

RESEARCH LIBRARY
Federal Reserve Bank

MONTHLY LABOR REVIEW

U.S. Department of Labor
Bureau of Labor Statistics
February 1984

A special issue on employment
and unemployment





U.S. DEPARTMENT OF LABOR
Raymond J. Donovan, Secretary
BUREAU OF LABOR STATISTICS
 Janet L. Norwood, *Commissioner*

The Monthly Labor Review is published by the Bureau of Labor Statistics of the U.S. Department of Labor. Communications on editorial matters should be addressed to the Editor-in-Chief, Monthly Labor Review, Bureau of Labor Statistics, Washington, D.C. 20212. Phone: (202) 523-1327.

Subscription price per year—\$26 domestic; \$32.50 foreign. Single copy \$5, domestic; \$6.25, foreign. Subscription prices and distribution policies for the Monthly Labor Review (ISSN 0098-1818) and other Government publications are set by the Government Printing Office, an agency of the U.S. Congress. Send correspondence on circulation and subscription matters (including address changes) to: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402

Make checks payable to Superintendent of Documents.

The Secretary of Labor has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through April 30, 1987. Second-class postage paid at Washington, D.C. and at additional mailing addresses.



February cover:

“General Washington on White Charger,” a painting on wood, artist unknown. Collection of Edgar William and Bernice Chrysler Garbisch, photograph courtesy National Gallery of Art, Washington, D.C.

Cover design by Melvin B. Moxley

**Regional Commissioners
 for Bureau of Labor Statistics**

Region I—Boston: *Anthony J. Ferrara*
 1603 JFK Federal Building, Government Center,
 Boston, Mass. 02203
 Phone: (617) 223-6761
 Connecticut
 Maine
 Massachusetts
 New Hampshire
 Rhode Island
 Vermont

Region II—New York: *Samuel M. Ehrenhalt*
 1515 Broadway, Suite 3400, New York, N.Y. 10036
 Phone: (212) 944-3121
 New Jersey
 New York
 Puerto Rico
 Virgin Islands

Region III—Philadelphia: *Alvin I. Margulis*
 3535 Market Street
 P.O. Box 13309, Philadelphia, Pa. 19101
 Phone: (215) 596-1154
 Delaware
 District of Columbia
 Maryland
 Pennsylvania
 Virginia
 West Virginia

Region IV—Atlanta: *Donald M. Cruse*
 1371 Peachtree Street, N.E., Atlanta, Ga. 30367
 Phone: (404) 881-4418
 Alabama
 Florida
 Georgia
 Kentucky
 Mississippi
 North Carolina
 South Carolina
 Tennessee

Region V—Chicago: *William E. Rice*
 9th Floor, Federal Office Building, 230 S. Dearborn Street,
 Chicago, Ill. 60604
 Phone: (312) 353-1880
 Illinois
 Indiana
 Michigan
 Minnesota
 Ohio
 Wisconsin

Region VI—Dallas: *Bryan Richey*
 Second Floor, 555 Griffin Square Building, Dallas, Tex. 75202
 Arkansas
 Louisiana
 New Mexico
 Oklahoma
 Texas

Regions VII and VIII—Kansas City: *Elliott A. Browar*
 911 Walnut Street, Kansas City, Mo. 64106
 Phone: (816) 374-2481

VII
 Iowa
 Kansas
 Missouri
 Nebraska
VIII
 Colorado
 Montana
 North Dakota
 South Dakota
 Utah
 Wyoming

Regions IX and X—San Francisco: *Sam M. Hirabayashi*
 450 Golden Gate Avenue, Box 36017,
 San Francisco, Calif. 94102
 Phone: (415) 556-4678

IX
 American Samoa
 Arizona
 California
 Guam
 Hawaii
 Nevada
 Trust Territory of the Pacific Islands
X
 Alaska
 Idaho
 Oregon
 Washington



MONTHLY LABOR REVIEW

FEBRUARY 1984
VOLUME 107, NUMBER 2

MAR 02 1984

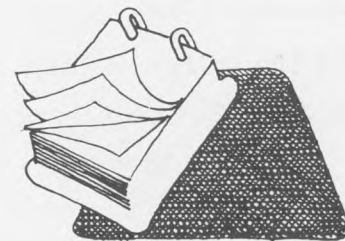
Henry Lowenstern, Editor-in-Chief
Robert W. Fisher, Executive Editor

-
- | | | |
|-------------------------|----|---|
| E. H. Becker, N. Bowers | 3 | Employment and unemployment gains widespread in 1983
During a full year of economic recovery, total employment increased by 4.0 million, and the unemployment rate dropped by 2.5 percentage points to 8.2 percent |
| Diane M. Nilsen | 15 | Employment in durable goods anything but durable in 1979-82
Durable goods manufacturers were hard hit by the recent back-to-back recessions; for some industries, long-term declines in competitive position intensified woes |
| Philip L. Rones | 25 | Recent recessions swell ranks of the long-term unemployed
In the last seven recessions, joblessness exceeding half a year has far outpaced the overall increase in unemployment and reached a postwar high during 1981-82 |
| Paul O. Flaim | 30 | Unemployment in 1982: the cost to workers and their families
The March 1983 work experience survey provides a close look at joblessness by extent and duration, as well as the effect on family income and the incidence of poverty |
| Richard J. Rosen | 38 | Regional variations in employment and unemployment, 1970-82
Even when the jobless rate was relatively low, 5.8 percent in 1979, wide differences in area rates existed, ranging from a high of 40 percent to a low of less than 1 percent |
| Diana Runner | 46 | Changes in unemployment legislation during 1983
In response to continued high unemployment, Federal supplemental compensation was extended through March 1985; many States increased their taxable wage base |
| LaVerne C. Tinsley | 55 | Workers' compensation: significant enactments in 1983
Most States increased maximum weekly compensation for total disability and death; other major changes dealt with occupational disease and rehabilitation benefits |

DEPARTMENTS

- | | |
|----|--------------------------------------|
| 2 | Labor month in review |
| 62 | Major agreements expiring next month |
| 64 | Developments in industrial relations |
| 68 | Book reviews |
| 71 | Current labor statistics |

Labor Month In Review



WIVES AS PRIMARY EARNERS. As more wives enter the labor force, some scholars and media are giving attention to the growth in the number of women who earn more than their husbands, and to the effect of that phenomenon on marital stability and the husbands' labor force attachment. Suzanne M. Bianchi of the Census Bureau has used microdata from the March 1982 Current Population Survey to estimate the prevalence of such "atypical" wage earning couples and to examine their demographic and income characteristics. Among her findings:

Demographics and income. The wife earned more than her husband in 5.9 million, or 12 percent, of the 49 million couples in the 1981 civilian population. Of these families, 1.9 million were couples in which the wife but not the husband had earnings, and 4.0 million were couples in which both had earnings but the wife's annual earnings exceeded those of her husband. Black couples were more likely to have a wife in a primary earning role—either as sole earner or the higher earning spouse in a dual-earner couple—than were white or Hispanic couples. In 20 percent of black couples, compared with 11 percent of white and 10 percent of Hispanic couples, the wife was the primary earner.

Among dual-earner couples in which the wife earned more, 55 percent had no children present in the home, compared with 40 percent where the wife was a secondary earner and 43 percent where the wife was not in paid labor force. Only 20 percent of wives who were primary earners had preschool-age children, as compared to 26 percent of wives who were secondary earners and 31 percent of wives who were not working for pay.

