cited the union's success in organizing new members, not only in its traditional membership base but also in public sector and other service industry units; the pace of organizing in 1986 was reported to be more than five new units a week. He noted the completion of the merger with the 34,000-member Upholsterers International Union, which became a division of the Steelworkers, with former Upholsterers President John Serembus serving as director.

The continued connection of retirees with the Steelworkers was personified by the appearance at the convention of former union president I.W. Abel, who has been appointed to head SOAR, the Steelworkers Organization of Active Retirees. According to its bylaws, SOAR will "deal with the social, economic, educational, legislative, and political developments and concerns of its members and spouses, the United Steelworkers of America, and the labor movement." President emeritus Abel, whose address anchored that portion of the convention celebrating the Steelworkers' jubilee, reviewed the history of the struggle to organize the steel industry and highlighted accomplishments of the union gained through both collective bargaining and involvement in the legislative process (for example, supporting enactment of the Occupational Safety and Health Act and the Employee Retirement Income Security Act).

In his address to the convention, AFL-CIO President Lane Kirkland pledged the Federation's support to the Steelworkers in its struggle against USX. He urged Government trade and employment policies that would help to preserve the Nation's industrial base, noting that "silicon chips cannot be sold over the counter in a 7-Eleven." He lauded the cooperative efforts of the union in attempting to meet the challenges facing the industry, but warned that such cooperation must be met by reciprocal actions on the part of employers.

Constitutional changes

The convention adopted constitutional changes and policy recommendations in many areas. Among the amendments enacted were the following:

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- Replacement of references to membership in “a plant or mill or any other place” with the words “an enterprise, public or private,” to reflect the union’s expanding jurisdiction.
- Amendment of Article III to permit membership by supervisors, including those empowered to hire or fire, subject to terms established by the International Executive Board. (Previous language had provided that only supervisors without such powers could join, subject to the specific approval of the local union and the Board). Those opposing this change argued that the union should not rush to embrace persons who are firing their fellow workers. But the amendment carried on a standing vote after members of the constitution committee explained that the language was not intended to apply to mill foremen and supervisors, but is largely aimed at expanding recruitment in the public sector, where, for example, a recently organized unit of middle managers in Boston brought in more than 400 members through the Salaried Employees of North America, a division of the Steelworkers.
- Amendment of Article IV to provide for annual, instead of semiannual, audits of the international union finances.
- Amendment of Article V to provide, in part, that protests regarding local union voting for national officers must be “received” by the international tellers within 15 days of the election. Prior language had required such protests to be “filed” with the tellers no later than 10 days after the election.
- Amendment of Article VII to provide that 100 or more persons (formerly 10) eligible for membership shall constitute a local union upon receipt of a charter from the international secretary. Smaller groups may be chartered upon the authority of the international president. Further, language was added to provide for International Executive Board rules governing transfer of jurisdiction of one local to another. Supporters of these changes cited the large number of small locals (of 4,232 locals, 557 have nine or fewer members and 2,692 have fewer than 100 members) and the strength that comes from amalgamation. They argued that the amendment reflects existing Board power to combine locals and promised that mergers would be accomplished in consultation with district directors and the affected locals. According to Williams, “Obviously those that are functioning properly will continue.” Floor discussion was closed before opponents of the measure spoke, as a delegate later took the floor to point out. The outcome of the voice vote being in doubt, a standing vote was held, and the change was adopted.
- Amendment of Article XIV to provide that when the assets of the strike and defense fund exceed \$200 million in any month, payments to it shall cease until the balance falls below \$150 million, instead of \$180 million as previously provided. (Interim payments will be divided equally between the international and local unions.) In response to a resolution that a mechanism be established

to enforce local affiliation with State and provincial central bodies, Article XIV was amended to provide for deduction for dues to such bodies from local per capita refunds by the international treasurer with the approval of the international president.

- Addition of Article XVIII to provide an associate membership aimed at organizing new membership and also to provide a means for continued affiliation by laid-off members who have gone beyond the 24-month period provided for continued membership status under Article XI, as well as for persons organized in units that subsequently fail to vote for union representation. The new article provides that associate members shall not be eligible to run or vote for international or local office but may participate in organizations of associates to the extent and under rules provided by the International Executive Board. These members will be eligible for benefits such as prepaid legal services, credit cards, and insurance coverage. Adoption of this category of membership parallels a recommendation of the AFL-CIO’s Committee on the Evolution of Work.

Among the constitutional amendments proposed but not adopted were those reducing or capping members’ dues and salaries of international officers and district directors, providing full voting membership for retirees, providing mail ballots in elections of international officers, expanding the access of members to absentee ballots in such elections, permitting locals to hold quarterly rather than monthly meetings, and providing for removal of local officers without “costly” trial procedures. In the collective bargaining area, amendments considered but not adopted included those to postpone conventions in years of major contract negotiations, to hold conventions in cities most affected by layoffs of members, to increase the amount of strike benefits, and to provide for strike benefits payment as a matter of right rather than after determination of need by the local union.

Other actions

As the union’s “court of last resort,” the convention heard appeals on matters such as local elections and trial procedures. The convention also adopted resolutions in the areas of politics, collective bargaining strategies and specific disputes, and legislative policies. For example, the union endorsed new strategies in collective bargaining, including consumer boycotts and corporate campaigns; adopted standards for the negotiation of Employee Stock Ownership Plans (they must be part of the labor agreement, must never be used as a substitute for an adequate, funded, Government-guaranteed pension plan, and should be based on thorough analysis of the company’s finances and prospects for survival); and endorsed legislation to require advance notice of plant closings and bargaining over alternatives to closings or layoffs. □

Major Agreements Expiring Next Month

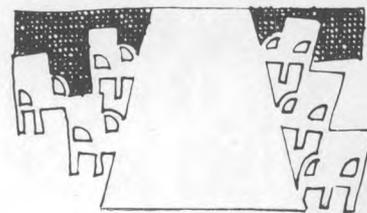


This list of selected collective bargaining agreements expiring in December is based on information collected by the Bureau's Office of Wages and Industrial Relations. The list includes agreements covering 1,000 workers or more. Private industry is arranged in order of Standard Industrial Classification.

Industry or activity	Employer and location	Labor organization ¹	Number of workers
Private			
Construction	Constructors Association of Western Pennsylvania (Pennsylvania)	Operating Engineers	3,000
	Constructors Association of Western Pennsylvania (Pennsylvania)	Laborers	3,600
Food products	National Electrical Contractors Association, Western Pennsylvania Chapter (Pennsylvania)	Electrical Workers (IBEW)	1,500
	Iowa Beef Processors, Inc. (Nebraska)	Food and Commercial Workers	2,000
Apparel	Plastic Soft Material Manufacturers Association (New York, NY)	Ladies' Garment Workers	2,600
Paper	Westvaco Corp. (Virginia and Maryland)	Paperworkers	1,050
Primary metals	Huntington Alloys Inc. (Huntington, WV)	Steelworkers	1,000
	Copperweld Corp. (Warren, OH)	Steelworkers	2,000
Electrical products	Neenah Foundry Co. (Neenah, WI)	Molders	1,000
	AVX Corp., AVX Ceramics (Myrtle Beach, SC)	Electrical Workers (IBEW)	1,400
Transportation equipment	Dana Corp. (Interstate)	Auto Workers	7,000
Water transportation	Great Lakes Association of Stevedores (Interstate)	Longshoremen's Association	6,000
	Northwest Airlines, flight attendants (Interstate)	Teamsters (Ind.)	3,000
Air transportation	Republic Airlines, clerical and office (Interstate)	Air Line Pilots	6,300
	Western Airlines, pilots (Interstate)	Air Line Pilots	1,200
Communication	Ozark Airlines, clerical and office (Interstate)	Machinists	1,800
	General Telephone Co. of Pennsylvania (Pennsylvania)	Electrical Workers (IBEW)	2,000
Utilities	Public Service Co. of Colorado (Denver, CO)	Electrical Workers (IBEW)	3,000
	Southern California Edison Co. (California)	Electrical Workers (IBEW)	5,750
Wholesale trade	New York Oil Heating Association (New York, NY)	Teamsters (Ind.)	1,700
Retail trade	New York-Bronx Meat and Food Dealers Inc. (New York, NY)	Food and Commercial Workers	1,600
	Kroger Co. (Dayton, OH)	Food and Commercial Workers	2,000
Restaurants	San Mateo Hotel and Restaurant Owners Association (California)	Hotel Employees and Restaurant Employees	5,200
	Bob's Big Boy Restaurants (California)	Bob's Employees' Association (Ind.)	5,200
Real estate	Realty Advisory Board on Labor Relations, Inc., Commercial Building Agreement (New York, NY)	Service Employees	18,000
Services	Service Employers Association (New York)	Service Employees	36,000
	Associated Guard and Patrol Agencies (Chicago, IL)	Service Employees	6,000
Public			
General government	Alaska: State general unit	State Employees Association	7,900
	Alaska: State labor trades and crafts	Laborers	1,500
Minnesota:	Hennepin County general unit	State, County and Municipal Employees	3,000
	Florida: Dade County classified employees	State, County and Municipal Employees	10,000
New York:	Broome County white-collar employees	Civil Service Employees Association	1,100
	Dutchess County general unit	State, County and Municipal Employees	1,200
Oneida County general unit	Oneida County general unit	Civil Service Employees Association	1,000
	Onondaga County general unit	State, County and Municipal Employees	3,500
Orange County general unit	Orange County general unit	State, County and Municipal Employees	1,500
	Chautauqua County general unit	Civil Service Employees Association	1,200
Nebraska:	Omaha municipal employees	State, County and Municipal Employees	1,050
	Wisconsin: Milwaukee County general unit	State, County and Municipal Employees	6,000
Milwaukee municipal employees	Milwaukee municipal employees	State, County and Municipal Employees	2,800
	Milwaukee Police Department	Police Association	1,800
Law enforcement	Cincinnati Police Department	Police	1,050
Fire protection	Pennsylvania: Pittsburgh Fire Department	Fire Fighters	1,050
Education	California: San Diego Unified School District, office	Education Association (Ind.)	2,300
	Colorado: Boulder District 21, teachers	Education Association (Ind.)	1,250
Cherry Creek teachers	Education Association (Ind.)	1,500	

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

Developments in Industrial Relations



Steel update

The financially beleaguered steel industry continued to suffer, as USX Corp. and Timken Co. were involved in work stoppages; Armco Inc. was unable to negotiate cuts in labor costs it had sought at its Middletown, OH, mill; and LTV Corp. filed for bankruptcy.

The Armco settlement with the Armco Employees Independent Federation does provide for a wage and benefit freeze for the 42-month contract term, but the company had been seeking a payout of more than 75 cents an hour, cuts in holiday, vacation, and insurance benefits, and adoption of a two-tier pay system.

Armco said it accepted the terms, which ended a 5-day strike by the 4,200 employees, "primarily in the interest of the customer and [out of] growing concern for the company's financial position." Armco's ability to sustain a long strike was hampered by its financial commitments, including an \$85 million pension payment due September 13.

Despite the company's dissatisfaction with the overall settlement, it did win the right to reopen negotiations in March of 1988 and 1989 if the mill fails to earn \$50 million before taxes on operations during the preceding calendar year. However, the union maintains that even if earnings are below \$50 million, the provision could be exercised only with its consent.

At USX Corp., there was a continuing dispute over which side impelled the stoppage that began on August 1, when the previous contract expired. The United Steelworkers contended the stoppage was a lockout, which would enable the idled employees to draw State unemployment benefits. According to USX, the stoppage was a strike, precluding the employees from drawing unemployment benefits. There was no single answer from the affected States—Pennsylvania, Ohio, Alabama, and Minnesota ruled the stoppage a lockout, while Illinois and Utah held that it was a strike. In some cases, the rulings were being appealed.

Both the company and the United Steelworkers viewed the Timken Co. stoppage as a strike. The 5,800 employees walked out of the three Ohio plants after the company demanded a 60-cent-an-hour wage decrease, and the union countered by offering a wage and benefit freeze.

"Developments in Industrial Relations" is prepared by George Ruben of the Division of Developments in Labor-Management Relations, Bureau of Labor Statistics, and is largely based on information from secondary sources.

The most significant recent event in the steel industry was LTV Corp., filing for protection from creditors under Chapter 11 of the bankruptcy code. LTV is the Nation's second largest steel producer. At the time, LTV reported assets of \$6.14 billion and liabilities of \$4.59 billion. The attempt to reorganize and return to profitability came just 3 months after the United Steelworkers had agreed to a \$3.15 an hour cut in wages and benefits to aid the company, which has suffered \$1.7 billion in losses since 1982. (See *Monthly Labor Review*, June 1986, p. 45.) The bankruptcy filing meant that further compensation cuts might be required of the employees, particularly after LTV officially informed the union that it wanted to renegotiate the April contract. The union's initial response was that it would not automatically agree to the proposal. The filing also raises the possibility that other companies that had already settled would press for renegotiation of their contracts to maintain competitive parity with LTV.

In conjunction with the Chapter 11 filing, LTV cancelled health and life insurance benefits for 76,000 retirees, including 61,000 retired Steelworkers. This triggered a strike by 4,400 workers at LTV's Indiana Harbor Works in East Chicago, IN, as well legal action by the Steelworkers to force a restoration of the benefits. The strike ended after 5 days when a bankruptcy judge acceded to LTV's request for permission to restore the benefits. The company said that ending the walkout was vital to improving its financial condition.

In another indication of LTV's difficult financial condition, the company asked the Pension Benefit Guaranty Board (PBGB) to assume payments to retirees covered by one pension plan, and the PBGB itself moved to take control of another underfunded plan. These events, combined with a possible PBGB takeover of two other LTV pension plans, could raise the PBGB obligation to more than \$2.5 billion.

Dispute settled in meat processing

In the meat processing industry, a long dispute that pitted employees against management and a local union against the parent United Food and Commercial Workers (UFCW) apparently ended when the UFCW settled with Geo. A Hormel and Co.'s flagship plant in Austin, MN. Concurrent with the Austin accord, Hormel and the UFCW also negotiated a new contract for seven plants in six states. The difficulties at the Austin plant, which included a "corporate

campaign" against Hormel that was initiated by the Local P-9 before the UFCW removed its officers and a year-long strike that ended with the contract settlement, can be traced through a number of developments in recent years:

- In 1982, Local P-9 agreed to a 3-year contract that included a no-strike guarantee, as well as elimination of an incentive pay plan. In return for these inducements to locate a new \$100 million plant in Austin, Hormel pledged to maintain the employees standard wage rate at the same level as at other major companies in the industry.
- In 1983, the industry was hit by bankruptcies and plant closings, leading to cuts in the previous \$10.69 an hour standard pay rate. Hormel pressed employees at all eight of its plants for similar cuts to remain competitive. Unlike employees at the other plants, those in Austin rejected the offer, contending that the "me-too" clause in their contract was only intended to raise wages. An arbitrator later ruled that Hormel could cut the rate at Austin to between \$8 and \$9 an hour.
- In 1984, employees of the seven other plants negotiated with Hormel on the issue and settled on an immediate \$9 rate, rising to \$10 in September 1985. Austin employees rejected the proposal and initiated the corporate campaign to bring consumer pressure against Hormel. At the same time, Hormel cut the pay rate to \$8.25 at Austin. Leaders of the parent union condemned Local P-9's action in breaking ranks with the other locals and questioned the value of the corporate campaign tactic. Despite the condemnation, the local did not change.
- In August 1985, 1,400 employees struck the plant after negotiators failed to agree on a new contract to succeed the 1982 contract. To increase pressure on the company, Local P-9 accelerated the corporate campaign, which was declared to be an illegal secondary boycott in a National Labor Relations Board ruling issued the following month.
- In January 1986, Hormel began hiring replacements for the strikers, leading to intensified picketing at the plant and a call-up of the National Guard, as well as efforts by pickets to increase pressure on Hormel by traveling to other company plants. This led to the firing of 500 workers at the Ottumwa, IA, plant for honoring the roving picket line. At the end of the month, Hormel said that it had nearly a full work force, comprising 550 returning strikers and 550 replacement workers.
- In March 1986, the UFCW declared the strike a lost cause and moved to place Local P-9 in trusteeship, leading to legal actions that culminated in a ruling that the UFCW's action was proper.
- In July 1986, some of the former strikers formed the North American Meatpackers Union in an attempt to eventually supplant the UFCW as bargaining agent for the Austin employees.
- In August 1986, Hormel and the UFCW settled for the Austin operations. The accord provides for pay increases

totaling 70 cents an hour for the strikers who returned to work in January. The replacement workers hired in January also will move up to \$10.70 an hour over the contract term. Previously, they were paid \$8 an hour to start and a maximum of \$9 later. The union did not win immediate rehiring of the strikers who remained out until the stoppage was concluded, but Hormel did agree that for 2 years the strikers will have priority in filling openings that occur.

The new Austin contract runs for 4 years, compared with 3 years for the other locations, where concurrent settlements resulted in the same pay rates as for Austin. Hormel said that in the 1990 negotiations for the seven plants, it will agree to a common expiration date at all locations, including Austin, a major union goal to strengthen its bargaining position. The seven plants are in Fremont, NE, Beloit, WI, Algona, IA, Charlotte, NC, Dallas and Houston, TX, and Atlanta, GA.

In a related event, an arbitrator ordered Hormel to rehire the 500 workers it had fired in January for refusing to cross picket lines. Hormel accepted the ruling in principle, but noted that the January shutdown of part of the Ottumwa facility precluded rehiring all of the workers.

Elsewhere in meat processing, the UFCW settled with Oscar Mayer Co. for 2,300 workers in Davenport, IA, Madison, WI, and Chicago, IL. The 3-year accord provides for wage increases totaling 65 cents an hour, bringing the standard rate to \$10.70; a new supplemental retirement plan; an additional paid holiday; and health care improvements.

Chrysler farms out work to American Motors

In an unusual move, Chrysler Corp. contracted out production of its large, rear-drive cars to American Motors Corp. (AMC). Chrysler said the farm-out was necessitated by the planned conversion of its St. Louis plant from large car to van production and by the unexpected continuing high demand for the large cars.

A major factor in winning the production contract was an agreement between AMC and Local 72 of the Auto Workers that lowered labor costs at the company's Kenosha, WI, plant, where the Chrysler cars will be produced on an assembly line that had been idle because of slow sales of AMC cars. The plant's other assembly line will continue to assemble AMC cars.

The AMC-Local 72 accord cut the 162 job classifications to 14 for skilled trade workers and to 32 for other workers. The number of classifications was a difficult issue, but a settlement did not come until the bargainers agreed on the precise duties each classification will encompass.

Locals of the Machinists and Teamsters unions also aided in the winning of the production contract by agreeing to cost-cutting measures for about 400 employees in Kenosha. UAW Local 75 also agreed to a cut in job classifications and other contract changes at AMC's parts plants in Milwaukee.

According to Chrysler, the production contract was ex-

pected to run for 2½ years, with an option for extension. Despite the pickup in production, which was expected to result in the recall of more than 3,000 laid-off AMC employees, the company continued to indicate that it considered the Kenosha facility to be obsolete and that it was considering the possibility of opening a replacement plant in Kenosha, or elsewhere in the United States.

Talks completed for 'Chrysler Electronics City'

Another step toward the expected 1988 opening of "Chrysler Electronics City" in Huntsville, AL, occurred when the company and Auto Workers Local 1413 agreed on a contract to become effective in 1988. The favorable vote by the local union's members, who are employed at other Chrysler facilities in the area, was 706 to 256. A union official said the contract will provide for "substantial" wage increases, a reduction in job classifications, and "pay-for-knowledge" provisions under which employees will receive higher pay for mastering more than one job.

The plant, covering 750,000 square feet on a 325 acre site, will produce electronic components for Chrysler vehicles. Chrysler hopes to attract some of its suppliers to the site. The plant is expected to employ 2,500 UAW members.

GM offers departure incentives

General Motors Corp. moved to reduce operating costs by announcing "incentives" to resign or retire that could be offered to any white-collar employee of the company's North American automotive operations. This was part of the company's announced plan to reduce its white-collar work force by 25 percent by 1989. GM currently has 133,000 salaried employees involved in automotive production in the United States and 9,000 in Canada.

The announcement was applauded by industry observers who contended that GM is overstaffed, compared with Ford Motor Co. and Chrysler Corp., which have been reducing their white-collar staffs since the early 1980's. GM did offer departure inducements to white-collar workers in 1984, and an undisclosed number accepted. Under the 1986 program, the inducements were to be made to individuals at the discretion of management. The affected employees could refuse the offer.

Police officers pick assignments, work schedules

The Arlington County, VA., police department has adopted an experimental program under which officers demonstrating superior performance will have priority in picking their beats and days they work. Previously, assignments and work schedules were based strictly on length of service. A department official said the program was established because "there are always people who work harder than other people, and we had no way to reward them." The experiment is limited to the 29-member day section.

Under the evaluation procedure of the new program, officers will receive 1 point for issuing a parking ticket, ranging up to 50 points for a felony arrest. If the program proves workable during the 6-month trial, officers who average at least 35 points a day during the period will be given priority in selecting neighborhood assignments and work schedules for the next 12 months. Within the group of eligible officers, those with the most seniority would have the first choice.

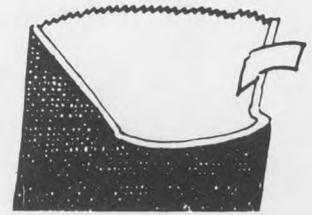
The president of the Arlington County Police Beneficial Association said it was too early to comment on the experiment. Under Virginia law, public employee unions can discuss contract provisions with employers, but they are not permitted to engage in binding collective bargaining.

Shipbuilding companies bargain separately

Bargaining in the West Coast shipbuilding industry led off with a settlement between Todd Shipyard Corp.'s Los Angeles shipyard and Local 9 of the Marine and Shipbuilding Workers. The 3-year accord could set a pattern for settlements between other shipyards and the Pacific Coast Metal Trades Council, comprising 11 unions with 10,000 members. Since the 1950's, the employers had bargained with the Trades Council as a unit, the Pacific Coast Shipbuilders Association, but the member companies decided to bargain individually in 1986.

The 3-year Todd agreement froze top pay rates, leaving most workers at the \$13.48 an hour rate that applies to nearly all trades. There was a change in pay progression, with new employees starting at \$9.50 an hour and moving to the top rate after 3 years. Previously, they started at \$8.50.

Todd also agreed to take over a union-administered pension and benefit plan, to establish a health maintenance organization, to offer dental coverage, and to increase sickness and accident benefits. □



Book Reviews

Labor in a turbulent era

American Workers, American Unions, 1920–1985. By Robert H. Zieger. Baltimore, MD, The Johns Hopkins University Press, 1986. 233 pp. \$25, cloth; \$9.95, paper.

Books on the history of the American workers and their unions are a rare occurrence indeed and for this reason alone Professor Robert H. Zieger's contribution is to be welcomed. Within the scope he has set for himself—no new sources and no original research—Zieger has succeeded in delineating the major economic and political events that have shaped the current labor movement and that in turn have been shaped by it. Although the author's sympathies are clear throughout the volume, the treatment of issues is even-handed, an approach further supported by a judiciously selected bibliography. It should serve as an excellent supplementary text in undergraduate courses in industrial relations and labor economics.

In his first chapter, the author takes us, perhaps too quickly, through the 1920's, stressing the economic plight of millions of workers during these much acclaimed years of prosperity.

Organized labor's massive and unexpected gains during the 1930's are the subject of chapter 2, which includes an insightful treatment of John L. Lewis, the CIO, and the organizing campaigns in steel, auto, and other manufacturing industries.

Chapter 3 discusses labor's role during World War II, a subject typically ignored in general history texts or those devoted to that period. Students of the labor movement will be grateful to the author not only for his discussion of black and women workers, but also for drawing attention to the flip-flop of the Communist party and its adherents before and after the German-Russian nonaggression pact. Unfortunately, his criticism of the National War Labor Board leads him to overlook the fact that the Board's policies, while trying to maintain some degree of wage control, also set the stage for an unprecedented growth in fringe benefits.

An undue emphasis on political radicalism and its effects on organized labor mars chapter 4. While the candidacy of Henry A. Wallace did garner some support from a few unions and while Jay Lovestone was indeed an interesting figure in the top echelon of the AFL, the extended discussion

given to these matters is likely to leave the general reader with the impression that all of this was of major concern to workers and their unions. Even more regrettable are several characterizations such as "... the ouster of the Communist-oriented elements in 1949-50 and the attacks on the expelled affiliates . . . usually degenerated into repression and violence." It needs to be remembered that, for example, the contest between the International Union of Electrical, Radio and Machine Workers (IUE) and the United Electrical, Radio and Machine Workers of America (UE) was decided in representation elections conducted by the National Labor Relations Board, and not by strong-arm tactics.

Chapter 5 describes the merger between the AFL-CIO in 1955 and the surprising gains scored by unions among workers in the public sector. Chapter 6 takes us into the 1960's and closes with the defeat of Hubert Humphrey in 1968, described as labor's political "Last Hurrah," an event it can be argued that actually occurred as early as 1947.

In what appears to be an attempt to give the book greater currency, the author added a 7-page epilogue, "Into the Eighties." This, unfortunately, was a mistake since many issues facing labor are either barely referred to or are omitted altogether. It is hoped that the author will do full justice to these topics in the next edition.

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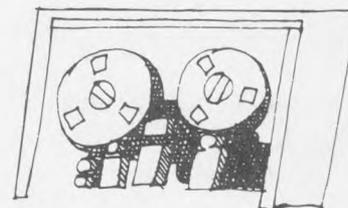
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I certify that the statements made by me above are correct and complete.

(Signed) Henry Lowenstern, Editor-in-Chief

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Schedule of release dates for BLS statistical series

Series	Release date	Period covered	Release date	Period covered	Release date	Period covered	MLR table number
Employment situation	November 7	October	December 5	November	January 9	December	1; 4-21
Occupational injuries and illnesses	November 13	1985	.....	.....	.....	.....	48
Producer Price Index	November 14	October	December 12	November	January 9	December	2; 33-35
Consumer Price Index	November 25	October	December 19	November	January 21	December	2; 30-32
Real earnings	November 25	October	December 19	November	January 21	December	14-17
Productivity and costs:							
Nonfinancial corporations .....	.....	.....	December 2	3d quarter	.....	.....	2; 42-44
Nonfarm business and manufacturing .....	.....	.....	.....	.....	January 29	4th quarter	2; 42-44
Major collective bargaining settlements .....	.....	.....	.....	.....	January 27	1986	3; 25-28
Employment Cost Index .....	.....	.....	.....	.....	January 27	4th quarter	1-3; 22-24
U.S. Import and Export Price Indexes .....	.....	.....	.....	.....	January 29	4th quarter	36-41

NOTES ON CURRENT LABOR STATISTICS

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force, employment, unemployment, collective bargaining settlements, consumer, producer, and international prices, productivity, international comparisons, and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described, key definitions are given, notes on the data are set forth, and sources of additional information are cited.

General notes

The following notes apply to several tables in this section:

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as "seasonally adjusted." (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of past experience. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years. (Seasonally adjusted data appear in tables 1-3, 4-10, 13, 14, 17, and 18.) Beginning in January 1980, the BLS introduced two major modifications in the seasonal adjustment methodology for labor force data. First, the data are seasonally adjusted with a procedure called X-11 ARIMA, which was developed at Statistics Canada as an extension of the standard X-11 method previously used by BLS. A detailed description of the procedure appears in *The X-11 ARIMA Seasonal Adjustment Method* by Estela Bee Dagum (Statistics Canada, Catalogue No. 12-564E, February 1980). The second change is that seasonal factors are calculated for use during the first 6 months of the year, rather than for the entire year, and then are calculated at midyear for the July-December period. However, revisions of historical data continue to be made only at the end of each calendar year.

Seasonally adjusted labor force data in tables 1 and 4-10 were revised in the February 1986 issue of the *Review*, to reflect experience through 1985.

Annual revisions of the seasonally adjusted payroll data shown in tables 13, 14, and 18 were made in the July 1986 *Review* using the X-11 ARIMA seasonal adjustment methodology. New seasonal factors for productivity data in table 42 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month to month and from quarter to quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the Hourly Earnings Index in table 17—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of \$3 and a current price index number of 150, where $1967 = 100$, the hourly rate expressed in 1967 dollars is \$2 ($\$3/150 \times 100 = \2). The \$2 (or any other resulting values) are described as "real," "constant," or "1967" dollars.

Additional information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule preceding these general notes. More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in *Employment and Earnings*, a monthly publication of the Bureau. More data from the household survey are published in the two-volume data book—*Labor Force Statistics Derived From the Current Population Survey*, Bulletin 2096. More data from the establishment survey appear in two data books—*Employment, Hours, and Earnings, United States*, and *Employment, Hours, and Earnings, States and Areas*, and the annual supplements to these data books. More detailed information on employee compensation and collective bargaining settlements is published in the monthly periodical, *Current Wage Developments*. More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report*, and *Producer Prices and Price Indexes*. Detailed data on all of the series in this section are provided in the *Handbook of Labor Statistics*, which is published biennially by the Bureau. BLS bulletins are issued covering productivity, injury and illness, and other data in this section. Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

Symbols

p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.

r = revised. Generally, this revision reflects the availability of later data but may also reflect other adjustments.

n.e.c. = not elsewhere classified.

n.e.s. = not elsewhere specified.

COMPARATIVE INDICATORS

(Tables 1-3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

Labor market indicators include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-to-population ratio, and unemployment rates for major demographic groups based on the Current Population ("household") Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonagricultural payroll data. The Employment Cost Index (compensation), by major sector and by

bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2. Measures of rates of change of compensation and wages from the Employment Cost Index program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in: consumer prices for all urban consumers; producer prices by stage of processing; and the overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

Alternative measures of wage and compensation rates of change, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

Notes on the data

Definitions of each series and notes on the data are contained in later

sections of these notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Volumes I and II, Bulletins 2134-1 and 2134-2 (Bureau of Labor Statistics, 1982 and 1984, respectively), as well as the additional bulletins, articles, and other publications noted in the separate sections of the *Review's* "Current Labor Statistics Notes." Historical data for many series are provided in the *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985). Users may also wish to consult *Major Programs, Bureau of Labor Statistics*, Report 718 (Bureau of Labor Statistics, 1985).

EMPLOYMENT DATA

(Tables 1; 4-21)

Household survey data

Description of the series

EMPLOYMENT DATA in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 59,500 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons include (1) all civilians who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. Members of the Armed Forces stationed in the United States are also included in the employed total. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff or waiting to start new jobs within the next 30 days are also counted among the unemployed. The **overall unemployment rate** represents the number unemployed as a percent of the labor force, including the resident Armed Forces. The **civilian unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **labor force** consists of all employed or unemployed civilians plus members of the Armed Forces stationed in the United States. Persons **not in the labor force** are those not classified as employed or unemployed; this group includes persons who are retired, those engaged in their own housework, those not working while attending school, those unable to work because of long-term illness, those discouraged from seeking work because of personal or job market factors, and those who are voluntarily idle. The **noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy, and members of the Armed Forces stationed in the United States. The **labor force participation rate** is the proportion of the noninstitutional population that is in the labor force. The **employment-population ratio** is total employment (including the resident Armed Forces) as a percent of the noninstitutional population.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the preceding years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on

the various data series appear in the Explanatory Notes of *Employment and Earnings*.

Data in tables 4-10 are seasonally adjusted, based on the seasonal experience through December 1985.

Additional sources of information

For detailed explanations of the data, see *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 1, and for additional data, *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985). A detailed description of the Current Population Survey as well as additional data are available in the monthly Bureau of Labor Statistics periodical, *Employment and Earnings*. Historical data from 1948 to 1981 are available in *Labor Force Statistics Derived from the Current Population Survey: A Databook*, Vols. I and II, Bulletin 2096 (Bureau of Labor Statistics, 1982).

A comprehensive discussion of the differences between household and establishment data on employment appears in Gloria P. Green, "Comparing employment estimates from household and payroll surveys," *Monthly Labor Review*, December 1969, pp. 9-20.

Establishment survey data

Description of the series

EMPLOYMENT, HOURS, AND EARNINGS DATA in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by more than 250,000 establishments representing all industries except agriculture. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in manufacturing include working supervisors and all nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 12-17 include production workers in manufacturing and mining; construction workers in construction; and nonsupervisory workers in the following industries: transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and

services. These groups account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments.

Real earnings are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). The

Hourly Earnings Index is calculated from average hourly earnings data adjusted to exclude the effects of two types of changes that are unrelated to underlying wage-rate developments: fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes and seasonal factors in the proportion of workers in high-wage and low-wage industries.

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received and are different from standard or scheduled hours. **Overtime hours** represent the portion of gross average weekly hours which were in excess of regular hours and for which overtime premiums were paid.

The Diffusion Index, introduced in the May 1983 *Review*, represents the percent of 185 nonagricultural industries in which employment was rising over the indicated period. One-half of the industries with unchanged employment are counted as rising. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. The diffusion index is useful for measuring the dispersion of economic gains or losses and is also an economic indicator.

Notes on the data

Establishment data collected by the Bureau of Labor Statistics are periodically adjusted to comprehensive counts of employment (called "benchmarks"). The latest complete adjustment was made with the release of May 1986 data, published in the July 1986 issue of the *Review*. Consequently, data published in the *Review* prior to that issue are not necessarily comparable to current data. Unadjusted data have been revised back to April 1984; seasonally adjusted data have been revised back to January 1981. These revisions were published in the *Supplement to Employment and Earnings* (Bureau of Labor Statistics, 1986). Unadjusted data from April 1985 forward, and seasonally adjusted data from January 1982 forward are subject to revision in future benchmarks.

In the establishment survey, estimates for the 2 most recent months are based on incomplete returns and are published as preliminary in the tables (13 to 16 in the *Review*). When all returns have been received, the estimates are revised and published as final in the third month of their appearance. Thus, August data are published as preliminary in October and November and as final in December. For the same reason, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Thus, second-quarter data are published as preliminary in August and September and as final in October.

COMPENSATION AND WAGE DATA

(Tables 1-3; 22-29)

COMPENSATION AND WAGE DATA are gathered by the Bureau from business establishments, State and local governments, labor unions, collective bargaining agreements on file with the Bureau, and secondary sources.

Employment Cost Index

Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It uses a fixed market basket of

Additional sources of information

Detailed data from the establishment survey are published monthly in the BLS periodical, *Employment and Earnings*. Earlier comparable unadjusted and seasonally adjusted data are published in *Employment, Hours, and Earnings, United States, 1909-84*, Bulletin 1312-12 (Bureau of Labor Statistics, 1985) and its annual supplement. For a detailed discussion of the methodology of the survey, see *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 2. For additional data, see *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985).

A comprehensive discussion of the differences between household and establishment data on employment appears in Gloria P. Green, "Comparing employment estimates from household and payroll surveys," *Monthly Labor Review*, December 1969, pp. 9-20.

Unemployment data by State

Description of the series

Data presented in this section are obtained from two major sources—the Current Population Survey (CPS) and the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act and the Public Works and Economic Development Act. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

Notes on the data

Data refer to State of residence. Monthly data for 11 States—California, Florida, Illinois, Massachusetts, Michigan, New York, New Jersey, North Carolina, Ohio, Pennsylvania, and Texas—are obtained directly from the CPS, because the size of the sample is large enough to meet BLS standards of reliability. Data for the remaining 39 States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates for the 11 States are revised to new population controls. For the remaining States and the District of Columbia, data are benchmarked to annual average CPS levels.