Median annual family income of dual earners where the wife was the primary earner (\$23,574) was higher than that of couples in which either the wife (\$17,122) or husband (\$22,800) was the sole earner, but was substantially below income for dual-earner families in which

the husband earned more (\$30,112).

Characteristics of wives. In 1981, wives earned more than their husbands in 16 percent of dual-earner couples, and the same as their husbands in another 2 percent of couples. The wife earned twice what her husband did in 1.6 million, or 6 percent, of dual-earner couples. Interestingly, almost 40 percent of the 4.0 million couples with a wife as primary earner fell into this category.

In approximately 10 percent of the "dual-earner, wife-primary" couples, the wife had some graduate or professional training. An additional 13 percent had completed 4 years of college. Thirty-eight percent had completed more years of school than their husbands.

In 1981, 36 percent of wives who earned more than their husbands were professionals or managers, compared with 25 percent of secondary earners. Among those whose husbands were full-time, year-round workers, 44 percent held professional or managerial jobs.

Wives who were primary earners appeared to have a much stronger attachment to the labor force than did wives who were secondary earners. Only 40 percent of the latter group worked full time throughout 1981, compared with 74 percent of the primary earners.

For wives working part time during the year, 64 percent of secondary earners did so by choice, whereas only 40 percent of primary earners voluntarily worked part time.

By dividing mean earnings by average annual hours worked in 1981, where annual hours are determined by taking weeks worked times usual hours worked per week during the year, the implicit wage rate for each group of wives can be calculated. Among wives whose husbands were the primary family earners, this rate was \$5.50, compared with \$7.55 for primary-earner wives. If secondary earners worked as many hours per year as primary earners, about \$3,000 of the mean annual earnings gap of \$7,000 would be closed. The other \$4,000 arises from differences other than the number of hours worked per year.

Husbands of primary earners. The most striking characteristic of husbands who were secondary workers was their relatively low level of labor force attachment. More than half of the husbands who were secondary earners in 1981 worked either part time or part year, or both, compared with only about one-fourth of husbands whose wives were not in the paid labor force, and fewer than one-fifth of husbands who were primary earners in dual-earner couples. Among husbands experiencing unemployment, secondary earners spent an average of 20 weeks looking for work compared to 12-13 weeks for sole and primary earners.

Secondary-earner husbands tended to earn less money than other husbands even when they were employed. When analysis was restricted to full-time, year-round workers, median earnings of husbands who were secondary earners (\$10,600) were still only about half as much as for primary (\$21,000) and sole-earner husbands (\$22,000).

Around 30 percent of secondary-earner husbands who worked part time in 1981 reported that they did so because they wanted to; this figure was more than twice that for husbands who were primary earners in dual-earner couples.

If husbands traded work for leisure as their wives' earnings increased, one would expect to see their annual hours of labor market work drop off as wives' income grew. However, the 1981 data for all spouses in the prime working ages 25 to 59 show that husbands' average annual hours of market work did not vary inversely with their wives' earnings, nor was the percentage of husbands working part year or part time greater for wives in higher earnings categories. In fact, husbands whose wives had relatively low earnings were more likely than others to have worked part year.

The 28-page report, *Wives who Earn More Than Their Husbands, Special Demographic Analyses*, CDS-80-9, is for sale by the Government Printing Office, Washington, D.C. 20402. Price: \$1.50. □

Employment and unemployment improvements widespread in 1983

During a full year of economic recovery, total employment increased by 4.0 million and the unemployment rate dropped by 2.5 percentage points to 8.2 percent

EUGENE H. BECKER AND NORMAN BOWERS

The end of 1983 marked a year of recovery from one of the longest and deepest post-World War II recessions. Improvement in the employment situation compared favorably with previous recovery periods. Spurred primarily by a surge in consumer spending, particularly on durable goods such as housing, appliances, and automobiles, real gross national product picked up sharply in the spring and summer months. Overall, real GNP grew by about 6 percent over the year (fourth quarter 1982 to fourth quarter 1983), compared with a decline in the prior year.

Industrial production, which had fallen by just over 12 percent during the 1981-82 recession, increased steadily throughout the year. By yearend, the index had risen by more than 15 percent, with the biggest increases occurring among durable goods manufacturers.

Concomitant with the improvements in production and spending came sharp gains in employment and reductions in unemployment. While comparatively stagnant in the first quarter of 1983, total civilian employment grew rapidly during the remaining quarters and posted an overall increase of 3.9 million between the 1981-82 recession trough of November 1982 and December 1983. Nonfarm payroll employment increased by 2.9 million over the same period.¹

Eugene H. Becker is an economist in the Division of Employment and Unemployment Analysis, Bureau of Labor Statistics. Norman Bowers, also an economist, is on leave from the Division and is working with the Organization for Economic Cooperation and Development. Carol Boyd Leon, an economist, and Stella Cromartie, an economic assistant, of the Division contributed to the preparation of this article.

While not all industries fared equally well, increases in payroll jobs were widespread. For example, 70 percent of the 186 industries which make up the BLS diffusion index registered gains in the fourth quarter of 1983, compared to just 25 percent a year earlier (3-month spans).²

The number of jobless persons fell by 2.7 million between November 1982 and December 1983, while the civilian unemployment rate dropped by 2.5 percentage points to 8.2 percent. The unemployment rate including the resident Armed Forces in the labor force base was 8.1 percent in December 1983, also down 2.5 percentage points from its recessionary high.

This article provides a detailed look at the Nation's labor market situation as it evolved during 1983. It gives a brief overview of the recovery compared with previous post-World War II recoveries, and discusses employment and unemployment developments during 1983.

A year of recovery

One way to compare economic recoveries is to examine key indicators—gross national product, production, and employment—to see if the changes in each series are similar over a given period.³ There are a number of limitations to this approach, particularly in the absence of a fairly well-grounded economic model of, for example, a firm's hiring and production decisions and their links to the macroeconomy. One would expect that the speed and diffusion of a recovery would be related, in part, to the depth and duration of the prior recession. In addition, the existence

of noncyclical changes may easily impair the ability to evaluate the relative strength of any given cyclical recovery. Subject to these limitations, table 1 provides a few important measures—various indexes of changes in employment, production, and other measures of economic activity.

In the context of this comparative approach, attention might be appropriately focused on the recoveries beginning in 1958 and 1975 because the depth of their prior recessions was most similar. For example, during the 1981–82 recession, production fell 12.3 percent and nonfarm payroll employment declined 3.1 percent. During the 1957–58 recession, the declines were 12.4 and 4.0 percent, and during the 1973–75 recession, 15.1 and 1.8 percent.

Over the first 13 months of the 1982–83 recovery, employment exhibited increases not far out of line with the recoveries since 1961. The 5.8-percent gain in manufacturing employment is greater than for all the recoveries shown except 1949 and 1958. But total nonfarm payroll employment, with a gain of 3.2 percent, falls short of the pre-1960 and 1975 increases. For example, in the first 13 months of the 1958–59 recovery period, nonfarm payroll jobs increased by 5.1 percent, while in the 1975–76 period, the increase was 3.5 percent. In terms of the other economic indicators in table 1, retail sales in 1983 have not yet shown gains commensurate with most other recoveries, and the increase in industrial production has fallen short of the 1958–59 recovery.