Additional sources of information

Information on the concepts, definitions, and technical procedures used to develop labor force data for States and sub-State areas as well as additional data on sub-States are provided in the monthly Bureau of Labor Statistics periodical, *Employment and Earnings*, and the annual report, *Geographic Profile of Employment and Unemployment* (Bureau of Labor Statistics). See also *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 4.

labor—similar in concept to the Consumer Price Index's fixed market basket of goods and services—to measure change over time in employer costs of employing labor. The index is not seasonally adjusted.

Statistical series on total compensation costs and on wages and salaries are available for private nonfarm workers excluding proprietors, the self-employed, and household workers. Both series are also available for State and local government workers and for the civilian nonfarm economy, which consists of private industry and State and local government workers combined. Federal workers are excluded.

The Employment Cost Index probability sample consists of about 2,200 private nonfarm establishments providing about 12,000 occupational observations and 700 State and local government establishments providing

3,500 occupational observations selected to represent total employment in each sector. On average, each reporting unit provides wage and compensation information on five well-specified occupations. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Beginning with June 1986 data, fixed employment weights from the 1980 Census of Population are used each quarter to calculate the indexes for civilian, private, and State and local governments. (Prior to June 1986, the employment weights are from the 1970 Census of Population.) These fixed weights, also used to derive all of the industry and occupation series indexes, ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the bargaining status, region, and metropolitan/nonmetropolitan area series, however, employment data by industry and occupation are not available from the census. Instead, the 1980 employment weights are reallocated within these series each quarter based on the current sample. Therefore, these indexes are not strictly comparable to those for the aggregate, industry, and occupation series.

Definitions

Total compensation costs include wages, salaries, and the employer's costs for employee benefits.

Wages and salaries consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

Benefits include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

Notes on the data

The Employment Cost Index data series began in the fourth quarter of 1975, with the quarterly percent change in wages and salaries in the private nonfarm sector. Data on employer costs for employee benefits were included in 1980 to produce, when combined with the wages and salaries series, a measure of the percent change in employer costs for employee total compensation. State and local government units were added to the ECI coverage in 1981, providing a measure of total compensation change in the *civilian* nonfarm economy (excluding Federal employees). Historical indexes (June 1981 = 100) of the quarterly rates of change are presented in the May issue of the BLS monthly periodical, *Current Wage Developments*.

Additional sources of information

For a more detailed discussion of the Employment Cost Index, see the *Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 11, and the following *Monthly Labor Review* articles: "Employment Cost Index: a measure of change in the 'price of labor'," July 1975; "How benefits will be incorporated into the Employment Cost Index," January 1978; "Estimation procedures for the Employment Cost Index," May 1982; and "Introducing new weights for the Employment Cost Index," June 1985.

Data on the ECI are also available in BLS quarterly press releases issued in the month following the reference months of March, June, September, and December; and from the *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985).

Collective bargaining settlements

Description of the series

Collective bargaining settlements data provide statistical measures of negotiated adjustments (increases, decreases, and freezes) in compensation

(wage and benefit costs) and wages alone, quarterly for private industry and semiannually for State and local government. Compensation measures cover all collective bargaining situations involving 5,000 workers or more and wage measures cover all situations involving 1,000 workers or more. These data, covering private nonagricultural industries and State and local governments, are calculated using information obtained from bargaining agreements on file with the Bureau, parties to the agreements, and secondary sources, such as newspaper accounts. The data are not seasonally adjusted.

Settlement data are measured in terms of future specified adjustments: those that will occur within 12 months after contract ratification—first-year—and all adjustments that will occur over the life of the contract expressed as an average annual rate. Adjustments are worker weighted. Both first-year and over-the-life measures exclude wage changes that may occur under cost-of-living clauses that are triggered by future movements in the Consumer Price Index.

Effective wage adjustments measure all adjustments occurring in the reference period, regardless of the settlement date. Included are changes from settlements reached during the period, changes deferred from contracts negotiated in earlier periods, and changes under cost-of-living adjustment clauses. Each wage change is worker weighted. The changes are prorated over all workers under agreements during the reference period yielding the average adjustment.

Definitions

Wage rate changes are calculated by dividing newly negotiated wages by the average hourly earnings, excluding overtime, at the time the agreement is reached. Compensation changes are calculated by dividing the change in the value of the newly negotiated wage and benefit package by existing average hourly compensation, which includes the cost of previously negotiated benefits, legally required social insurance programs, and average hourly earnings.

Compensation changes are calculated by placing a value on the benefit portion of the settlements at the time they are reached. The cost estimates are based on the assumption that conditions existing at the time of settlement (for example, methods of financing pensions or composition of labor force) will remain constant. The data, therefore, are measures of negotiated changes and not of total changes in employer cost.

Contract duration runs from the effective date of the agreement to the expiration date or first wage reopening date, if applicable. Average annual percent changes over the contract term take account of the compounding of successive changes.

Notes on the data

Care should be exercised in comparing the size and nature of the settlements in State and local government with those in the private sector because of differences in bargaining practices and settlement characteristics. A principal difference is the incidence of cost-of-living adjustment (COLA) clauses which cover only about 2 percent of workers under a few local government settlements, but cover 50 percent of workers under private sector settlements. Agreements without COLA's tend to provide larger specified wage increases than those with COLA's. Another difference is that State and local government bargaining frequently excludes pension benefits which are often prescribed by law. In the private sector, in contrast, pensions are typically a bargaining issue.

Additional sources of information

For a more detailed discussion on the series, see the *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 10. Comprehensive data are published in press releases issued quarterly (in January, April, July, and October) for private industry, and semi-

annually (in February and August) for State and local government. Historical data and additional detailed tabulations for the prior calendar year appear in the April issue of the BLS monthly periodical, *Current Wage Developments*.

Work stoppages

Description of the series

Data on **work stoppages** measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of time lost because of stoppage.

Data are largely from newspaper accounts and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

Definitions

Number of stoppages: The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

Workers involved: The number of workers directly involved in the stoppage.

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

Days of idleness as a percent of estimated working time: Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

Additional sources of information

Data for each calendar year are reported in a BLS press release issued in the first quarter of the following year. Monthly data appear in the BLS

monthly periodical, *Current Wage Developments*. Historical data appear in the *BLS Handbook of Labor Statistics*.

Other compensation data

Other BLS data on pay and benefits, not included in the Current Labor Statistics section of the *Monthly Labor Review*, appear in and consist of the following:

Industry Wage Surveys provide data for specific occupations selected to represent an industry's wage structure and the types of activities performed by its workers. The Bureau collects information on weekly work schedules, shift operations and pay differentials, paid holiday and vacation practices, and information on incidence of health, insurance, and retirement plans. Reports are issued throughout the year as the surveys are completed. Summaries of the data and special analyses also appear in the *Monthly Labor Review*.

Area Wage Surveys annually provide data for selected office, clerical, professional, technical, maintenance, toolroom, powerplant, material movement, and custodial occupations common to a wide variety of industries in the areas (labor markets) surveyed. Reports are issued throughout the year as the surveys are completed. Summaries of the data and special analyses also appear in the *Review*.

The National Survey of Professional, Administrative, Technical, and Clerical Pay provides detailed information annually on salary levels and distributions for the types of jobs mentioned in the survey's title in private employment. Although the definitions of the jobs surveyed reflect the duties and responsibilities in private industry, they are designed to match specific pay grades of Federal white-collar employees under the General Schedule pay system. Accordingly, this survey provides the legally required information for comparing the pay of salaried employees in the Federal civil service with pay in private industry. (See Federal Pay Comparability Act of 1970, 5 U.S.C. 5305.) Data are published in a BLS news release issued in the summer and in a bulletin each fall; summaries and analytical articles also appear in the *Review*.

Employee Benefits Survey provides nationwide information on the incidence and characteristics of employee benefit plans in medium and large establishments in the United States, excluding Alaska and Hawaii. Data are published in an annual BLS news release and bulletin, as well as in special articles appearing in the *Review*.

PRICE DATA (Tables 2; 30-41)

PRICE DATA are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period (1967 = 100, unless otherwise noted).

Consumer Price Indexes

Description of the series

The **Consumer Price Index (CPI)** is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all urban consumer index (CPI-U) introduced in 1978 is representative of the 1972-73 buying habits of about 80 percent of the noninstitutional population of the United States at that time, compared with 40 percent represented in the CPI-W. In addition to wage earners and clerical

workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 24,000 retail establishments and 24,000 tenants in 85 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 28 major urban centers are presented in table 31. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are measured for the CPI-U. A rental equivalence method replaced the

asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-w. The central purpose of the change was to separate shelter costs from the investment component of homeownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes.

Additional sources of information

For a discussion of the general method for computing the CPI, see *BLS Handbook of Methods, Volume II, The Consumer Price Index*, Bulletin 2134-2 (Bureau of Labor Statistics, 1984). The recent change in the measurement of homeownership costs is discussed in Robert Gillingham and Walter Lane, "Changing the treatment of shelter costs for homeowners in the CPI," *Monthly Labor Review*, June 1982, pp. 9-14.

Additional detailed CPI data and regular analyses of consumer price changes are provided in the *CPI Detailed Report*, a monthly publication of the Bureau. Historical data for the overall CPI and for selected groupings may be found in the *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985).

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received in primary markets of the United States by producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 60,000 quotations per month selected to represent the movement of prices of all commodities produced in the manufacturing, agriculture, forestry, fishing, mining, gas and electricity, and public utilities sectors. The stage of processing structure of Producer Price Indexes organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1976, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1972. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

Notes on the data

Beginning with the January 1986 issue, the *Review* is no longer presenting tables of Producer Price Indexes for commodity groupings, special composite groups, or SIC industries. However, these data will continue to be presented in the Bureau's monthly publication *Producer Price Indexes*.

The Bureau has completed the first major stage of its comprehensive overhaul of the theory, methods, and procedures used to construct the Producer Price Indexes. Changes include the replacement of judgment sampling with probability sampling techniques; expansion to systematic coverage of the net output of virtually all industries in the mining and manufacturing sectors; a shift from a commodity to an industry orientation;

the exclusion of imports from, and the inclusion of exports in, the survey universe; and the respecification of commodities priced to conform to Bureau of the Census definitions. These and other changes have been phased in gradually since 1978. The result is a system of indexes that is easier to use in conjunction with data on wages, productivity, and employment and other series that are organized in terms of the Standard Industrial Classification and the Census product class designations.

Additional sources of information

For a discussion of the methodology for computing Producer Price Indexes, see *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 7.

Additional detailed data and analyses of price changes are provided monthly in *Producer Price Indexes*. Selected historical data may be found in the *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985).

International price indexes

Description of the series

The BLS **International Price Program** produces quarterly export and import price indexes for nonmilitary goods traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts: it includes corporations, businesses, and individuals but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents. With publication of an all-import index in February 1983 and an all-export index in February 1984, all U.S. merchandise imports and exports now are represented in these indexes. The reference period for the indexes is 1977 = 100, unless otherwise indicated.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected quarterly by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during the first 2 weeks of the third month of each calendar quarter—March, June, September, and December. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined by the 4- and 5-digit level of detail of the Standard Industrial Trade Classification System (SITC). The calculation of indexes by SITC category facilitates the comparison of U.S. price trends and sector production with similar data for other countries. Detailed indexes are also computed and published on a Standard Industrial Classification (SIC-based) basis, as well as by end-use class.

Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. Price relatives are assigned equal importance within each weight category and are then aggregated to the SITC level. The values assigned to each weight category are based on trade value figures compiled

by the Bureau of the Census. The trade weights currently used to compute both indexes relate to 1980.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's quarterly questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

For the export price indexes, the preferred pricing basis is f.a.s. (free alongside ship) U.S. port of exportation. When firms report export prices f.o.b. (free on board), production point information is collected which enables the Bureau to calculate a shipment cost to the port of exportation.

An attempt is made to collect two prices for imports. The first is the import price f.o.b. at the foreign port of exportation, which is consistent with the basis for valuation of imports in the national accounts. The second is the import price c.i.f. (cost, insurance, and freight) at the U.S. port of importation, which also includes the other costs associated with bringing the product to the U.S. border. It does not, however, include duty charges.

Additional sources of information

For a discussion of the general method of computing International Price Indexes, see *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 8.

Additional detailed data and analyses of international price developments are presented in the Bureau's quarterly publication *U.S. Import and Export Price Indexes* and in occasional *Monthly Labor Review* articles prepared by BLS analysts. Selected historical data may be found in the *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985).

PRODUCTIVITY DATA

(Tables 2; 42-44)

U. S. productivity and related data

Description of the series

The productivity measures relate real physical output to real input. As such, they encompass a family of measures which include single factor input measures, such as output per unit of labor input (output per hour) or output per unit of capital input, as well as measures of multifactor productivity (output per unit of labor and capital inputs combined). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

Definitions

Output per hour of all persons (labor productivity) is the value of goods and services in constant prices produced per hour of labor input.

Output per unit of capital services (capital productivity) is the value of goods and services in constant dollars produced per unit of capital services input.

Multifactor productivity is the ratio output per unit of labor and capital inputs combined. Changes in this measure reflect changes in a number of factors which affect the production process such as changes in technology, shifts in the composition of the labor force, changes in capacity utilization, research and development, skill and efforts of the work force, management, and so forth. Changes in the output per hour measures reflect the impact of these factors as well as the substitution of capital for labor.

Compensation per hour is the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, and the wages, salaries, and supplementary payments for the self-employed (except for nonfinancial corporations in which there are no self-employed)—the sum divided by hours paid for. **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

Unit labor costs are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current dollar value of output and dividing by output. **Unit nonlabor costs** contain all the components of unit nonlabor payments except unit profits.

Unit profits include corporate profits and the value of inventory adjustments per unit of output.

Hours of all persons are the total hours paid of payroll workers, self-employed persons, and unpaid family workers.

Capital services is the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

Labor and capital inputs combined are derived by combining changes in labor and capital inputs with weights which represent each component's share of total output. The indexes for capital services and combined units of labor and capital are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

Notes on the data

Output measures for the business sector and the nonfarm business sector exclude the constant dollar value of owner-occupied housing, rest of world, households and institutions, and general government output from the constant dollar value of gross national product. The measures are derived from data supplied by the Bureau of Economic Analysis, U.S. Department of Commerce, and the Federal Reserve Board. Quarterly manufacturing output indexes are adjusted by the Bureau of Labor Statistics to annual estimates of output (gross product originating) from the Bureau of Economic Analysis. Compensation and hours data are developed from data of the Bureau of Labor Statistics and the Bureau of Economic Analysis.

The productivity and associated cost measures in tables 42-44 describe the relationship between output in real terms and the labor time and capital services involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input. Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; capital investment; level of output; utilization of capacity, energy, and materials; the organization of production; managerial skill; and the characteristics and efforts of the work force.

Additional sources of information

Descriptions of methodology underlying the measurement of output per hour and multifactor productivity are found in the *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 13. Historical data for selected industries are provided in the Bureau's *Handbook of Labor Statistics*, 1985, Bulletin 2217.

INTERNATIONAL COMPARISONS (Tables 45–47)

Labor force and unemployment

Description of the series

Tables 45 and 46 present comparative measures of the labor force, employment, and unemployment—approximating U.S. concepts—for the United States, Canada, Australia, Japan, and six European countries. The unemployment statistics (and, to a lesser extent, employment statistics) published by other industrial countries are not, in most cases, comparable to U.S. unemployment statistics. Therefore, the Bureau adjusts the figures for selected countries, where necessary, for all known major definitional differences. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country.

Definitions

For the principal U.S. definitions of the **labor force**, **employment**, and **unemployment**, see the Notes section on EMPLOYMENT DATA: Household Survey Data.

Notes on the data

The adjusted statistics have been adapted to the age at which compulsory schooling ends in each country, rather than to the U.S. standard of 16 years of age and over. Therefore, the adjusted statistics relate to the population age 16 and over in France, Sweden, and from 1973 onward, Great Britain; 15 and over in Canada, Australia, Japan, Germany, the Netherlands, and prior to 1973, Great Britain; and 14 and over in Italy. The institutional population is included in the denominator of the labor force participation rates and employment-population ratios for Japan and Germany; it is excluded for the United States and the other countries.

In the U.S. labor force survey, persons on layoff who are awaiting recall to their job are classified as unemployed. European and Japanese layoff practices are quite different in nature from those in the United States; therefore, strict application of the U.S. definition has not been made on this point. For further information, see *Monthly Labor Review*, December 1981, pp. 8–11.

The figures for one or more recent years for France, Germany, Great Britain, Italy, and the Netherlands are calculated using adjustment factors based on labor force surveys for earlier years and are considered preliminary. The recent-year measures for these countries are, therefore, subject to revision whenever data from more current labor force surveys become available.

Additional sources of information

For further information, see *International Comparisons of Unemployment*, Bulletin 1979 (Bureau of Labor Statistics, 1978), Appendix B and unpublished Supplements to Appendix B available on request. The statistics are also analyzed periodically in the *Monthly Labor Review*. Additional historical data, generally beginning with 1959, are published in the *Handbook of Labor Statistics* and are available in unpublished statistical supplements to Bulletin 1979.

Manufacturing productivity and labor costs

Description of the series

Table 47 presents comparative measures of manufacturing labor productivity, hourly compensation costs, and unit labor costs for the United

States, Canada, Japan, and nine European countries. These measures are limited to trend comparisons—that is, intercountry series of changes over time—rather than level comparisons because reliable international comparisons of the levels of manufacturing output are unavailable.

Definitions

Output is constant value output (value added), generally taken from the national accounts of each country. While the national accounting methods for measuring real output differ considerably among the 12 countries, the use of different procedures does not, in itself, connote lack of comparability—rather, it reflects differences among countries in the availability and reliability of underlying data series.

Hours refer to all employed persons including the self-employed in the United States and Canada; to all wage and salary employees in the other countries. The U.S. hours measure is hours paid; the hours measures for the other countries are hours worked.

Compensation (labor cost) includes all payments in cash or kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. In addition, for some countries, compensation is adjusted for other significant taxes on payrolls or employment (or reduced to reflect subsidies), even if they are not for the direct benefit of workers, because such taxes are regarded as labor costs. However, compensation does not include all items of labor cost. The costs of recruitment, employee training, and plant facilities and services—such as cafeterias and medical clinics—are not covered because data are not available for most countries. Self-employed workers are included in the U.S. and Canadian compensation figures by assuming that their hourly compensation is equal to the average for wage and salary employees.

Notes on the data

For most of the countries, the measures refer to total manufacturing as defined by the International Standard Industrial Classification. However, the measures for France (beginning 1959), Italy (beginning 1970), and the United Kingdom (beginning 1976), refer to manufacturing and mining less energy-related products and the figures for the Netherlands exclude petroleum refining from 1969 to 1976. For all countries, manufacturing includes the activities of government enterprises.

The figures for one or more recent years are generally based on current indicators of manufacturing output, employment, hours, and hourly compensation and are considered preliminary until the national accounts and other statistics used for the long-term measures become available.

Additional sources of information

For additional information, see the *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 16 and periodic *Monthly Labor Review* articles. Historical data are provided in the Bureau's *Handbook of Labor Statistics*, Bulletin*2217, 1985. The statistics are issued twice per year—in a news release (generally in May) and in a *Monthly Labor Review* article (generally in December).

OCCUPATIONAL INJURY AND ILLNESS DATA

(Table 48)

Description of the series

The Annual Survey of Occupational Injuries and Illnesses is designed to collect data on injuries and illnesses based on records which employers in the following industries maintain under the Occupational Safety and Health Act of 1970: agriculture, forestry, and fishing; oil and gas extraction; construction; manufacturing; transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. Excluded from the survey are self-employed individuals, farmers with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies.

Because the survey is a Federal-State cooperative program and the data must meet the needs of participating State agencies, an independent sample is selected for each State. The sample is selected to represent all private industries in the States and territories. The sample size for the survey is dependent upon (1) the characteristics for which estimates are needed; (2) the industries for which estimates are desired; (3) the characteristics of the population being sampled; (4) the target reliability of the estimates; and (5) the survey design employed.

While there are many characteristics upon which the sample design could be based, the total recorded case incidence rate is used because it is one of the most important characteristics and the least variable; therefore, it requires the smallest sample size.

The survey is based on stratified random sampling with a Neyman allocation and a ratio estimator. The characteristics used to stratify the establishments are the Standard Industrial Classification (SIC) code and size of employment.

Definitions

Recordable occupational injuries and illnesses are: (1) occupational deaths, regardless of the time between injury and death, or the length of the illness; or (2) nonfatal occupational illnesses; or (3) nonfatal occupational injuries which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid).

Occupational injury is any injury such as a cut, fracture, sprain, amputation, and so forth, which results from a work accident or from exposure involving a single incident in the work environment.

Occupational illness is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

Lost workday cases are cases which involve days away from work, or days of restricted work activity, or both.

Lost workday cases involving restricted work activity are those cases which result in restricted work activity only.

Lost workdays away from work are the number of workdays (consecutive or not) on which the employee would have worked but could not because of occupational injury or illness.

Lost workdays—restricted work activity are the number of workdays (consecutive or not) on which, because of injury or illness: (1) the employee was assigned to another job on a temporary basis; or (2) the em-

ployee worked at a permanent job less than full time; or (3) the employee worked at a permanently assigned job but could not perform all duties normally connected with it.

The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked even though able to work.

Incidence rates represent the number of injuries and/or illnesses or lost workdays per 100 full-time workers.

Notes on the data

Estimates are made for industries and employment-size classes and for severity classification: fatalities, lost workday cases, and nonfatal cases without lost workdays. Lost workday cases are separated into those where the employee would have worked but could not and those in which work activity was restricted. Estimates of the number of cases and the number of days lost are made for both categories.

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses, or lost workdays, per 100 full-time employees. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Only a few of the available measures are included in the *Handbook of Labor Statistics*. Full detail is presented in the annual bulletin, *Occupational Injuries and Illnesses in the United States, by Industry*.

Comparable data for individual States are available from the BLS Office of Occupational Safety and Health Statistics.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration, respectively. Data from these organizations are included in BLS and State publications. Federal employee experience is compiled and published by the Occupational Safety and Health Administration. Data on State and local government employees are collected by about half of the States and territories; these data are not compiled nationally.

Additional sources of information

The Supplementary Data System provides detailed information describing various factors associated with work-related injuries and illnesses. These data are obtained from information reported by employers to State workers' compensation agencies. The Work Injury Report program examines selected types of accidents through an employee survey which focuses on the circumstances surrounding the injury. These data are not included in the *Handbook of Labor Statistics* but are available from the BLS Office of Occupational Safety and Health Statistics.

The definitions of occupational injuries and illnesses and lost workdays are from *Recordkeeping Requirements under the Occupational Safety and Health Act of 1970*. For additional data, see *Occupational Injuries and Illnesses in the United States, by Industry*, annual Bureau of Labor Statistics bulletin; BLS *Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 17; *Handbook of Labor Statistics*, Bulletin 2217 (Bureau of Labor Statistics, 1985), pp. 411-14; annual reports in the *Monthly Labor Review*; and annual U.S. Department of Labor press releases.

1. Labor market indicators

Selected indicators	1984	1985	1984		1985				1986	
			III	IV	I	II	III	IV	I	II
Employment data										
Employment status of the civilian noninstitutionalized population (household survey) ¹										
Labor Force participation rate	64.4	64.8	64.4	64.5	64.8	64.7	64.7	64.9	65.1	65.3
Employment-population ratio	59.5	60.1	59.7	59.8	60.1	60.0	60.1	60.4	60.5	60.6
Unemployment rate	7.5	7.2	7.4	7.2	7.3	7.3	7.2	7.0	7.1	7.2
Men	7.4	7.0	7.3	7.1	7.1	7.1	7.0	6.9	6.8	7.1
16 to 24 years	14.4	14.1	14.5	13.8	14.1	14.2	14.0	14.0	13.3	14.5
25 years and over	5.7	5.3	5.5	5.4	5.4	5.4	5.3	5.2	5.3	5.4
Women	7.6	7.4	7.6	7.5	7.6	7.5	7.4	7.2	7.3	7.3
16 to 24 years	13.3	13.0	13.1	12.9	13.1	13.0	12.7	13.1	13.2	13.2
25 years and over	6.0	5.9	6.0	5.9	6.0	6.0	5.9	5.5	5.7	5.7
Unemployment rate, 15 weeks and over	2.4	2.0	2.3	2.1	2.0	2.0	2.0	1.9	1.9	1.9
Employment, nonagricultural (payroll data), in thousands: ¹										
Total	94,496	97,614	94,977	95,907	96,581	97,295	97,897	98,668	99,403	99,848
Private sector	78,472	81,199	78,914	79,736	80,341	80,958	81,414	82,069	82,731	83,144
Goods-producing	24,727	24,930	24,891	24,943	24,970	24,947	24,866	24,937	25,028	24,952
Manufacturing	19,378	19,314	19,489	19,486	19,439	19,323	19,241	19,261	19,284	19,194
Service-producing	69,769	72,684	70,086	70,964	71,611	72,347	73,031	73,731	74,375	74,896
Average hours										
Private sector	35.2	34.9	35.1	35.1	35.0	34.9	34.9	34.9	34.9	34.8
Manufacturing	40.7	40.5	40.6	40.5	40.4	40.4	40.6	40.8	40.7	40.7
Overtime	3.4	3.3	3.3	3.4	3.3	3.2	3.3	3.5	3.4	3.4
Employment Cost Index										
Percent change in the ECI, compensation: ²										
All workers (excluding farm, household, and Federal workers)	-	-	1.3	1.2	1.3	.7	1.6	.6	1.1	.7
Private industry workers	-	-	.8	1.3	1.2	.8	1.3	.6	1.1	.8
Goods-producing ³	-	-	.9	1.1	1.5	.7	.6	.6	1.1	.9
Servicing-producing ³	-	-	.7	1.4	1.0	1.0	1.8	.5	1.1	.6
State and local government workers	-	-	3.5	1.0	1.2	.2	3.4	.7	1.0	.6
Workers by bargaining status (private industry)										
Union	-	-	.7	1.1	.7	.6	.8	.5	1.0	.2
Nonunion	-	-	.9	1.3	1.6	1.0	1.4	.6	1.2	.9

¹ Quarterly data seasonally adjusted.

² Annual changes are December to December change. Quarterly changes are calculated using last month of each quarter.

³ Good-producing industries include mining, construction, and manufacturing. Service-producing industries include all other private sector industries.

- Data not available.

2. Annual and quarterly percent changes in compensation, prices, and productivity

Selected measures	1984	1985	1984		1985				1986	
			III	IV	I	II	III	IV	I	II
Compensation data: ^{1, 2}										
Employment Cost Index--compensation (wages, salaries, benefits)										
Civilian nonfarm	-	-	1.3	1.2	1.3	0.7	1.6	0.6	1.1	0.7
Private nonfarm	-	-	.8	1.3	1.2	.8	1.3	.6	1.1	.8
Employment Cost Index--wages and salaries										
Civilian nonfarm	-	-	1.3	1.2	1.2	.9	1.7	.6	1.0	.8
Private nonfarm	-	-	.8	1.2	1.2	1.1	1.3	.6	1.0	.9
Price data¹										
Consumer Price Index (All urban consumers): All items	4.0	3.8	1.2	.3	1.0	1.1	.7	.9	-4	.6
Producer Price Index										
Finished goods	1.7	1.8	-5	.9	.0	.7	-1.4	2.5	-3.1	.3
Finished consumer goods	1.6	1.5	-5	.8	-.3	.7	-1.4	2.5	-4.1	.2
Capital equipment	1.8	2.7	-5	1.1	1.3	.4	-1.4	2.5	.2	.5
Intermediate materials, supplies, components	1.3	-3	-4	-1	-4	.2	-5	.4	-2.9	-8
Crude materials	-1.6	-5.6	-2.0	-1.2	-3.1	-2.1	-4.5	4.3	-7.6	-2.2
Productivity data ³										
Output per hour of all persons:										
Business sector	2.3	1.0	-.3	-.1	.9	2.7	3.4	-3.2	3.3	-.3
Nonfarm business sector	1.8	.5	-.7	-.4	.3	1.8	2.2	-3.5	4.3	-.5
Nonfinancial corporations ⁴	2.0	1.2	-1.6	1.1	.8	2.2	4.9	-2.8	-5	-2.3

¹ Annual changes are December-to-December change. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted and the price data are not compounded.

² Excludes Federal and private household workers.

³ Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

⁴ Output per hour of all employees.

- Data not available.

3. Alternative measures of wage and compensation changes

Components	Quarterly average								Four quarters ended--					
	1985				1986				1985				1986	
	I	II	III	IV	I	II	I	II	III	IV	I	II		
Average hourly compensation:¹														
All persons, business sector	3.9	5.1	4.4	3.8	2.5	2.7	3.9	4.5	4.4	4.4	3.9	3.3		
All employees, nonfarm business sector	3.9	4.4	3.2	3.6	3.1	2.1	3.9	4.2	3.9	3.8	3.6	3.0		
Employment Cost Index--compensation:														
Civilian nonfarm ²	1.3	.7	1.6	.6	1.1	.7	4.8	4.6	4.9	4.3	4.1	4.0		
Private nonfarm	1.2	.8	1.3	.6	1.1	.8	4.4	4.2	4.7	3.9	3.8	3.8		
Union .....	.7	.6	.8	.5	1.0	.2	3.5	3.1	3.2	2.6	2.9	2.5	
Nonunion	1.6	1.0	1.4	.6	1.2	.9	4.9	4.9	5.4	4.6	4.2	4.2		
State and local governments	1.2	.2	3.4	.7	1.0	.6	6.3	6.1	6.0	5.7	5.5	5.8		
Employment Cost Index--wages and salaries:														
Civilian nonfarm ²	1.2	.9	1.7	.6	1.0	.8	4.4	4.5	5.0	4.4	4.2	4.1		
Private nonfarm	1.2	1.1	1.3	.6	1.0	.9	4.1	4.3	4.8	4.1	3.9	3.7		
Union .....	.7	1.1	.9	.5	.7	.4	3.0	3.4	3.6	3.1	3.2	2.5	
Nonunion	1.4	1.1	1.5	.6	1.1	.9	4.6	4.8	5.4	4.6	4.3	4.1		
State and local governments	1.0	.2	3.5	.8	1.0	.4	5.6	5.5	5.6	5.6	5.5	5.7		
Total effective wage adjustments³														
From current settlements .....	.7	.8	1.2	.5	.6	.7	3.6	3.5	3.5	3.3	3.1	2.9	
From prior settlements	-.1	-.2	-.2	-.1	-.2	-.7	.9	.9	.9	.7	.6	.5		
From cost-of-living provision .....	.6	.5	.5	.2	.4	.6	2.2	1.9	1.8	1.8	1.7	1.8	
From settlements .....	.1	.1	.4	.1	.2	.0	.7	.7	.8	.7	.8	.7	
Negotiated wage adjustments from settlements³														
First-year adjustments	3.3	2.5	2.0	2.1	1.0	1.3	2.4	2.4	2.4	2.3	2.0	1.7		
Annual rate over life of contract	3.2	2.8	3.1	1.9	1.6	2.0	2.3	2.4	2.5	2.7	2.5	2.3		
Negotiated wage and benefit adjustments from settlements:⁴														
First-year adjustment	3.6	3.5	2.0	2.0	.4	.7	3.4	3.4	3.1	2.6	2.3	1.5		
Annual rate over life of contract	2.7	3.4	3.0	1.4	1.3	1.6	2.6	2.7	2.7	2.7	2.6	2.0		

¹ Seasonally adjusted.

² Excludes Federal and household workers.

³ Limited to major collective bargaining units of 1,000 workers or more. The most recent data are preliminary.

⁴ Limited to major collective bargaining units of 5,000 workers or more. The most recent data are preliminary.

4. Employment status of the total population, by sex, monthly data seasonally adjusted

(Numbers in thousands)

Employment status	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TOTAL															
Noninstitutional population ^{1, 2}	178,080	179,912	180,304	180,470	180,642	180,810	181,361	181,512	181,678	181,843	181,998	182,183	182,354	182,525	182,713
Labor force ²	115,241	117,167	117,522	117,814	117,832	117,927	118,477	118,779	118,900	118,929	119,351	119,796	119,744	119,879	119,936
Participation rate ³	64.7	65.1	65.2	65.3	65.2	65.2	65.3	65.4	65.4	65.4	65.6	65.8	65.7	65.7	65.6
Total employed ²	106,702	108,856	109,251	109,513	109,671	109,904	110,646	110,252	110,481	110,587	110,797	111,353	111,554	111,852	111,607
Employment-population ratio ⁴	59.9	60.5	60.6	60.7	60.7	60.8	61.0	60.7	60.8	60.8	60.9	61.1	61.2	61.3	61.1
Resident Armed Forces ¹	1,697	1,706	1,732	1,700	1,702	1,698	1,691	1,691	1,693	1,695	1,687	1,680	1,672	1,697	1,716
Civilian employed	105,005	107,150	107,519	107,813	107,969	108,206	108,955	108,561	108,788	108,892	109,110	109,673	109,882	110,155	109,891
Agriculture	3,321	3,179	3,017	3,058	3,070	3,151	3,299	3,096	3,285	3,222	3,160	3,165	3,112	3,048	3,121
Nonagricultural industries	101,685	103,971	104,502	104,755	104,899	105,055	105,655	105,465	105,503	105,670	105,950	106,508	106,769	107,107	106,770
Unemployed	8,539	8,312	8,271	8,301	8,161	8,023	7,831	8,527	8,419	8,342	8,554	8,443	8,190	8,027	8,329
Unemployment rate ⁵	7.4	7.1	7.0	7.0	6.9	6.8	6.6	7.2	7.1	7.0	7.2	7.0	6.8	6.7	6.9
Not in labor force	62,839	62,744	62,782	62,656	62,810	62,883	62,885	62,733	62,778	62,914	62,647	62,387	62,610	62,646	62,777
Men, 16 years and over															
Noninstitutional population ^{1, 2}	85,156	86,025	86,217	86,293	86,374	86,459	86,882	86,954	87,035	87,120	87,195	87,288	87,373	87,460	87,556
Labor force ²	65,386	65,967	66,074	66,227	66,176	66,139	66,679	66,838	66,864	66,757	66,943	66,964	66,936	66,944	67,094
Participation rate ³	76.8	76.7	76.6	76.7	76.6	76.5	76.7	76.9	76.8	76.6	76.8	76.7	76.6	76.5	76.6
Total employed ²	60,642	61,447	61,629	61,656	61,731	61,793	62,458	62,243	62,288	62,254	62,190	62,322	62,365	62,515	62,483
Employment-population ratio ⁴	71.2	71.4	71.5	71.4	71.5	71.5	71.9	71.6	71.6	71.5	71.3	71.4	71.4	71.5	71.4
Resident Armed Forces ¹	1,551	1,556	1,580	1,551	1,552	1,549	1,539	1,539	1,540	1,541	1,533	1,525	1,518	1,541	1,560
Civilian employed	59,091	59,891	60,049	60,105	60,179	60,244	60,919	60,704	60,748	60,713	60,657	60,797	60,847	60,974	60,923
Unemployed	4,744	4,521	4,445	4,571	4,445	4,346	4,221	4,585	4,577	4,503	4,754	4,642	4,571	4,429	4,611
Unemployment rate ⁵	7.3	6.9	6.7	6.9	6.7	6.6	6.3	6.9	6.8	6.7	7.1	6.9	6.8	6.6	6.9
Women, 16 years and over															
Noninstitutional population ^{1, 2}	92,924	93,886	94,087	94,177	94,266	94,351	94,479	94,558	94,643	94,723	94,803	94,895	94,981	95,065	95,156
Labor force ²	49,855	51,200	51,448	51,587	51,655	51,788	51,797	51,941	52,036	52,172	52,408	52,832	52,808	52,935	52,842
Participation rate ³	53.7	54.5	54.7	54.8	54.8	54.9	54.8	54.9	55.0	55.1	55.3	55.7	55.6	55.7	55.5
Total employed ²	46,061	47,409	47,622	47,857	47,939	48,111	48,187	48,009	48,194	48,333	48,608	49,031	49,189	49,337	49,125
Employment-population ratio ⁴	49.6	50.5	50.6	50.8	50.9	51.0	51.0	50.8	50.9	51.0	51.3	51.7	51.8	51.9	51.6
Resident Armed Forces ¹	146	150	152	149	149	149	152	152	153	154	154	155	154	156	156
Civilian employed	45,915	47,259	47,470	47,708	47,790	47,962	48,035	47,857	48,041	48,179	48,454	48,876	49,035	49,181	48,969
Unemployed	3,794	3,791	3,826	3,730	3,716	3,677	3,610	3,932	3,842	3,839	3,800	3,801	3,619	3,598	3,717
Unemployment rate ⁵	7.6	7.4	7.4	7.2	7.2	7.1	7.0	7.6	7.4	7.4	7.3	7.2	6.9	6.8	7.0

¹ The population and Armed Forces figures are not adjusted for seasonal variation.