How much of the 1981–82 recession's job loss has been

“restored” compared to other periods of expansion? The following tabulation shows nonfarm and manufacturing payroll employment increases (in thousands) over the first 13 months of recovery as a percent of the job loss during each prior recession (the 1980–81 recovery only lasted 12 months):

Recovery	Total nonfarm	Manufacturing
Oct. 1949–Nov. 1950	169.5	132.0
May 1954–June 1955	120.9	45.0
Apr. 1958–May 1959	121.8	77.0
Feb. 1961–Mar. 1962	146.1	74.0
Nov. 1970–Dec. 1971	200.4	10.0
Mar. 1975–Apr. 1976	188.7	35.7
July 1980–July 1981	154.9	45.9
Nov. 1982–Dec. 1983	105.9	49.1

Consider the manufacturing sector. Throughout the first 13 months of recovery from the four recessions since 1970, the proportions of jobs recovered tended to be less than in the early postwar recovery periods, undoubtedly reflecting a number of noncyclical changes in the structure of production and employment.

For example, 49 percent of the overall manufacturing jobs lost during the 1981–82 recession had been regained, compared with more than 75 percent during the 1958–59 recovery. Since the 1973–75 recession, the percentages have been more similar. To put this in another perspective, factory job losses accounted for 79 percent, 152 percent, and 67 percent of total nonfarm job declines over the course of the 1981–82, 1973–75, and 1957–58 recessions, respectively. As a proportion of nonfarm payroll job gains 13 months after each recession trough, manufacturing jobs accounted for 37 percent, 29 percent, and 42 percent, respectively. Also by the thirteenth month of every previous recovery, total nonfarm jobs had already recovered substantially more than the recession job loss. By this measure, recovery during the 1983 expansion has been less robust. One should bear in mind that these data on restored jobs are not able to isolate cyclical from secular and other micro- and macro-economic changes.

Employment growth strong

The payroll jobs picture brightened considerably throughout 1983. After declining by 2.7 million over the course of the recession and exhibiting essentially no growth in the first few months of 1983, payroll employment increased rapidly through the end of the year. Between the November 1982 National Bureau of Economic Research (NBER) designated trough and December 1983, payroll jobs increased by 2.9 million.⁴ These developments are traced on a quarterly basis in table 2.

Employment gains were widespread, although not necessarily proportionate to the size of the industry or to the magnitude of recession-induced employment cutbacks. The BLS Diffusion Index of over-the-month employment gains

Table 1. Changes in selected economic indicators from postwar business cycle troughs through the first 13 months of recovery, seasonally adjusted

[In percent]

Recovery periods	Civilian employment	Nonfarm payroll employment	Manufacturing payroll employment	Real gross national product ¹	Index of industrial production	Private housing starts ²	Retail sales ³
October 1949 to November 1950	4.2	8.9	14.7	13.3	27.5	-6.1	2.6
May 1954 to June 1955	3.1	3.8	4.1	7.4	14.0	20.7	10.3
April 1958 to May 1959	3.3	5.1	7.0	8.4	22.7	29.8	10.0
February 1961 to March 1962	1.4	3.3	4.5	7.0	14.0	17.7	6.9
November 1970 to December 1971	2.3	2.2	.9	4.7	7.2	39.3	11.4
March 1975 to April 1976	3.8	3.5	4.3	6.7	15.6	40.5	10.5
July 1980 to July 1981 ⁴	1.9	2.0	2.9	4.2	9.7	-18.4	1.8
November 1982 to December 1983 ⁵	3.9	3.2	5.8	6.1	15.9	29.0	8.0

¹Measured in 1972 dollars at an annual rate. This series is estimated on a quarterly basis so that the calculations are based on the quarter within which each recovery date fell.

²Measured as an annual rate of housing starts.

³Measured in 1972 dollars.

⁴The National Bureau of Economic Research designated July 1981 as the prerecession peak; thus, the recovery from the 1980 recession did not last 13 months.

⁵The changes in private housing starts and retail sales refer to the November 1982–November 1983 period.

among 186 industries increased from a 32-percent low in November 1982 to 71 percent in May 1983; in the remaining months of the year, the index was between 60 and 70 percent. The goods-producing sector, which had about 96 percent of the 1981-82 job declines, accounted for only 46 percent of the increases posted since November 1982.

Service-producing industries. Employment in the service-producing sector advanced by 1.6 million between November 1982 and December 1983. These gains were dominated by the services industry, which has such diverse industries as business, educational, personal, and legal services, motels, amusement and recreation, and auto repair. The services industry gained 935,000 jobs. In contrast, government employment, particularly at the State and local level, showed no growth, reflecting, in large part, stringent budgets and consequent staffing limitations. State and local government employment had declined by 206,000 during the recession.

Wholesale and retail trade employment remained relatively stagnant in early 1983 but began to increase in the early summer, spurred by the surge in consumer spending. Over the year, jobs in retail trade increased by 361,000, while wholesale trade edged up by about 113,000. The cyclical transportation and public utilities industry registered essentially no growth during 1983; employment in this industry had declined by 165,000 during the recession.

Goods-producing industries. From a purely cyclical perspective, the goods-producing sector shows the most movement. Employment in this sector, which declined 2.6 million over the NBER-dated recession period, did not bottom out until March 1983. By December, the number employed was 24.4 million, an increase of 1.4 million from March, with the biggest job gains in construction and durable goods manufacturing.

Construction employment continued to decline through the early part of 1983, but began to increase in the spring. Depressed since 1979, the housing industry—and, hence, residential construction—was one of the star performers of the economy in 1983, particularly during the spring and summer. New housing starts, which had hovered around 900,000 units (at an annual rate) during the first half of 1982, began to edge up slowly toward the end of 1982. They took off in 1983, hitting a peak of 1.9 million units annually in August. However, during the summer, mortgage interest rates began to inch upward again and were instrumental in slowing single-family home sales and construction. As a result, housing starts tailed off to an annual rate of 1.7 million units toward yearend, but were still substantially above the levels of the previous 2 years. By the end of 1983, construction industry employment was 350,000 above its March trough.

Jobs in manufacturing, which had accounted for nearly 80 percent of the decline in total nonfarm jobs in the recession, increased steadily throughout the year. Between No-

Table 2. Employees on nonagricultural payrolls by industry, seasonally adjusted quarterly averages, 1981-83

[In thousands]

Industry	1981	1982	1983			
	III	IV	I	II	III	IV ¹
Total	91,440	88,796	88,815	89,452	90,250	91,381
Total private	75,492	73,026	73,075	73,726	74,512	75,596
Goods-producing	25,653	23,160	23,088	23,341	23,830	24,308
Mining	1,193	1,067	1,019	998	1,022	1,047
Construction	4,162	3,835	3,817	3,860	4,009	4,089
Manufacturing, total	20,298	18,258	18,252	18,484	18,799	19,172
Production workers	14,121	12,287	12,306	12,527	12,806	13,141
Durable goods	12,196	10,607	10,606	10,774	11,021	11,318
Lumber and wood products	667	609	631	664	697	713
Furniture and fixtures	470	427	430	445	458	469
Stone, clay, and glass products	639	559	558	569	581	592
Primary metal industries	1,133	826	814	826	843	875
Fabricated metal products	1,603	1,366	1,363	1,377	1,404	1,439
Machinery, except electrical	2,522	2,092	2,040	2,054	2,106	2,153
Electric and electronic equipment	2,111	1,969	1,981	2,013	2,057	2,127
Transportation equipment	1,906	1,683	1,721	1,754	1,801	1,859
Instruments and related products	736	700	693	689	692	702
Miscellaneous manufacturing	410	375	375	382	383	390
Nondurable goods	8,102	7,651	7,646	7,710	7,778	7,854
Food and kindred products	1,662	1,631	1,622	1,636	1,632	1,634
Tobacco manufactures	71	66	68	66	63	61
Textile mill products	830	729	727	738	750	760
Apparel and other textile products	1,257	1,143	1,147	1,154	1,177	1,201
Paper and allied products	693	653	652	656	660	666
Printing and publishing	1,273	1,264	1,266	1,277	1,288	1,300
Chemicals and allied products	1,111	1,063	1,056	1,057	1,058	1,061
Petroleum and coal products	215	200	199	198	196	193
Rubber and miscellaneous plastic products	748	686	693	715	738	761
Leather and leather products	243	215	215	214	216	217
Private service-producing	65,787	65,636	65,727	66,110	66,421	67,073
Transportation and public utilities	5,184	5,020	4,969	4,991	4,785	5,023
Wholesale trade	5,376	5,214	5,181	5,200	5,251	5,293
Retail trade	15,262	15,093	15,169	15,193	15,323	15,408
Finance, insurance, and real estate	5,317	5,358	5,383	5,436	5,484	5,521
Services	18,700	19,182	19,285	19,564	19,839	20,043
Government	15,948	15,770	15,740	15,726	15,738	15,785
Federal	2,771	2,745	2,744	2,745	2,754	2,769
State and local	13,177	13,025	12,996	12,981	12,984	13,016

¹Data are preliminary.

ember 1982 and December 1983, manufacturing employment increased by 1,050,000. However, this gain represented only 49 percent of the jobs lost during the recession. Of note is the fact that production workers accounted for virtually all of the manufacturing job gains as employers sought to control overhead costs. Those workers had accounted for 70 percent of the prerecession peak manufacturing work force and 91 percent of the decline in employment. Between November 1982 and December 1983, they made up 93

percent of the job gains. However, their number, at 13.2 million, was still about 1 million below the previous peak reached in the second quarter of 1981. It should be emphasized that several manufacturing industries had been confronted with serious secular problems prior to the recession—international competition, technological change, and the like. Thus, other things equal, it would be unrealistic to expect a complete recoupment of jobs in these industries.

Although gains in manufacturing were fairly pervasive, they were also somewhat uneven. More than three-quarters of the absolute increase occurred in durable goods, with especially large gains in industries closely connected to consumer spending on big-ticket items. For example, noteworthy employment increases were posted in lumber, furniture, electrical equipment, and transportation equipment. The increases in both lumber and electrical equipment began in early 1983, and by the end of the year the increases exceeded the number of jobs lost during the recession (July 1981–November 1982). Employment in transportation equipment, paced largely by motor vehicles and equipment, was up 12.8 percent or 210,000 jobs between November 1982 and December 1983. In the last quarter of 1983, domestic cars sold at more than a 7-million annual rate, and auto manufacturers' production schedules had increased from an annual rate of approximately 5 million units in the fourth quarter of 1982 to more than 7.5 million units near the end of 1983.⁵

Three durable goods industries with very large recessionary job losses—primary metals, fabricated metals, and machinery—posted only minimal gains in 1983 relative to the number of jobs lost. Between November 1982 and December 1983, employment in primary metals, which includes steel, increased by 60,000, or only one-fifth of the industry's seasonally adjusted job loss. While steel production and capacity utilization had increased significantly from the nadir of the recession, the restructuring which is occurring in the industry suggests that major advances in employment are unlikely in the near future. Employment in machinery, which dropped by more than 400,000 during the recession, continued to decline during the first half of 1983. A substantial increase in the growth of business equipment investment and nondefense capital goods shipments in the second quarter was instrumental in pushing the number of jobs in machinery up by 100,000 between the second and fourth quarters of 1983. However, growth in this component of investment was off in the latter half of the year, and its effect on future employment gains thus remains uncertain.

In nondurable goods, large advances occurred during the November 1982–December 1983 period in the rubber and plastics (85,000), printing (40,000), and apparel (70,000) industries, while a decline occurred in petroleum. Elsewhere, the number of jobs in the mining industry continued its downward trend through the first 5 months of 1983 before increasing during the remaining months.

Worker recalls? To what extent is the improved employment and unemployment picture, particularly in manufacturing, attributable to recalls of laid-off workers? Were the furloughed auto workers called back, did they find a job in another industry, or did they simply drop out of the labor force? The information needed to definitively answer these questions is not available. However, the nature and magnitude of employment growth during the recovery makes it implausible that the improvement could be attributable entirely to new hires.

Moreover, changes in the pattern of reasons reported for unemployment can provide some insight. During the recession, job loss—layoffs and permanent separations—is by far the major reason for increasing unemployment, particularly in cyclically-sensitive industries.⁶ For example, between the third quarters of 1981 and 1982, unemployment in manufacturing increased by 1.1 million. More than half of this increase (52 percent) was due to layoffs, with permanent separations accounting for the remainder. A similar pattern was evident in durable goods industries, while permanent job separations predominated in nondurable goods and in the construction industry. During the recovery phase, the improved unemployment picture was dominated by a reduction in layoffs. For example, 85 percent of the decline in unemployment of manufacturing workers between the third quarters of 1982 and 1983 was the result of a drop in the number of persons on layoff. (The proportions were 92 percent in durable goods, 65 percent in nondurable goods, and 52 percent in construction.)

Hours and part-time work. Two other important features of the state of the labor market in 1983 were changes in the number of involuntary part-time workers and the average number of hours worked. In a recession, employers typically resort to cutbacks in hours as well as layoffs and hiring freezes. Hours reductions tend to occur prior to layoffs. During the recovery period, as orders and production pick up, firms tend to restore hours prior to recalling persons on layoff or hiring new workers. In fact, the factory workweek, which had reached a low of 39 hours in December 1982, was up to 40.5 hours at the end of 1983, and the index of aggregate weekly hours of production workers in manufacturing—which reflects both employment and hours—rose 12 percent over the year.

Further insight into the improved job market can be gleaned by examining the series on the number of workers on part-time schedules for economic reasons. The two major reasons for involuntary part-time work are slack work (that is, employer-reduced hours), and the inability of persons to find a full-time job.⁷ Table 3 presents the number of persons at work in nonagricultural industries by type of work schedule.

The number of involuntary part-time workers increased steadily throughout the recession and peaked at 6.7 million workers—7.4 percent of the total number of persons at work in nonagricultural industries—in January 1983. Thereafter,

Table 3. Persons at work in nonagricultural industries by full- or part-time status, seasonally adjusted quarterly averages, 1981-83

Status	1981	1982	1983			
	III	IV	I	II	III	IV
Total at work (in thousands)	91,474	90,124	90,484	91,405	92,467	93,760
Full-time schedules	74,507	71,412	71,834	73,196	74,003	75,416
Part time for economic reasons	4,508	6,385	6,403	5,976	5,864	5,761
Part time for noneconomic reasons	12,459	12,327	12,247	12,234	12,600	12,583
Percent at work	100.0	100.0	100.0	100.0	100.0	100.0
Full-time schedules	81.5	79.2	79.4	80.1	80.0	80.4
Part time for economic reasons	4.9	7.1	7.1	6.5	6.3	6.1
Part time for noneconomic reasons	13.6	13.7	13.5	13.4	13.6	13.4

the number of involuntary part-timers decreased fairly steadily throughout the year. By year's end, there were 5.7 million such workers, 1.0 million fewer than in January.