² Includes members of the Armed Forces stationed in the United States.

³ Labor force as a percent of the noninstitutional population.

⁴ Total employed as a percent of the noninstitutional population.

⁵ Unemployment as a percent of the labor force (including the resident Armed Forces).

5. Employment status of the civilian population, by sex, age, race and Hispanic origin, monthly data seasonally adjusted

(Numbers in thousands)

Employment status	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TOTAL															
Civilian noninstitutional population ¹	176,383	178,206	178,572	178,770	178,940	179,112	179,670	179,821	179,985	180,148	180,311	180,503	180,682	180,828	180,997
Civilian labor force	113,544	115,461	115,790	116,114	116,130	116,229	116,786	117,088	117,207	117,234	117,664	118,116	118,072	118,182	118,220
Participation rate	64.4	64.8	64.8	65.0	64.9	64.9	65.0	65.1	65.1	65.1	65.3	65.3	65.3	65.4	65.3
Employed	105,005	107,150	107,519	107,813	107,969	108,206	108,955	108,561	108,788	108,892	109,110	109,673	109,882	110,155	109,891
Employment-population ratio ²	59.5	60.1	60.2	60.3	60.3	60.4	60.6	60.4	60.4	60.4	60.5	60.8	60.8	60.9	60.7
Unemployed	8,539	8,312	8,271	8,301	8,161	8,023	7,831	8,527	8,419	8,342	8,554	8,443	8,190	8,027	8,329
Unemployment rate	7.5	7.2	7.1	7.1	7.0	6.9	6.7	7.3	7.2	7.1	7.3	7.1	6.9	6.8	7.0
Not in labor force	62,839	62,744	62,782	62,656	62,810	62,883	62,885	62,733	62,778	62,914	62,647	62,387	62,610	62,646	62,777
Men, 20 years and over															
Civilian noninstitutional population ¹	76,219	77,195	77,389	77,498	77,566	77,651	78,101	78,171	78,236	78,309	78,387	78,484	78,586	78,634	78,722
Civilian labor force	59,701	60,277	60,407	60,526	60,553	60,548	61,212	61,183	61,268	61,053	61,208	61,387	61,323	61,235	61,345
Participation rate	78.3	78.1	78.1	78.1	78.1	78.0	78.4	78.3	78.3	78.0	78.1	78.2	78.0	77.9	77.9
Employed	55,769	56,562	56,751	56,849	56,897	56,982	57,706	57,384	57,459	57,391	57,312	57,560	57,499	57,607	57,547
Employment-population ratio ²	73.2	73.3	73.3	73.4	73.4	73.4	73.9	73.4	73.4	73.3	73.1	73.3	73.2	73.3	73.1
Agriculture	2,418	2,278	2,171	2,188	2,210	2,278	2,349	2,258	2,411	2,347	2,278	2,320	2,266	2,173	2,272
Nonagricultural industries	53,351	54,284	54,580	54,661	54,687	54,704	55,356	55,127	55,048	55,043	55,034	55,241	55,233	55,435	55,275
Unemployed	3,932	3,715	3,656	3,677	3,656	3,566	3,507	3,799	3,809	3,663	3,897	3,827	3,824	3,628	3,798
Unemployment rate	6.6	6.2	6.1	6.1	6.0	5.9	5.7	6.2	6.2	6.0	6.4	6.2	6.2	5.9	6.2
Women, 20 years and over															
Civilian noninstitutional population ¹	85,429	86,506	86,727	86,810	86,901	86,988	87,112	87,185	87,263	87,355	87,444	87,547	87,629	87,689	87,779
Civilian labor force	45,900	47,283	47,558	47,663	47,713	47,870	47,895	47,921	47,952	48,107	48,409	48,805	48,916	48,989	48,922
Participation rate	53.7	54.7	54.8	54.9	54.9	55.0	55.0	55.0	55.0	55.1	55.4	55.7	55.8	55.9	55.7
Employed	42,793	44,154	44,363	44,609	44,656	44,882	44,980	44,710	44,797	45,009	45,284	45,701	45,918	45,999	45,879
Employment-population ratio ²	50.1	51.0	51.2	51.4	51.4	51.6	51.6	51.3	51.3	51.5	51.8	52.2	52.4	52.5	52.3
Agriculture	595	596	557	609	591	597	696	593	598	576	609	565	608	627	610
Nonagricultural industries	42,198	43,558	43,806	44,000	44,065	44,285	44,284	44,117	44,199	44,433	44,675	45,136	45,309	45,372	45,269
Unemployed	3,107	3,129	3,195	3,054	3,057	2,988	2,915	3,211	3,155	3,097	3,125	3,104	2,998	2,990	3,042
Unemployment rate	6.8	6.6	6.7	6.4	6.4	6.2	6.1	6.7	6.6	6.4	6.5	6.4	6.1	6.1	6.2
Both sexes, 16 to 19 years															
Civilian noninstitutional population ¹	14,735	14,506	14,456	14,463	14,472	14,474	14,458	14,465	14,485	14,484	14,480	14,472	14,467	14,505	14,496
Civilian labor force	7,943	7,901	7,825	7,925	7,864	7,811	7,678	7,984	7,987	8,074	8,047	7,923	7,833	7,958	7,953
Participation rate	53.9	54.5	54.1	54.8	54.3	54.0	53.1	55.2	55.1	55.7	55.6	54.7	54.1	54.9	54.9
Employed	6,444	6,434	6,405	6,355	6,416	6,342	6,289	6,467	6,532	6,492	6,515	6,411	6,465	6,549	6,465
Employment-population ratio ²	43.7	44.4	44.3	43.9	44.3	43.8	43.4	44.7	45.1	44.8	45.0	44.3	44.7	45.2	44.6
Agriculture	309	305	289	261	269	276	254	246	276	298	274	280	238	249	239
Nonagricultural industries	6,135	6,129	6,116	6,094	6,147	6,066	6,015	6,221	6,256	6,194	6,241	6,131	6,227	6,300	6,226
Unemployed	1,499	1,468	1,420	1,570	1,448	1,469	1,409	1,517	1,455	1,582	1,532	1,512	1,368	1,409	1,488
Unemployment rate	18.9	18.6	18.1	19.8	18.4	18.8	18.4	19.0	18.2	19.6	19.0	19.1	17.5	17.7	18.7
White															
Civilian noninstitutional population ¹	152,347	153,679	153,938	154,082	154,203	154,327	154,784	154,889	155,005	155,122	155,236	155,376	155,502	155,604	155,723
Civilian labor force	98,492	99,926	100,179	100,533	100,478	100,533	100,961	101,232	101,248	101,249	101,515	101,975	101,922	102,189	102,127
Participation rate	64.6	65.0	65.1	65.2	65.2	65.1	65.2	65.4	65.3	65.3	65.4	65.6	65.5	65.7	65.6
Employed	92,120	93,736	94,055	94,369	94,507	94,585	95,165	94,803	94,958	95,081	95,180	95,731	95,760	96,271	95,953
Employment-population ratio ²	60.5	61.0	61.1	61.2	61.3	61.3	61.5	61.2	61.3	61.3	61.3	61.6	61.6	61.9	61.6
Unemployed	6,372	6,191	6,124	6,164	5,971	5,948	5,796	6,429	6,290	6,168	6,335	6,244	6,162	5,918	6,174
Unemployment rate	6.5	6.2	6.1	6.1	5.9	5.9	5.7	6.4	6.2	6.1	6.2	6.1	6.0	5.8	6.0
Black															
Civilian noninstitutional population ¹	19,348	19,664	19,728	19,761	19,790	19,819	19,837	19,863	19,889	19,916	19,943	19,974	20,002	20,028	20,056
Civilian labor force	12,033	12,364	12,378	12,412	12,457	12,522	12,548	12,545	12,656	12,740	12,781	12,754	12,601	12,473	12,630
Participation rate	62.2	62.9	62.7	62.8	62.9	63.2	63.3	63.2	63.6	64.0	64.1	63.9	63.0	62.3	63.0
Employed	10,119	10,501	10,500	10,566	10,518	10,657	10,737	10,690	10,791	10,856	10,889	10,825	10,836	10,654	10,757
Employment-population ratio ²	52.3	53.4	53.2	53.5	53.1	53.8	54.1	53.8	54.3	54.6	54.6	54.2	54.2	53.2	53.6
Unemployed	1,914	1,864	1,878	1,846	1,939	1,865	1,810	1,855	1,865	1,884	1,892	1,929	1,766	1,819	1,873
Unemployment rate	15.9	15.1	15.2	14.9	15.6	14.9	14.4	14.8	14.7	14.8	14.8	15.1	14.0	14.6	14.8

See footnotes at end of table.

5. Continued— Employment status of the civilian population, by sex, age, race and Hispanic origin, monthly data seasonally adjusted

(Numbers in thousands)

Employment status	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Hispanic origin															
Civilian noninstitutional population ¹	11,478	11,915	12,004	12,040	12,075	12,111	12,148	12,184	12,219	12,255	12,290	12,326	12,362	12,397	12,432
Civilian labor force	7,451	7,698	7,844	7,854	7,782	7,772	7,787	7,943	7,920	7,975	8,002	8,110	8,123	8,102	8,170
Participation rate	64.9	64.6	65.3	65.2	64.4	64.2	64.1	65.2	64.8	65.1	65.1	65.8	65.7	65.4	65.7
Employed	6,651	6,888	7,026	6,982	6,953	6,962	6,998	6,969	7,105	7,144	7,123	7,251	7,274	7,213	7,264
Employment-population ratio ²	57.9	57.8	58.5	58.0	57.6	57.5	57.6	57.2	58.2	58.3	58.0	58.8	58.8	58.2	58.4
Unemployed	800	811	818	872	829	810	789	974	815	832	878	858	849	889	906
Unemployment rate	10.7	10.5	10.4	11.1	10.7	10.4	10.1	12.3	10.3	10.4	11.0	10.6	10.5	11.0	11.1

¹ The population figures are not seasonally adjusted.

² Civilian employment as a percent of the civilian noninstitutional population.

because data for the "other races" groups are not presented and Hispanics are included in both the white and black population groups.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals

6. Selected employment indicators, monthly data seasonally adjusted

(In thousands)

Selected categories	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
CHARACTERISTIC															
Civilian employed, 16 years and over	105,005	107,150	107,519	107,813	107,969	108,206	108,955	108,561	108,788	108,892	109,110	109,673	109,882	110,155	109,891
Men	59,091	59,891	60,049	60,105	60,179	60,244	60,919	60,704	60,748	60,713	60,657	60,797	60,847	60,974	60,923
Women	45,915	47,259	47,470	47,708	47,790	47,962	48,035	47,857	48,041	48,179	48,454	48,876	49,035	49,181	48,969
Married men, spouse present ..	39,056	39,248	39,103	39,272	39,314	39,278	39,615	39,382	39,365	39,555	39,614	39,626	39,611	39,716	39,623
Married women, spouse present	25,636	26,336	26,531	26,702	26,721	26,804	26,958	26,593	26,656	26,802	26,920	27,427	27,523	27,438	27,203
Women who maintain families ..	5,465	5,597	5,556	5,514	5,605	5,693	5,702	5,733	5,771	5,812	5,718	5,668	5,829	5,826	5,927
MAJOR INDUSTRY AND CLASS OF WORKER															
Agriculture:															
Wage and salary workers	1,555	1,535	1,438	1,465	1,537	1,572	1,673	1,519	1,689	1,587	1,480	1,498	1,486	1,469	1,501
Self-employed workers	1,553	1,458	1,414	1,436	1,361	1,409	1,492	1,444	1,453	1,475	1,486	1,504	1,427	1,379	1,472
Unpaid family workers	213	185	179	172	158	164	163	156	172	180	186	154	171	178	157
Nonagricultural industries:															
Wage and salary workers	93,565	95,871	96,546	96,530	96,676	96,921	97,911	97,516	97,698	97,831	97,994	98,372	98,206	98,667	98,738
Government	15,770	16,031	16,145	16,213	16,157	16,194	16,418	16,104	16,095	16,187	16,325	16,387	16,647	16,479	16,307
Private industries	77,794	79,841	80,401	80,317	80,519	80,727	81,494	81,412	81,604	81,643	81,669	81,984	81,559	82,188	82,432
Private households	1,238	1,249	1,266	1,271	1,197	1,131	1,256	1,197	1,213	1,321	1,275	1,279	1,243	1,261	1,234
Other	76,556	78,592	79,135	79,046	79,322	79,596	80,238	80,216	80,390	80,322	80,394	80,705	80,317	80,927	81,198
Self-employed workers	7,785	7,811	7,846	7,991	8,013	7,903	7,655	7,669	7,644	7,571	7,757	7,807	8,081	7,982	7,927
Unpaid family workers	335	289	266	248	249	250	273	270	240	253	229	235	254	282	277
PERSONS AT WORK PART TIME¹															
All industries:															
Part time for economic reasons ..	5,744	5,590	5,554	5,475	5,498	5,494	5,543	5,377	5,538	5,923	5,980	5,537	5,399	5,443	5,544
Slack work	2,430	2,430	2,433	2,251	2,306	2,303	2,364	2,369	2,330	2,603	2,659	2,434	2,484	2,411	2,496
Could only find part-time work ..	2,948	2,819	2,815	2,897	2,883	2,864	2,883	2,703	2,953	2,974	2,893	2,810	2,624	2,711	2,764
Voluntary part time	13,169	13,489	13,496	13,713	13,645	13,556	13,958	13,817	13,754	13,933	13,638	14,268	13,991	14,023	13,860
Nonagricultural industries:															
Part time for economic reasons ..	5,512	5,334	5,299	5,241	5,295	5,294	5,275	5,158	5,301	5,621	5,673	5,320	5,191	5,259	5,298
Slack work	2,291	2,273	2,292	2,115	2,196	2,195	2,208	2,224	2,159	2,430	2,523	2,308	2,323	2,286	2,327
Could only find part-time work ..	2,866	2,730	2,730	2,801	2,784	2,760	2,776	2,636	2,861	2,849	2,790	2,724	2,579	2,660	2,712
Voluntary part time	12,704	13,038	13,053	13,277	13,194	13,122	13,441	13,369	13,285	13,599	13,191	13,779	13,656	13,683	13,468

¹ Excludes persons "with a job but not at work" during the survey period for such

reasons as vacation, illness, or industrial disputes.

7. Selected unemployment indicators, monthly data seasonally adjusted

(Unemployment rates)

Selected categories	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
CHARACTERISTIC															
Total, all civilian workers	7.5	7.2	7.1	7.1	7.0	6.9	6.7	7.3	7.2	7.1	7.3	7.1	6.9	6.8	7.0
Both sexes, 16 to 19 years	18.9	18.6	18.1	19.8	18.4	18.8	18.4	19.0	18.2	19.6	19.0	19.1	17.5	17.7	18.7
Men, 20 years and over	6.6	6.2	6.1	6.1	6.0	5.9	5.7	6.2	6.2	6.0	6.4	6.2	5.9	6.2	
Women, 20 years and over	6.8	6.6	6.7	6.4	6.4	6.2	6.1	6.7	6.6	6.4	6.5	6.4	6.1	6.1	
White, total	6.5	6.2	6.1	6.1	5.9	5.9	5.7	6.4	6.2	6.1	6.2	6.1	6.0	5.8	6.0
Both sexes, 16 to 19 years	16.0	15.7	15.3	17.0	15.5	15.9	14.9	16.2	14.5	16.4	16.0	16.2	15.0	15.2	16.1
Men, 16 to 19 years	16.8	16.5	16.2	18.5	15.8	16.2	14.7	16.5	15.3	17.2	17.3	17.8	15.3	16.7	17.0
Women, 16 to 19 years	15.2	14.8	14.4	15.3	15.1	15.5	15.1	15.8	13.7	15.6	14.7	14.4	14.7	13.5	15.2
Men, 20 years and over	5.7	5.4	5.2	5.2	5.2	5.1	5.0	5.4	5.5	5.2	5.5	5.4	5.5	5.0	5.4
Women, 20 years and over	5.8	5.7	5.7	5.5	5.4	5.4	5.3	5.9	5.8	5.5	5.5	5.4	5.3	5.2	5.3
Black, total	15.9	15.1	15.2	14.9	15.6	14.9	14.4	14.8	14.7	14.8	14.8	15.1	14.0	14.6	14.8
Both sexes, 16 to 19 years	42.7	40.2	38.8	39.7	40.8	41.6	41.9	39.1	43.7	42.6	40.8	40.2	38.6	39.5	38.3
Men, 16 to 19 years	42.7	41.0	41.1	41.0	45.2	41.0	41.3	38.7	44.1	41.4	40.8	38.5	41.6	37.4	38.9
Women, 16 to 19 years	42.6	39.2	36.1	38.2	36.0	42.3	42.4	39.5	43.4	43.7	40.8	41.9	35.1	41.8	37.8
Men, 20 years and over	14.3	13.2	13.3	13.7	13.7	13.1	12.7	13.3	12.6	12.6	12.7	13.3	12.7	13.2	13.7
Women, 20 years and over	13.5	13.1	13.5	12.1	13.6	12.6	12.0	12.5	12.2	12.5	12.8	12.8	11.9	12.5	12.5
Hispanic origin, total	10.7	10.5	10.4	11.1	10.7	10.4	10.1	12.3	10.3	10.4	11.0	10.6	10.5	11.0	11.1
Married men, spouse present	4.6	4.3	4.3	4.2	4.3	4.3	4.3	4.5	4.5	4.2	4.5	4.5	4.4	4.1	4.2
Married women, spouse present	5.7	5.6	5.6	5.3	5.5	5.3	5.1	5.5	5.6	5.3	5.4	5.2	5.3	5.1	5.0
Women who maintain families	10.3	10.4	11.3	10.4	10.0	9.4	9.9	9.9	10.1	9.4	10.2	10.1	9.2	10.3	10.1
Full-time workers	7.2	6.8	6.8	6.8	6.7	6.6	6.4	6.9	6.9	6.7	7.0	6.7	6.6	6.4	6.7
Part-time workers	9.3	9.3	9.3	9.6	8.8	9.0	8.4	9.4	9.1	9.6	9.2	9.1	9.0	9.3	9.3
Unemployed 15 weeks and over	2.4	2.0	2.0	2.0	1.9	1.9	1.8	2.0	1.9	1.8	1.9	2.0	1.9	1.9	2.0
Labor force time lost ¹	8.6	8.1	8.1	7.9	7.9	7.8	7.6	8.1	8.1	8.1	8.3	8.1	7.7	7.7	8.0
INDUSTRY															
Nonagricultural private wage and salary workers	7.4	7.2	7.2	7.1	7.0	6.9	6.7	7.2	7.2	7.2	7.3	7.1	7.2	6.9	7.0
Mining	10.0	9.5	8.9	7.7	7.3	10.3	10.9	9.2	10.4	12.8	13.7	17.6	17.0	16.7	13.3
Construction	14.3	13.1	13.6	13.5	13.4	12.6	12.9	13.2	13.0	12.0	13.3	12.1	13.2	12.2	12.7
Manufacturing	7.5	7.7	7.7	7.5	7.7	7.3	7.0	7.2	7.2	6.8	7.5	7.3	6.9	6.8	7.0
Durable goods	7.2	7.6	7.7	7.3	7.6	7.3	7.0	7.4	6.8	6.8	7.3	7.1	6.7	6.9	6.5
Nondurable goods	7.8	7.8	7.8	7.8	7.8	7.3	7.1	7.0	7.7	6.8	7.7	7.5	7.2	6.7	7.8
Transportation and public utilities	5.5	5.1	5.3	5.1	5.1	5.0	4.3	5.3	6.1	5.6	5.3	5.5	6.1	4.6	4.7
Wholesale and retail trade	8.0	7.6	7.8	7.7	7.5	7.6	7.2	7.8	7.6	8.1	8.1	7.7	7.8	7.4	7.6
Finance and service industries	5.9	5.6	5.5	5.4	5.4	5.3	5.2	5.9	5.7	5.9	5.5	5.4	5.7	5.7	5.6
Government workers	4.5	3.9	3.8	3.9	3.6	3.8	3.4	3.8	4.0	3.5	3.7	3.6	3.2	3.2	3.5
Agricultural wage and salary workers	13.5	13.2	13.3	12.9	12.5	10.6	10.9	14.3	11.9	13.4	15.8	13.2	11.6	13.8	13.5

¹ Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.

8. Unemployment rates by sex and age, monthly data seasonally adjusted

(Civilian workers)

Sex and age	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	Total, 16 years and over	7.5	7.2	7.1	7.1	7.0	6.9	6.7	7.3	7.2	7.1	7.3	7.1	6.9	6.8	7.0
16 to 24 years	13.9	13.6	13.3	13.9	13.5	13.3	13.0	13.6	13.2	13.9	14.2	13.5	13.0	12.8	13.8
16 to 19 years	18.9	18.6	18.1	19.8	18.4	18.8	18.4	19.0	18.2	19.6	19.0	19.1	17.5	17.7	18.7
16 to 17 years	21.2	21.0	20.3	22.7	21.4	21.1	20.9	21.8	19.4	20.9	21.1	20.6	19.4	19.6	20.3
18 to 19 years	17.4	17.0	16.7	17.8	16.9	17.5	16.4	17.2	17.1	18.9	17.5	17.9	15.7	16.6	17.4
20 to 24 years	11.5	11.1	10.9	10.9	11.0	10.6	10.4	10.8	10.6	10.9	11.7	10.7	10.8	10.2	11.2
25 years and over	5.8	5.6	5.6	5.4	5.4	5.3	5.1	5.7	5.7	5.4	5.5	5.6	5.4	5.3	5.4
25 to 54 years	6.1	5.8	5.8	5.7	5.6	5.5	5.4	5.9	5.9	5.8	5.9	5.9	5.8	5.6	5.6
55 years and over	4.5	4.1	4.1	3.9	3.8	3.9	3.9	4.4	4.3	3.9	3.6	3.7	3.8	3.7	4.1
Men, 16 years and over	7.4	7.0	6.9	7.1	6.9	6.7	6.5	7.0	7.0	6.9	7.3	7.1	7.0	6.8	7.0
16 to 24 years	14.4	14.1	13.8	14.6	13.9	13.5	12.8	13.6	13.6	14.5	15.0	14.0	13.5	13.3	14.5
16 to 19 years	19.6	19.5	19.3	21.5	19.4	19.3	18.2	19.3	18.9	20.2	20.4	20.1	18.2	19.2	19.4
16 to 17 years	21.9	21.9	20.7	24.0	20.9	21.6	20.9	23.2	20.0	21.2	21.6	19.4	20.0	21.0	21.9
18 to 19 years	18.3	17.9	18.3	19.9	18.7	18.0	16.2	16.6	17.8	19.7	19.6	20.4	16.1	18.1	17.4
20 to 24 years	11.9	11.4	11.0	11.1	11.2	10.6	10.3	10.7	11.0	11.6	12.2	11.0	11.2	10.3	12.0
25 years and over	5.7	5.3	5.3	5.3	5.2	5.1	5.0	5.5	5.5	5.2	5.4	5.5	5.5	5.3	5.3
25 to 54 years	5.9	5.6	5.5	5.5	5.4	5.4	5.3	5.7	5.7	5.5	5.8	5.8	5.8	5.5	5.5
55 years and over	4.6	4.1	4.0	4.1	4.0	3.9	3.9	4.4	4.3	3.9	3.8	4.1	3.9	4.1	4.3
Women, 16 years and over	7.6	7.4	7.5	7.3	7.2	7.1	7.0	7.6	7.4	7.4	7.3	7.2	6.9	6.8	7.1
16 to 24 years	13.3	13.0	12.9	13.1	13.1	13.2	13.2	13.6	12.7	13.2	13.3	13.0	12.5	12.1	12.9
16 to 19 years	18.0	17.6	16.9	17.9	17.4	18.3	18.5	18.6	17.5	19.0	17.6	18.0	16.6	16.0	17.9
16 to 17 years	20.4	20.0	19.8	21.2	22.0	20.6	20.8	20.2	18.7	20.5	20.5	21.9	18.7	18.1	18.5
18 to 19 years	16.6	16.0	14.9	15.5	15.1	16.9	16.5	17.7	16.3	18.1	15.3	15.1	15.3	15.0	17.3
20 to 24 years	10.9	10.7	10.9	10.7	10.8	10.6	10.5	11.0	10.1	10.0	11.1	10.4	10.4	10.1	10.3
25 years and over	6.0	5.9	6.0	5.6	5.6	5.4	5.3	5.9	5.9	5.8	5.7	5.7	5.4	5.4	5.5
25 to 54 years	6.3	6.2	6.2	5.9	5.9	5.7	5.6	6.2	6.3	6.2	6.1	6.1	5.7	5.8	5.8
55 years and over	4.2	4.1	4.2	3.7	3.6	3.9	3.8	4.4	4.4	3.8	3.4	3.1	3.6	3.1	3.8

9. Unemployed persons by reason for unemployment, monthly data seasonally adjusted

(Numbers in thousands)

Reason for unemployment	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	Job losers	4,421	4,139	4,142	4,040	4,081	3,933	3,776	4,162	4,246	4,034	4,311	4,335	3,937	3,831	4,044
On layoff	1,171	1,157	1,167	1,161	1,175	1,132	1,163	1,152	1,164	1,028	1,133	1,066	1,079	990	1,014
Other job losers	3,250	2,982	2,975	2,879	2,906	2,801	2,613	3,010	3,082	3,006	3,178	3,269	2,858	2,841	3,030
Job leavers	823	877	852	911	808	876	996	1,001	1,002	1,110	975	1,013	1,034	978	1,043
Reentrants	2,184	2,256	2,335	2,237	2,226	2,225	2,066	2,292	2,197	2,191	2,217	2,064	2,223	2,232	2,118
New entrants	1,110	1,039	918	1,045	1,055	1,033	1,025	1,097	1,000	1,059	1,062	1,059	965	1,000	1,044
PERCENT OF UNEMPLOYED															
Job losers	51.8	49.8	50.2	49.1	50.0	48.8	48.0	48.7	50.3	48.1	50.3	51.2	48.3	47.6	49.0
On layoff	13.7	13.9	14.2	14.1	14.4	14.0	14.8	13.5	13.8	12.2	13.2	12.6	13.2	12.3	12.3
Other job losers	38.1	35.9	36.1	35.0	35.6	34.7	33.2	35.2	36.5	35.8	37.1	38.6	35.0	35.3	36.7
Job leavers	9.6	10.6	10.3	11.1	9.9	10.9	12.7	11.7	11.9	13.2	11.4	12.0	12.7	12.2	12.6
Reentrants	25.6	27.1	28.3	27.2	27.2	27.6	26.3	26.8	26.1	25.9	24.4	27.2	27.8	27.8	25.7
New entrants	13.0	12.5	11.1	12.7	12.9	12.8	13.0	12.8	11.8	12.6	12.4	12.5	11.8	12.4	12.7
PERCENT OF CIVILIAN LABOR FORCE															
Job losers	3.9	3.6	3.6	3.5	3.5	3.4	3.2	3.6	3.6	3.4	3.7	3.7	3.3	3.2	3.4
Job leavers	.7	.8	.7	.8	.7	.8	.9	.9	.9	.9	.8	.9	.9	.8	.9
Reentrants	1.9	2.0	2.0	1.9	1.9	1.9	1.8	2.0	1.9	1.9	1.9	1.7	1.9	1.9	1.8
New entrants	1.0	.9	.8	.9	.9	.9	.9	.9	.9	.9	.9	.9	.8	.8	.9

10. Duration of unemployment, monthly data seasonally adjusted

(Numbers in thousands)

Weeks of unemployment	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	Less than 5 weeks	3,350	3,498	3,484	3,430	3,465	3,374	3,311	3,562	3,589	3,628	3,705	3,384	3,394	3,427	3,407
5 to 14 weeks	2,451	2,509	2,505	2,536	2,448	2,460	2,441	2,622	2,640	2,685	2,737	2,708	2,486	2,379	2,533
15 weeks and over	2,737	2,305	2,307	2,277	2,205	2,188	2,056	2,340	2,258	2,135	2,209	2,320	2,256	2,295	2,405
15 to 26 weeks	1,104	1,025	1,035	1,057	894	973	969	1,149	1,099	1,001	1,072	1,036	1,066	1,086	1,114
27 weeks and over	1,634	1,280	1,272	1,220	1,311	1,215	1,087	1,191	1,159	1,134	1,137	1,284	1,190	1,209	1,291
Mean duration in weeks	18.2	15.6	15.5	15.4	15.7	15.4	14.9	15.3	14.4	14.3	14.4	15.2	15.0	15.8	15.6
Median duration in weeks	7.9	6.8	6.9	7.0	6.9	6.9	6.8	6.9	6.8	6.5	6.6	7.3	7.1	7.2	7.2

11. Unemployment rates of civilian workers by State, data not seasonally adjusted

State	Aug. 1985	Aug. 1986	State	Aug. 1985	Aug. 1986
Alabama	8.4	10.1	Montana	6.4	6.5
Alaska	7.9	10.2	Nebraska	4.9	3.9
Arizona	6.9	6.9	Nevada	7.3	5.2
Arkansas	7.7	8.5	New Hampshire	3.6	2.9
California	7.3	6.7	New Jersey	4.4	4.5
Colorado	5.5	6.6	New Mexico	8.6	9.0
Connecticut	4.8	3.9	New York	6.1	5.9
Delaware	6.2	4.1	North Carolina	5.8	5.1
District of Columbia	8.4	8.4	North Dakota	4.9	5.5
Florida	5.8	5.9	Ohio	8.8	8.0
Georgia	6.6	5.9	Oklahoma	6.8	9.2
Hawaii	5.7	4.7	Oregon	7.8	8.3
Idaho	7.4	8.2	Pennsylvania	7.3	6.3
Illinois	8.8	7.9	Rhode Island	4.5	3.3
Indiana	7.1	6.4	South Carolina	6.7	5.9
Iowa	7.1	6.8	South Dakota	4.4	4.1
Kansas	4.8	5.3	Tennessee	7.7	7.4
Kentucky	8.5	7.5	Texas	7.0	9.1
Louisiana	11.8	12.3	Utah	5.0	5.3
Maine	4.4	4.2	Vermont	4.0	3.5
Maryland	4.2	4.0	Virginia	5.4	4.4
Massachusetts	3.7	3.7	Washington	7.1	7.6
Michigan	9.7	7.9	West Virginia	10.9	11.6
Minnesota	5.1	4.3	Wisconsin	6.1	6.2
Mississippi	10.4	12.7	Wyoming	6.1	8.0
Missouri	6.1	6.3			

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the database.

12. Employment of workers on nonagricultural payrolls by State, data not seasonally adjusted

(In thousands)

State	Aug., 1985	July, 1986	Aug., 1986 ^P	State	Aug., 1985	July, 1986	Aug., 1986 ^P
Alabama	1,425.3	1,446.5	1,436.5	Nebraska	649.4	653.7	654.7
Alaska	249.2	243.3	243.5	Nevada	451.7	467.7	468.6
Arizona	1,262.3	1,331.6	1,335.4	New Hampshire	478.1	490.5	494.7
Arkansas	805.6	817.3	823.4	New Jersey	3,470.5	3,563.8	3,563.6
California	10,948.1	11,160.2	11,173.1	New Mexico	516.4	520.2	521.4
Colorado	1,419.5	1,444.3	1,447.9	New York	7,799.1	7,927.9	7,912.7
Connecticut	1,569.8	1,605.5	1,607.6	North Carolina	2,623.3	2,681.9	2,697.3
Delaware	295.9	298.6	301.7	North Dakota	252.3	249.5	248.6
District of Columbia	645.1	669.4	667.1	Ohio	4,385.8	4,515.6	4,523.9
Florida	4,367.5	4,502.1	4,508.2	Oklahoma	1,173.2	1,149.5	1,139.3
Georgia	2,583.6	2,634.0	2,651.4	Oregon	1,034.7	1,046.4	1,059.4
Hawaii	423.7	431.3	431.5	Pennsylvania	4,756.4	4,808.8	4,833.3
Idaho	341.2	335.0	335.7	Rhode Island	426.1	424.7	430.6
Illinois	4,788.7	4,807.2	4,825.7	South Carolina	1,301.1	1,339.0	1,345.8
Indiana	2,185.9	2,253.1	2,263.7	South Dakota	250.4	251.5	252.0
Iowa	1,072.3	1,063.4	1,063.7	Tennessee	1,875.1	1,929.3	1,943.8
Kansas	968.1	981.9	989.7	Texas	6,677.0	6,664.5	6,653.4
Kentucky	1,248.3	1,272.8	1,275.4	Utah	626.9	632.7	632.7
Louisiana	1,589.9	1,511.3	1,500.6	Vermont	223.9	223.0	224.6
Maine	476.4	477.9	485.6	Virginia	2,446.9	2,534.2	2,536.5
Maryland	1,900.5	1,949.3	1,942.1	Washington	1,720.9	1,761.0	1,773.0
Massachusetts	2,928.3	2,959.4	2,966.4	West Virginia	600.3	603.3	597.1
Michigan	3,506.7	3,549.3	3,577.9	Wisconsin	1,991.9	2,020.7	2,032.1
Minnesota	1,879.0	1,899.0	1,906.3	Wyoming	213.5	203.0	200.8
Mississippi	831.6	840.7	835.0	Puerto Rico	673.4	725.9	697.2
Missouri	2,111.2	2,153.9	2,162.9	Virgin Islands	36.8	37.4	37.2
Montana	280.9	274.1	273.1				

^P = preliminary

NOTE: Some data in this table may differ from data published elsewhere

because of the continual updating of the database.