It is useful to delve deeper into the source of this improvement to determine the industries in which these workers are concentrated. Some recent evidence suggests that the cyclical behavior of the "slack work" and "could only find part-time work" components differ.⁸ It appears, for example, that the slack-work rate improves (declines) much earlier in a recovery than the "failure to find" rate. This means that employees' hours are restored before there is sufficient economic improvement to enable firms to hire additional full-time workers. Moreover, as one would expect, the relative importance of each component varies among industries. This perspective is borne out in the current recession-to-recovery data. Changes in the slack work component are highlighted in the following unadjusted data on involuntary part-time workers as a proportion of the total at work for the third quarters, 1981-83, selected industries:

	Nonagri- cultural in- dustries	Manufac- turing	Wholesale and retail trade	Miscella- neous services
1981:				
Slack work ..	2.0	2.0	2.3	1.6
Could only find part time	2.5	.5	5.7	3.1
1982:				
Slack work ..	3.2	4.2	3.4	2.2
Could only find part time	3.2	.7	7.3	4.0
1983:				
Slack work ..	2.3	2.4	2.7	2.1
Could only find part time	3.6	.8	8.2	4.2

Between the third quarters of 1981 and 1982, the number of involuntary part-timers increased by 1.3 million persons,

68 percent of whom were put on short workweeks because of slack work. This group's proportion of the at-work total rose from 2.0 to 3.2 percent. With the onset of recovery, however, the number of workers subject to a slack workload declined, and by the third quarter of 1983 had fallen to 2.3 percent of total number of persons at work. The "could only find part-time" rate, on the other hand, continued to increase into the recovery, although at a much reduced rate.

Particularly dramatic differences are seen when manufacturing industries are compared with the two major service-producing industries. Swings in part-time work in manufacturing were dominated by slack workloads; the ratio to total at work went from 2.0 percent at the start of the recession to 4.2 percent in the latter half of 1982, before improving quickly to 2.4 percent of those at work in the third quarter of 1983. On the other hand, while slack work is also important in trade and services and behaves in the same cyclical manner as in manufacturing, the situation of only being able to find part-time work appears to be more predominant. The data also support the notion that persons who desire full-time work but are unable to obtain it settle for part-time jobs in those industries that provide such jobs—services and trade.

Employment among worker groups. Civilian employment, as measured by the Current Population Survey, declined by 1.4 million during the course of the downturn to a low of 99.2 million in the first quarter of 1983, and then rose by 3.3 million to 102.5 million by yearend. The number of employed adult men (those age 20 and over) increased by 1.9 million from its recession low and by the end of 1983 had surpassed the previous peak reached during the third quarter of 1981. Employment among adult women, which had increased, albeit at a slower pace, throughout most of the recession, increased by 1.4 million between the first and last quarters of 1983. Indeed, with the exception of teenagers, whose population and proportion of the labor force have been declining, all demographic groups shown in table 4 posted employment gains. Employment of blacks and Hispanics rose by 400,000 and 415,000 from their recession troughs, increases more than proportionate to their share of employment.

In addition to providing demographic information not available in the establishment survey, the household survey covers self-employed workers, whose numbers increased substantially in 1983. In contrast to earlier in the postwar period when self-employment growth tended to be countercyclical, in the past decade, self-employment has grown fastest in the expansionary phase of the cycle. Nevertheless, in relation to previous recoveries, the increase in self-employment from November 1982 through December 1983 was exceptionally large—360,000. The following tabulation shows the percent change in self-employment from the trough through the first 13 months of the recovery.

Recovery period	Total	Nonagricultural sector	Agricultural sector
Jan. 1970/Dec. 1971	0.8	2.0	-3.0
Mar. 1975/Apr. 1976	-0.6	.8	-5.0
July 1980/July 1981	0.4	1.4	-3.9
Nov. 1982/Dec. 1983	4.0	5.6	-3.0

The employment-population ratio provides a useful indicator of the economy's ability to generate enough jobs for a growing population, as the ratio is affected by changes in both the number of jobholders and the working-age population. The overall ratio for civilians declined throughout the recession and into the first quarter of 1983—from 59.4 percent in the second quarter of 1981 to 57.2 percent. By the fourth quarter of 1983, it had increased to 58.6 percent, still short of the prerecession high. Adult men, whose employment ratio dropped 3.1 percentage points during the recession, posted a ratio of 72.2 percent at yearend, an increase of 1.6 percentage points from their low point. In contrast, the ratio for adult women was only modestly affected by the recession and, at the end of the year, was a record 49.3 percent. Ratios fell substantially during the recession to lows of 48.8 percent for blacks, 53.6 percent for Hispanics, and 58.3 percent for whites. All three groups

posted gains during 1983, although at an uneven pace, and were still considerably short of their prerecession highs by yearend.

Unemployment improved, but still high

With strong employment growth during most of 1983, the level of unemployment dropped by 2.6 million between December 1982 and December 1983. Despite this improvement, the number unemployed, 9.2 million at yearend, and the civilian unemployment rate, 8.2 percent, were still quite high by historical standards, and there was continued concern about the magnitude of the numbers and the demographic composition of the jobless total.

At the end of 1983, nearly half the unemployed were adult men, a third were adult women, and the remainder were teenagers. Because about twice as many men as women became unemployed in 1982, it was not surprising that more men than women left the jobless ranks during the recovery period. Thus, the decline in unemployment between December 1982 and 1983 was greater for men (1.4 million or 24.3 percent) than for women (790,000 or 20.6 percent) or teenagers (410,000 or 21.7 percent). Despite the greater improvement for men during the year, jobless rates for women continued to be lower than men's, sustaining a pattern first noted in late 1981.

Duration. An important consideration in the overall evaluation of the health of the economy is the duration of unemployed persons' job search. Average duration of unemployment (the mean and median) and the number of weeks spent looking for work generally decrease with an upturn in the business cycle. However, their movements tend to lag behind other unemployment indicators because those who become unemployed early in the downturn typically have the least seniority and skills and, consequently, are the last to obtain jobs when conditions improve. This lag was clearly evident during the 1983 recovery period. While the level and rate of unemployment peaked in December 1982 at 11.9 million and 10.7 percent, respectively, both the average duration figures and the number jobless for a half year or more reached their highs after unemployment had been on the decline for 6 months.

Because increases in unemployment can be a function of both increased flows into the unemployment stream as well as increases in the duration of unemployment, it is useful to trace the pattern of the newly unemployed, that is, those who have been unemployed for less than 5 weeks. Chart 1 shows that during the months preceding the economic downturn of 1981-82, the number of short-duration unemployed began to increase. But as the downturn deepened, the increased levels of unemployment moved into the longer duration categories and ultimately into the 27 week and longer group. During the initial months of the 1983 recovery, the number entering unemployment declined, while the long-term unemployed continued to increase. It was not until the

Table 4. Civilian employment and employment-population ratios for major labor force groups, seasonally adjusted quarterly averages, 1981-83

Group	1981		1982		1983			
	III	IV	I	II	III	IV		
Total, civilian employment (in thousands)	100,452	99,054	99,214	100,037	101,528	102,506		
Men, 20 years and over	53,709	52,537	52,563	53,095	53,839	54,418		
Women, 20 years and over	39,568	40,108	40,313	40,654	41,324	41,717		
Teenagers	7,175	6,409	6,338	6,288	6,366	6,370		
White	88,815	87,368	87,459	88,231	89,485	90,353		
Black	9,286	9,133	9,226	9,287	9,452	9,531		
Hispanic origin	5,339	5,052	5,083	5,293	5,360	5,467		
Married men, spouse present	38,819	37,642	37,511	37,710	38,256	38,374		
Married women, spouse present	23,868	24,055	24,177	24,360	24,815	25,050		
Women who maintain families	4,977	5,033	5,046	4,996	5,097	5,221		
Total, civilian employment-population ratios (in percent)	58.9	57.2	57.2	57.5	58.2	58.6		
Men, 20 years and over	74.0	70.9	70.6	71.1	71.8	72.2		
Women, 20 years and over	48.4	48.1	48.2	48.5	49.1	49.3		
Teenagers	44.4	41.1	41.0	41.0	41.9	42.3		
White	59.9	58.3	58.2	58.6	59.3	59.7		
Black	50.8	48.8	49.1	49.2	49.8	50.0		
Hispanic origin	56.9	53.9	54.0	54.5	55.4	56.3		
Married men, spouse present	76.8	73.8	73.7	74.0	74.4	74.8		
Married women, spouse present	47.4	47.2	47.6	47.9	48.5	48.7		
Women who maintain families	53.2	52.5	51.8	51.4	52.4	53.3		

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

Chart 1. Unemployed persons by duration, seasonally adjusted quarterly averages, 1972-83



NOTE: Shaded areas denote recessions.