13. Employment of workers on nonagricultural payrolls by industry, monthly data seasonally adjusted

(In thousands)

Industry	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^P	Sept. ^P
TOTAL	94,496	97,614	98,128	98,428	98,666	98,910	99,296	99,429	99,484	99,783	99,918	99,843	100,105	100,261	100,368
PRIVATE SECTOR	78,472	81,199	81,592	81,853	82,073	82,281	82,659	82,748	82,785	83,072	83,198	83,161	83,508	83,641	83,746
GOODS PRODUCING	24,727	24,930	24,843	24,903	24,931	24,977	25,101	25,038	24,945	25,038	24,965	24,854	24,869	24,886	24,843
Mining	966	930	917	913	907	901	897	880	852	821	790	772	768	752	745
Oil and gas extraction	607	585	577	571	565	560	556	541	518	488	461	446	442	431	426
Construction	4,383	4,687	4,728	4,754	4,765	4,787	4,901	4,864	4,838	4,972	4,974	4,947	4,980	5,012	5,014
General building contractors	1,161	1,251	1,267	1,276	1,283	1,287	1,330	1,320	1,298	1,315	1,314	1,299	1,299	1,305	1,299
Manufacturing	19,378	19,314	19,198	19,236	19,259	19,289	19,303	19,294	19,255	19,245	19,201	19,135	19,121	19,122	19,084
Production workers	13,285	13,130	13,029	13,059	13,074	13,100	13,111	13,097	13,061	13,060	13,025	12,979	12,961	12,966	12,942
Durable goods	11,505	11,516	11,421	11,447	11,453	11,461	11,466	11,455	11,418	11,415	11,378	11,307	11,294	11,296	11,258
Production workers	7,739	7,660	7,572	7,594	7,594	7,595	7,595	7,579	7,545	7,547	7,519	7,462	7,441	7,445	7,422
Lumber and wood products	704	700	702	705	708	710	716	716	715	719	719	721	724	729	732
Furniture and fixtures	487	493	491	493	493	494	494	494	493	494	496	496	498	499	496
Stone, clay, and glass products	593	591	590	591	591	593	596	597	594	600	599	597	593	593	595
Primary metal industries	857	813	795	797	801	803	798	795	787	785	780	761	758	742	741
Blast furnaces and basic steel products	334	305	304	304	302	303	300	299	293	291	288	286	285	265	264
Fabricated metal products	1,463	1,468	1,459	1,460	1,459	1,456	1,455	1,452	1,450	1,451	1,447	1,440	1,428	1,430	1,432
Machinery, except electrical	2,198	2,182	2,147	2,146	2,139	2,133	2,137	2,127	2,118	2,111	2,100	2,089	2,079	2,075	2,048
Electrical and electronic equipment	2,208	2,207	2,179	2,181	2,179	2,182	2,182	2,181	2,177	2,177	2,175	2,143	2,169	2,169	2,164
Transportation equipment	1,901	1,971	1,970	1,987	1,993	1,998	1,996	1,998	1,989	1,986	1,972	1,974	1,969	1,978	1,973
Motor vehicles and equipment	862	876	871	873	870	872	867	864	858	854	839	839	824	831	827
Instruments and related products	714	723	723	722	723	725	724	725	726	723	721	717	713	716	714
Miscellaneous manufacturing industries	382	369	365	365	367	367	368	370	369	369	369	369	363	365	363
Nondurable goods	7,873	7,798	7,777	7,789	7,806	7,828	7,837	7,839	7,837	7,830	7,823	7,828	7,827	7,826	7,826
Production workers	5,546	5,470	5,457	5,465	5,480	5,505	5,516	5,518	5,516	5,513	5,506	5,517	5,520	5,521	5,520
Food and kindred products	1,612	1,608	1,607	1,610	1,612	1,623	1,623	1,631	1,632	1,633	1,640	1,648	1,645	1,650	1,651
Tobacco manufactures	64	65	65	64	65	64	64	63	63	63	62	62	62	59	57
Textile mill products	746	704	697	699	701	702	702	705	707	703	705	707	710	711	709
Apparel and other textile products	1,185	1,125	1,121	1,121	1,122	1,130	1,133	1,122	1,117	1,119	1,113	1,106	1,108	1,106	1,103
Paper and allied products	681	683	682	683	687	686	687	687	688	689	689	690	687	685	687
Printing and publishing	1,376	1,435	1,442	1,447	1,454	1,457	1,461	1,467	1,469	1,472	1,474	1,477	1,483	1,480	1,482
Chemicals and allied products	1,049	1,046	1,042	1,040	1,037	1,035	1,034	1,032	1,031	1,028	1,024	1,026	1,025	1,026	1,025
Petroleum and coal products	189	178	171	171	170	169	168	167	166	166	166	164	163	163	163
Rubber and misc. plastics products	780	790	785	790	794	798	802	803	804	800	796	797	792	794	798
Leather and leather products	189	166	165	164	164	164	163	162	160	157	154	151	152	152	151
SERVICE-PRODUCING	69,769	72,684	73,285	73,525	73,735	73,933	74,195	74,391	74,539	74,745	74,953	74,989	75,236	75,375	75,525
Transportation and public utilities	5,159	5,242	5,257	5,260	5,272	5,277	5,286	5,277	5,280	5,266	5,265	5,167	5,288	5,250	5,279
Transportation	2,917	3,006	3,023	3,026	3,040	3,046	3,056	3,048	3,053	3,040	3,037	3,035	3,057	3,059	3,058
Communication and public utilities	2,242	2,236	2,234	2,234	2,232	2,231	2,230	2,229	2,227	2,226	2,228	2,132	2,231	2,191	2,221
Wholesale trade	5,555	5,740	5,777	5,796	5,796	5,809	5,830	5,843	5,841	5,864	5,872	5,829	5,849	5,872	5,874
Durable goods	3,276	3,409	3,432	3,442	3,451	3,460	3,470	3,482	3,480	3,485	3,488	3,454	3,483	3,488	3,489
Nondurable goods	2,279	2,331	2,345	2,354	2,345	2,349	2,360	2,361	2,361	2,379	2,384	2,375	2,366	2,384	2,385
Retail trade	16,545	17,360	17,489	17,543	17,589	17,622	17,734	17,795	17,828	17,851	17,911	17,944	17,992	18,026	18,069
General merchandise stores	2,267	2,320	2,326	2,329	2,326	2,317	2,328	2,333	2,333	2,342	2,344	2,350	2,354	2,360	2,371
Food stores	2,637	2,779	2,813	2,828	2,845	2,870	2,880	2,891	2,901	2,910	2,917	2,932	2,938	2,950	2,951
Automotive dealers and service stations	1,799	1,892	1,910	1,916	1,918	1,922	1,929	1,938	1,939	1,940	1,944	1,945	1,950	1,961	1,972
Eating and drinking places	5,388	5,715	5,761	5,772	5,783	5,801	5,831	5,854	5,868	5,859	5,889	5,918	5,931	5,921	5,938
Finance, insurance, and real estate	5,689	5,953	6,014	6,038	6,070	6,095	6,123	6,157	6,184	6,228	6,261	6,295	6,334	6,365	6,385
Finance	2,854	2,979	3,011	3,024	3,039	3,053	3,066	3,082	3,095	3,120	3,137	3,159	3,176	3,193	3,203
Insurance	1,757	1,830	1,846	1,852	1,862	1,868	1,878	1,889	1,900	1,910	1,918	1,927	1,945	1,952	1,962
Real estate	1,078	1,144	1,157	1,162	1,169	1,174	1,179	1,186	1,189	1,198	1,206	1,209	1,213	1,220	1,220
Services	20,797	21,974	22,212	22,313	22,415	22,501	22,585	22,638	22,707	22,825	22,924	23,072	23,176	23,242	23,296
Business services	4,057	4,452	4,542	4,567	4,604	4,631	4,660	4,687	4,698	4,750	4,755	4,792	4,835	4,845	4,885
Health services	6,122	6,310	6,350	6,375	6,401	6,424	6,447	6,471	6,497	6,511	6,543	6,571	6,601	6,634	6,656
Government	16,024	16,415	16,536	16,575	16,593	16,629	16,637	16,681	16,699	16,711	16,720	16,682	16,597	16,620	16,622
Federal	2,807	2,875	2,899	2,895	2,904	2,913	2,918	2,923	2,914	2,899	2,875	2,866	2,866	2,876	2,911
State	3,734	3,848	3,878	3,895	3,901	3,904	3,916	3,924	3,927	3,938	3,936	3,927	3,921	3,917	3,902
Local	9,482	9,692	9,759	9,785	9,788	9,812	9,803	9,839	9,849	9,859	9,885	9,880	9,810	9,827	9,809

^P = preliminary

revision.

NOTE: See notes on the data for a description of the most recent benchmark

14. Average weekly hours of production or nonsupervisory workers on private nonagricultural payrolls by industry, monthly data seasonally adjusted

Industry	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^P	Sept. ^P
PRIVATE SECTOR	35.2	34.9	34.9	34.9	34.8	34.9	35.0	34.9	34.9	34.8	34.8	34.7	34.7	34.8	34.7
CONSTRUCTION	37.8	37.7	-	-	-	-	-	-	-	-	-	-	-	-	-
MANUFACTURING	40.7	40.5	40.7	40.7	40.7	40.9	40.8	40.7	40.7	40.7	40.7	40.6	40.6	40.8	40.8
Overtime hours	3.4	3.3	3.3	3.4	3.4	3.6	3.5	3.4	3.4	3.4	3.4	3.3	3.4	3.5	3.5
Durable goods	41.4	41.2	41.3	41.3	41.3	41.6	41.5	41.4	41.4	41.3	41.2	41.2	41.1	41.4	41.5
Overtime hours	3.6	3.5	3.5	3.5	3.6	3.7	3.6	3.5	3.6	3.6	3.4	3.5	3.5	3.5	3.6
Lumber and wood products	39.9	39.9	40.1	40.2	39.9	40.2	40.4	40.0	40.2	40.3	40.3	39.9	40.1	40.2	40.3
Furniture and fixtures	39.7	39.4	39.4	39.5	39.4	39.9	40.0	39.7	39.4	39.1	39.4	39.4	39.4	39.9	40.1
Stone, clay, and glass products	42.0	41.9	42.0	42.1	41.8	41.8	42.7	41.9	41.9	42.4	42.3	42.2	42.2	42.5	42.5
Primary metal industries	41.7	41.5	41.5	41.8	41.9	42.1	41.9	42.1	41.9	41.3	41.7	41.6	41.3	41.9	42.2
Blast furnaces and basic steel products	40.7	41.1	41.1	41.6	41.9	41.9	41.7	41.8	41.7	40.5	41.5	41.1	41.2	41.7	42.6
Fabricated metal products	41.4	41.3	41.5	41.5	41.5	41.6	41.5	41.5	41.4	41.2	41.1	41.1	41.1	41.3	41.5
Machinery except electrical	41.9	41.5	41.6	41.5	41.6	41.7	41.6	41.6	41.6	41.8	41.8	41.7	41.4	41.6	41.8
Electrical and electronic equipment	41.0	40.6	40.5	40.6	40.9	41.1	41.0	40.9	41.0	41.1	41.0	41.0	41.1	41.2	41.2
Transportation equipment	42.7	42.6	42.9	42.8	42.7	43.0	42.8	42.7	42.7	42.1	41.9	42.2	42.1	42.8	42.3
Motor vehicles and equipment	43.8	43.5	43.6	43.7	43.6	44.0	43.6	43.4	43.3	41.9	41.8	42.4	42.4	43.0	42.4
Instruments and related products	41.3	41.0	40.9	40.9	41.0	41.6	41.1	41.2	41.3	41.3	40.9	41.0	40.8	40.9	40.7
Miscellaneous manufacturing	39.4	39.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Nondurable goods	39.7	39.6	39.8	39.8	39.8	40.0	39.9	39.7	39.8	39.9	39.9	39.8	39.8	39.9	39.9
Overtime hours	3.1	3.1	3.1	3.2	3.2	3.4	3.3	3.2	3.2	3.3	3.4	3.2	3.4	3.4	3.3
Food and kindred products	39.8	40.0	40.1	40.2	40.0	40.1	40.1	39.8	39.9	40.2	40.2	40.0	40.0	40.2	39.9
Tobacco manufactures	38.9	37.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Textile mill products	39.9	39.7	40.5	40.7	40.8	41.0	40.8	40.6	40.7	41.3	41.1	40.8	40.9	41.4	41.4
Apparel and other textile products	36.4	36.4	36.6	36.6	36.8	36.8	36.7	36.3	36.5	36.9	36.5	36.5	36.6	36.4	36.5
Paper and allied products	43.1	43.1	43.1	43.2	43.3	43.5	43.6	43.5	43.5	43.0	43.2	43.1	43.2	43.4	43.2
Printing and publishing	37.9	37.8	37.9	37.9	37.9	38.1	38.0	38.0	38.0	38.0	38.0	37.8	37.9	37.9	38.0
Chemicals and allied products	41.9	41.9	41.7	41.8	41.9	42.0	41.9	41.8	41.9	41.9	42.0	41.9	41.9	42.0	41.8
Petroleum and coal products	43.7	43.0	43.3	44.2	43.2	43.6	43.5	43.7	43.8	43.6	43.4	44.0	43.5	44.4	43.7
Leather and leather products	36.8	37.2	-	-	-	-	-	-	-	-	-	-	-	-	-
TRANSPORTATION AND PUBLIC UTILITIES	39.4	39.5	39.5	39.5	39.4	39.5	39.4	39.5	39.6	39.2	39.2	39.1	39.2	39.0	38.9
WHOLESALE TRADE	38.5	38.4	38.4	38.4	38.4	38.4	38.5	38.4	38.5	38.5	38.4	38.3	38.3	38.3	38.3
RETAIL TRADE	29.8	29.4	29.4	29.3	29.3	29.2	29.3	29.3	29.3	29.2	29.2	29.1	29.2	29.3	29.2
SERVICES	32.6	32.5	32.4	32.5	32.4	32.5	32.6	32.6	32.5	32.5	32.5	32.4	32.4	32.4	32.4

- Data not available.
P = preliminary

NOTE: See "Notes on the data" for a description of the most recent benchmark adjustment.

15. Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls by industry

Industry	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^P	Sept. ^P
PRIVATE SECTOR	\$8.32	\$8.57	\$8.67	\$8.64	\$8.66	\$8.71	\$8.72	\$8.74	\$8.73	\$8.72	\$8.72	\$8.71	\$8.69	\$8.69	\$8.81
Seasonally adjusted	-	-	8.62	8.63	8.65	8.70	8.68	8.71	8.73	8.72	8.73	8.74	8.73	8.75	8.77
MINING	11.63	11.98	12.05	12.00	12.07	12.27	12.24	12.32	12.35	12.43	12.44	12.50	12.46	12.45	12.49
CONSTRUCTION	12.13	12.31	12.46	12.42	12.28	12.47	12.34	12.35	12.22	12.29	12.33	12.31	12.31	12.40	12.55
MANUFACTURING	9.19	9.53	9.57	9.56	9.63	9.74	9.70	9.70	9.72	9.70	9.71	9.70	9.74	9.67	9.75
Durable goods	9.74	10.10	10.15	10.15	10.22	10.34	10.27	10.29	10.30	10.28	10.28	10.26	10.27	10.22	10.30
Lumber and wood products	8.03	8.22	8.33	8.30	8.29	8.35	8.30	8.36	8.33	8.32	8.37	8.43	8.36	8.40	8.44
Furniture and fixtures	6.84	7.17	7.27	7.29	7.32	7.38	7.36	7.31	7.35	7.36	7.39	7.46	7.44	7.46	7.52
Stone, clay, and glass products	9.57	9.84	9.91	9.87	9.91	9.95	9.96	9.94	9.93	10.00	10.04	10.04	10.06	10.07	10.10
Primary metal industries	11.47	11.68	11.69	11.61	11.77	11.84	11.81	11.96	11.99	12.00	12.02	11.94	12.06	11.86	11.96
Blast furnaces and basic steel products	12.98	13.34	13.43	13.32	13.43	13.44	13.48	13.81	13.80	13.82	13.86	13.88	14.08	13.91	14.09
Fabricated metal products	9.40	9.70	9.74	9.71	9.76	9.91	9.85	9.85	9.88	9.84	9.85	9.88	9.84	9.81	9.88
Machinery, except electrical	9.96	10.29	10.38	10.41	10.48	10.55	10.50	10.53	10.58	10.55	10.55	10.55	10.57	10.56	10.60
Electrical and electronic equipment	9.04	9.47	9.54	9.55	9.61	9.68	9.60	9.62	9.62	9.64	9.61	9.68	9.67	9.74	
Transportation equipment	12.20	12.72	12.78	12.78	12.85	13.06	12.91	12.87	12.90	12.83	12.79	12.78	12.78	12.74	12.88
Motor vehicles and equipment	12.73	13.42	13.48	13.44	13.52	13.81	13.66	13.59	13.66	13.54	13.47	13.41	13.40	13.34	13.54
Instruments and related products	8.84	9.16	9.25	9.24	9.27	9.39	9.32	9.39	9.41	9.41	9.40	9.41	9.47	9.53	9.57
Miscellaneous manufacturing	7.05	7.30	7.33	7.32	7.37	7.48	7.48	7.50	7.51	7.50	7.54	7.54	7.59	7.52	7.56
Nondurable goods	8.38	8.71	8.73	8.72	8.79	8.87	8.86	8.86	8.88	8.88	8.90	8.91	8.99	8.93	8.98
Food and kindred products	8.39	8.57	8.53	8.51	8.61	8.71	8.72	8.71	8.74	8.75	8.78	8.74	8.75	8.64	8.68
Tobacco manufactures	11.22	11.94	11.34	11.31	11.97	11.78	11.89	12.38	12.76	12.84	13.38	13.68	13.48	13.41	12.51
Textile mill products	6.46	6.71	6.75	6.76	6.79	6.83	6.85	6.83	6.86	6.87	6.88	6.87	6.90	6.98	7.04
Apparel and other textile products	5.55	5.73	5.75	5.74	5.75	5.80	5.82	5.79	5.80	5.81	5.78	5.79	5.76	5.79	5.87
Paper and allied products	10.41	10.82	10.91	10.91	10.97	11.07	11.02	10.99	11.03	11.05	11.12	11.15	11.31	11.18	11.17
Printing and publishing	9.41	9.71	9.81	9.78	9.83	9.92	9.85	9.86	9.90	9.87	9.91	9.88	9.96	10.00	10.10
Chemicals and allied products	11.07	11.56	11.65	11.70	11.80	11.85	11.86	11.81	11.78	11.82	11.89	11.94	12.04	11.98	12.03
Petroleum and coal products	13.44	14.06	14.09	13.99	14.07	14.24	14.26	14.21	14.22	14.16	14.02	14.14	14.16	14.08	14.50
Rubber and miscellaneous plastics products	8.29	8.54	8.56	8.54	8.63	8.73	8.69	8.69	8.72	8.68	8.75	8.75	8.82	8.81	8.81
Leather and leather products	5.71	5.82	5.83	5.77	5.83	5.83	5.86	5.83	5.86	5.89	5.88	5.88	5.89	5.89	5.94
TRANSPORTATION AND PUBLIC UTILITIES	11.12	11.40	11.54	11.48	11.59	11.61	11.59	11.64	11.62	11.55	11.54	11.57	11.61	11.58	11.67
WHOLESALE TRADE	8.89	9.16	9.22	9.16	9.23	9.33	9.28	9.36	9.33	9.29	9.29	9.32	9.30	9.31	9.35
RETAIL TRADE	5.85	5.94	5.98	5.95	5.97	5.99	6.03	6.04	6.03	6.01	6.00	5.99	5.97	5.95	6.04
FINANCE, INSURANCE, AND REAL ESTATE	7.63	7.94	8.04	8.01	8.06	8.15	8.14	8.28	8.30	8.29	8.31	8.37	8.30	8.34	8.41
SERVICES	7.59	7.89	7.99	7.99	8.05	8.12	8.12	8.17	8.18	8.12	8.10	8.10	8.04	8.04	8.20

- Data not available.

P = preliminary

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

16. Average weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls by industry

Industry	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^P	Sept. ^P
PRIVATE SECTOR															
Current dollars	\$292.86	\$299.09	\$303.45	\$301.54	\$301.37	\$306.59	\$302.58	\$300.66	\$302.93	\$301.71	\$302.58	\$303.98	\$304.15	\$305.02	\$307.47
Seasonally adjusted	-	-	300.84	301.19	301.02	303.63	303.80	303.98	304.68	303.46	303.80	303.28	302.93	304.50	304.32
Constant (1977) dollars	172.78	170.42	171.83	170.36	169.59	172.05	169.32	168.82	171.05	170.94	170.85	170.78	170.97	171.17	-
MINING	503.58	519.93	526.59	518.40	521.42	537.43	543.46	522.37	522.41	522.06	519.99	525.00	518.34	527.88	533.32
CONSTRUCTION	458.51	464.09	479.71	475.69	450.68	460.14	459.05	434.72	444.81	462.10	467.31	465.32	471.47	474.92	485.69
MANUFACTURING															
Current dollars	374.03	385.97	390.46	390.05	393.87	406.16	394.79	390.91	395.60	392.85	394.23	395.76	391.55	393.57	399.75
Constant (1977) dollars	220.67	219.93	221.10	220.37	221.65	227.92	220.92	219.49	223.38	222.58	222.60	222.34	220.10	220.86	-
Durable goods	403.24	416.12	420.21	419.20	424.13	439.45	425.18	421.89	426.42	423.54	423.54	424.76	417.99	421.06	428.48
Lumber and wood products	320.40	327.98	338.20	335.32	327.46	335.67	329.51	328.55	333.20	334.46	338.99	342.26	334.40	341.04	345.20
Furniture and fixtures	271.55	282.50	289.35	291.60	291.34	303.32	289.98	284.36	288.12	286.30	288.21	294.67	287.93	298.40	304.56
Stone, clay, and glass products	401.94	412.30	421.18	419.48	414.24	414.92	414.34	403.56	412.10	425.00	428.71	429.71	427.55	432.00	435.31
Primary metal industries	478.30	484.72	486.30	480.65	491.99	504.38	493.66	503.52	504.78	499.20	501.23	499.09	495.67	492.19	505.91
Blast furnaces and basic steel products	528.29	548.27	553.32	544.79	557.35	564.48	556.72	578.64	576.84	569.38	576.58	577.41	582.91	575.87	600.23
Fabricated metal products	389.16	400.61	405.18	403.94	406.02	422.17	407.79	403.85	409.03	403.44	404.84	408.04	398.52	403.19	411.01
Machinery, except electrical	417.32	427.04	431.81	430.97	438.06	452.60	437.85	437.00	442.24	437.83	437.83	439.94	431.26	435.07	443.08
Electrical and electronic equipment	370.64	384.48	387.32	387.73	396.89	408.50	394.56	389.76	395.38	392.50	393.31	394.01	391.07	395.50	402.26
Transportation equipment	520.94	541.87	544.43	545.71	551.27	577.25	555.13	545.69	552.12	542.71	537.18	540.59	530.37	533.81	540.96
Motor vehicles and equipment	557.57	583.77	585.03	585.98	588.12	625.59	595.58	583.01	592.84	574.10	567.09	572.61	560.12	557.61	571.39
Instruments and related products	365.09	375.56	380.18	376.07	382.85	400.01	383.05	384.99	389.57	385.81	382.58	385.81	382.59	386.92	391.41
Miscellaneous manufacturing	277.77	287.62	293.20	295.00	296.27	304.44	297.70	294.75	299.65	297.75	297.08	298.58	294.49	295.54	299.38
Nondurable goods	332.69	344.92	349.20	347.93	351.60	359.24	352.63	347.31	352.54	351.65	354.22	355.51	356.00	357.20	360.10
Food and kindred products	333.92	342.80	348.02	343.80	346.12	354.50	347.93	339.69	344.36	346.50	352.08	350.47	350.00	350.78	352.41
Tobacco manufactures	436.46	444.17	434.32	444.48	435.71	448.82	448.25	453.11	478.50	469.94	504.43	523.94	483.93	485.44	480.38
Textile mill products	257.75	266.39	275.40	276.48	279.75	283.45	278.80	274.57	278.52	278.92	282.08	283.04	278.07	290.37	293.57
Apparel and other textile products	202.02	208.57	210.45	211.23	212.75	215.18	213.01	207.28	211.70	211.48	210.97	213.65	209.09	211.34	214.26
Paper and allied products	448.67	466.34	473.49	472.40	477.20	490.40	479.37	472.57	477.60	474.05	479.27	480.57	486.33	482.98	485.90
Printing and publishing	356.64	367.04	374.74	371.64	375.51	384.90	371.35	370.74	377.19	374.07	374.60	370.50	374.50	380.00	386.83
Chemicals and allied products	463.83	484.36	486.97	486.72	495.60	503.63	495.75	492.48	494.76	495.26	499.38	502.67	502.07	499.57	502.85
Petroleum and coal products	587.33	604.58	621.37	619.76	610.64	622.29	616.03	612.45	621.41	615.96	605.66	622.16	618.79	625.15	643.80
Rubber and miscellaneous plastics products	345.69	350.99	351.82	350.99	356.42	366.66	359.77	356.29	360.14	356.75	360.50	361.38	357.21	362.97	364.73
Leather and leather products	210.13	216.50	219.21	216.95	219.21	220.96	217.41	209.88	212.72	213.81	215.80	221.68	217.93	215.57	216.81
TRANSPORTATION AND PUBLIC UTILITIES	438.13	450.30	458.14	453.46	457.81	460.92	452.01	456.29	457.83	450.45	450.06	455.86	457.43	455.09	456.30
WHOLESALE TRADE	342.27	351.74	354.97	351.74	355.36	360.14	355.42	355.68	357.34	355.81	356.74	358.82	358.05	357.50	359.04
RETAIL TRADE	174.33	174.64	175.81	173.74	173.73	178.50	173.06	172.74	174.27	173.69	174.60	176.71	178.50	178.50	176.37
FINANCE, INSURANCE, AND REAL ESTATE	278.50	289.02	293.46	290.76	291.77	299.11	296.30	304.70	304.61	301.76	301.65	306.34	302.95	306.08	306.97
SERVICES	247.43	256.43	258.88	259.68	260.02	263.90	263.09	264.71	265.03	263.09	262.44	264.06	263.71	263.71	265.68

- Data not available.
P = preliminary

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

17. The Hourly Earnings Index for production or nonsupervisory workers on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Sept. 1985	July 1986	Aug. 1986 ^P	Sept. 1986 ^P	Sept. 1985	May 1986	June 1986	July 1986	Aug. 1986	Sept. 1986 ^P
PRIVATE SECTOR (in current dollars)	166.7	168.5	168.4	170.0	166.4	168.7	169.2	168.9	169.2	169.7
Mining ¹	179.4	181.7	180.8	181.4	-	-	-	-	-	-
Construction	152.5	150.3	151.4	153.3	150.7	151.0	151.4	150.8	151.4	151.5
Manufacturing	169.3	172.8	172.2	172.8	169.5	172.5	172.5	172.7	173.0	173.0
Transportation and public utilities	168.6	169.3	169.2	170.8	167.9	170.1	170.7	170.3	169.7	170.1
Wholesale trade ¹	170.2	171.4	171.6	172.5	-	-	-	-	-	-
Retail trade	157.0	157.4	157.1	158.9	156.8	157.2	157.8	157.7	158.2	158.8
Finance, insurance, and real estate ¹	174.0	179.1	179.9	181.2	-	-	-	-	-	-
Services	170.5	172.4	172.5	175.6	169.8	173.4	174.3	173.4	174.3	174.9
PRIVATE SECTOR (in constant dollars)	94.4	94.7	94.5	-	94.4	95.4	95.2	95.1	95.1	-

¹ This series is not seasonally adjusted because the seasonal component is small relative to the trend-cycle, irregular components, or both, and consequently cannot be separated with sufficient precision.
- Data not available.

^P = preliminary.
NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

18. Indexes of diffusion: industries in which employment increased, data seasonally adjusted

(In percent)

Time span and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span												
1984	67.8	72.7	67.6	67.6	62.4	65.4	62.2	55.9	50.5	63.0	53.5	57.0
1985	52.4	47.8	53.8	49.2	51.6	47.0	56.2	56.8	50.8	61.9	57.6	59.5
1986	59.7	53.5	45.1	54.1	49.2	46.2	54.6	55.7	51.4	-	-	-
Over 3-month span												
1984	76.5	75.1	75.9	71.4	71.6	68.1	63.2	58.1	56.8	53.5	58.1	53.0
1985	51.1	49.7	46.2	46.2	45.1	51.4	49.7	51.1	55.1	55.9	61.4	60.5
1986	58.1	54.3	51.1	49.7	48.4	44.9	48.6	52.7	-	-	-	-
Over 6-month span												
1984	78.1	76.5	77.0	75.1	69.2	65.1	63.2	59.2	58.6	53.2	49.7	54.9
1985	49.2	47.8	43.0	45.9	44.3	44.3	48.9	50.8	54.1	57.0	57.0	55.9
1986	53.8	53.8	47.6	45.9	46.8	47.8	-	-	-	-	-	-
Over 12-month span												
1984	81.1	78.1	72.2	72.2	68.9	67.8	65.7	62.7	59.7	54.6	51.4	48.6
1985	46.2	45.7	46.8	43.8	44.9	47.3	47.6	48.9	47.3	49.5	48.9	48.6
1986	50.3	50.8	50.5	-	-	-	-	-	-	-	-	-

- Data not available.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the

spans. Data for the most recent months shown in each span are preliminary. See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

19. Annual data: Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	1977	1978	1979	1980	1981	1982	1983	1984	1985
Noninstitutional population	160,689	163,541	166,460	169,349	171,775	173,939	175,891	178,080	179,912
Labor force									
Total (number)	100,665	103,882	106,559	108,544	110,315	111,872	113,226	115,241	117,167
Percent of population	62.6	63.5	64.0	64.1	64.2	64.3	64.4	64.7	65.1
Employed									
Total (number)	93,673	97,679	100,421	100,907	102,042	101,194	102,510	106,702	108,856
Percent of population	58.3	59.7	60.3	59.6	59.4	58.2	58.3	59.9	60.5
Resident Armed Forces	1,656	1,631	1,597	1,604	1,645	1,668	1,676	1,697	1,706
Civilian									
Total	92,017	96,048	98,824	99,303	100,397	99,526	100,834	105,005	107,150
Agriculture	3,283	3,387	3,347	3,364	3,368	3,401	3,383	3,321	3,179
Nonagricultural industries	88,734	92,661	95,477	95,938	97,030	96,125	97,450	101,685	103,971
Unemployed									
Total (number)	6,991	6,202	6,137	7,637	8,273	10,678	10,717	8,539	8,312
Percent of labor force	6.9	6.0	5.8	7.0	7.5	9.5	9.5	7.4	7.1
Not in labor force (number)	60,025	59,659	59,900	60,806	61,460	62,067	62,665	62,839	62,744

20. Annual data: Employment levels by industry

(Numbers in thousands)

Industry	1977	1978	1979	1980	1981	1982	1983	1984	1985
Total employment	82,471	86,697	89,823	90,406	91,156	89,566	90,200	94,496	97,614
Private sector	67,344	71,026	73,876	74,166	75,126	73,729	74,330	78,472	81,199
Goods-producing	24,346	25,585	26,461	25,658	25,497	23,813	23,334	24,727	24,930
Mining	813	851	958	1,027	1,139	1,128	952	966	930
Construction	3,851	4,229	4,463	4,346	4,188	3,905	3,948	4,383	4,687
Manufacturing	19,682	20,505	21,040	20,285	20,170	18,781	18,434	19,378	19,314
Service-producing	58,125	61,113	63,363	64,748	65,659	65,753	66,866	69,769	72,684
Transportation and public utilities	4,713	4,923	5,136	5,146	5,165	5,082	4,954	5,159	5,242
Wholesale trade	4,708	4,969	5,204	5,275	5,358	5,278	5,268	5,555	5,740
Retail trade	13,808	14,573	14,989	15,035	15,189	15,179	15,613	16,545	17,360
Finance, insurance, and real estate	4,467	4,724	4,975	5,160	5,298	5,341	5,468	5,689	5,953
Services	15,303	16,252	17,112	17,890	18,619	19,036	19,694	20,797	21,974
Government	15,127	15,672	15,947	16,241	16,031	15,837	15,869	16,024	16,415
Federal	2,727	2,753	2,773	2,866	2,772	2,739	2,774	2,807	2,875
State	3,377	3,474	3,541	3,610	3,640	3,640	3,662	3,734	3,848
Local	9,023	9,446	9,633	9,765	9,619	9,458	9,434	9,482	9,692

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.

21. Annual data: Average hours and earnings of production or nonsupervisory workers on nonagricultural payrolls, by industry

Industry	1977	1978	1979	1980	1981	1982	1983	1984	1985
Private sector									
Average weekly hours	36.0	35.8	35.7	35.3	35.2	34.8	35.0	35.2	34.9
Average hourly earnings (in dollars)	5.25	5.69	6.16	6.66	7.25	7.68	8.02	8.32	8.57
Average weekly earnings (in dollars)	189.00	203.70	219.91	235.10	255.20	267.26	280.70	292.86	299.09
Mining									
Average weekly hours	43.4	43.4	43.0	43.3	43.7	42.7	42.5	43.3	43.4
Average hourly earnings (in dollars)	6.94	7.67	8.49	9.17	10.04	10.77	11.28	11.63	11.98
Average weekly earnings (in dollars)	301.20	332.88	365.07	397.06	438.75	459.88	479.40	503.58	519.93
Construction									
Average weekly hours	36.5	36.8	37.0	37.0	36.9	36.7	37.1	37.8	37.7
Average hourly earnings (in dollars)	8.10	8.66	9.27	9.94	10.82	11.63	11.94	12.13	12.31
Average weekly earnings (in dollars)	295.65	318.69	342.99	367.78	399.26	426.82	442.97	458.51	464.09
Manufacturing									
Average weekly hours	40.3	40.4	40.2	39.7	39.8	38.9	40.1	40.7	40.5
Average hourly earnings (in dollars)	5.68	6.17	6.70	7.27	7.99	8.49	8.83	9.19	9.53
Average weekly earnings (in dollars)	228.90	249.27	269.34	288.62	318.00	330.26	354.08	374.03	385.97
Transportation and public utilities									
Average weekly hours	39.9	40.0	39.9	39.6	39.4	39.0	39.0	39.4	39.5
Average hourly earnings (in dollars)	6.99	7.57	8.16	8.87	9.70	10.32	10.79	11.12	11.40
Average weekly earnings (in dollars)	278.90	302.80	325.58	351.25	382.18	402.48	420.81	438.13	450.30
Wholesale trade									
Average weekly hours	38.8	38.8	38.8	38.5	38.5	38.3	38.5	38.5	38.4
Average hourly earnings (in dollars)	5.39	5.88	6.39	6.96	7.56	8.09	8.55	8.89	9.16
Average weekly earnings (in dollars)	209.13	228.14	247.93	267.96	291.06	309.85	329.18	342.27	351.74
Retail trade									
Average weekly hours	31.6	31.0	30.6	30.2	30.1	29.9	29.8	29.8	29.4
Average hourly earnings (in dollars)	3.85	4.20	4.53	4.88	5.25	5.48	5.74	5.85	5.94
Average weekly earnings (in dollars)	121.66	130.20	138.62	147.38	158.03	163.85	171.05	174.33	174.64
Finance, insurance, and real estate									
Average weekly hours	36.4	36.4	36.2	36.2	36.3	36.2	36.2	36.5	36.4
Average hourly earnings (in dollars)	4.54	4.89	5.27	5.79	6.31	6.78	7.29	7.63	7.94
Average weekly earnings (in dollars)	165.26	178.00	190.77	209.60	229.05	245.44	263.90	278.50	289.02
Services									
Average weekly hours	33.0	32.8	32.7	32.6	32.6	32.6	32.7	32.6	32.5
Average hourly earnings (in dollars)	4.65	4.99	5.36	5.85	6.41	6.92	7.31	7.59	7.89
Average weekly earnings (in dollars)	153.45	163.67	175.27	190.71	208.97	225.59	239.04	247.43	256.43

22. Employment Cost Index, compensation,¹ by occupation and industry group

(June 1981 = 100)

Series	1984			1985				1986		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 1986	
Civilian workers²	120.8	122.4	123.9	125.5	126.4	128.4	129.2	130.6	131.5	0.7	4.0
Workers, by occupational group:											
White-collar workers	122.1	124.0	125.5	127.3	128.3	130.7	131.6	133.1	134.2	.8	4.6
Blue-collar workers	118.6	119.6	120.9	122.2	123.1	124.4	124.9	126.2	126.8	.5	3.0
Service occupations	122.1	124.6	126.8	127.8	128.0	130.9	131.8	133.1	133.7	.5	4.5
Workers, by industry division:											
Manufacturing	119.1	120.4	122.0	123.9	124.6	125.5	126.0	127.7	128.7	.8	3.3
Nonmanufacturing	121.6	123.3	124.8	126.2	127.2	129.7	130.6	131.9	132.8	.7	4.4
Services	125.5	128.8	130.9	131.9	132.6	136.4	137.1	138.8	139.4	.4	5.1
Public administration ³	123.7	126.9	128.6	130.1	130.3	134.2	134.8	136.8	138.0	.9	5.9
Private industry workers	120.1	121.1	122.7	124.2	125.2	126.8	127.5	128.9	129.9	.8	3.8
Workers, by occupational group:											
White-collar workers	121.4	122.4	123.9	125.8	127.1	128.8	129.8	131.3	132.5	.9	4.2
Blue-collar workers	118.4	119.3	120.6	121.9	122.8	124.0	124.4	125.7	126.3	.5	2.9
Service occupations	121.2	123.2	125.7	126.3	126.5	128.8	129.5	130.9	131.1	.2	3.6
Workers, by industry division:											
Manufacturing	119.1	120.4	122.0	123.9	124.6	125.5	126.0	127.7	128.7	.8	3.3
Nonmanufacturing	120.7	121.6	123.1	124.4	125.6	127.6	128.4	129.7	130.6	.7	4.0
State and local government workers	124.4	128.8	130.1	131.7	132.0	136.5	137.5	138.9	139.7	.6	5.8
Workers, by occupational group:											
White-collar workers	125.0	129.7	131.1	132.5	132.9	137.6	138.6	140.0	140.5	.4	5.7
Blue-collar workers	122.3	125.0	125.9	128.1	128.5	131.9	132.7	134.7	136.3	1.2	6.1
Workers, by industry division:											
Services	125.0	129.9	131.3	132.8	133.2	137.9	139.1	140.4	140.8	.3	5.7
Schools	124.7	130.6	132.0	133.4	133.7	139.1	140.3	141.5	141.7	.1	6.0
Elementary and secondary	125.7	132.1	133.5	134.4	134.6	140.9	142.0	143.0	143.2	.1	6.4
Hospitals and other services ⁴	125.7	127.9	129.2	131.1	131.5	134.1	135.2	136.8	137.9	.8	4.9
Public administration ³	123.7	126.9	128.6	130.1	130.3	134.2	134.8	136.8	138.0	.9	5.9

¹ Cost (cents-per-hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.
² Consist of private industry workers (excluding farm and household workers)

and State and local government (excluding Federal Government) workers.
³ Consists of legislative, judicial, administrative, and regulatory activities.
⁴ Includes, for example, library, social, and health services.