Table 5. Unemployed persons by duration of unemployment, seasonally adjusted quarterly averages, 1981-83

(Numbers in thousands)

Duration	1981	1982	1983			
	III	IV	I	II	III	IV
Less than 5 weeks	3,379	3,913	3,622	3,598	3,634	3,405
5 to 14 weeks	2,465	3,454	3,224	3,034	2,859	2,615
15 weeks and over	2,228	4,449	4,608	4,464	4,122	3,517
15 to 26 weeks	1,106	2,053	1,914	1,686	1,591	1,331
27 weeks and over	1,122	2,396	2,693	2,778	2,530	2,186
Mean duration, in weeks	13.9	17.7	19.2	20.3	20.5	20.0
Median duration, in weeks	7.1	10.1	10.5	11.2	9.6	9.3
Total unemployed (in percent)	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	41.9	33.1	31.6	32.4	34.2	35.7
5 to 14 weeks	30.5	29.2	28.1	27.3	26.9	27.4
15 weeks and over	27.6	37.6	40.2	40.2	38.8	36.9
15 to 26 weeks	13.7	17.4	16.7	15.2	15.0	14.0
27 weeks and over	13.9	20.3	23.5	25.0	23.8	22.9

third quarter of 1983 that the number of long-term unemployed, too, began to decline. (See table 5.) This lead and lag phenomenon is fairly typical of unemployment cycles.

Men were unemployed for more successive weeks in 1983 than either women or teenagers, as more than two-fifths of those who were unemployed at the end of 1983 had been looking for work for 15 weeks or longer, and more than two-thirds of this long-term group had been searching for a job for at least 27 weeks. About one-third of the women had been jobless for 15 weeks or more, and, like men, two-thirds of them had been job hunting for at least 27 weeks. Slightly more than one-fifth of the teenagers were unemployed for 15 weeks or more, but less than half were unemployed for as long as 27 weeks.

The following tabulation shows median duration, in weeks, for men, women, and teenagers, quarterly, 1982-83:

	Men	Women	Teenagers
1982:			
IV	11	9	7
1983:			
I	14	10	8
II	18	10	5
III	13	7	6
IV	12	7	6

Not only is the duration of unemployment longer for men than for women or teenagers, but the gap widens during a downturn. A possible explanation for the shorter duration of women and teenagers is that they tend to enter and leave the job market more often than men. They are also more likely to end a spell of unemployment by dropping out of the labor force.⁹

Job losers, leavers, and entrants. The unemployed are classified by whether they have lost their last job because of layoff or other reasons, left it voluntarily, are entering the job market for the first time, or are reentering after a period of absence. Reflecting the economic expansion of

1983, the number of unemployed persons who had lost their jobs declined by 2.3 million to about 5.0 million by December, with, as indicated earlier, the greatest part of that decline among persons on layoff, who accounted for more than half of the reduction. The improvement among job losers was more than twice the rate of recovery registered in the 13 months following the 1973-75 recession.

As the job-loser share of unemployment declines during expansionary periods, the share of persons who voluntarily quit a job in order to search for another increases significantly. The number of unemployed job leavers reached a low of 6.8 percent of total unemployment during the fourth quarter of 1982—it had been 11.5 percent in the third quarter of 1981—and was up to 9.0 percent by the final quarter of 1983. Typically, upward movement in this indicator augurs increased confidence about job prospects, a confidence borne out by strong employment growth. The number of unemployed new entrants and reentrants remained about the same over the year.

Selected characteristics of joblessness

Racial and ethnic differences. The overall decline in jobless rates was predominantly fueled by a decline in the unemployment of white workers. (See table 6.) While the white jobless rate peaked in the final quarter of the 1981-82 downturn, the black rate, which had registered virtually no improvement during the 1980-81 recovery, continued increasing until the second quarter of 1983. Nevertheless, during the third quarter of 1983, there was a strong downward movement in the black unemployment rate that carried over into the fourth quarter.

To a large extent, the higher jobless rate for blacks in 1983 than in 1982 was a result of the increasing unemployment of black teenagers, whose jobless rate reached a record 50 percent in the third quarter, and only dropped back to 48 percent in the final quarter of the year. In comparison, between the fourth quarters of 1982 and 1983, the

Table 6. Unemployment rates for major labor force groups, seasonally adjusted quarterly averages, 1981-83

Group	1981	1982	1983			
	III	IV	I	II	III	IV
Total (all civilian workers)	7.4	10.6	10.4	10.1	9.4	8.5
Men, 20 years and over	6.1	9.9	9.7	9.4	8.7	7.8
Women, 20 years and over	6.8	9.0	8.9	8.5	7.9	7.2
Teenagers	19.0	24.1	23.1	23.3	22.4	20.6
White	6.4	9.5	9.1	8.8	8.1	7.4
Black	15.8	20.6	20.2	20.4	19.4	17.9
Hispanic origin	9.8	15.3	15.6	14.2	12.8	12.1
Married men, spouse present	4.1	7.5	7.2	6.9	6.2	5.5
Married women, spouse present	5.8	8.1	7.7	7.5	6.9	6.2
Women who maintain families	10.7	12.5	13.2	12.7	11.9	11.0
Full-time workers	7.1	10.6	10.3	10.0	9.3	8.3
Part-time workers	9.5	11.0	10.5	11.1	10.2	9.8

black adult rate decreased from 18 percent to 15 percent, largely because of improvements among men. Among Hispanics, unemployment declined each quarter in 1983, with the sharpest drop occurring in the third quarter.

Age, sex, and industry. While still higher than at the outset of the recession in the third quarter of 1981, joblessness for men and women and for teenagers declined in 1983 from the fourth quarter of 1982, with each quarter showing some improvement. As discussed earlier, the jobless rate for men traditionally has been lower than that for women. However, as the 1981–82 recession intensified, particularly in the male-dominated goods-producing sector, this relationship began to change. In 1982, for the first time in more than three decades, the unemployment rate for men exceeded that for women on an annual average basis. Although the male rate remained higher than the female rate throughout 1983, the gap narrowed considerably toward the end of the year, commensurate with the faster pace of improvement for male unemployment.

Teenagers continued to account for a disproportionate share of the unemployed, as shown in the following tabulation of seasonally adjusted fourth-quarter data:¹⁰

	1979	1980	1981	1982	1983
Teenagers as a percent of the civilian labor force	9.2	8.7	8.3	7.7	7.3
Teenagers as a percent of total unemployed	25.3	21.9	21.3	18.5	17.1

The declining proportion of unemployed teenagers resulted largely from a more rapid increase in the number of unemployed adults and the shrinking of the teenage population and labor force.