23. Employment Cost Index, wages and salaries, by occupation and industry group

(June 1981=100)

Series	1984			1985				1986		Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
										June 1986	
Civilian workers ¹	118.8	120.3	121.7	123.1	124.2	126.3	127.0	128.3	129.3	0.8	4.1
Workers, by occupational group:											
White-collar workers	120.4	122.2	123.5	125.2	126.4	128.8	129.8	131.2	132.4	.9	4.7
Blue-collar workers	116.1	117.0	118.2	119.3	120.5	122.0	122.3	123.4	124.1	.6	3.0
Service occupations	119.8	122.3	124.3	124.8	125.3	128.0	128.6	129.8	130.0	.2	3.8
Workers, by industry division											
Manufacturing	116.8	118.0	119.5	121.0	122.3	123.2	123.8	125.3	126.5	1.0	3.4
Nonmanufacturing	119.7	121.3	122.6	123.9	125.0	127.6	128.4	129.6	130.4	.6	4.3
Services	123.8	127.2	128.9	129.7	130.5	134.2	134.8	136.4	137.0	.4	5.0
Public administration ²	121.3	124.4	125.7	127.0	127.2	131.4	132.0	133.8	134.6	.6	5.8
Private industry workers	118.2	119.2	120.6	122.0	123.3	124.9	125.6	126.8	127.9	.9	3.7
Workers, by occupational group:											
White-collar workers	119.9	120.9	122.3	124.0	125.5	127.3	128.3	129.6	131.1	1.2	4.5
Professional specialty and technical occupations	123.8	125.2	127.3	127.7	128.7	131.2	131.5	132.7	134.0	1.0	4.1
Executive, administrative, and managerial occupations	119.2	121.0	122.2	123.8	126.5	127.7	128.4	130.5	132.1	1.2	4.4
Sales occupations	111.9	110.5	111.6	116.3	117.4	119.3	122.5	122.4	124.3	1.6	5.9
Administrative support occupations, including clerical	120.7	122.0	122.9	124.7	125.6	127.1	127.9	129.6	130.8	.9	4.1
Blue-collar workers	115.9	116.7	118.0	119.1	120.3	121.7	122.0	123.1	123.7	.5	2.8
Precision production, craft, and repair occupations	117.3	118.0	119.4	120.8	122.0	123.7	123.8	125.3	125.7	.3	3.0
Machine operators, assemblers, and inspectors	115.8	116.6	117.9	118.9	120.1	121.1	121.6	122.6	123.6	.8	2.9
Transportation and material moving occupations	112.7	113.4	114.0	114.5	115.7	117.7	117.8	118.0	118.9	.8	2.8
Handlers, equipment cleaners, helpers, and laborers	114.1	114.7	115.9	116.7	118.5	118.6	119.8	120.0	120.3	.3	1.5
Service occupations	119.3	121.2	123.7	123.8	124.4	126.3	126.6	128.0	128.0	.0	2.9
Workers, by industry division:											
Manufacturing	116.8	118.0	119.5	121.0	122.3	123.2	123.8	125.3	126.5	1.0	3.4
Durables	116.6	117.7	119.1	120.6	122.0	122.7	123.4	124.8	125.8	.8	3.1
Nondurables	117.1	118.6	120.2	121.6	122.6	124.0	124.6	126.1	127.9	1.4	4.3
Nonmanufacturing	119.0	119.9	121.2	122.6	123.9	125.9	126.6	127.7	128.7	.8	3.9
Construction	114.0	114.3	114.4	115.5	116.6	117.3	117.9	118.3	119.8	1.3	2.7
Transportation and public utilities	119.3	119.9	120.7	121.7	122.8	124.8	125.2	126.3	126.6	.2	3.1
Wholesale and retail trade	116.0	116.5	118.1	118.8	121.1	122.7	123.7	124.5	125.8	1.0	3.9
Wholesale trade	120.0	120.7	122.9	123.7	126.8	127.7	128.3	129.7	131.2	1.2	3.5
Retail trade	114.4	114.9	116.2	116.9	118.9	120.8	121.9	122.5	123.7	1.0	4.0
Finance, insurance, and real estate	116.9	115.3	115.8	122.0	121.7	124.1	126.5	126.6	128.0	1.1	5.2
Services	124.7	127.1	129.5	129.9	131.0	133.9	134.1	136.2	136.9	.5	4.5
State and local government workers	122.0	126.1	127.1	128.4	128.7	133.2	134.2	135.5	136.0	.4	5.7
Workers, by occupational group:											
White-collar workers	122.5	127.1	128.0	129.3	129.6	134.3	135.3	136.6	137.0	.3	5.7
Blue-collar workers	119.6	121.9	122.5	124.2	124.5	127.9	128.4	130.4	131.9	1.2	5.9
Workers, by industry division											
Services	122.5	127.2	128.1	129.4	129.7	134.5	135.6	136.8	137.1	.2	5.7
Schools	122.3	127.8	128.7	129.9	130.2	135.8	137.0	138.0	138.2	.1	6.1
Elementary and secondary	123.0	129.3	130.2	130.8	131.1	137.5	138.5	139.4	139.4	.0	6.3
Hospitals and other services ³	123.1	125.1	125.9	127.7	128.0	130.2	130.9	132.4	133.3	.7	4.1
Public administration ²	121.3	124.4	125.7	127.0	127.2	131.4	132.0	133.8	134.6	.6	5.8

¹ Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

² Consists of legislative, judicial, administrative, and regulatory activities.

³ Includes, for example, library, social and health services.

24. Employment Cost Index, private nonfarm workers, by bargaining status, region, and area size

(June 1981 = 100)

Series	1984			1985			1986			Percent change	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	3 months ended	12 months ended
	June 1986										
COMPENSATION											
Workers, by bargaining status¹											
Union	121.7	122.6	123.9	124.8	125.5	126.5	127.1	128.4	128.7	0.2	2.5
Manufacturing	120.5	121.6	123.2	124.2	124.2	125.0	125.5	127.0	126.9	-.1	2.2
Nonmanufacturing	122.8	123.6	124.5	125.3	126.6	127.8	128.6	129.7	130.4	.5	3.0
Nonunion	119.2	120.3	121.9	123.8	125.0	126.8	127.5	129.0	130.2	.9	4.2
Manufacturing	117.9	119.3	120.8	123.6	124.8	125.7	126.3	128.1	129.7	1.2	3.9
Nonmanufacturing	119.8	120.7	122.4	123.9	125.1	127.3	128.1	129.5	130.4	.7	4.2
Workers, by region¹											
Northeast	120.7	122.4	123.8	125.1	126.4	128.8	129.9	131.6	133.3	1.3	5.5
South	120.7	120.7	122.2	124.2	125.2	126.5	127.2	128.7	129.6	.7	3.5
Midwest (formerly North Central)	117.9	119.7	120.8	122.0	122.7	124.2	124.6	125.9	126.2	.2	2.9
West	122.2	122.5	124.9	126.8	127.9	129.1	129.8	130.8	131.6	.6	2.9
Workers, by area size¹											
Metropolitan areas	120.6	121.5	123.2	124.7	125.7	127.3	128.1	129.5	130.5	.8	3.8
Other areas	117.4	119.0	119.8	121.4	122.5	123.9	123.9	125.5	126.4	.7	3.2
WAGES AND SALARIES											
Workers, by bargaining status¹											
Union	119.0	119.8	120.9	121.7	123.0	124.1	124.7	125.6	126.1	.4	2.5
Manufacturing	117.1	118.1	119.5	120.4	121.7	122.8	123.3	124.2	124.6	.3	2.4
Nonmanufacturing	120.7	121.3	122.1	122.8	124.1	125.3	125.9	126.9	127.4	.4	2.7
Nonunion	117.8	118.8	120.4	122.1	123.4	125.2	125.9	127.3	128.5	.9	4.1
Manufacturing	116.5	117.9	119.5	121.5	122.8	123.7	124.4	126.1	127.7	1.3	4.0
Nonmanufacturing	118.3	119.2	120.7	122.3	123.6	125.9	126.6	127.8	128.9	.9	4.3
Workers, by region¹											
Northeast	118.9	120.5	121.9	123.0	124.6	126.8	128.1	129.2	131.3	1.6	5.4
South	119.0	119.0	120.2	122.3	123.4	124.8	125.4	126.8	127.8	.8	3.6
Midwest (formerly North Central)	116.0	117.8	118.7	119.6	121.1	122.5	122.9	124.2	124.4	.2	2.7
West	119.6	120.0	122.5	124.0	125.1	126.6	127.1	128.1	128.9	.6	3.0
Workers, by area size¹											
Metropolitan areas	118.6	119.5	121.0	122.4	123.8	125.5	126.3	127.4	128.5	.9	3.8
Other areas	116.0	117.5	118.3	119.6	120.6	121.9	122.0	123.6	124.5	.7	3.2

¹ The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the

Monthly Labor Review Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

25. Specified compensation and wage adjustments from contract settlements, and effective wage adjustments, private industry collective bargaining situations covering 1,000 workers or more (in percent)

Measure	Annual average		Quarterly average							
	1984	1985	1984		1985				1986	
			III	IV	I	II	III	IV	I	II
Specified adjustments:										
Total compensation ¹ adjustments, ² settlements covering 5,000 workers or more:										
First year of contract	3.6	2.6	2.7	3.7	3.6	3.5	2.0	2.0	0.4	0.7
Annual rate over life of contract	2.8	2.7	3.1	2.0	2.7	3.4	3.0	1.4	1.3	1.6
Wage adjustments, settlements covering 1,000 workers or more:										
First year of contract	2.4	2.3	2.1	2.3	3.3	2.5	2.0	2.1	1.0	1.3
Annual rate over life of contract	2.4	2.7	2.6	1.5	3.2	2.8	3.1	1.9	1.6	2.0
Effective adjustments:										
Total effective wage adjustment ³	3.7	3.3	1.2	.7	.7	.8	1.2	.5	.6	.7
From settlements reached in period .....	.8	.7	.2	.3	.1	.2	.2	.1	.0	.2
Deferred from settlements reached in earlier periods	2.0	1.8	.7	.2	.6	.5	.5	.2	.4	.6
From cost-of-living-adjustments clauses .....	.9	.7	.3	.2	.1	.1	.4	.1	.2	.0

¹ Compensation includes wages, salaries, and employers' cost of employee benefits when contract is negotiated.

² Adjustments are the net result of increases, decreases, and no changes in

compensation or wages.

³ Because of rounding total may not equal sum of parts.

P = preliminary.

26. Average specified compensation and wage adjustments, major collective bargaining settlements in private industry situations covering 1,000 workers or more during 4-quarter periods (in percent)

Measure	Average for four quarters ending--							
	1984		1985				1986	
	III	IV	I	II	III	IV	I	II
Specified total compensation adjustments, settlements covering 5,000 workers or more, all industries:								
First year of contract	4.2	3.6	3.4	3.4	3.1	2.6	2.3	1.5
Annual rate over life of contract	3.2	2.8	2.6	2.7	2.7	2.7	2.6	2.0
Specified wage adjustments, settlements covering 1,000 workers or more:								
All industries								
First year of contract	3.2	2.4	2.4	2.4	2.4	2.3	2.0	1.7
Contracts with COLA clauses	4.5	2.9	2.5	2.3	1.9	1.6	1.6	1.6
Contracts without COLA clauses	2.3	2.1	2.4	2.4	2.7	2.7	2.2	1.7
Annual rate over life of contract	2.8	2.4	2.3	2.4	2.5	2.7	2.5	2.3
Contracts with COLA clauses	2.8	1.8	1.3	1.5	1.8	2.5	2.5	2.5
Contracts without COLA clauses	2.8	2.7	2.8	2.8	3.0	2.8	2.5	2.2
Manufacturing								
First year of contract	2.6	2.3	2.1	2.0	1.5	.8	.9	.1
Contracts with COLA clauses	1.5	2.1	2.0	1.9	1.5	.8	.8	.7
Contracts without COLA clauses	3.7	2.9	2.5	2.2	1.5	.9	.9	-.4
Annual rate over life of contract	2.8	1.5	1.4	1.5	1.6	1.8	1.8	1.4
Contracts with COLA clauses	1.8	1.0	.9	1.0	1.4	2.1	2.1	2.0
Contracts without COLA clauses	3.8	3.3	3.2	3.0	2.4	1.6	1.5	.9
Nonmanufacturing								
First year of contract	3.3	2.5	2.6	2.7	3.2	3.3	2.8	2.7
Contracts with COLA clauses	5.4	5.5	5.1	4.3	4.0	3.6	3.5	3.2
Contracts without COLA clauses	2.1	2.0	2.4	2.5	3.0	3.3	2.7	2.6
Annual rate over life of contract	2.8	2.9	2.8	2.9	3.3	3.3	3.0	2.9
Contracts with COLA clauses	3.1	4.8	4.0	3.8	3.9	3.6	3.6	3.3
Contracts without COLA clauses	2.6	2.6	2.7	2.8	3.2	3.3	2.9	2.8
Construction								
First year of contract .....	.9	.5	.9	1.1	1.0	1.5	1.7	2.4
Contracts with COLA clauses	4.0	4.0	4.6	9.2	(¹)	(¹)	(¹)	.7
Contracts without COLA clauses .....	.9	.4	.8	1.0	(¹)	(¹)	(¹)	2.5
Annual rate over life of contract	1.4	1.0	1.4	1.7	1.7	2.1	2.2	2.6
Contracts with COLA clauses	1.4	1.4	1.7	4.6	(¹)	(¹)	(¹)	1.1
Contracts without COLA clauses	1.4	1.0	1.4	1.7	(¹)	(¹)	(¹)	2.6

¹ Data do not meet publication standards.

P = preliminary.

27. Average effective wage adjustments, private industry collective bargaining situations covering 1,000 workers or more during 4-quarter periods (in percent)

Effective wage adjustment	Average for four quarters ending--						
	1984	1985				1986	
	IV	I	II	III	IV	I	II ^P
For all workers:¹							
Total	3.7	3.6	3.5	3.5	3.3	3.1	2.9
From settlements reached in period .....	.8	.7	.9	.9	.7	.6	.5
Deferred from settlements reached in earlier period	2.0	2.2	1.9	1.8	1.8	1.7	1.8
From cost-of-living-adjustments clauses .....	.9	.7	.7	.8	.7	.8	.7
For workers receiving changes:							
Total	4.4	4.5	4.2	4.3	4.1	4.0	3.8
From settlements reached in period	3.0	2.9	2.9	2.8	3.4	2.9	2.5
Deferred from settlements reached in earlier period	4.0	4.2	3.9	3.7	3.7	3.5	3.4
From cost-of-living-adjustments clauses	2.7	2.3	2.3	2.8	2.2	2.5	2.1

¹ Because of rounding total may not equal sum of parts.

^P = preliminary.

28. Specified compensation and wage adjustments from contract settlements, and effective wage adjustments, State and local government collective bargaining situations covering 1,000 workers or more (in percent)

Measure	Annual average		First 6 months 1986 ^P
	1984	1985	
Specified adjustments:			
Total compensation ¹ adjustments, ² settlements covering 5,000 workers or more:			
First year of contract	5.2	4.2	6.7
Annual rate over life of contract	5.4	5.1	6.4
Wage adjustments, settlements covering 1,000 workers or more:			
First year of contract	4.8	4.6	6.1
Annual rate over life of contract	5.1	5.4	6.0
Effective adjustments:			
Total effective wage adjustment ³	5.0	5.7	1.8
From settlements reached in period	1.9	4.1	0.6
Deferred from settlements reached in earlier periods	3.1	1.6	1.2
From cost-of-living-adjustment clauses	(*)	(*)	(*)

¹ Compensation includes wages, salaries, and employers' cost of employee benefits when contract is negotiated.

² Adjustments are the net result of increases, decreases, and no changes in compensation or wages.

³ Because of rounding total may not equal sum of parts.

⁴ Less than 0.05 percent.

^P = preliminary.

29. Work stoppages involving 1,000 workers or more

Measure	Annual totals		1985				1986 ^P								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Number of stoppages:															
Beginning in period	62	54	11	6	3	2	4	3	2	4	6	11	13	10	5
In effect during period	68	61	20	20	13	9	7	7	8	8	10	15	22	22	16
Workers involved:															
Beginning in period (in thousands)	376.0	323.9	69.5	76.6	26.2	8.2	7.6	24.0	11.2	6.1	28.6	198.0	46.7	113.3	32.4
In effect during period (in thousands)	391.0	584.1	93.9	119.3	47.0	38.0	12.0	28.4	38.6	17.6	41.2	205.9	66.3	144.8	84.0
Days idle:															
Number (in thousands)	8,499.0	7,079.0	863.8	1,428.8	688.2	661.9	170.0	309.5	367.5	297.3	303.6	3,684.3	894.5	1,612.1	1,191.7
Percent of estimated working time ¹ .....	.04	.03	.04	.06	.04	.03	.01	.02	.02	.02	.02	.07	.04	.07	.06

¹ Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is

found in "'Total economy' measure of strike idleness," *Monthly Labor Review*, October 1968, pp. 54-56.

^P = preliminary.

30. Consumer Price Index for All Urban Consumers: U.S. city average, by expenditure category and commodity or service group; and CPI for Urban Wage Earners and Clerical Workers, all items

(1967=100, unless otherwise indicated)

Series	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS:															
All items	311.1	322.2	324.5	325.5	326.6	327.4	328.4	327.5	326.0	325.3	326.3	327.9	328.0	328.6	330.2
All items (1957-59=100)	361.9	374.7	377.4	378.5	379.9	380.8	381.9	380.8	379.1	378.3	379.5	381.4	381.4	382.1	384.1
Food and beverages	295.1	302.0	302.1	302.5	303.6	305.6	307.9	307.7	307.8	308.5	309.4	309.5	312.2	314.6	315.1
Food	302.9	309.8	309.9	309.8	311.0	313.2	315.6	315.3	315.4	316.1	317.0	317.1	320.1	322.7	323.2
Food at home	292.6	296.8	295.6	295.3	296.6	299.3	302.5	301.5	301.2	301.5	302.1	301.6	305.5	308.9	309.0
Cereals and bakery products	305.3	317.0	319.2	318.9	319.9	321.9	322.0	322.5	322.7	322.5	323.8	326.1	326.3	328.2	328.5
Meats, poultry, fish, and eggs	266.6	263.4	260.6	261.1	266.1	269.9	271.5	268.4	267.7	264.2	265.1	274.9	283.0	284.7	
Dairy products	253.2	258.0	258.0	257.1	257.1	256.9	257.2	257.3	256.8	256.8	257.1	257.2	258.4	258.3	
Fruits and vegetables	317.4	325.7	319.9	317.1	314.3	323.9	334.4	320.7	319.2	329.5	336.5	327.8	330.3	332.1	
Other foods at home	352.2	361.1	362.6	363.0	362.2	361.3	365.7	375.1	375.7	376.1	374.6	374.1	373.7	374.0	
Sugar and sweets	389.1	398.8	401.1	402.6	401.4	402.2	405.1	408.6	408.4	411.4	411.2	411.5	412.4	413.1	
Fats and oils	288.0	294.4	294.8	291.2	292.1	290.3	292.1	291.4	290.2	288.5	287.2	287.0	287.3	288.6	
Nonalcoholic beverages	443.0	451.7	452.8	454.1	451.7	448.8	459.7	485.3	488.0	487.4	481.9	480.0	478.3	476.9	
Other prepared foods	284.9	294.2	296.3	296.8	296.8	297.3	298.0	299.5	299.3	300.2	301.4	301.7	301.8	303.2	
Food away from home	333.4	346.6	349.9	350.3	351.3	352.1	353.1	354.2	355.5	357.0	358.8	360.2	360.8	361.8	
Alcoholic beverages	222.1	229.5	229.3	236.4	236.2	236.2	237.5	238.3	238.8	239.5	239.4	240.1	240.4	240.1	
Housing	338.5	349.9	353.8	354.4	355.0	355.8	356.8	356.5	357.0	358.0	358.5	361.2	361.5	362.4	
Shelter	361.7	382.0	386.9	389.1	391.3	392.3	393.8	394.8	397.0	400.1	400.9	401.6	403.5	405.2	
Renters' costs (12/82=100)	108.6	115.4	117.0	117.9	118.4	118.3	118.8	119.0	119.6	120.9	121.1	121.6	122.5	122.9	
Rent, residential	249.3	264.6	267.7	269.9	271.7	272.4	273.4	273.7	275.0	277.9	278.4	279.4	281.2	281.7	
Other renters' costs	373.4	398.4	410.7	412.5	408.7	398.1	401.1	404.1	405.5	410.8	411.3	415.2	420.1	425.7	
Homeowners' costs (12/82=100)	107.3	113.1	114.6	115.1	115.8	116.3	116.7	117.0	117.9	118.7	118.9	119.0	119.4	119.9	
Owners' equivalent rent (12/82=100)	107.3	113.2	114.6	115.1	115.9	116.3	116.7	117.0	117.9	118.7	118.9	119.0	119.4	119.9	
Household insurance (12/82=100)	107.5	112.4	113.7	114.6	114.5	115.0	115.7	117.4	118.0	118.3	118.8	118.9	119.9	119.9	
Maintenance and repairs	359.2	368.9	368.7	368.5	372.7	373.7	379.1	379.6	367.5	367.6	367.1	366.6	369.2	376.4	
Maintenance and repair services	409.7	421.1	421.9	422.2	426.4	426.2	432.6	432.8	422.4	424.6	425.5	427.4	430.1	434.2	
Maintenance and repair commodities	262.7	269.6	268.6	268.0	271.5	273.3	277.1	277.8	266.1	264.5	262.9	260.7	262.7	271.3	
Fuel and other utilities	387.3	393.6	400.5	395.6	392.1	393.3	394.6	390.0	385.5	381.8	382.5	393.8	389.4	389.5	
Fuels	485.5	488.1	496.8	488.4	481.5	483.6	484.7	476.3	467.6	459.6	460.6	477.0	469.2	469.0	
Fuel oil, coal, and bottled gas	641.8	619.5	601.7	615.3	641.6	657.3	650.3	591.2	549.9	518.3	496.8	486.6	459.4	447.3	
Gas (piped) and electricity	445.2	452.7	466.5	453.9	440.5	439.9	442.6	444.5	442.3	439.2	444.6	466.0	462.3	464.5	
Other utilities and public services	230.2	240.7	244.6	244.7	245.9	245.8	247.3	247.9	249.0	251.3	251.5	255.2	255.6	255.9	
Household furnishings and operations	242.5	247.2	247.1	248.4	248.9	248.8	248.8	249.0	249.8	249.6	249.9	250.2	250.5	250.5	
Housefurnishings	199.1	200.1	199.0	200.3	200.8	200.1	199.8	199.7	201.0	200.4	200.8	200.8	201.2	200.9	
Housekeeping supplies	303.2	313.6	313.9	315.7	316.4	317.7	318.3	318.6	317.9	318.5	318.3	319.6	319.5	319.8	
Housekeeping services	327.5	338.9	341.5	342.2	342.7	343.2	343.9	344.5	345.1	345.4	345.8	346.1	346.6	347.4	
Apparel and upkeep	200.2	206.0	209.6	211.1	211.2	209.0	205.0	204.1	206.3	207.3	206.4	204.5	203.2	207.0	
Apparel commodities	187.0	191.6	195.3	196.7	196.8	194.2	189.5	188.5	190.8	191.7	190.7	188.4	187.0	191.2	
Men's and boys' apparel	192.4	197.9	201.5	203.2	203.6	202.0	198.6	198.8	198.3	199.7	200.2	198.1	195.8	197.8	
Women's and girls' apparel	163.6	169.5	176.1	177.9	176.5	172.6	164.4	163.4	167.6	168.0	164.9	161.3	159.8	167.2	
Infants' and toddlers' apparel	287.0	299.7	302.0	302.1	307.0	304.1	313.9	311.6	313.1	316.6	318.5	319.7	307.5	316.0	
Footwear	209.5	212.1	210.9	212.3	215.5	213.1	209.1	207.9	210.1	211.4	211.5	210.0	209.1	209.6	
Other apparel commodities	216.4	215.5	215.2	214.9	214.9	214.6	215.5	216.1	214.6	215.3	215.4	215.8	218.1	221.6	
Apparel services	305.0	320.9	324.1	325.7	326.3	326.9	329.8	330.7	331.5	332.9	333.6	334.3	334.6	334.7	
Transportation	311.7	319.9	319.7	320.9	323.2	324.0	323.9	319.2	309.6	303.3	305.7	308.6	304.7	301.3	
Private transportation	306.6	314.2	313.6	314.7	317.0	317.8	317.3	312.2	302.1	295.3	297.8	300.8	296.5	292.8	
New vehicles	208.0	214.9	214.2	215.9	218.2	219.2	219.7	220.2	220.1	221.0	222.8	224.0	224.5	224.5	
New cars	208.5	215.2	214.5	216.2	218.4	219.4	219.9	220.4	220.3	221.2	222.0	224.2	224.7	224.2	
Used cars	375.7	379.7	374.3	375.3	376.4	375.6	374.1	370.7	367.2	364.8	363.6	362.5	360.3	358.0	
Motor fuel	370.7	373.8	377.7	374.6	376.7	377.5	373.3	351.5	308.5	279.5	289.3	299.4	280.2	265.9	
Gasoline	370.2	373.3	377.4	374.2	376.1	376.8	372.5	350.8	307.7	278.6	288.7	299.1	279.8	265.3	
Maintenance and repair	341.5	351.4	353.5	355.7	355.8	357.5	357.9	358.9	359.3	360.6	361.3	362.1	363.4	364.3	
Other private transportation	273.3	287.6	285.8	289.6	293.9	295.2	297.7	299.2	301.5	301.6	301.3	303.0	304.5	304.5	
Other private transportation commodities	201.5	202.6	203.4	202.8	201.6	202.1	203.4	202.9	203.6	202.2	202.4	201.5	201.6	201.8	
Other private transportation services	295.0	312.8	310.4	315.4	321.2	322.7	325.5	327.6	330.3	330.9	330.4	332.8	334.6	334.6	
Public transportation	385.2	402.8	408.0	411.5	412.8	412.9	419.6	422.2	421.2	422.2	423.7	425.4	428.0	428.5	
Medical care	379.5	403.1	408.3	410.5	413.0	414.7	418.2	422.3	425.8	428.0	429.7	432.0	434.8	437.5	
Medical care commodities	239.7	256.7	260.2	261.3	262.7	262.9	264.5	267.4	269.4	271.3	272.3	273.3	275.4	276.0	
Medical care services	410.3	435.1	440.5	443.0	445.8	448.0	451.9	456.2	460.1	462.3	464.2	466.8	469.8	473.0	
Professional services	346.1	367.3	371.7	373.2	375.5	377.1	378.9	381.6	385.0	386.9	388.3	390.3	391.7	393.3	
Other medical care services	486.0	517.0	523.9	527.4	530.8	533.6	540.3	546.4	550.8	555.5	555.9	559.2	564.2	569.4	
Entertainment	255.1	265.0	266.8	268.4	269.0	268.3	270.8	272.0	271.9	272.3	272.9	273.9	274.4	274.7	
Entertainment commodities	253.3	260.6	262.5	264.0	264.0	262.5	264.7	265.2	265.0	264.8	265.3	266.1	265.8	266.1	
Entertainment services	258.3	271.8	273.3	275.2	276.6	277.1	279.9	282.1	282.2	283.5	284.2	285.5	287.0	287.3	
Other goods and services	307.7	326.6	333.3	334.9	335.3	336.5	339.1	340.3	341.1	341.8	342.1	342.6	344.9	346.4	
Tobacco products	310.0	328.5	332.8	334.4	334.7	337.4	342.7	344.7	345.6	346.5	346.5	347.1	354.3	356.2	
Personal care	271.4	281.9	284.1	285.0	285.4	286.3	288.1	289.1	290.3	290.5	290.9	291.0	291.1	292.3	
Toilet goods and personal care appliances	269.6	278.5	280.6	281.4	281.1	282.5	285.3	286.0	287.3	287.7	287.9	287.0	287.1	289.1	

30. Continued— Consumer Price Index for All Urban Consumers: U.S. city average, by expenditure category and commodity or service group; and CPI for Urban Wage Earners and Clerical Workers, all items

(1967=100, unless otherwise indicated)