The reduction in unemployment was reflected in a wide range of industries. Table 7 contains quarterly average unemployment rates among wage and salary workers in selected industry categories. The unemployment rate for manufacturing workers improved throughout 1983 and, at 8.9 percent in the fourth quarter, was more than 5 percentage points below its recession high. Substantial improvement occurred in each of the manufacturing industries shown. The unemployment rate for construction workers dropped from 22 percent in the fourth quarter of 1982 to about 16 percent in the last 3 months of 1983.

The service-producing sector was less affected by the recession, but the unemployment situation nonetheless generally worsened during 1982. For example, in the sector as a whole, the unemployment rate went from 6.6 percent in the third quarter of 1981 to 8.8 percent by the end of 1982. By the end of 1983, it had edged down to 7.7 percent.

Among the major industry groups, the incidence of unemployment was unevenly distributed by sex. (See table 8.) As discussed earlier, there have been large employment gains in a number of industries, with accompanying declines

Table 7. Unemployment rates of nonagricultural wage and salary workers by industry, seasonally adjusted quarterly averages, 1981–83

Industry	1981	1982	1983			
	III	IV	I	II	III	IV
Nonagricultural private wage and salary workers	7.5	11.3	10.8	10.3	9.6	8.6
Goods-producing	9.0	15.8	14.5	13.8	12.3	10.4
Mining	5.7	18.2	18.6	19.7	16.1	12.4
Construction	15.7	22.1	20.1	19.5	18.0	15.9
Manufacturing	7.6	14.2	13.0	12.1	10.7	8.9
Durable goods	7.3	16.1	14.5	13.2	11.3	9.2
Lumber and wood products	11.6	17.1	16.1	16.1	14.8	12.7
Furniture and fixtures	8.3	16.5	15.1	12.6	11.1	10.8
Primary metal industries	7.9	25.7	26.6	21.2	17.3	14.5
Fabricated metal products	8.6	18.0	15.5	14.6	14.8	11.9
Machinery, except electrical	5.4	15.0	15.3	13.6	11.5	8.0
Electrical machinery, equipment, and supplies	6.4	12.2	11.4	10.2	8.3	6.0
Automobiles	13.2	22.4	16.4	14.8	10.9	8.5
Nondurable goods	8.0	11.4	10.9	10.5	9.8	8.6
Textile mill products	9.1	12.4	11.2	10.4	9.5	7.0
Apparel and other textile products	11.6	15.1	14.8	13.6	11.3	10.1
Rubber and miscellaneous plastics products	9.9	14.4	11.0	10.7	9.9	10.8
Private service-producing	6.6	8.8	8.8	8.5	8.2	7.7
Transportation and public utilities	4.6	8.1	7.8	7.6	7.5	6.8
Wholesale and retail trade	8.2	10.7	10.9	10.2	9.7	9.2
Finance and services	5.8	7.6	7.4	7.3	7.2	6.7
Government	4.7	5.2	5.7	5.5	5.2	5.0

in unemployment. Men and women in the goods-producing industries—especially in durable goods manufacturing—experienced the largest over-the-year unemployment declines. However, unemployment rates remained higher among women than among men in manufacturing, particularly in nondurable goods manufacturing. In the service-producing sector, unemployment rates for men and women declined less, and, in most instances, the declines were comparable, at least at the major industry levels. However, in finance and in services, women showed no over-the-year reductions, while men did.

Major occupation. Because employment in the manufacturing and construction industries is more sensitive to cyclical movements, it follows that the occupations which are concentrated in these industries—precision production, craft and repair, and operators, fabricators, and laborers—are more likely to evidence unemployment declines during economic recoveries.¹¹ With over-the-year employment increases, these two major occupational groups showed a decline in unemployment of 1.5 million. Three-fourths of this decline was concentrated in the operators, fabricators, and laborers occupations, but, even so, this group still had the highest unemployment rate among the major occupations. (See table 9.)

Unemployment also declined over the year among managerial and professional workers, who have the lowest jobless rates. In the service occupations traditionally least affected

by cyclical downturns, unemployment rates remained quite high, even after a year of recovery.

Families and marital status. The proportion of families having at least one member unemployed declined to 10.9 percent from 13.6 percent between the fourth quarters of 1982 and 1983. In 60 percent of those 6.8 million families, the effects of unemployment were mitigated, to some extent, by the full-time employment of some other family member, up from 58 percent a year earlier.

A family's experience with unemployment differed significantly by race and ethnic origin in 1983. The proportion of black families experiencing some unemployment was almost 21 percent at yearend, compared with 10 percent among white families. These proportions represented a slight decrease for both black families and white families over 1982. Unemployment touched about 16 percent of Hispanic families in late 1983, down from more than 19 percent a year earlier.

As with most other unemployment indicators, the jobless rates of married men and women peaked in the fourth quarter of 1982. Typically, their rates are well below the national average. For example, the December 1983 rate for married men, at 5.2 percent, was 3.0 percentage points below the national average, while the rate for married women, at 6.1 percent, was 2.1 percentage points below. On the other hand, women who maintain families have considerably higher than average unemployment rates. (See table 6.)

Discouraged workers. Of the 63 million persons not in the labor force in 1983 (on average), about 90 percent did not want jobs. Of these, slightly more than half were women keeping house. Others not in the labor force who did not want jobs were retired workers, students, and those who were either ill or disabled. The remaining 6.5 million persons outside the work force want jobs "now" but are not looking for work because of ill health, school attendance, home responsibilities, or because they think they cannot

Table 9. Occupational status of the employed and unemployed, fourth quarters 1982 and 1983, not seasonally adjusted

(Numbers in thousands)

Occupation	1982			1983		
	Civilian employed	Unemployed	Unemployment rate	Civilian employed	Unemployed	Unemployment rate
Managerial and professional specialty	23,567	845	3.5	24,071	654	2.6
Technical, sales, and administrative support	31,048	2,192	6.6	31,843	1,868	5.5
Service occupations	13,496	1,712	11.3	14,115	1,603	10.2
Precision production, craft, and repair	11,554	1,475	11.3	12,814	1,138	8.2
Operators, fabricators, and laborers	16,051	3,558	18.1	16,618	2,431	12.8
Farming, forestry, and fishing	3,607	408	10.2	3,365	398	10.6

find work. This last group is commonly referred to as "discouraged workers."

Discouraged workers—although reporting that they want a job—are excluded from counts of the unemployed, with whom they often are compared, because they have not looked for work during the 4 weeks prior to being surveyed. Changes in their number generally follow cyclical changes in unemployment. For example, the number of discouraged workers reached a recession high of 1.8 million in the fourth quarter of 1982, the same time the unemployment rate peaked. (See table 10.) As the unemployment rate began to decline, so too did the number of discouraged workers, such that by the final quarter of 1983 their number was down to 1.5 million.

About three-fourths of discouraged workers cited "job market factors" as the reason for their discouragement in 1983. These include the individual's repeated failure in finding a job or the belief that no suitable jobs existed in his or her line of work or geographic area. The rest of the discouraged workers cited "personal factors" for their discouragement, namely, the belief that employers would not hire them because they lack the necessary education or skills, are too young or too old, or are otherwise not acceptable for employment. The group citing job market factors for its discouragement is much more strongly influenced by changes in the business cycle. Accordingly, the decline in the number of discouraged workers from the final quarter of 1982 to the fourth quarter of 1983 of nearly 350,000 occurred almost exclusively among this group. Discouragement because of personal factors is usually insensitive to cyclical changes; the number actually increased between the first two quarters of 1983, and then remained constant at about 410,000 for the remainder of the year.