Series	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
All items	311.1	322.2	324.5	325.5	326.6	327.4	328.4	327.5	326.0	325.3	326.3	327.9	328.0	328.6	330.2
Commodities	280.7	286.7	287.1	287.9	289.2	289.9	290.1	287.4	283.7	281.2	282.1	282.8	281.9	281.9	283.5
Food and beverages	295.1	302.0	302.1	302.5	303.6	305.6	307.9	307.7	307.8	308.5	309.4	309.5	312.2	314.6	315.1
Commodities less food and beverages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nondurables less food and beverages	275.7	282.1	284.6	285.3	286.8	286.8	284.9	278.6	268.9	262.0	263.3	264.7	259.8	258.1	261.5
Apparel commodities	187.0	191.6	195.3	196.7	196.8	194.2	189.5	188.5	190.8	191.7	190.7	188.4	187.0	191.2	196.6
Nondurables less food, beverages, and apparel	325.8	333.3	335.3	335.6	337.8	339.1	338.7	329.5	313.6	302.6	305.2	308.4	301.7	296.9	299.5
Durables	266.5	270.7	266.7	270.2	271.5	271.4	271.4	270.5	269.7	269.2	269.6	269.9	269.6	269.0	269.3
Services	363.0	381.5	386.5	387.7	388.7	389.5	391.7	393.3	394.9	396.8	397.9	401.0	402.3	403.7	405.5
Rent of shelter	107.7	113.9	115.4	116.1	116.7	117.0	117.4	117.7	118.5	119.4	119.7	119.9	120.5	120.9	121.7
Household services less rent of shelter	108.1	111.2	113.5	112.1	110.8	110.8	111.4	111.8	111.6	111.6	112.3	115.2	114.9	115.3	114.9
Transportation services	321.1	337.0	337.1	341.1	344.7	346.1	349.0	351.0	352.4	353.2	353.4	355.3	357.1	357.3	356.2
Medical care services	410.3	435.1	440.5	443.0	445.8	448.0	451.9	456.2	460.1	462.3	463.4	466.8	469.8	473.0	475.7
Other services	296.0	314.1	319.7	321.4	322.5	322.9	324.8	326.1	326.6	327.6	328.2	329.2	330.1	330.8	337.9
Special indexes:															
All items less food	311.3	323.3	326.2	327.4	328.5	328.9	329.5	328.5	326.6	325.7	326.7	328.6	328.0	328.1	330.0
All items less shelter	295.1	303.9	305.7	306.3	307.2	307.9	308.8	307.4	305.2	303.6	304.7	306.5	306.1	306.4	307.9
All items less homeowners' costs	106.3	109.7	110.4	110.7	111.1	111.3	111.6	111.2	110.5	110.1	110.4	111.1	111.0	111.2	111.7
All items less medical care	307.3	317.7	319.9	320.8	321.9	322.6	323.4	322.2	320.5	319.7	320.6	322.2	322.1	322.6	324.2
Commodities less food	267.0	272.5	273.1	274.4	275.7	275.7	274.7	270.9	265.2	261.2	262.1	263.0	260.2	259.0	261.1
Nondurables less food	270.8	277.2	279.6	280.7	282.0	282.0	280.4	274.5	265.6	259.2	260.5	261.8	257.3	255.6	258.9
Nondurables less food and apparel	311.9	319.2	321.0	322.0	324.0	325.1	324.9	316.8	302.7	292.9	295.2	296.1	292.2	287.9	290.2
Nondurables	286.6	293.2	294.6	295.1	296.4	297.4	294.3	289.5	286.3	287.4	288.2	287.1	287.4	289.4	
Services less rent of shelter	108.5	113.5	115.0	115.1	115.2	115.4	116.2	116.8	117.1	117.4	117.8	119.2	119.5	119.8	120.2
Services less medical care	355.6	373.3	378.3	379.3	380.1	380.8	382.7	384.0	385.4	387.2	388.3	391.3	392.5	393.6	395.4
Energy	423.6	426.5	432.6	427.1	425.1	426.5	424.7	408.9	381.3	361.8	367.6	380.6	366.5	358.6	360.6
All items less energy	302.9	314.8	316.8	318.4	319.8	320.5	321.8	323.3	323.3	324.4	325.0	325.5	326.9	328.3	330.0
All items less food and energy	301.2	314.4	316.9	318.9	320.4	320.7	321.6	322.3	323.6	324.8	325.3	325.9	326.9	327.9	329.9
Commodities less food and energy	253.1	259.7	260.2	262.0	262.7	261.8	261.6	262.0	262.0	262.2	262.0	262.0	262.0	262.9	264.5
Energy commodities	409.8	409.9	411.2	410.1	415.2	417.9	413.2	386.5	343.0	313.3	319.3	327.1	306.6	292.4	297.7
Services less energy	356.4	375.9	380.2	382.5	384.8	385.8	387.9	389.4	391.5	393.8	394.5	395.9	397.7	399.0	401.4
Purchasing power of the consumer dollar:															
1967=\$1.00	32.1	31.0	30.8	30.7	30.6	30.5	30.5	30.5	30.7	30.7	30.6	30.5	30.5	30.4	30.3
1957-59=\$1.00	27.6	26.7	26.5	26.4	26.3	26.3	26.2	26.3	26.4	26.4	26.4	26.2	26.2	26.2	26.0
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS:															
All items	307.6	318.5	320.5	321.3	322.6	323.4	324.3	323.2	321.4	320.4	321.4	323.0	322.9	323.4	324.9
All items (1957-59=100)	357.7	370.4	372.7	373.7	375.1	376.1	377.1	375.8	373.7	372.6	373.7	375.6	375.5	376.1	377.8
Food and beverages	295.2	301.8	301.8	302.2	303.4	305.4	307.7	307.5	307.6	308.3	309.0	309.3	312.0	314.5	315.0
Food	302.7	309.3	309.3	309.3	310.6	312.8	315.1	314.9	315.0	315.6	316.4	316.6	319.5	322.3	322.8
Food at home	291.2	295.3	294.0	293.7	295.2	297.9	300.9	300.1	299.7	299.9	300.4	300.0	303.9	307.3	307.5
Cereals and bakery products	303.7	315.4	317.6	317.3	318.2	320.4	320.9	321.1	320.9	322.1	324.5	324.6	326.7	326.8	
Meats, poultry, fish, and eggs	266.0	262.7	259.9	260.4	265.4	269.2	270.7	267.7	267.2	263.5	262.6	264.2	274.0	282.2	284.0
Dairy products	252.2	256.9	256.8	255.9	255.9	255.7	256.0	255.5	255.5	255.5	255.8	255.9	257.0	256.9	257.1
Fruits and vegetables	312.5	320.3	313.6	311.2	309.4	319.3	329.7	316.0	314.6	325.0	331.6	323.5	325.6	327.2	324.2
Other foods at home	352.7	361.5	362.9	363.4	362.5	361.6	366.1	375.2	375.6	376.0	374.3	373.9	373.4	373.9	373.5
Sugar and sweets	388.6	398.3	400.8	402.2	400.9	401.8	404.7	408.1	407.8	410.9	410.6	410.9	411.9	412.6	413.0
Fats and oils	287.5	293.9	294.1	290.6	291.8	289.6	291.6	290.8	289.7	287.8	286.6	286.4	286.6	287.1	285.1
Nonalcoholic beverages	444.4	453.2	454.1	455.6	453.1	450.4	461.0	485.5	487.4	487.0	481.2	479.5	477.6	476.9	475.5
Other prepared foods	286.4	295.7	297.7	298.3	298.3	298.7	299.4	300.9	300.7	301.6	302.7	303.0	303.1	304.5	305.2
Food away from home	336.7	349.7	353.0	353.4	354.4	355.2	356.2	357.3	358.6	360.2	362.0	363.5	364.2	365.2	366.6
Alcoholic beverages	225.3	232.6	232.6	239.1	238.8	239.1	240.1	240.9	241.4	242.3	242.2	242.9	243.4	243.0	243.4
Housing	329.2	343.3	347.2	347.5	348.3	349.1	350.1	349.7	350.1	351.1	351.6	354.3	354.5	355.4	356.6
Shelter	350.0	370.4	375.0	377.1	379.3	380.4	381.8	382.9	385.0	388.1	388.8	389.4	391.5	392.9	395.2
Renters' costs (12/84=100)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rent, residential	248.6	263.7	266.8	268.9	270.7	271.5	272.5	272.8	274.1	277.0	277.5	278.5	280.3	280.8	282.2
Other renters' costs	372.4	397.9	409.8	411.6	408.0	397.5	400.8	403.5	405.4	411.6	411.3	415.5	420.4	426.1	428.9
Homeowners' costs (12/84=100)	-	103.1	104.3	104.8	105.5	105.9	106.3	106.6	107.4	108.1	108.3	108.4	108.8	109.3	110.0
Owners' equivalent rent (12/84=100)	-	103.0	104.3	104.8	105.5	105.9	106.3	106.6	107.3	108.1	108.3	108.4	108.8	109.2	110.0
Household insurance (12/84=100)	-	103.2	104.3	105.2	105.2	105.7	106.3	107.8	108.2	108.5	109.0	109.1	110.1	110.1	110.4
Maintenance and repairs	356.3	364.1	364.4	364.6	367.7	368.5	373.2	374.0	364.7	364.6	363.8	363.2	366.7	371.5	370.6
Maintenance and repair services	403.5	415.0	416.8	417.4	420.9	420.1	426.2	426.5	416.6	419.2	420.0	422.6	425.2	428.6	430.7
Maintenance and repair commodities	257.2	261.1	260.5	260.5	262.7	264.2	267.2	268.1	261.1	259.4	258.0	255.7	259.0	263.5	261.1
Fuel and other utilities	388.6	394.7	401.9	396.3	393.2	394.3	395.6	390.9	386.3	382.6	383.0	394.9	390.3	390.6	389.1
Fuels	485.0	487.5	496.7	487.2	481.0	483.1	484.1	475.7	467.1	459.1	459.7	477.3	469.1	469.3	467.1
Fuel oil, coal, and bottled gas	644.3	622.0	604.3	618.1	644.3	659.9	652.7	593.6	552.8	521.5	499.9	489.9	462.9	450.7	456.6
Gas (piped) and electricity	444.1	451.6	465.9	452.0	439.5	438.8	441.4	443.2	441.2	438.0	443.0	445.7	461.4	464.1	460.3
Other utilities and public services	231.2	241.6	245.6	245.7	246.8	246.7	248.3	248.8	249.9	252.1	252.2	255.8	256.3	256.6	256.2
Household furnishings and operations	239.1	243.4	243.2	244.5	245.1	245.2	2								

30. Continued— Consumer Price Index for All Urban Consumers: U.S. city average, by expenditure category and commodity or service group; and CPI for Urban Wage Earners and Clerical Workers, all items

(1967=100, unless otherwise indicated)

Series	Annual average		1985				1986								
	1984	1985	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Apparel commodities	186.6	191.3	195.1	196.6	196.5	194.1	189.4	188.2	190.4	191.2	190.1	187.7	186.3	190.8	196.2
Men's and boys' apparel	192.9	198.2	201.8	203.5	203.7	202.2	198.8	196.8	198.0	199.3	200.0	198.0	195.4	197.1	202.3
Women's and girls' apparel	165.0	171.3	178.2	180.0	178.3	174.5	166.1	165.2	169.0	169.3	165.9	162.0	160.8	169.3	178.1
Infants' and toddlers' apparel	297.6	311.7	314.9	314.8	320.7	317.3	332.7	328.6	329.6	331.3	334.3	335.6	323.7	328.6	326.2
Footwear	210.0	212.5	211.0	212.6	215.9	213.6	209.9	208.4	210.7	212.1	212.0	210.6	209.6	209.9	212.0
Other apparel commodities	204.5	203.1	202.5	202.4	202.5	202.4	203.5	204.2	203.5	204.1	203.8	204.5	206.5	209.5	209.0
Apparel services	302.9	318.5	321.6	323.2	323.6	324.4	327.2	328.1	329.0	330.2	330.9	331.9	332.2	332.3	334.2
Transportation	313.9	321.6	321.1	322.2	324.6	325.3	325.1	320.1	310.3	303.5	305.9	308.7	304.6	300.9	301.8
Private transportation	310.1	317.4	316.6	317.6	320.1	320.8	320.2	314.8	304.5	297.4	299.9	302.8	298.3	294.4	295.3
New vehicles	207.3	214.2	213.5	215.3	217.5	218.6	219.0	219.4	219.4	220.2	222.0	223.2	223.7	223.6	223.3
New cars	207.9	214.5	213.8	215.5	217.8	218.8	219.2	219.7	219.5	220.4	222.3	223.4	223.9	223.9	223.7
Used cars	375.7	379.7	374.3	375.3	376.4	375.6	374.1	370.7	367.2	364.8	363.6	362.5	360.3	358.0	359.5
Motor fuel	372.2	375.4	379.5	376.3	378.7	379.6	375.3	353.0	309.6	280.1	290.3	300.6	280.9	266.7	271.9
Gasoline	371.8	375.0	379.2	375.8	378.1	378.9	374.6	352.3	308.8	279.1	289.6	300.3	280.5	266.1	271.4
Maintenance and repair	342.2	352.6	354.5	356.9	357.2	359.0	359.4	360.4	360.9	362.2	362.8	363.6	365.0	365.7	366.6
Other private transportation	274.2	287.7	285.2	289.2	293.7	294.7	296.9	298.4	300.6	300.4	299.8	301.2	302.4	302.2	299.7
Other private transportation commodities	203.9	204.7	205.6	205.0	203.7	204.3	205.6	205.4	206.0	204.6	204.9	203.9	203.8	204.0	202.7
Other private transportation services	295.4	312.3	308.9	314.1	320.2	321.3	323.7	325.7	328.3	328.5	327.7	329.6	331.2	330.9	328.1
Public transportation	376.8	391.7	396.8	399.3	400.1	400.2	408.6	412.6	412.0	413.0	413.8	415.1	418.0	418.4	418.8
Medical care	377.7	401.2	406.3	408.5	410.9	412.6	416.0	420.0	423.5	425.7	427.3	429.6	432.4	435.0	437.1
Medical care commodities	239.7	256.3	259.8	260.9	262.2	262.3	264.1	267.0	268.8	270.7	271.7	272.5	274.6	275.2	275.8
Medical care services	407.9	432.7	438.1	440.6	443.2	445.4	449.2	453.5	457.3	459.5	461.3	464.0	466.9	470.1	472.6
Professional services	346.5	367.7	372.1	373.7	375.8	377.6	379.3	382.2	385.6	387.4	388.3	390.2	392.3	394.0	396.6
Other medical care services	484.7	513.9	520.7	524.4	527.5	530.4	536.9	543.0	547.3	550.0	552.3	555.8	560.7	565.8	568.1
Entertainment	251.2	260.1	261.6	263.0	263.7	263.0	265.4	266.5	266.5	266.9	267.3	268.4	269.0	269.2	270.0
Entertainment commodities	247.7	254.2	256.0	257.1	257.2	255.7	257.8	258.3	258.3	258.4	258.7	259.8	259.6	259.8	259.8
Entertainment services	258.5	271.6	272.6	274.6	276.3	276.8	280.0	282.0	282.1	283.0	283.6	284.8	286.5	286.7	288.9
Other goods and services	304.9	322.7	328.7	330.1	330.5	331.9	334.9	336.1	337.0	337.6	338.0	338.4	341.2	342.6	347.5
Tobacco products	309.7	328.1	332.4	334.0	334.3	337.1	342.4	344.4	345.2	346.0	346.0	346.7	354.0	355.9	356.5
Personal care	269.4	279.6	281.8	282.7	283.1	284.0	285.9	286.8	288.0	288.2	288.6	288.6	288.8	289.9	289.5
Toilet goods and personal care appliances	270.3	279.0	281.1	282.0	281.9	283.3	285.9	286.7	288.1	288.4	288.6	287.6	287.8	289.7	288.7
Personal care services	268.8	280.5	282.8	283.7	284.8	285.2	286.4	287.4	288.4	288.4	289.0	290.0	290.2	290.5	290.8
Personal and educational expenses	368.2	399.3	414.5	416.5	417.3	417.4	418.9	419.9	420.1	421.2	422.0	422.9	423.8	425.1	446.1
School books and supplies	327.5	355.7	366.9	369.2	369.3	369.4	375.6	378.4	379.0	379.1	379.1	380.2	380.5	381.4	393.9
Personal and educational services	378.2	410.1	426.1	428.1	428.9	429.1	429.7	430.3	430.5	431.8	432.8	433.6	434.6	436.0	458.7
All items	307.6	318.5	320.5	321.3	322.6	323.4	324.3	323.2	321.4	320.4	321.4	323.0	322.9	323.4	324.9
Commodities	280.4	286.5	286.8	287.6	288.9	289.7	289.8	287.0	283.1	280.4	281.3	282.0	281.1	281.1	282.6
Food and beverages	295.2	301.8	301.8	302.2	303.4	305.4	307.7	307.5	307.6	308.3	309.0	309.3	312.0	314.5	315.0
Commodities less food and beverages	269.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nondurables less food and beverages	277.5	283.8	286.5	287.0	288.5	288.7	286.9	280.1	269.6	262.0	263.6	265.2	260.1	258.1	261.5
Apparel commodities	186.6	191.3	195.1	196.6	196.5	194.1	189.4	188.2	190.4	191.2	190.1	187.7	186.3	190.8	196.2
Nondurables less food, beverages, and apparel	327.0	334.2	336.4	336.5	338.8	340.1	339.6	330.1	313.2	301.6	304.5	308.0	301.0	295.9	298.4
Durables	261.1	265.2	263.1	264.5	265.7	265.6	265.6	264.6	263.7	263.3	263.5	263.6	263.2	262.6	263.0
Services	358.0	377.3	382.0	383.0	384.2	385.1	387.2	388.8	390.5	392.2	393.2	396.4	397.7	399.0	400.4
Rent of shelter (12/84=100)	-	103.2	104.5	105.1	105.8	106.1	106.4	106.7	107.4	108.3	108.5	108.7	109.2	109.6	110.3
Household services less rent of shelter (12/84=100)	-	102.6	104.8	103.3	102.1	102.0	102.6	103.0	102.8	102.7	103.4	106.4	106.0	106.4	106.0
Transportation services	317.2	332.2	331.4	335.5	339.3	340.5	343.3	345.4	347.0	347.5	347.3	348.9	350.6	350.7	349.2
Medical care services	407.9	432.7	438.1	440.6	443.2	445.4	449.2	453.5	457.3	459.5	461.3	464.0	466.9	470.1	472.6
Other services	292.9	310.1	315.0	316.7	317.8	318.3	320.4	321.6	322.1	322.9	323.6	324.6	325.6	326.0	332.2
Special indexes:															
All items less food	307.5	319.4	321.9	322.9	324.2	324.6	325.1	323.8	321.5	320.2	321.2	323.2	322.3	322.2	323.9
All items less shelter	295.1	303.4	304.8	305.4	306.4	307.2	307.9	306.4	303.8	302.1	303.0	304.8	304.3	304.6	305.9
All items less homeowners' costs (12/84=100)	-	101.8	102.4	102.6	103.0	103.2	103.5	103.0	102.3	101.8	102.1	102.7	102.6	102.7	103.2
All items less medical care	304.0	314.3	316.1	316.9	318.1	318.9	319.6	318.3	316.2	315.2	316.1	317.7	317.4	317.8	319.3
Commodities less food	267.1	272.8	273.4	274.5	275.9	275.9	275.0	270.9	264.9	260.7	261.6	262.6	259.6	258.3	260.3
Nondurables less food	272.6	279.0	281.5	282.4	283.8	283.9	282.3	276.1	266.4	259.4	260.9	262.4	257.7	255.8	259.1
Nondurables less food and apparel	313.2	320.3	322.3	323.1	325.0	326.3	325.9	317.5	302.6	292.2	294.9	298.0	291.8	287.3	289.6
Nondurables	287.4	293.9	295.2	295.7	297.1	298.2	298.4	295.0	289.8	286.3	287.5	288.4	287.2	287.5	289.5
Services less rent of shelter (12/84=100)	-	102.6	103.8	103.9	103.9	104.2	104.9	105.5	105.7	105.9	106.2	107.6	107.8	108.1	108.3
Services less medical care	350.5	369.0	373.6	374.5	375.5	376.2	378.2	379.5	381.0	382.7	383.6	386.8	387.9	389.0	390.3
Energy	423.3	426.3	432.5	426.6	425.4	426.8	424.7	408.1	379.0	358.4	364.6	378.1	363.1	354.8	356.9
All items less energy	298.3	309.9	311.5	313.0	314.5	315.3	316.9	317.8	318.8	319.2	319.7	321.1	321.4	322.4	323.9
All items less food and energy	295.8	308.7	310.7	312.7	314.2	314.6	315.4	316.1	317.2	318.3	318.6	319.1	320.1	321.0	322.7
Commodities less food and energy	250.5	256.8	257.2	258.8	259.5	259.2	258.8	258.5	258.7	258.8	258.8	258.5	258.5	259.3	260.9
Energy commodities	410.5	410.9	412.6	411.2	416.3	418.9	414.1	387.3	343.3	312.9	319.8	328.1	307.2	292.9	298.2
Services less energy	350.8	371.1	374.9	377.3	379.8	380.8	382.9	384.5	386.5	388.8	389.4	390.8	392.6	393.7	395.7
Purchasing power of the consumer dollar:															
1967=\$1.00	32.5	31.4	31.2	31											

31. Consumer Price Index: U.S. city average and available local area data: all items

(1967 = 100, unless otherwise indicated)

Area ¹	Pricing schedule ²	Other index base	All Urban Consumers								Urban Wage Earners					
			1985		1986				1985		1986					
			Sept.	Oct.	May	June	July	Aug.	Sept.	Oct.	May	June	July	Aug.	Sept.	
U.S. city average		-	324.5	325.5	326.3	327.9	328.0	328.6	330.2	320.5	321.3	321.4	323.0	322.9	323.4	324.9
Chicago, Ill.-Northwestern Ind.	M	-	326.3	322.6	324.2	330.4	331.1	331.4	333.9	312.1	308.9	309.6	315.6	316.0	316.2	318.3
Detroit, Mich.	M	-	320.5	319.7	321.7	321.0	318.4	323.2	321.1	310.3	309.7	311.0	310.2	307.5	312.8	310.5
Los Angeles-Long Beach, Anaheim, Calif.	M	-	323.8	326.1	329.4	331.3	330.9	330.9	334.6	317.7	320.0	322.7	324.5	323.8	323.5	326.8
New York, N.Y.-Northeastern N.J.	M	-	316.9	317.4	320.6	322.8	325.1	325.9	326.6	309.3	309.9	312.3	314.4	316.5	317.2	317.5
Philadelphia, Pa.-N.J.	M	-	316.5	317.4	318.9	321.7	323.0	323.1	325.8	319.1	320.3	320.8	323.5	324.6	324.4	326.7
Anchorage, Alaska (10/67 = 100)	1	10/67	284.5	-	288.9	-	286.3	-	286.2	277.3	-	281.8	-	278.4	-	277.9
Baltimore, Md.	1	-	327.5	-	329.1	-	330.2	-	334.0	326.3	-	326.8	-	327.9	-	330.9
Boston, Mass.	1	-	321.3	-	322.6	-	323.6	-	328.2	319.3	-	319.3	-	320.8	-	325.2
Cincinnati, Ohio-Ky.-Ind.	1	-	329.8	-	332.0	-	332.4	-	333.0	322.8	-	324.8	-	324.9	-	324.7
Denver-Boulder, Colo.	1	-	358.0	-	356.3	-	358.4	-	362.9	353.3	-	350.3	-	352.4	-	357.2
Miami, Fla. (11/77 = 100)	1	11/77	173.5	-	173.0	-	171.2	-	174.3	174.5	-	173.4	-	171.6	-	174.5
Milwaukee, Wis.	1	-	332.4	-	332.0	-	331.3	-	332.9	351.4	-	350.6	-	350.1	-	351.7
Northeast, Pa.	1	-	306.8	-	309.2	-	309.0	-	311.3	306.3	-	308.1	-	307.8	-	310.2
Portland, Oreg.-Wash.	1	-	314.9	-	314.6	-	314.7	-	318.0	305.4	-	303.2	-	303.4	-	306.3
St. Louis, Mo.-Ill.	1	-	321.6	-	318.6	-	325.6	-	325.7	318.5	-	314.2	-	320.6	-	320.7
San Diego, Calif.	1	-	377.3	-	382.8	-	383.1	-	385.9	340.3	-	345.2	-	345.0	-	347.4
Seattle-Everett, Wash.	1	-	321.8	-	323.5	-	323.7	-	326.3	308.9	-	309.4	-	310.1	-	312.3
Washington, D.C.-Md.-Va.	1	-	323.6	-	329.6	-	329.3	-	332.3	327.4	-	330.2	-	330.2	-	334.6
Atlanta, Ga.	2	-	-	333.0	-	338.5	-	338.9	-	-	330.0	-	335.5	-	335.4	-
Buffalo, N.Y.	2	-	-	309.3	-	308.9	-	307.5	-	-	295.3	-	294.0	-	292.5	-
Cleveland, Ohio	2	-	-	348.6	-	350.6	-	352.7	-	-	327.0	-	328.2	-	329.9	-
Dallas-Ft. Worth, Tex.	2	-	-	343.9	-	344.7	-	346.2	-	-	337.5	-	337.4	-	339.1	-
Honolulu, Hawaii	2	-	-	295.6	-	299.2	-	301.5	-	-	302.7	-	306.5	-	308.3	-
Houston, Tex.	2	-	-	337.6	-	333.3	-	332.9	-	-	335.0	-	330.9	-	330.5	-
Kansas City, Mo.-Kansas Minn.-Wis.	2	-	-	323.1	-	322.9	-	323.9	-	-	312.9	-	311.4	-	311.9	-
Pittsburgh, Pa.	2	-	-	340.6	-	342.1	-	340.3	-	-	336.0	-	336.2	-	334.5	-
San Francisco-Oakland, Calif.	2	-	-	328.4	-	328.6	-	330.1	-	-	309.9	-	308.3	-	309.2	-
San Francisco-Oakland, Calif.	2	-	-	336.7	-	344.0	-	345.5	-	-	331.0	-	338.1	-	339.0	-
Region ³																
Northeast	2	12/77	-	172.5	-	174.2	-	175.0	-	-	170.3	-	171.6	-	172.2	-
North Central	2	12/77	-	174.9	-	176.1	-	176.2	-	-	171.4	-	172.2	-	172.2	-
South	2	12/77	-	175.7	-	176.3	-	176.4	-	-	175.3	-	175.2	-	175.3	-
West	2	12/77	-	176.9	-	178.7	-	179.0	-	-	174.8	-	176.3	-	176.4	-
Population size class ³																
A-1	2	12/77	-	172.9	-	175.7	-	176.6	-	-	168.7	-	171.0	-	171.8	-
A-2	2	12/77	-	177.6	-	178.9	-	179.1	-	-	174.6	-	175.2	-	175.3	-
B	2	12/77	-	176.3	-	177.0	-	176.6	-	-	173.6	-	174.1	-	173.5	-
C	2	12/77	-	173.8	-	174.7	-	175.0	-	-	174.1	-	174.6	-	174.8	-
D	2	12/77	-	173.8	-	173.4	-	173.8	-	-	174.9	-	174.2	-	174.5	-
Region/population size class cross classification ³																
Class A:																
Northeast	2	12/77	-	169.6	-	171.8	-	173.1	-	-	166.1	-	167.7	-	168.8	-
North Central	2	12/77	-	178.2	-	180.3	-	180.7	-	-	173.1	-	174.7	-	175.0	-
South	2	12/77	-	175.6	-	176.8	-	176.7	-	-	175.7	-	176.1	-	176.1	-
West	2	11/77	-	179.1	-	181.8	-	182.0	-	-	174.6	-	177.1	-	176.9	-
Class B:																
Northeast	2	12/77	-	174.9	-	175.2	-	174.7	-	-	171.8	-	172.2	-	171.8	-
North Central	2	12/77	-	173.4	-	174.1	-	172.5	-	-	169.5	-	169.7	-	168.1	-
South	2	12/77	-	177.4	-	178.5	-	178.6	-	-	173.9	-	174.6	-	174.6	-
West	2	12/77	-	177.9	-	178.3	-	178.1	-	-	178.4	-	178.7	-	178.3	-

See footnotes at end of table.

31. Continued— Consumer Price Index: U.S. city average and available local area data: all items

(1967 = 100, unless otherwise indicated)

Area ¹	Pricing schedule ²	Other index base	All Urban Consumers						Urban Wage Earners							
			1985		1986				1985		1986					
			Sept.	Oct.	May	June	July	Aug.	Sept.	Oct.	May	June	July	Aug.	Sept.	
Class C:																
Northeast	2	12/77	-	181.7	-	183.4	-	182.8	-	-	186.5	-	187.8	-	187.2	-
North Central	2	12/77	-	170.1	-	170.7	-	171.2	-	-	166.9	-	167.2	-	167.7	-
South	2	12/77	-	174.3	-	174.5	-	174.8	-	-	175.7	-	175.2	-	175.3	-
West	2	12/77	-	169.7	-	171.6	-	173.0	-	-	168.3	-	169.9	-	171.1	-
Class D:																
Northeast	2	12/77	-	175.6	-	176.1	-	176.8	-	-	175.3	-	175.5	-	176.2	-
North Central	2	12/77	-	171.6	-	171.3	-	171.4	-	-	173.1	-	172.6	-	172.4	-
South	2	12/77	-	174.8	-	173.9	-	174.3	-	-	176.2	-	174.6	-	175.0	-
West	2	12/77	-	174.5	-	174.1	-	174.9	-	-	176.0	-	175.4	-	176.3	-

¹ Area is generally the Standard Metropolitan Statistical Area (SMSA), exclusive of farms. L.A.-Long Beach, Anaheim, Calif. is a combination of two SMSA's, and N.Y., N.Y.-Northeastern N.J. and Chicago, Ill.-Northwestern Ind. are the more extensive Standard Consolidated Areas. Area definitions are those established by the Office of Management and Budget in 1973, except for Denver-Boulder, Colo. which does not include Douglas County. Definitions do not include revisions made since 1973.

² Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated.
M - Every month.

1 - January, March, May, July, September, and November.

2 - February, April, June, August, October, and December.

³ Regions are defined as the four Census regions.

The population size classes are aggregations of areas which have urban population as defined:

A-1 - More than 4,000,000.

A-2 - 1,250,000 to 4,000,000.

B - 385,000 to 1,250,000

C - 75,000 to 385,000.

D - Less than 75,000.

Population size class A is the aggregation of population size classes A-1 and A-2.

- Data not available.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Because each local index is a small subset of the national index, it has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error than the national index. As a result, local area indexes show greater volatility than the national index, although their long-term trends are quite similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in escalator clauses.

32. Annual data: Consumer Price Index all items and major groups

Series	1977	1978	1979	1980	1981	1982	1983	1984	1985
Consumer Price Index for All Urban Consumers:									
All items:									
Index	181.5	195.4	217.4	246.8	272.4	289.1	298.4	311.1	322.2
Percent change	6.5	7.7	11.3	13.5	10.4	6.1	3.2	4.3	3.6
Food and beverages:									
Index	188.0	206.3	228.5	248.0	267.3	278.2	284.4	295.1	302.0
Percent change	6.0	9.7	10.8	8.5	7.8	4.1	2.2	3.8	2.3
Housing:									
Index	186.5	202.8	227.6	263.3	293.5	314.7	323.1	336.5	349.9
Percent change	6.8	8.7	12.2	15.7	11.5	7.2	2.7	4.1	4.0
Apparel and upkeep:									
Index	154.2	159.6	166.6	178.4	186.9	191.8	196.5	200.2	206.0
Percent change	4.5	3.5	4.4	7.1	4.8	2.6	2.5	1.9	2.9
Transportation:									
Index	177.2	185.5	212.0	249.7	280.0	291.5	298.4	311.7	319.9
Percent change	7.1	4.7	14.3	17.8	12.1	4.1	2.4	4.5	2.6
Medical care:									
Index	202.4	219.4	239.7	265.9	294.5	328.7	357.3	379.5	403.1
Percent change	9.6	8.4	9.3	10.9	10.8	11.6	8.7	6.2	6.2
Entertainment:									
Index	167.7	176.6	188.5	205.3	221.4	235.8	246.0	255.1	265.0
Percent change	4.9	5.3	6.7	8.9	7.8	6.5	4.3	3.7	3.9
Other goods and services:									
Index	172.2	183.3	196.7	214.5	235.7	259.9	288.3	307.7	326.6
Percent change	5.8	6.4	7.3	9.0	9.9	10.3	10.9	6.7	6.1
Consumer Price Index for Urban Wage Earners and Clerical Workers									
All items:									
Index	181.5	195.3	217.7	247.0	272.3	288.6	297.4	307.6	318.5
Percent change	6.5	7.6	11.5	13.5	10.2	6.0	3.0	3.4	3.5

33. Producer Price Indexes, by stage of processing

(1967=100)

Grouping	Annual average		1985			1986								
	1984	1985	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Finished goods	291.1	293.7	294.7	296.4	297.2	296.0	291.9	288.0	287.2	288.9	288.9	288.0	288.3	287.5
Finished consumer goods	290.3	291.8	292.3	294.4	295.4	293.8	288.4	283.4	281.9	284.1	284.1	282.7	283.1	282.7
Finished consumer goods	273.3	271.2	268.2	271.8	275.0	275.0	272.0	271.6	271.9	274.8	275.1	280.7	283.6	282.2
Finished consumer goods excluding foods	294.1	297.3	299.4	300.7	300.7	298.3	291.8	284.6	282.2	284.0	283.8	278.8	278.0	278.1
Nondurable goods less food	337.3	339.3	340.3	342.6	343.2	339.6	328.0	315.4	309.8	313.0	312.6	303.4	302.0	304.8
Durable goods	236.8	241.5	244.9	245.0	244.3	243.5	243.9	243.7	245.7	245.5	245.8	246.3	246.2	242.7
Capital equipment	294.0	300.5	303.5	303.8	303.7	303.9	304.3	304.3	305.6	305.7	305.8	306.4	306.3	304.2
Intermediate materials, supplies, and components	320.0	318.7	317.6	318.1	318.9	317.4	313.5	309.5	307.1	306.7	307.1	305.0	304.5	306.1
Materials and components for manufacturing	301.8	299.5	298.0	297.7	297.9	297.1	296.5	296.4	295.5	295.4	295.3	295.8	296.0	296.2
Materials for food manufacturing	271.1	258.8	252.3	254.0	254.3	252.8	249.2	246.7	244.8	248.7	247.8	251.6	255.7	254.3
Materials for nondurable manufacturing	290.5	285.9	283.3	282.8	283.1	283.8	282.4	282.5	279.3	278.2	278.0	278.2	277.2	277.3
Materials for durable manufacturing	325.1	320.2	318.6	317.5	317.6	313.4	313.1	313.6	313.7	313.2	313.3	313.3	313.4	314.5
Components for manufacturing	287.5	291.5	292.3	292.3	292.4	293.1	293.6	293.7	294.1	294.1	294.2	294.6	294.9	295.1
Materials and components for construction	310.3	315.2	315.5	315.0	315.7	316.2	316.5	317.0	318.3	318.3	317.7	318.0	317.6	317.9
Processed fuels and lubricants	566.2	548.9	542.6	550.5	557.2	540.8	500.8	453.4	428.5	424.2	429.3	401.6	395.2	409.1
Containers	302.3	311.2	310.4	309.8	310.6	311.2	310.9	312.3	312.8	313.6	313.6	314.2	316.4	317.8
Supplies	283.4	284.2	285.1	285.6	285.7	286.6	286.4	286.8	287.2	287.1	287.3	287.4	287.1	287.9
Crude materials for further processing ...	330.8	306.1	297.8	304.7	304.3	301.0	289.0	281.1	273.7	279.4	274.9	278.0	275.5	275.5
Foodstuffs and feedstuffs	259.5	235.0	224.6	236.6	236.8	231.7	227.2	224.4	220.3	229.9	226.1	233.6	236.3	231.9
Nonfood materials ¹	484.5	459.2	455.3	451.6	450.0	450.6	422.7	403.9	389.4	386.9	380.7	374.1	360.0	369.6
Special groupings														
Finished goods, excluding foods	294.8	299.0	301.3	302.4	302.4	300.7	296.3	291.2	289.9	291.2	291.1	287.8	287.2	286.6
Finished energy goods	750.3	720.9	716.5	729.5	733.8	700.9	629.3	554.1	517.2	534.1	531.5	467.8	459.1	477.2
Finished goods less energy	265.1	269.2	270.5	271.6	272.2	272.7	272.2	272.1	273.1	274.0	274.2	276.4	277.2	275.4
Finished consumer goods less energy	257.8	261.3	262.1	263.4	264.3	264.8	264.0	263.9	264.9	266.1	266.2	269.0	270.0	268.4
Finished goods less food and energy	262.3	268.7	271.6	271.8	271.4	272.1	272.5	272.5	273.9	274.0	274.1	275.0	275.0	273.1
Finished consumer goods less food and energy	245.9	252.1	254.9	255.0	254.6	255.5	256.0	256.0	257.3	257.5	257.6	258.6	258.6	256.9
Consumer nondurable goods less food and energy	239.0	246.2	248.3	248.5	248.3	250.5	251.1	251.2	252.0	252.3	252.3	253.8	253.8	253.6
Intermediate materials less foods and feeds	325.0	325.0	324.1	324.5	325.3	323.6	319.7	315.5	313.0	312.4	312.8	310.5	309.9	311.5
Intermediate foods and feeds	253.1	232.8	228.6	231.4	232.7	232.6	228.9	227.8	227.0	229.3	229.0	230.3	232.4	233.3
Intermediate energy goods	545.0	528.3	522.2	529.3	536.2	520.0	482.0	437.0	413.3	409.1	413.9	387.1	380.8	393.8
Intermediate goods less energy	303.8	304.0	303.4	303.2	303.5	303.4	303.0	303.3	303.1	303.0	302.9	303.4	303.5	304.0
Intermediate materials less foods and energy	303.6	305.2	304.6	304.2	304.5	304.3	304.2	304.5	304.3	304.0	303.9	304.2	304.2	304.7
Crude energy materials	785.2	748.1	743.1	737.1	735.6	732.8	662.9	614.5	577.0	570.6	554.2	538.7	524.5	544.1
Crude materials less energy	255.5	233.2	224.7	233.2	233.0	229.8	226.5	224.7	221.9	229.2	226.5	232.0	231.1	228.5
Crude nonfood materials less energy	266.1	249.7	246.5	244.6	242.9	245.8	246.5	247.9	249.1	249.3	250.0	249.2	236.1	239.2

¹ Crude nonfood materials except fuel.

34. Producer Price indexes, by durability of product

(1967 = 100)

Grouping	Annual average		1985			1986								
	1984	1985	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Total durable goods	293.6	297.3	298.8	298.5	298.5	298.1	298.4	298.6	299.7	299.6	299.6	300.0	300.1	299.2
Total nondurable goods	323.3	317.2	314.3	317.6	318.8	316.8	308.4	300.7	296.0	297.9	297.4	294.9	294.0	295.6
Total manufactures	302.9	304.3	304.4	305.4	306.0	304.8	301.1	297.3	296.1	296.7	297.0	295.4	295.6	296.2
Durable	293.9	298.1	299.7	299.5	299.5	299.0	299.3	299.4	300.5	300.4	300.5	300.9	300.9	300.1
Nondurable	312.3	310.5	309.2	311.4	312.5	310.6	302.9	294.9	291.2	292.6	293.1	289.2	289.7	292.0
Total raw or slightly processed goods	346.6	327.9	320.6	326.2	327.6	326.0	316.3	310.3	303.0	306.2	302.6	304.3	299.7	299.2
Durable	266.7	252.2	248.1	245.2	244.3	248.2	251.2	252.4	253.1	252.1	250.9	248.9	252.4	253.2
Nondurable	351.4	332.4	324.9	331.2	332.7	330.6	320.2	313.6	305.8	309.3	305.5	307.4	302.3	301.7

35. Annual data: Producer Price Indexes, by stage of processing

(1967 = 100)

Index	1977	1978	1979	1980	1981	1982	1983	1984	1985
Finished goods:									
Total	181.7	195.9	217.7	247.0	269.8	280.7	285.2	291.1	293.7
Consumer goods	180.7	194.9	217.9	248.9	271.3	281.0	284.6	290.3	291.8
Capital equipment	184.6	199.2	216.5	239.8	264.3	279.4	287.2	294.0	300.5
Intermediate materials, supplies, and components:									
Total	201.5	215.6	243.2	280.3	306.0	310.4	312.3	320.0	318.7
Materials and components for manufacturing	195.4	208.7	234.4	265.7	286.1	289.8	293.4	301.8	299.5
Materials and components for construction	203.4	224.7	247.4	268.3	287.6	293.7	301.8	310.3	315.2
Processed fuels and lubricants	282.5	295.3	364.8	503.0	595.4	591.7	564.8	566.2	548.9
Containers	188.3	202.8	226.8	254.5	276.1	285.6	286.6	302.3	311.2
Supplies	188.7	198.5	218.2	244.5	263.8	272.1	277.1	283.4	284.2
Crude materials for further processing:									
Total	209.2	234.4	274.3	304.6	329.0	319.5	323.6	330.8	306.1
Foodstuffs and feedstuffs	192.1	216.2	247.9	259.2	257.4	247.8	252.2	259.5	235.0
Nonfood materials except fuel	212.2	233.1	284.5	346.1	413.7	376.8	372.2	380.5	355.3
Fuel	372.1	426.8	507.6	615.0	751.2	886.1	931.5	931.3	909.6

36. U.S. export price indexes by Standard International Trade Classification

(June 1977=100, unless otherwise indicated)

Category	1974 SITC	1983		1984				1985				1986	
		Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	
ALL COMMODITIES (9/83=100)		99.5	100.2	101.5	99.3	98.1	97.5	97.5	96.5	96.7	97.0	96.7	
Food (3/83=100)	0	108.8	106.2	109.6	103.5	96.5	95.8	94.0	90.2	93.6	90.5	89.5	
Meat (3/83=100)	01	101.2	108.9	108.7	105.6	104.4	103.9	104.7	106.1	112.2	111.5	114.7	
Fish (3/83=100)	03	100.4	99.8	98.7	98.0	98.7	101.0	103.6	102.6	101.8	102.2	106.2	
Grain and grain preparations (3/80=100)	04	105.6	102.7	107.4	101.2	92.9	92.4	90.3	82.6	87.1	82.1	79.1	
Vegetables and fruit (3/83=100)	05	116.1	116.2	126.8	125.5	114.6	119.4	120.1	126.8	118.8	115.2	125.7	
Feedstuffs for animals (3/83=100)	08	117.4	106.9	98.8	83.5	82.4	72.8	68.6	75.7	83.4	88.5	85.5	
Misc. food products (3/83=100)	09	101.7	104.9	110.6	109.5	108.4	110.6	109.2	108.1	107.7	106.0	104.7	
Beverages and tobacco (6/83=100)	1	101.5	101.6	101.9	102.8	101.3	99.9	100.1	99.7	98.6	95.6	96.5	
Beverages (9/83=100)	11	103.3	102.3	102.9	103.3	103.7	104.0	105.3	101.8	100.9	101.9	103.0	
Tobacco and tobacco products (6/83=100)	12	101.4	101.6	101.8	102.7	101.1	99.5	99.6	99.5	98.4	95.1	95.9	
Crude materials (6/83=100)	2	112.2	112.5	118.3	105.2	101.4	97.5	96.8	93.3	92.5	95.8	95.6	
Raw hides and skins (6/80=100)	21	135.2	145.6	154.7	153.7	133.6	121.0	126.2	129.0	139.9	138.9	148.9	
Oilseeds and oleaginous fruit (9/77=100)	22	98.8	93.9	104.3	79.9	74.8	71.0	71.2	64.2	63.9	66.9	65.8	
Crude rubber (including synthetic and reclaimed) (9/83=100)	23	102.2	103.3	106.0	104.1	104.0	106.4	106.3	107.1	106.0	106.0	106.1	
Wood	24	129.8	131.1	129.4	123.8	125.4	128.7	125.7	124.5	128.1	128.7	128.7	
Pulp and waste paper (6/83=100)	25	106.0	112.5	122.1	120.8	114.2	100.5	96.1	93.8	92.7	98.8	109.7	
Textile fibers	26	123.1	120.5	125.6	109.4	106.7	102.4	105.8	103.6	97.7	101.6	98.6	
Crude fertilizers and minerals	27	144.8	146.6	147.7	163.0	163.2	165.6	167.9	169.4	165.5	168.0	166.1	
Metalliferous ores and metal scrap	28	96.7	100.2	98.5	93.2	92.4	89.2	82.0	80.1	78.7	83.4	80.5	
Mineral fuels	3	99.2	99.1	99.7	99.7	99.7	100.1	99.2	97.6	96.6	91.9	86.2	
Animal and vegetable oils, fats, and waxes	4	122.0	129.8	164.5	145.7	147.9	142.0	144.5	114.5	101.4	90.8	84.4	
Fixed vegetable oils and fats (6/83=100)	42	129.3	133.2	176.4	159.0	156.7	152.9	164.8	128.8	108.7	95.4	95.3	
Chemicals (3/83=100)	5	98.6	101.4	99.7	98.3	97.7	97.0	96.8	97.1	96.6	96.5	95.4	
Organic chemicals (12/83=100)	51	100.0	100.2	101.0	97.4	94.7	93.8	96.5	97.1	95.4	93.5	89.3	
Fertilizers, manufactured (3/83=100)	56	96.8	108.3	96.9	97.4	94.8	92.5	87.9	89.8	90.0	88.6	84.0	
Intermediate manufactured products (9/81=100)	-	100.0	101.0	101.3	102.0	100.4	99.4	99.2	99.2	99.1	100.3	101.2	
Leather and furskins (9/79=100)	6	75.8	83.5	81.2	80.8	79.0	82.5	79.2	75.9	78.5	77.8	82.5	
Rubber manufactures	61	145.0	146.7	147.5	148.9	148.5	150.2	149.0	148.3	148.7	151.0	150.0	
Paper and paperboard products (6/78=100)	62	145.5	150.2	154.7	160.0	159.5	155.0	151.6	149.6	148.2	152.2	158.7	
Iron and steel (3/82=100)	64	96.3	95.9	96.1	96.8	96.5	95.5	95.3	95.9	98.2	98.4	99.4	
Nonferrous metals (9/81=100)	-	93.8	94.2	92.9	90.4	82.5	79.7	79.6	79.8	78.2	80.2	79.1	
Metal manufactures, n.e.s. (3/82=100)	-	102.1	103.1	104.5	105.1	105.0	105.4	105.2	105.4	104.4	105.3	105.5	
Machinery and transport equipment, excluding military and commercial aircraft (12/78=100)	67	137.0	138.5	139.4	140.1	141.5	142.3	142.9	143.1	143.3	144.0	144.1	
Power generating machinery and equipment (12/78=100)	68	154.4	158.4	156.9	160.6	167.5	165.3	167.4	167.1	167.5	169.1	169.2	
Machinery specialized for particular industries (9/78=100)	69	151.1	152.3	152.8	153.7	153.4	155.0	155.7	156.0	156.2	155.5	154.7	
Metalworking machinery (6/78=100)	7	148.7	150.8	151.2	151.7	151.9	153.4	155.1	156.3	158.4	159.0	158.9	
General industrial machines and parts n.e.s. 9/78=100)	71	145.9	148.6	149.0	149.3	150.2	152.4	152.0	152.4	152.2	152.3	153.3	
Office machines and automatic data processing equipment	72	102.5	101.4	101.5	99.8	101.4	100.9	100.0	99.9	99.4	99.9	99.2	
Telecommunications, sound recording and reproducing equipment	73	132.1	133.0	132.3	134.4	134.3	133.3	133.3	134.1	134.5	136.5	137.0	
Electrical machinery and equipment	74	109.8	110.2	112.6	113.8	114.6	114.9	116.1	115.3	113.8	115.1	114.1	
Road vehicles and parts (3/80=100)	75	128.8	130.2	131.2	131.0	131.8	133.1	133.9	133.8	135.0	135.5	136.4	
Other transport equipment, excl. military and commercial aviation	76	179.3	183.1	187.7	189.6	191.7	195.5	196.6	199.3	200.7	203.3	205.6	
Other manufactured articles	77	100.2	100.6	100.4	100.7	99.3	99.5	100.4	100.3	100.3	102.6	103.4	
Apparel (9/83=100)	78	100.8	101.9	102.1	103.9	103.4	104.7	104.7	105.0	105.3	-	-	
Professional, scientific, and controlling instruments and apparatus	79	171.5	171.8	172.0	175.8	171.7	175.5	178.3	178.7	178.8	182.2	183.8	
Photographic apparatus and supplies, optical goods, watches and clocks (12/77=100)	8	132.0	132.0	131.3	132.7	130.3	128.0	129.1	127.5	128.5	131.6	132.9	
Miscellaneous manufactured articles, n.e.s.	84	98.2	98.5	97.9	95.2	94.1	92.4	93.1	93.1	92.4	95.6	95.6	
Gold, non-monetary (6/83=100)	971	96.2	95.8	93.5	81.7	79.5	69.1	75.4	77.4	77.5	81.8	82.2	

- Data not available.

37. U.S. import price indexes by Standard International Trade Classification

(June 1977 = 100, unless otherwise indicated)

Category	1974 SITC	1984			1985				1986	
		June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
ALL COMMODITIES (9/82 = 100)		98.3	96.7	95.7	93.5	93.0	92.9	94.2	88.5	83.2
Food (9/77 = 100)	0	103.5	102.0	98.1	98.5	96.8	94.9	102.8	113.4	104.7
Meat	01	133.8	135.4	132.3	130.4	118.2	120.6	131.2	122.7	118.5
Dairy products and eggs (6/81 = 100)	02	99.8	98.9	98.4	98.3	97.9	99.1	100.5	106.7	107.1
Fish	03	134.2	134.2	133.9	132.9	129.4	129.7	132.7	139.3	144.8
Bakery goods, pasta products, grain and grain preparations (9/77 = 100)	04	134.8	132.9	132.8	131.8	132.3	136.3	141.9	146.9	149.3
Fruits and vegetables	05	135.8	135.4	117.2	127.1	129.4	120.2	131.3	119.4	119.4
Sugar, sugar preparations, and honey (3/82 = 100)	06	120.3	119.0	118.5	118.4	122.6	123.1	111.9	124.6	121.6
Coffee, tea, cocoa	07	62.4	60.3	58.4	57.0	56.0	54.4	64.6	85.9	69.2
Beverages and tobacco	1	156.3	157.1	156.5	156.2	157.1	158.0	162.1	163.2	165.5
Beverages	11	153.6	153.5	152.8	154.2	154.3	156.0	159.1	161.8	163.9
Crude materials	2	102.6	100.6	98.9	94.0	93.6	91.5	91.2	94.2	95.3
Crude rubber (inc. synthetic & reclaimed) (3/84 = 100)	23	93.7	90.7	83.8	77.6	76.4	68.9	73.2	78.8	75.5
Wood (9/81 = 100)	24	103.2	99.6	104.0	100.7	106.9	101.6	99.4	104.3	106.3
Pulp and waste paper (12/81 = 100)	25	96.1	96.3	93.2	84.0	80.4	76.8	75.8	74.9	79.9
Crude fertilizers and crude minerals (12/83 = 100)	27	96.2	98.0	98.6	100.3	101.7	102.7	102.1	101.5	100.0
Metalliferous ores and metal scrap (3/84 = 100)	28	102.8	100.1	95.6	90.4	87.6	89.5	90.1	94.5	95.6
Crude vegetable and animal materials, n.e.s.	29	100.8	101.1	106.4	104.3	104.9	102.5	102.5	103.6	104.4
Fuels and related products (6/82 = 100)	3	88.0	86.9	85.2	82.9	80.9	79.8	79.1	55.3	37.4
Petroleum and petroleum products (6/82 = 100)	33	88.1	87.0	85.2	83.8	81.6	80.3	80.1	54.7	36.1
Fats and oils (9/83 = 100)	4	141.8	124.4	114.9	89.9	76.7	57.6	50.6	41.4	39.3
Vegetable oils (9/83 = 100)	42	143.1	125.3	115.3	89.5	75.9	56.2	48.9	39.3	37.4
Chemicals (9/82 = 100)	5	100.6	98.8	97.1	95.7	94.9	94.5	94.2	94.6	93.3
Medicinal and pharmaceutical products (3/84 = 100)	54	98.5	96.4	94.6	91.6	95.1	95.3	96.7	102.9	104.9
Manufactured fertilizers (3/84 = 100)	56	101.7	98.5	92.9	94.2	82.0	80.8	78.5	79.2	79.7
Chemical materials and products, n.e.s. (9/84 = 100)	59	-	100.0	97.5	96.1	95.6	96.9	97.8	99.9	100.2
Intermediate manufactured products (12/77 = 100)	6	139.6	137.2	136.8	133.1	132.4	133.6	133.4	134.0	135.6
Leather and furskins	61	145.3	144.0	140.4	135.3	133.3	137.0	141.3	141.6	143.0
Rubber manufactures, n.e.s.	62	140.8	139.6	140.5	139.5	138.6	137.3	138.1	136.5	137.7
Cork and wood manufactures	63	131.0	126.4	126.1	121.3	121.2	123.4	124.0	130.8	134.3
Paper and paperboard products	64	150.4	156.1	157.5	157.6	157.2	157.8	156.5	157.1	157.1
Textiles	65	130.1	131.6	132.9	130.4	127.5	126.5	128.1	131.2	132.9
Nonmetallic mineral manufactures, n.e.s.	66	166.6	156.6	159.4	154.3	151.8	157.6	162.3	164.2	169.6
Iron and steel (9/78 = 100)	67	123.8	124.7	123.7	121.0	120.1	119.1	118.3	117.3	118.1
Nonferrous metals (12/81 = 100)	68	96.3	90.2	87.3	81.9	82.3	83.7	80.4	79.4	78.9
Metal manufactures, n.e.s.	69	120.5	119.3	119.3	117.4	117.8	119.5	121.6	124.4	127.8
Machinery and transport equipment (6/81 = 100)	7	104.1	102.6	102.9	101.6	102.6	103.5	107.2	111.5	115.3
Machinery specialized for particular industries (9/78 = 100)	72	100.0	98.8	98.0	96.2	97.0	101.4	104.9	112.1	115.4
Metalworking machinery (3/80 = 100)	73	93.8	92.1	89.9	86.3	90.5	94.2	98.1	105.0	107.7
General industrial machinery and parts, n.e.s. (6/81 = 100)	74	94.4	92.4	91.3	89.2	91.1	94.3	98.0	103.8	109.0
Office machines and automatic data processing equipment (3/80 = 100)	75	96.7	94.1	92.2	89.6	89.4	90.3	93.7	96.9	100.8
Telecommunications, sound recording and reproducing apparatus (3/80 = 100)	76	94.8	93.6	91.3	90.0	88.8	88.3	88.6	89.4	91.6
Electrical machinery and equipment (12/81 = 100)	77	91.2	87.0	86.4	82.1	83.9	81.4	83.1	84.5	87.4
Road vehicles and parts (6/81 = 100)	78	110.4	109.8	111.3	111.5	112.1	112.7	117.8	123.4	127.1
Misc. manufactured articles (3/80 = 100)	8	101.5	99.7	100.0	97.0	98.0	99.6	100.8	103.3	104.8
Plumbing, heating, and lighting fixtures (6/80 = 100)	81	112.0	110.7	111.6	113.9	114.1	117.8	115.0	120.1	123.5
Furniture and parts (6/80 = 100)	82	140.8	138.4	142.5	137.4	136.7	142.1	142.7	147.0	142.2
Clothing (9/77 = 100)	84	132.5	135.4	138.5	136.7	133.9	134.5	134.5	133.4	135.3
Footwear	85	140.8	138.4	142.5	137.4	136.7	142.1	142.7	147.0	142.2
Professional, scientific, and controlling instruments and apparatus (12/79 = 100)	87	97.8	95.6	92.9	89.2	92.3	98.8	102.4	106.4	112.5
Photographic apparatus and supplies, optical goods, watches, and clocks (3/80 = 100)	88	92.8	91.2	91.3	88.9	89.5	91.1	94.5	99.3	103.7
Misc. manufactured articles, n.e.s. (6/82 = 100)	89	104.0	98.3	96.3	91.2	95.2	96.4	97.9	102.1	103.4
Gold, non-monetary (6/82 = 100)	971	-	-	-	-	-	-	-	-	-

- Data not available.

38. U.S. export price indexes by end-use category

(September 1983 = 100 unless otherwise indicated)

Category	Per-centage of 1980 trade value	1984			1985			1986		
		June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Foods, feeds, and beverages	16.294	98.5	88.8	83.0	81.5	80.9	76.2	77.5	75.5	74.7
Raw materials	30.696	102.5	100.5	99.1	97.6	97.2	96.5	95.9	96.0	94.8
Raw materials, nondurable	21.327	104.4	102.8	101.4	99.6	99.5	98.7	97.9	97.5	96.0
Raw materials, durable	9.368	97.7	95.0	93.3	92.6	91.6	91.1	91.0	92.5	91.9
Capital goods (12/82=100)	30.186	103.9	104.6	105.6	106.2	106.6	106.6	106.6	107.4	107.5
Automotive vehicles, parts and engines (12/82=100)	7.483	105.3	105.3	105.7	106.7	108.0	108.1	109.2	109.5	110.4
Consumer goods	7.467	100.9	101.3	100.8	100.9	101.1	101.9	101.4	103.7	104.5
Durables	3.965	99.6	99.4	99.3	99.1	99.2	100.4	99.5	101.8	101.8
Nondurables	3.501	102.1	103.0	102.3	102.7	103.0	103.3	103.3	105.5	107.2

39. U.S. import price indexes by end-use category

(December 1982=100)

Category	Per-centage of 1980 trade value	1984			1985			1986		
		June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Foods, feeds, and beverages	7.477	107.2	105.6	101.8	102.1	100.4	99.0	106.0	115.8	108.2
Petroleum and petroleum products, excl. natural gas	31.108	88.5	87.5	85.7	84.4	82.1	80.9	80.5	55.4	36.7
Raw materials, excluding petroleum	19.205	104.3	102.5	101.1	96.3	95.8	95.4	93.9	94.5	94.0
Raw materials, nondurable	9.391	102.1	101.7	100.7	95.0	93.9	93.5	91.8	91.1	89.7
Raw materials, durable	9.814	106.7	103.3	101.6	97.7	97.8	97.4	96.2	98.1	98.7
Capital goods	13.164	99.8	98.0	97.8	94.8	96.3	97.6	100.0	102.8	106.6
Automotive vehicles, parts and engines	11.750	104.9	104.0	105.2	105.4	105.9	106.4	111.4	115.6	119.0
Consumer goods	14.250	101.9	100.6	101.1	99.5	99.4	101.0	102.4	104.5	106.6
Durable	5.507	101.4	98.8	98.5	97.0	97.0	98.9	100.7	103.4	106.6
Nondurable	8.743	102.5	103.0	104.6	103.0	102.5	103.9	104.7	106.0	106.6

40. U.S. export price indexes by Standard Industrial Classification ¹

Industry group	1984			1985			1986		
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Manufacturing:									
Food and kindred products (6/83=100)	112.7	105.6	103.3	99.5	99.5	96.7	98.1	97.0	95.0
Lumber and wood products, except furniture (6/83=100)	100.1	97.0	97.9	99.9	99.5	98.3	101.2	101.5	101.2
Furniture and fixtures (9/83=100)	103.1	103.5	104.9	105.2	106.5	107.1	108.4	109.2	109.7
Paper and allied products (3/81=100)	104.3	106.2	103.6	97.1	94.7	93.2	92.1	95.7	101.6
Chemicals and allied products (12/84=100)	102.3	101.3	100.7	100.3	99.6	99.7	99.2	98.9	98.3
Petroleum and coal products (12/83=100)	102.1	100.7	100.4	101.3	102.7	102.0	99.1	93.5	83.1
Primary metal products (3/82=100)	104.0	100.0	95.8	91.2	92.7	93.6	93.6	96.4	96.6
Machinery, except electrical (9/78=100)	137.9	138.0	139.9	140.4	140.5	140.6	140.5	140.6	140.3
Electrical machinery (12/80=100)	109.5	110.7	111.1	111.3	112.4	111.9	111.2	112.6	112.2
Transportation equipment (12/78=100)	157.2	157.8	158.9	160.5	161.9	162.8	164.3	165.2	166.9
Scientific instruments; optical goods; clocks (6/77=100)	153.2	156.0	153.0	154.9	156.6	156.2	156.7	159.7	161.2

¹ SIC - based classification.

41. U.S. import price indexes by Standard Industrial Classification ¹

Industry group	1984			1985				1986	
	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Manufacturing:									
Food and kindred products (6/77 = 100)	126.6	124.1	122.6	118.8	115.0	114.2	115.1	117.7	115.6
Textile mill products (9/82 = 100)	103.8	104.3	104.7	102.8	101.0	100.4	101.8	104.7	106.4
Apparel and related products (6/77 = 100)	129.6	133.9	138.2	135.6	133.0	133.9	134.4	133.4	135.1
Lumber and wood products, except furniture (6/77 = 100)	121.1	117.3	120.0	116.3	120.6	117.5	115.8	122.1	124.8
Furniture and fixtures (6/80 = 100)	96.9	96.2	95.6	93.9	96.1	97.7	98.2	101.2	103.5
Paper and allied products (6/77 = 100)	141.9	146.0	145.5	141.5	139.8	138.7	137.4	137.6	139.4
Chemicals and allied products (9/82 = 100)	101.8	99.8	98.2	95.3	93.9	93.3	95.8	98.6	102.1
Rubber and miscellaneous plastic products (12/80 = 100)	98.5	97.8	98.0	96.9	96.7	96.6	97.5	100.9	100.6
Leather and leather products	143.7	141.6	144.2	139.1	138.9	142.3	144.0	145.8	144.6
Primary metal products (6/81 = 100)	91.9	88.3	86.6	82.2	83.0	83.4	81.9	82.0	82.4
Fabricated metal products (12/84 = 100)	-	-	100.0	99.0	99.1	101.0	102.6	104.9	108.5
Machinery, except electrical (3/80 = 100)	97.1	95.5	94.1	91.8	93.4	96.6	100.0	105.5	108.9
Electrical machinery (9/84 = 100)	-	100.0	98.6	95.1	95.8	94.5	95.8	97.0	100.2
Transportation equipment (6/81 = 100)	111.6	110.7	112.9	113.1	114.2	114.8	119.6	123.9	128.0
Scientific instruments; optical goods; clocks (12/79 = 100)	95.5	94.4	93.2	90.7	91.7	94.6	98.8	103.9	109.5
Miscellaneous manufactured commodities (9/82 = 100)	99.1	95.8	96.4	95.1	95.1	96.6	98.7	99.9	101.7

¹ SIC - based classification.

- Data not available.

42. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

(1977 = 100)

Item	Annual average	Quarterly Indexes										
		1984	1984				1985				1986	
			IV	I	II	III	IV	I	II	III	IV	I	II
Business:												
Output per hour of all persons	105.3	103.8	104.9	105.6	105.5	105.5	105.7	106.4	107.3	106.4	107.3	107.2
Compensation per hour	168.1	163.6	165.9	167.1	169.0	170.6	172.3	174.5	176.4	178.0	179.1	180.4
Real compensation per hour	98.1	98.0	98.1	97.9	98.1	98.2	98.4	98.7	99.1	99.0	99.2	100.3
Unit labor costs	159.7	157.7	158.2	158.3	160.2	161.7	163.1	164.0	164.4	167.3	167.0	168.2
Unit nonlabor payments	156.3	150.6	154.1	156.7	157.0	157.7	158.3	160.0	161.4	159.6	162.2	161.9
Implicit price deflator	158.5	155.2	156.7	157.7	159.0	160.3	161.4	162.6	163.4	164.6	165.3	166.0
Nonfarm business:												
Output per hour of all persons	104.3	103.3	103.9	104.6	104.4	104.3	104.4	104.9	105.4	104.5	105.6	105.5
Compensation per hour	167.9	163.4	165.6	166.9	168.7	170.4	172.1	174.0	175.4	177.0	178.3	179.3
Real compensation per hour	98.0	97.9	97.9	97.8	98.0	98.1	98.2	98.4	98.5	98.4	98.8	99.7
Unit labor costs	161.0	158.2	159.4	159.5	161.5	163.3	164.8	165.9	166.3	169.3	168.8	170.0
Unit nonlabor payments	156.1	152.3	153.2	156.4	157.2	157.9	158.9	160.8	163.0	160.3	163.9	163.5
Implicit price deflator	159.3	156.2	157.2	158.4	160.0	161.4	162.7	164.1	165.2	166.2	167.1	167.7
Nonfinancial corporations:												
Output per hour of all employees	105.6	104.5	105.3	105.9	105.5	105.8	106.0	106.5	107.8	107.0	106.9	106.3
Compensation per hour	165.9	161.7	163.6	164.8	166.6	168.3	169.9	171.6	173.1	174.5	175.4	176.0
Real compensation per hour	96.8	96.8	96.8	96.6	96.7	96.8	97.0	97.0	97.2	97.0	97.1	97.9
Total unit costs	161.5	159.0	159.4	160.1	162.6	163.8	164.9	165.8	165.0	167.2	168.3	169.4
Unit labor costs	157.0	154.8	155.4	155.7	157.9	159.1	160.3	161.1	160.5	163.0	164.0	165.6
Unit nonlabor costs	174.6	171.4	171.1	173.1	176.4	177.5	178.5	179.8	178.3	179.8	181.1	180.9
Unit profits	133.4	128.6	134.4	138.5	130.3	130.5	129.3	130.2	141.7	131.2	131.7	128.4
Unit nonlabor payments	160.1	156.4	158.3	161.0	160.3	161.0	161.3	162.5	165.5	162.8	163.8	162.5
Implicit price deflator	158.1	155.3	156.4	157.5	158.7	159.8	160.6	161.6	162.2	162.9	164.0	164.5
Manufacturing:												
Output per hour of all persons	116.6	113.3	114.7	115.7	117.8	118.2	119.3	121.7	123.0	122.9	123.4	124.0
Compensation per hour	168.2	163.6	165.4	166.8	169.1	171.5	173.8	175.6	178.1	179.3	180.2	181.4
Real compensation per hour	98.1	97.9	97.8	97.8	98.2	98.7	99.2	99.3	100.0	99.7	99.8	100.9
Unit labor costs	144.2	144.3	144.1	144.2	143.5	145.1	145.7	144.3	144.8	145.8	146.1	146.2

43. Annual indexes of multifactor productivity and related measures, selected years

(1977 = 100)

Item	1960	1970	1973	1974	1976	1978	1979	1980	1981	1982	1983	1984
Private business												
Productivity:												
Output per hour of all persons	67.3	88.4	95.9	93.8	98.4	100.8	99.5	99.2	100.6	100.3	103.0	105.4
Output per unit of capital services	102.4	102.0	105.3	98.8	97.2	102.0	99.8	94.2	92.4	86.6	88.3	92.4
Multifactor productivity	78.2	92.9	99.1	95.6	98.0	101.2	99.7	97.4	97.7	95.2	97.6	100.6
Output	55.3	80.2	93.0	91.2	94.5	105.8	107.9	106.6	108.9	105.4	109.9	118.9
Inputs:												
Hours of all persons	82.2	90.8	96.9	97.2	96.1	105.0	108.4	107.5	108.2	105.2	106.7	112.8
Capital services	54.0	78.7	88.3	92.4	97.2	103.8	108.0	113.1	117.8	121.7	124.4	128.7
Combined units of labor and capital input	70.7	86.3	93.8	95.5	96.5	104.5	108.2	109.4	111.5	110.7	112.6	118.1
Capital per hour of all persons	65.7	86.7	91.1	95.0	101.2	98.8	99.7	105.3	108.8	115.7	116.7	114.1
Private nonfarm business												
Productivity:												
Output per hour of all persons	70.7	89.2	96.4	94.3	98.5	100.8	99.2	98.7	99.6	99.1	102.4	104.3
Output per unit of capital services	103.7	102.8	106.0	99.2	97.3	101.9	99.0	93.4	91.1	85.1	87.3	90.9
Multifactor productivity	80.9	93.7	99.6	96.0	98.1	101.2	99.1	96.9	96.7	94.1	97.0	99.6
Output	54.4	79.9	92.9	91.1	94.4	106.0	107.9	106.6	108.4	104.8	110.0	118.9
Inputs:												
Hours of all persons	77.0	89.6	96.3	96.6	95.8	105.1	108.8	108.0	108.8	105.7	107.4	114.0
Capital services	52.5	77.7	87.6	91.9	97.0	104.0	109.0	114.1	119.0	123.2	126.1	130.8
Combined units of labor and capital input	67.3	85.3	93.3	95.0	96.2	104.7	108.9	110.0	112.2	111.4	113.5	119.4
Capital per hour of all persons	68.2	86.8	91.0	95.1	101.3	98.9	100.1	105.6	109.4	116.5	117.4	114.7
Manufacturing												
Productivity:												
Output per hour of all persons	62.2	80.8	93.4	90.6	97.1	101.5	101.4	101.4	103.6	105.9	112.0	116.6
Output per unit of capital services	102.5	98.6	111.4	101.2	96.2	102.1	99.7	91.2	89.2	81.8	86.9	94.4
Multifactor productivity	71.9	85.2	97.9	93.3	96.8	101.7	101.0	98.7	99.8	99.2	105.1	110.7
Output	52.5	78.6	96.3	91.7	93.1	106.0	108.1	103.2	104.8	98.4	104.7	116.0
Inputs:												
Hours of all persons	84.4	97.3	103.1	101.2	95.9	104.4	106.5	101.7	101.1	92.9	93.5	99.5
Capital services	51.2	79.7	86.4	90.6	96.7	103.7	108.4	113.1	117.5	120.3	120.6	122.9
Combined units of labor and capital inputs	73.0	92.2	98.4	98.3	96.1	104.2	107.0	104.5	105.0	99.2	99.7	104.8
Capital per hour of all persons	60.7	82.0	83.8	89.5	100.9	99.4	101.7	111.2	116.2	129.4	129.0	123.6

44. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

(1977 = 100)

Item	1960	1970	1973	1974	1976	1978	1979	1980	1981	1982	1983	1984	1985
Business:													
Output per hour of all persons	67.6	88.4	95.9	93.9	98.3	100.8	99.6	99.3	100.7	100.3	103.0	105.3	106.4
Compensation per hour	33.6	57.8	70.9	77.6	92.8	108.5	119.1	131.5	143.7	154.9	161.5	168.1	175.3
Real compensation per hour	68.9	90.2	96.7	95.4	98.7	100.8	99.4	96.7	95.7	97.3	98.2	98.1	98.8
Unit labor costs	49.7	65.4	73.9	82.7	94.3	107.6	119.5	132.5	142.7	154.5	156.8	159.7	164.8
Unit nonlabor payments	46.4	59.4	72.5	76.4	93.3	106.7	112.5	118.7	134.6	136.6	146.3	156.3	159.7
Implicit price deflator	48.5	63.2	73.4	80.5	94.0	107.3	117.0	127.6	139.8	148.1	153.0	158.5	163.0
Nonfarm business:													
Output per hour of all persons	71.0	89.3	96.4	94.3	98.5	100.8	99.3	98.8	99.8	99.2	102.4	104.3	104.8
Compensation per hour	35.3	58.2	71.2	78.0	92.8	108.6	118.9	131.3	143.6	154.8	161.5	167.9	174.6
Real compensation per hour	72.3	90.8	97.1	95.9	98.8	100.9	99.2	96.6	95.7	97.2	98.2	98.0	98.4
Unit labor costs	49.7	65.2	73.9	82.7	94.3	107.7	119.7	132.9	144.0	156.0	157.7	161.0	166.7
Unit nonlabor payments	46.3	60.0	69.3	74.0	93.0	105.6	110.5	118.5	133.5	136.5	148.1	156.1	160.6
Implicit price deflator	48.5	63.4	72.3	79.7	93.8	107.0	116.5	127.8	140.3	149.2	154.3	159.3	164.6
Nonfinancial corporations:													
Output per hour of all employees	73.4	91.1	97.5	94.6	98.4	100.6	99.8	99.1	99.6	100.4	103.5	105.6	106.8
Compensation per hour	36.9	59.2	71.6	78.2	92.9	108.4	118.7	131.1	143.3	154.3	159.9	165.9	172.3
Real compensation per hour	75.5	92.4	97.6	96.1	98.9	100.7	99.1	96.4	95.5	96.9	97.3	96.8	97.0
Unit labor costs	50.2	65.0	73.4	82.6	94.3	107.8	119.0	132.3	143.8	153.8	154.5	157.0	161.2
Unit nonlabor payments	51.5	60.1	68.9	73.1	93.8	104.4	108.4	118.6	137.8	142.1	152.1	160.1	163.0
Implicit price deflator	50.7	63.3	71.9	79.4	94.2	106.6	115.4	127.6	141.7	149.8	153.7	158.1	161.8
Manufacturing:													
Output per hour of all persons	62.2	80.8	93.4	90.6	97.1	101.5	101.4	101.4	103.6	105.9	112.0	116.6	121.7
Compensation per hour	36.5	57.4	68.8	76.2	92.1	108.2	118.6	132.4	145.2	157.5	162.4	168.2	176.7
Real compensation per hour	74.8	89.5	93.8	93.6	98.1	100.5	99.1	97.4	96.7	98.9	98.8	98.1	99.5
Unit labor costs	58.7	71.0	73.7	84.1	94.9	106.6	117.0	130.6	140.1	148.7	145.0	144.2	145.1
Unit nonlabor payments	60.0	64.1	70.7	67.7	93.5	101.9	98.9	97.8	111.8	114.0	128.5	136.9	134.4
Implicit price deflator	59.1	69.0	72.8	79.3	94.5	105.2	111.7	121.0	131.8	138.6	140.2	142.1	142.0

45. Unemployment rates in nine countries, quarterly data seasonally adjusted

Country	Annual average		1984	1985				1986	
	1984	1985	IV	I	II	III	IV	I	II
Total labor force basis									
United States	7.4	7.1	7.1	7.2	7.2	7.1	6.9	7.0	7.1
Canada	11.2	10.4	11.1	11.0	10.5	10.2	10.1	9.7	9.5
Australia	8.9	8.2	8.6	8.5	8.4	8.1	7.8	7.9	-
Japan	2.7	2.6	2.7	2.6	2.5	2.6	2.9	2.6	2.8
France	9.7	10.1	10.0	10.2	10.1	10.2	9.9	10.0	10.3
Germany	7.6	7.7	7.7	7.7	7.8	7.7	7.7	7.6	7.5
Great Britain	12.8	13.0	12.8	12.9	13.0	13.2	12.8	13.0	13.1
Italy ^{1, 2}	5.8	5.9	5.7	5.8	5.7	5.9	6.2	6.2	6.3
Sweden	3.1	2.8	3.0	3.0	2.9	2.7	2.7	2.8	2.6
Civilian labor force basis									
United States	7.5	7.2	7.2	7.3	7.3	7.2	7.0	7.1	7.2
Canada	11.3	10.5	11.1	11.1	10.6	10.2	10.1	9.7	9.6
Australia	9.0	8.3	8.6	8.6	8.5	8.2	7.9	8.0	-
Japan	2.8	2.6	2.7	2.6	2.6	2.7	2.9	2.7	2.8
France	9.9	10.4	10.3	10.5	10.4	10.4	10.1	10.3	10.5
Germany	7.8	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.6
Great Britain	12.9	13.1	13.0	13.1	13.2	13.4	13.0	13.1	13.3
Italy	5.9	6.0	5.8	5.9	5.8	6.0	6.3	6.3	6.5
Sweden	3.1	2.8	3.0	3.0	2.9	2.8	2.7	2.8	2.6

¹ Quarterly rates are for the first month of the quarter.

² Major changes in the Italian labor force survey, introduced in 1977, resulted in a large increase in persons enumerated as unemployed. However, many persons reported that they had not actively sought work in the past 30 days, and they have been provisionally excluded for comparability with U.S. concepts. Inclusion of such persons would more than double the Italian unemployment rate

shown.

- Data not available.

NOTE: Quarterly figures for France, Germany, and Great Britain are calculated by applying annual adjustment factors to current published data and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures.

46. Annual data: Employment status of the civilian working-age population, ten countries

(Numbers in thousands)

Employment status and country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Labor force										
United States	96,158	99,009	102,251	104,962	106,940	108,670	110,204	111,550	113,544	115,461
Canada	10,203	10,500	10,895	11,231	11,573	11,904	11,958	12,183	12,399	12,639
Australia	6,244	6,358	6,443	6,519	6,693	6,810	6,910	6,997	7,133	7,272
Japan	53,100	53,820	54,610	55,210	55,740	56,320	56,980	58,110	58,480	58,820
France	22,000	22,300	22,470	22,670	22,790	22,930	23,150	23,130	23,290	23,330
Germany	25,900	25,870	26,000	26,250	26,520	26,650	26,710	26,740	26,880	27,090
Great Britain	25,290	25,430	25,620	25,710	25,870	25,870	25,880	26,010	26,530	26,960
Italy	20,300	20,530	20,630	20,910	21,210	21,410	21,450	21,610	21,680	21,800
Netherlands	4,890	4,950	5,010	5,100	5,290	5,500	5,560	5,720	5,740	5,690
Sweden	4,149	4,168	4,203	4,262	4,312	4,326	4,350	4,369	4,385	4,418
Participation rate										
United States	61.6	62.3	63.2	63.7	63.8	63.9	64.0	64.0	64.4	64.8
Canada	61.1	61.6	62.7	63.4	64.1	64.8	64.1	64.4	64.8	65.2
Australia	62.7	62.7	62.0	61.7	62.2	62.0	61.8	61.5	61.5	61.8
Japan	62.4	62.5	62.8	62.7	62.6	62.6	62.7	63.1	62.7	62.3
France	57.3	57.6	57.5	57.5	57.2	57.1	57.1	56.6	56.6	56.4
Germany	53.8	53.4	53.3	53.3	53.2	52.9	52.7	52.5	52.6	53.2
Great Britain	63.2	63.2	63.3	63.2	63.2	62.2	61.9	61.9	62.7	63.6
Italy	47.8	48.0	47.7	47.8	48.0	48.0	47.4	47.2	47.3	47.2
Netherlands	49.1	49.0	48.8	49.0	50.0	51.3	51.2	52.1	52.0	51.2
Sweden	66.0	65.9	66.1	66.6	67.0	66.8	66.8	66.7	66.8	67.2
Employed										
United States	88,752	92,017	96,048	98,824	99,303	100,397	99,526	100,834	105,005	107,150
Canada	9,477	9,651	9,987	10,395	10,708	11,006	10,644	10,734	11,000	11,311
Australia	5,946	6,000	6,038	6,111	6,284	6,416	6,415	6,300	6,490	6,670
Japan	52,020	52,720	53,370	54,040	54,600	55,060	55,620	56,550	56,870	57,260
France	21,010	21,180	21,260	21,300	21,320	21,200	21,230	21,170	20,980	20,910
Germany	25,010	24,970	25,130	25,470	25,750	25,560	25,130	24,750	24,790	24,960
Great Britain	23,810	23,840	24,040	24,360	24,100	23,190	22,820	22,680	23,100	23,420
Italy	19,600	19,800	19,870	20,100	20,380	20,480	20,430	20,470	20,390	20,490
Netherlands	4,630	4,700	4,750	4,830	4,960	4,990	4,930	4,890	4,880	4,890
Sweden	4,083	4,093	4,109	4,174	4,226	4,218	4,213	4,218	4,249	4,293
Employment-population ratio										
United States	56.8	57.9	59.3	59.9	59.2	59.0	57.8	57.9	59.5	60.1
Canada	56.7	56.6	57.5	58.7	59.3	59.9	57.0	56.7	57.4	58.4
Australia	59.7	59.2	58.1	57.9	58.4	58.4	57.3	55.4	56.0	56.6
Japan	61.1	61.2	61.3	61.4	61.3	61.2	61.2	61.4	61.0	60.6
France	54.8	54.7	54.4	54.0	53.5	52.8	52.3	51.8	51.0	50.5
Germany	52.0	51.6	51.5	51.7	51.7	50.8	49.6	48.6	48.5	49.0
Great Britain	59.5	59.3	59.4	59.8	58.9	55.8	54.6	54.0	54.6	55.2
Italy	46.1	46.3	45.9	45.9	46.1	45.9	45.2	44.7	44.5	44.4
Netherlands	46.5	46.5	46.3	46.4	46.9	46.5	45.4	44.5	44.2	44.0
Sweden	64.9	64.8	64.6	65.3	65.6	65.1	64.7	64.4	64.7	65.3
Unemployed										
United States	7,406	6,991	6,202	6,137	7,637	8,273	10,678	10,717	8,539	8,312
Canada	726	849	908	836	865	898	1,314	1,448	1,399	1,328
Australia	298	358	405	408	409	394	495	697	642	602
Japan	1,080	1,100	1,240	1,170	1,140	1,260	1,360	1,560	1,610	1,560
France	990	1,120	1,210	1,370	1,470	1,730	1,920	1,960	2,310	2,420
Germany	890	900	870	780	770	1,090	1,580	1,990	2,090	2,130
Great Britain	1,480	1,590	1,580	1,350	1,770	2,680	3,060	3,330	3,430	3,540
Italy	700	740	760	810	830	920	1,020	1,140	1,280	1,310
Netherlands	260	250	260	270	330	510	630	830	860	800
Sweden	66	75	94	88	86	108	137	151	136	125
Unemployment rate										
United States	7.7	7.1	6.1	5.8	7.1	7.6	9.7	9.6	7.5	7.2
Canada	7.1	8.1	8.3	7.4	7.5	7.5	11.0	11.9	11.3	10.5
Australia	4.8	5.6	6.3	6.3	6.1	5.8	7.2	10.0	9.0	8.3
Japan	2.0	2.0	2.3	2.1	2.0	2.2	2.4	2.7	2.8	2.6
France	4.5	5.0	5.4	6.0	6.4	7.5	8.3	8.5	9.9	10.4
Germany	3.4	3.5	3.4	3.0	2.9	4.1	5.9	7.4	7.8	7.9
Great Britain	5.9	6.3	6.2	5.3	6.8	10.4	11.8	12.8	12.9	13.1
Italy	3.4	3.6	3.7	3.9	3.9	4.3	4.8	5.3	5.9	6.0
Netherlands	5.3	5.0	5.2	5.3	6.2	9.3	11.3	14.5	15.0	14.1
Sweden	1.6	1.8	2.2	2.1	2.0	2.5	3.1	3.5	3.1	2.8

47. Annual indexes of productivity and related measures, twelve countries

(1977 = 100)

Item and country	1960	1970	1973	1974	1976	1977	1979	1980	1981	1982	1983	1984	1985
Output per hour													
United States	62.2	80.8	93.4	90.6	97.1	100.0	101.4	101.4	103.6	105.9	112.9	118.5	121.8
Canada	50.3	76.8	91.3	93.4	96.2	100.0	104.2	101.9	104.0	101.0	107.6	111.5	115.1
Japan	23.2	64.8	83.1	86.5	94.3	100.0	114.8	122.7	127.2	135.0	142.3	152.2	159.9
Belgium	32.8	60.0	78.7	83.2	95.3	100.0	111.8	119.3	127.2	132.8	141.0	145.5	-
Denmark	37.2	65.5	83.2	86.0	98.2	100.0	106.5	112.3	114.2	114.6	117.3	118.3	118.4
France	36.4	69.6	82.2	85.2	95.0	100.0	110.3	112.0	116.4	123.5	129.3	135.0	140.2
Germany	40.3	71.2	84.0	87.4	96.5	100.0	108.2	108.6	111.0	112.6	119.0	124.7	131.9
Italy	36.5	72.7	90.9	95.3	98.9	100.0	110.5	116.9	121.0	123.4	126.6	135.0	139.1
Netherlands	32.4	64.3	81.5	88.1	95.8	100.0	112.3	113.9	116.9	119.4	126.1	139.3	-
Norway	54.6	81.7	94.6	97.7	99.7	100.0	107.1	109.3	109.7	112.6	119.2	122.3	125.0
Sweden	42.3	80.7	94.8	98.8	101.7	100.0	110.9	112.7	113.2	116.5	125.5	132.6	135.2
United Kingdom	53.8	77.6	92.9	95.2	99.1	100.0	102.2	101.2	107.9	112.7	121.2	126.2	129.7
Output													
United States	52.5	78.6	96.3	91.7	93.1	100.0	108.1	103.2	104.8	98.4	105.6	117.9	121.0
Canada	41.5	75.1	94.6	98.0	98.1	100.0	110.9	107.7	108.8	96.4	101.7	110.1	115.2
Japan	19.2	69.9	91.9	91.7	94.8	100.0	113.9	124.1	129.8	137.3	148.2	165.2	175.8
Belgium	41.7	78.1	95.8	99.6	99.5	100.0	104.2	107.2	105.9	109.1	110.7	112.8	-
Denmark	49.2	82.0	95.9	97.4	99.6	100.0	105.4	110.1	106.6	108.3	112.2	118.6	122.3
France	35.4	73.3	88.6	91.8	96.1	100.0	106.1	106.6	105.9	106.0	107.4	108.4	109.0
Germany	50.0	86.6	96.1	95.4	98.0	100.0	106.6	106.6	104.9	102.4	103.5	107.4	113.0
Italy	37.4	78.0	90.5	96.3	97.9	100.0	108.6	115.4	114.3	111.6	109.2	113.2	115.3
Netherlands	44.8	84.4	95.8	100.0	99.0	100.0	106.1	106.6	106.7	105.0	105.3	110.8	-
Norway	55.1	87.0	99.5	104.0	101.4	100.0	100.3	101.3	100.1	99.8	98.8	101.3	103.7
Sweden	52.6	92.5	100.3	105.7	106.1	100.0	103.6	104.0	100.6	100.1	105.2	112.4	114.6
United Kingdom	71.0	94.7	104.7	103.5	98.2	100.0	100.5	91.7	86.2	86.4	88.9	92.4	95.0
Total hours													
United States	84.4	97.3	103.1	101.2	95.9	100.0	106.5	101.7	101.1	92.9	93.5	99.5	99.3
Canada	82.6	97.7	103.6	105.0	102.0	100.0	106.4	105.7	104.6	95.4	94.6	98.7	100.1
Japan	82.7	107.9	110.7	106.1	100.6	100.0	99.3	101.2	102.0	101.7	104.2	108.5	110.0
Belgium	127.0	130.1	121.8	119.7	104.4	100.0	93.2	89.9	83.3	82.1	78.5	77.5	-
Denmark	132.4	125.1	115.2	113.2	101.4	100.0	99.0	98.1	93.4	94.5	95.7	100.2	103.3
France	97.2	105.3	107.8	107.8	101.2	100.0	96.2	95.2	91.0	85.9	83.0	80.3	77.8
Germany	123.8	121.7	114.4	109.2	101.6	100.0	98.5	98.1	94.6	91.0	87.0	86.2	85.7
Italy	102.3	107.4	99.6	101.0	99.0	100.0	98.2	98.7	94.5	90.4	86.2	83.9	82.9
Netherlands	138.4	131.2	117.6	113.5	103.3	100.0	94.4	93.6	91.2	88.0	83.5	79.5	-
Norway	101.0	106.4	105.1	106.5	101.7	100.0	93.6	92.6	91.3	88.6	82.9	82.8	83.0
Sweden	124.4	114.6	105.7	107.0	104.3	100.0	93.4	92.3	88.9	85.9	83.9	84.8	84.8
United Kingdom	131.9	122.1	112.7	108.7	99.0	100.0	98.3	90.7	79.9	76.7	73.3	73.2	73.3
Compensation per hour													
United States	36.5	57.3	68.8	76.2	92.1	100.0	118.6	132.4	145.2	157.5	163.2	169.1	176.6
Canada	27.1	46.5	59.2	68.5	89.9	100.0	118.3	130.6	151.5	167.1	179.3	182.1	191.4
Japan	8.9	33.9	55.1	72.3	90.7	100.0	113.4	120.7	129.8	136.6	140.7	144.8	148.3
Belgium	13.8	34.9	53.5	65.2	89.5	100.0	117.6	130.4	144.6	152.0	163.7	176.6	-
Denmark	12.6	36.3	56.1	67.9	90.4	100.0	123.1	135.9	149.6	162.9	174.3	183.9	195.5
France	15.1	36.6	52.3	62.0	88.9	100.0	129.3	147.5	170.3	200.8	226.2	246.5	262.7
Germany	18.8	48.0	67.5	76.9	91.3	100.0	116.1	125.6	134.5	141.0	148.4	155.3	164.7
Italy	8.3	26.1	43.7	54.5	84.2	100.0	134.7	160.2	197.1	237.3	276.4	303.0	334.0
Netherlands	12.5	39.0	60.5	71.9	91.9	100.0	117.0	123.6	129.1	137.5	144.7	152.8	-
Norway	15.8	37.9	54.5	63.6	88.8	100.0	116.0	128.0	142.8	156.0	173.5	188.3	205.2
Sweden	14.7	38.5	54.2	63.8	91.5	100.0	120.1	133.6	148.1	158.9	173.3	190.7	205.8
United Kingdom	14.8	30.8	44.8	56.9	88.4	100.0	137.7	165.8	188.9	206.4	222.4	237.2	257.0
Unit labor costs: National currency basis:													
United States	58.7	70.9	73.7	84.1	94.9	100.0	117.0	130.6	140.1	148.7	144.5	142.8	145.0
Canada	53.9	60.6	64.8	73.3	93.5	100.0	113.5	128.1	145.7	165.4	166.7	163.2	166.3
Japan	38.4	52.3	66.4	83.6	96.2	100.0	98.8	98.4	102.0	101.2	98.9	95.1	92.7
Belgium	42.0	58.1	68.0	78.3	93.9	100.0	105.2	109.3	113.6	114.4	116.1	121.4	-
Denmark	33.8	55.4	67.4	79.0	92.1	100.0	115.7	121.0	131.1	142.2	148.6	155.5	165.1
France	41.6	52.6	63.6	72.8	93.6	100.0	117.3	131.7	146.3	162.6	175.0	182.5	187.4
Germany	46.6	67.4	80.3	88.0	94.6	100.0	107.3	115.7	121.2	125.2	124.7	124.6	124.9
Italy	22.8	36.0	48.1	57.2	85.1	100.0	121.9	137.0	162.9	192.4	218.3	224.5	240.1
Netherlands	38.5	60.7	74.3	81.6	96.0	100.0	104.1	108.5	110.4	115.2	114.7	109.7	-
Norway	29.0	46.4	57.6	65.2	89.1	100.0	108.2	117.0	130.2	138.6	145.5	154.0	164.2
Sweden	34.8	47.7	57.2	64.6	90.0	100.0	108.3	118.6	130.9	136.3	138.1	143.8	152.2
United Kingdom	27.6	39.7	48.2	59.7	89.2	100.0	134.7	163.8	175.1	183.1	183.5	187.9	198.1
Unit labor costs: U.S. dollar basis:													
United States	58.7	70.9	73.7	84.1	94.9	100.0	117.0	130.6	140.1	148.7	144.5	142.8	145.0
Canada	59.0	61.7	68.8	79.7	100.7	100.0	103.0	116.4	129.1	142.3	143.7	133.9	129.4
Japan	28.5	39.1	65.6	76.8	86.9	100.0	121.3	116.8	123.8	108.8	111.5	107.2	104.2
Belgium	30.2	42.0	62.8	72.1	87.2	100.0	128.5	134.1	109.9	89.5	81.3	75.3	-
Denmark	29.5	44.4	67.2	77.9	91.5	100.0	132.0	129.0	110.3	102.3	97.5	90.1	93.5
France	41.7	46.8	70.4	74.5	96.3	100.0	135.5	153.4	132.2	121.5	112.9	102.7	102.6
Germany	25.9	42.9	70.4	79.1	87.3	100.0	135.9	147.9	124.9	119.7	113.4	101.6	98.6
Italy	32.5	50.6	73.1	77.6	90.5	100.0	129.5	141.4	126.3	125.4	126.8	112.8	111.1
Netherlands	25.1	41.2	65.6	74.6	89.1	100.0	127.4	134.2	108.9	105.8	98.6	83.9	-
Norway	21.7	34.5	53.4	62.8	86.9	100.0	113.8	126.2	120.6	114.2	106.1	100.4	101.7
Sweden	30.1	41.1	58.7	65.1	92.3	100.0	112.9	125.3	115.4	96.9	80.4	77.7	79.1
United Kingdom	44.4	54.4	67.7	80.1	92.3	100.0	163.9	218.3	203.1	183.5	159.4	143.9	147.3

- Data not available.

48. Occupational injury and illness incidence rates by industry, United States

Industry and type of case ¹	Incidence rates per 100 full-time workers ²								
	1976	1977	1978	1979	1980	1981	1982	1983	1984
PRIVATE SECTOR³									
Total cases	9.2	9.3	9.4	9.5	8.7	8.3	7.7	7.6	8.0
Lost workday cases	3.5	3.8	4.1	4.3	4.0	3.8	3.5	3.4	3.7
Lost workdays	60.5	61.6	63.5	67.7	65.2	61.7	58.7	58.5	63.4
Agriculture, forestry, and fishing³									
Total cases	11.0	11.5	11.6	11.7	11.9	12.3	11.8	11.9	12.0
Lost workday cases	4.7	5.1	5.4	5.7	5.8	5.9	5.9	6.1	6.1
Lost workdays	83.3	81.1	80.7	83.7	82.7	82.8	86.0	90.8	90.7
Mining									
Total cases	11.0	10.9	11.5	11.4	11.2	11.6	10.5	8.4	9.7
Lost workday cases	5.8	6.0	6.4	6.8	6.5	6.2	5.4	4.5	5.3
Lost workdays	114.4	128.8	143.2	150.5	163.6	146.4	137.3	125.1	160.2
Construction									
Total cases	15.3	15.5	16.0	16.2	15.7	15.1	14.6	14.8	15.5
Lost workday cases	5.5	5.9	6.4	6.8	6.5	6.3	6.0	6.3	6.9
Lost workdays	105.0	111.5	109.4	120.4	117.0	113.1	115.7	118.2	128.1
General building contractors:									
Total cases	14.5	15.0	15.9	16.3	15.5	15.1	14.1	14.4	15.4
Lost workday cases	5.2	5.7	6.3	6.8	6.5	6.1	5.9	6.2	6.9
Lost workdays	100.0	100.2	105.3	111.2	113.0	107.1	112.0	113.0	121.3
Heavy construction contractors:									
Total cases	16.3	16.0	16.6	16.6	16.3	14.9	15.1	15.4	14.9
Lost workday cases	5.5	5.7	6.2	6.7	6.3	6.0	5.8	6.2	6.4
Lost workdays	109.2	116.7	110.9	123.1	117.6	106.0	113.1	122.4	131.7
Special trade contractors:									
Total cases	15.3	15.6	15.8	16.0	15.5	15.2	14.7	14.8	15.8
Lost workday cases	5.6	6.1	6.6	6.9	6.7	6.6	6.2	6.4	7.1
Lost workdays	105.8	115.5	111.0	124.3	118.9	119.3	118.6	119.0	130.1
Manufacturing									
Total cases	13.2	13.1	13.2	13.3	12.2	11.5	10.2	10.0	10.6
Lost workday cases	4.8	5.1	5.6	5.9	5.4	5.1	4.4	4.3	4.7
Lost workdays	79.5	82.3	84.9	90.2	86.7	82.0	75.0	73.5	77.9
Durable goods									
Lumber and wood products:									
Total cases	22.1	22.3	22.6	20.7	18.6	17.6	16.9	18.3	19.6
Lost workday cases	9.7	10.4	11.1	10.8	9.5	9.0	8.3	9.2	9.9
Lost workdays	167.3	178.0	178.8	175.9	171.8	158.4	153.3	163.5	172.0
Furniture and fixtures:									
Total cases	16.9	17.2	17.5	17.6	16.0	15.1	13.9	14.1	15.3
Lost workday cases	6.0	6.0	6.9	7.1	6.6	6.2	5.5	5.7	6.4
Lost workdays	94.5	92.0	95.9	99.6	97.6	91.9	85.6	83.0	101.5
Stone, clay, and glass products:									
Total cases	16.1	16.9	16.8	16.8	15.0	14.1	13.0	13.1	13.6
Lost workday cases	6.4	6.9	7.8	8.0	7.1	6.9	6.1	6.0	6.6
Lost workdays	114.1	120.4	126.3	133.7	128.1	122.2	112.2	112.0	120.8
Primary metal industries:									
Total cases	16.6	16.2	17.0	17.3	15.2	14.4	12.4	12.4	13.3
Lost workday cases	6.3	6.8	7.5	8.1	7.1	6.7	5.4	5.4	6.1
Lost workdays	114.8	119.4	123.6	134.7	128.3	121.3	101.6	103.4	115.3
Fabricated metal products:									
Total cases	18.9	19.1	19.3	19.9	18.5	17.5	15.3	15.1	16.1
Lost workday cases	6.8	7.2	8.0	8.7	8.0	7.5	6.4	6.1	6.7
Lost workdays	109.8	109.0	112.4	124.2	118.4	109.9	102.5	96.5	104.9
Machinery, except electrical:									
Total cases	14.2	14.0	14.4	14.7	13.7	12.9	10.7	9.8	10.7
Lost workday cases	4.6	4.7	5.4	5.9	5.5	5.1	4.2	3.6	4.1
Lost workdays	70.6	69.9	75.1	83.6	81.3	74.9	66.0	58.1	65.8
Electric and electronic equipment:									
Total cases	8.5	8.6	8.7	8.6	8.0	7.4	6.5	6.3	6.8
Lost workday cases	2.8	3.0	3.3	3.4	3.3	3.1	2.7	2.6	2.8
Lost workdays	44.9	46.7	50.3	51.9	51.8	48.4	42.2	41.4	45.0
Transportation equipment:									
Total cases	12.4	11.8	11.5	11.6	10.6	9.8	9.2	8.4	9.3
Lost workday cases	4.7	5.0	5.1	5.5	4.9	4.6	4.0	3.6	4.2
Lost workdays	73.8	79.3	78.0	85.9	82.4	78.1	72.2	64.5	68.8
Instruments and related products:									
Total cases	7.2	7.0	6.9	7.2	6.8	6.5	5.6	5.2	5.4
Lost workday cases	2.4	2.4	2.6	2.8	2.7	2.7	2.3	2.1	2.2
Lost workdays	36.7	37.4	37.0	40.0	41.8	39.2	37.0	35.6	37.5
Miscellaneous manufacturing industries:									
Total cases	11.7	11.5	11.8	11.7	10.9	10.7	9.9	9.9	10.5
Lost workday cases	4.0	4.0	4.5	4.7	4.4	4.4	4.1	4.0	4.3
Lost workdays	59.4	58.7	66.4	67.7	67.9	68.3	69.9	66.3	70.2

See footnotes at end of table.

48. Continued— Occupational injury and illness incidence rates by industry, United States

Industry and type of case ¹	Incidence rates per 100 full-time workers ²								
	1976	1977	1978	1979	1980	1981	1982	1983	1984
Nondurable goods									
Food and kindred products:									
Total cases	19.3	19.5	19.4	19.9	18.7	17.8	16.7	16.5	16.7
Lost workday cases	8.0	8.5	8.9	9.5	9.0	8.6	8.0	7.9	8.1
Lost workdays	123.8	130.1	132.2	141.8	136.8	130.7	129.3	131.2	131.6
Tobacco manufacturing:									
Total cases	10.0	9.1	8.7	9.3	8.1	8.2	7.2	6.5	7.7
Lost workday cases	4.1	3.8	4.0	4.2	3.8	3.9	3.2	3.0	3.2
Lost workdays	62.5	66.7	58.6	64.8	45.8	56.8	44.6	42.8	51.7
Textile mill products:									
Total cases	10.5	10.2	10.2	9.7	9.1	8.8	7.6	7.4	8.0
Lost workday cases	2.7	2.9	3.4	3.4	3.3	3.2	2.8	2.8	3.0
Lost workdays	55.5	57.4	61.5	61.3	62.8	59.2	53.8	51.4	54.0
Apparel and other textile products:									
Total cases	6.7	6.7	6.5	6.5	6.4	6.3	6.0	6.4	6.7
Lost workday cases	1.9	2.0	2.2	2.2	2.2	2.2	2.1	2.4	2.5
Lost workdays	31.0	31.7	32.4	34.1	34.9	35.0	36.4	40.6	40.9
Paper and allied products:									
Total cases	13.7	13.6	13.5	13.5	12.7	11.6	10.6	10.0	10.4
Lost workday cases	4.7	5.0	5.7	6.0	5.8	5.4	4.9	4.5	4.7
Lost workdays	94.8	101.6	103.3	108.4	112.3	103.6	99.1	90.3	93.8
Printing and publishing:									
Total cases	6.8	6.8	7.0	7.1	6.9	6.7	6.6	6.6	6.5
Lost workday cases	2.6	2.7	2.9	3.1	3.1	3.0	2.8	2.9	2.9
Lost workdays	40.3	41.7	43.8	45.1	46.5	47.4	45.7	44.6	46.0
Chemicals and allied products:									
Total cases	8.2	8.0	7.8	7.7	6.8	6.6	5.7	5.5	5.3
Lost workday cases	3.1	3.1	3.3	3.5	3.1	3.0	2.5	2.5	2.4
Lost workdays	50.6	51.4	50.9	54.9	50.3	48.1	39.4	42.3	40.8
Petroleum and coal products:									
Total cases	7.9	8.1	7.9	7.7	7.2	6.7	5.3	5.5	5.1
Lost workday cases	3.2	3.3	3.4	3.6	3.5	2.9	2.5	2.4	2.4
Lost workdays	62.5	59.2	58.3	62.0	59.1	51.2	46.4	46.8	53.5
Rubber and miscellaneous plastics products:									
Total cases	16.8	16.8	17.1	17.1	15.5	14.6	12.7	13.0	13.6
Lost workday cases	7.1	7.6	8.1	8.2	7.4	7.2	6.0	6.2	6.4
Lost workdays	113.3	118.1	125.5	127.1	118.6	117.4	100.9	101.4	104.3
Leather and leather products:									
Total cases	11.6	11.5	11.7	11.5	11.7	11.5	9.9	10.0	10.5
Lost workday cases	4.1	4.4	4.7	4.9	5.0	5.1	4.5	4.4	4.7
Lost workdays	69.0	68.9	72.5	76.2	82.7	82.6	86.5	87.3	94.4
Transportation and public utilities									
Total cases	9.8	9.7	10.1	10.0	9.4	9.0	8.5	8.2	8.8
Lost workday cases	5.0	5.3	5.7	5.9	5.5	5.3	4.9	4.7	5.2
Lost workdays	94.0	95.9	102.3	107.0	104.5	100.6	96.7	94.9	105.1
Wholesale and retail trade									
Total cases	7.5	7.7	7.9	8.0	7.4	7.3	7.2	7.2	7.4
Lost workday cases	2.8	2.9	3.2	3.4	3.2	3.1	3.1	3.1	3.3
Lost workdays	43.2	44.0	44.9	49.0	48.7	45.3	45.5	47.8	50.5
Wholesale trade:									
Total cases	8.1	8.5	8.9	8.8	8.2	7.7	7.1	7.0	7.2
Lost workday cases	3.3	3.6	3.9	4.1	3.9	3.6	3.4	3.2	3.5
Lost workdays	51.8	52.5	57.5	59.1	58.2	54.7	52.1	50.6	55.5
Retail trade:									
Total cases	7.2	7.4	7.5	7.7	7.1	7.1	7.2	7.3	7.5
Lost workday cases	2.6	2.7	2.8	3.1	2.9	2.9	2.9	3.0	3.2
Lost workdays	39.7	40.5	39.7	44.7	44.5	41.1	42.6	46.7	48.4
Finance, insurance, and real estate									
Total cases	2.0	2.0	2.1	2.1	2.0	1.9	2.0	2.0	1.9
Lost workday cases .....	.7	.8	.8	.9	.8	.8	.9	.9	.9
Lost workdays	11.6	10.4	12.5	13.3	12.2	11.6	13.2	12.8	13.6
Services									
Total cases	5.3	5.5	5.5	5.5	5.2	5.0	4.9	5.1	5.2
Lost workday cases	2.0	2.2	2.4	2.5	2.3	2.3	2.3	2.4	2.5
Lost workdays	38.4	35.4	36.2	38.1	35.8	35.9	35.8	37.0	41.1

¹ Total cases include fatalities.

² The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as: (N/EH) X 200,000, where:

N = number of injuries and illnesses or lost workdays.

EH = total hours worked by all employees during calendar year.
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year.)

³ Excludes farms with fewer than 11 employees since 1976.

Employee Benefits in Medium and Large Firms, 1985

U.S. Department of Labor
Bureau of Labor Statistics
Bulletin 2262

The Bureau of Labor Statistics issues its 1985 Bulletin on employee benefits in medium and large firms. This survey is the seventh in an annual series.

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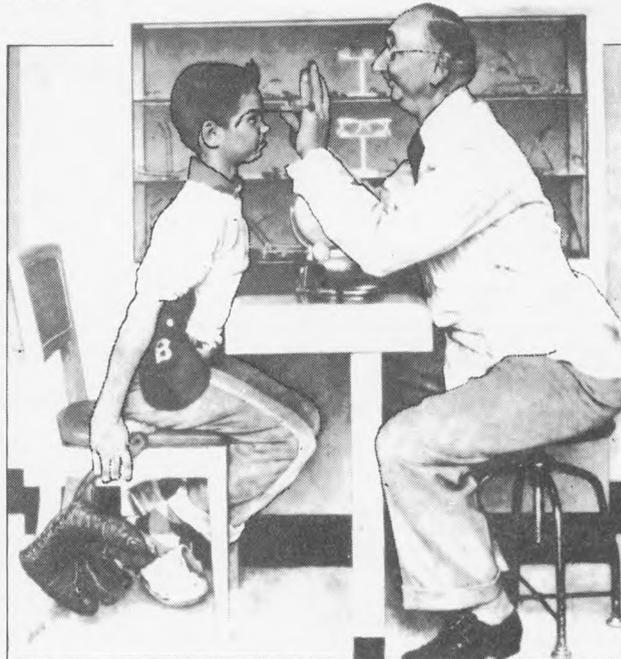
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Employee Benefits in Medium and Large Firms, 1985



U.S. Department of Labor
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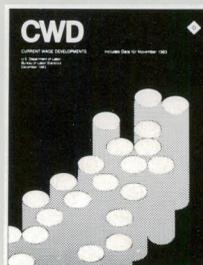
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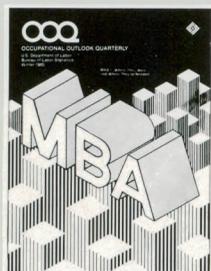
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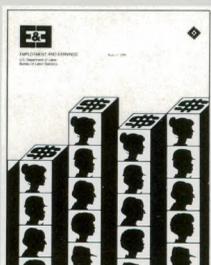
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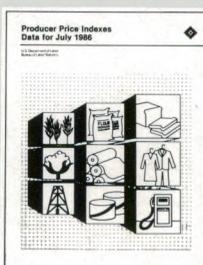
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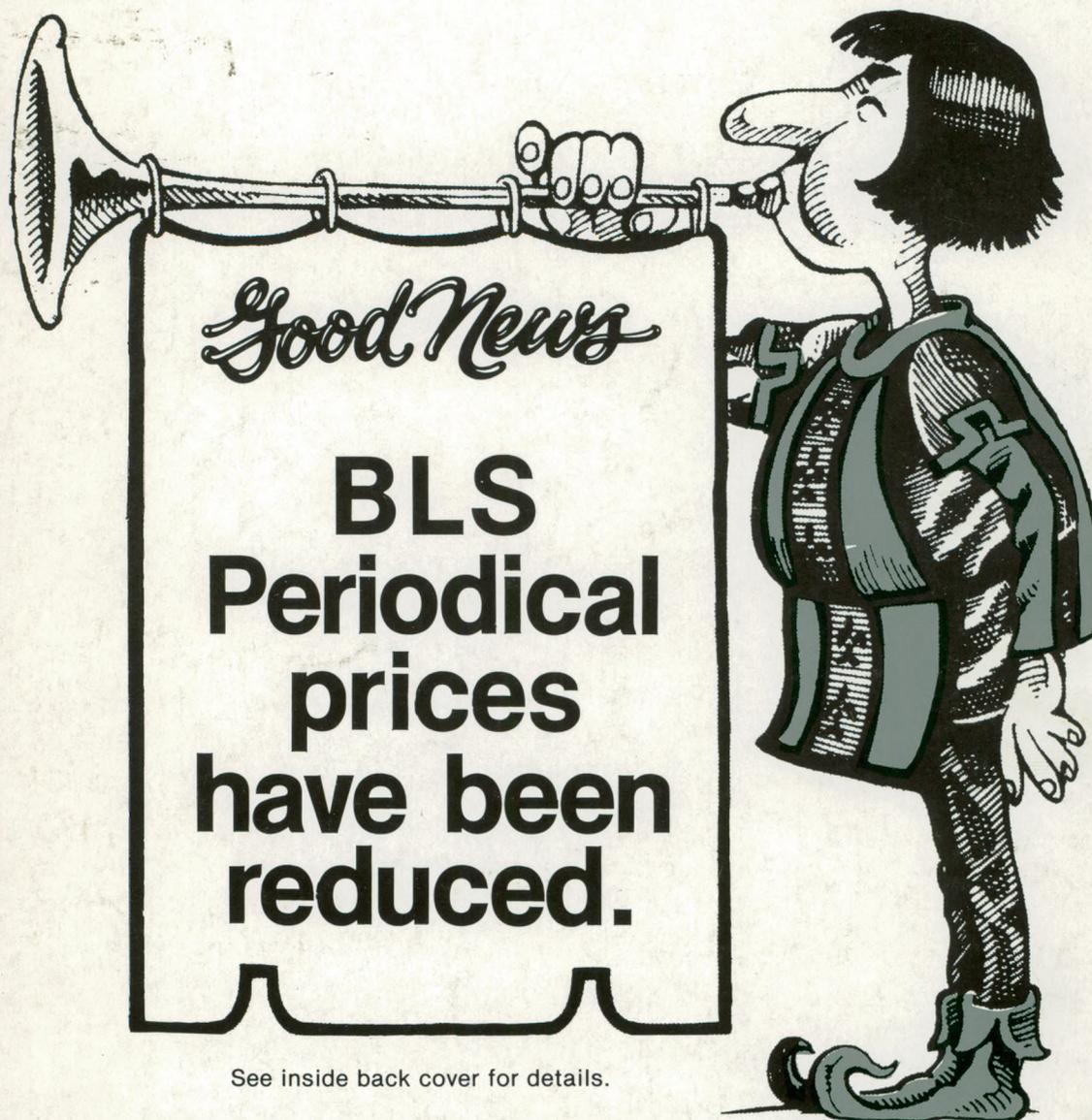
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