Women are somewhat more likely than men to be discouraged workers. Their number peaked at 1.1 million during the fourth quarter of 1982, compared with a peak for men of 695,000 (reached in the first quarter of 1983). Also,

Table 8. Unemployment rates for nonagricultural private wage and salary workers by industry and sex, fourth quarters 1979, 1982, and 1983, not seasonally adjusted

Industry	1979		1982		1983	
	Men	Women	Men	Women	Men	Women
Mining	4.3	2.5	19.1	4.3	12.8	4.7
Construction	9.5	7.2	20.3	15.9	14.5	11.4
Manufacturing	4.7	7.7	13.2	15.5	8.3	9.6
Durable goods	4.9	6.6	15.3	16.9	8.8	9.5
Nondurable goods	4.4	8.7	9.1	14.0	7.4	9.8
Transportation and public utilities	3.6	4.7	8.1	5.9	6.8	5.1
Wholesale and retail trade	5.1	7.2	9.2	11.4	8.1	9.8
Finance, insurance, and real estate	1.9	3.4	5.3	5.0	3.8	4.4
Services, excluding private households	5.0	5.4	9.1	7.7	8.1	6.7

the level of discouragement among women was fairly constant for most of 1983. Discouragement among men followed a more cyclical pattern, with a pronounced decline during the year. Blacks make up a very disproportionate share of the discouraged group when compared with whites—about 30 percent in recent years.

The labor force

The civilian labor force, at 112.0 million in the final quarter, grew at almost the same pace in 1983 as in 1982, finishing the year 1.3 million higher, compared with increases of 1.7 million in 1982 and 1.6 million in 1981. Most of the labor force growth occurred in the third quarter. (See table 11.)

The relatively slow rate of labor force increase is the result of several factors. There have been fewer persons reaching working age in recent years because the high birth rates of the 1950's and early 1960's were not sustained in the later 1960's and early 1970's. The number of teenagers of labor force age has dropped steadily from a high of 16.7 million in the fourth quarter of 1977 to 15.1 million by the fourth quarter of 1983. The drop in the teenage population is the dominant reason for the declining rate of increase in the overall working age population (16 years and older), from 2.6 percent between 1971 and 1972 to 1.1 percent between 1982 and 1983.

Women accounted for more than half of the labor force growth in 1983. At 48.8 million, they accounted for nearly 44 percent of the labor force in December, reflecting a marked increase during the postwar era. However, the rate of increase has slowed somewhat in recent years. Although women constituted a larger share of the labor force in 1983 than in any previous year, they did not enter the job market at the same pace as in earlier years. This has also contributed to the slower than usual labor force growth over the year. The following tabulation shows women as a percent of the civilian labor force, 1974–83:

Year	Percent	Year	Percent
1974	39.4	1979	42.1
1975	40.0	1980	42.5
1976	40.5	1981	43.0
1977	41.0	1982	43.3
1978	41.7	1983	43.5

The labor force participation rate—the proportion of the civilian population in the labor force—averaged the same in 1983 as in the prior year. The rate for men has been declining fairly consistently since the early 1950's, largely because of the labor force withdrawal of older men.¹² In particular, the participation rate for white men has been declining steadily over the past three decades, with the largest year-to-year decline occurring over the 1974–75 period. The drop from 79.2 percent in 1982 to 78.9 percent in 1983 reflects a continuation of the trend over the decades. During the year, however, there was some upward movement in their rate, especially during the first 6 months, as the eco-

Table 10. Discouraged workers by selected characteristics, seasonally adjusted quarterly averages, 1981–83

[In thousands]

Characteristic	1981	1982	1983			
	III	IV	I	II	III	IV
Total	1,110	1,813	1,765	1,726	1,610	1,457
Job-market factors	822	1,393	1,408	1,316	1,197	1,046
Personal factors	288	420	357	411	413	411
Men	396	683	695	683	607	620
Women	714	1,131	1,070	1,043	1,003	836
White	751	1,252	1,194	1,245	1,076	974
Black	324	522	512	431	473	458

nomomic recovery began to take hold.

As with white men, the rate for black men has also shown a general downward trend. Although the participation rate for black men was slightly higher in 1983 than in 1982, most of the increase came, as it did for whites, in the first half of the year. The last 6 months brought a slight decline in the participation rate for black men.

The participation rate for women was 53.1 percent in 1983, compared with 52.7 percent a year earlier and 41.6 percent in 1968. The secular increase for women has accompanied a tremendous expansion in the service sector where women have obtained the majority of new jobs. For example, 15 years earlier, service-producing industries employed about 44 million persons, of whom some 19 million were women. By 1983, total employment in this sector had grown by 21 million to 66 million, 33 million of them women. In the last decade and a half, then, women have accounted for two-thirds of the increase in service-producing employment. It is possible that better employment opportunities for women in the growing services sector may have contributed to their greater labor force participation. It is too early to draw any firm conclusions about future trends in women's participation rates, but it is clear that there has been a reduction in the rate of increase thus far in the 1980's.

White women have entered the labor force at a much faster pace than black women over the past decade. In 1983, however, the increase in the participation rate between the two groups was about the same.

The labor force participation rate for the Hispanic population, which peaked at 64.1 percent in 1981, was the same in 1983 as in 1982—63.6 percent.

The rate at which teenagers participate in the labor force increased from the early 1960's, when it was about 45 percent, and reached a high of almost 58 percent in 1978 and 1979. Since then, however, their participation has been on a downward trend, finishing 1983 at slightly more than 53 percent.

The factors that motivate teenagers to join the work force are complex and include, among other issues, family economic situation, whether their friends work, the cost of education, their interests, and potential earnings. Most recently, the declining teenage participation rate may have stemmed from the recessions of 1980 and 1981–82. To the

Table 11. Civilian labor force and participation rates for major age-sex groups, seasonally adjusted quarterly averages, 1982-83

[Numbers in thousands]

Group	1982				1983			
	I	II	III	IV	I	II	III	IV
Total, civilian labor force	109,414	110,192	110,517	110,829	110,700	111,277	112,057	112,012
Men, 20 years and over	57,608	57,963	58,130	58,335	58,208	58,634	58,983	59,017
Women, 20 years and over	43,141	43,662	43,949	44,053	44,247	44,442	44,868	44,971
Teenagers	8,665	8,567	8,439	8,441	8,245	8,201	8,206	8,024
Total, participation rate	63.8	64.1	64.1	64.0	63.8	64.0	64.2	64.0
Men, 20 years and over	78.7	78.9	78.8	78.7	78.2	78.5	78.6	78.4
Women, 20 years and over	52.4	52.8	52.9	52.9	52.9	53.0	53.3	53.2
Teenagers	54.4	54.1	53.7	54.1	53.3	53.4	54.0	53.2

extent that teenagers are unskilled or untrained, or are perceived by employers to have only a transient commitment to the job market, it becomes especially hard for them to find employment during a recessionary period. This, of course, is not lost on the teenager, who may be in or out of school but who has not yet begun to search for a job. Together with rapidly increasing unemployment among adult and more experienced workers, it may be the psychologically inhibiting factor telling the teenager not to enter the labor force. But whatever the cause, a declining participation rate has

been noted among teenagers over the past 3 to 4 years and is yet another factor in the slackened pace of labor force growth.

AS 1983 ENDED, the economic recovery was 13 months old. Over this span, the labor market situation improved considerably. Employment as measured by the household survey increased by 3.9 million, while the unemployment rate, at 8.2 percent, declined from its recession peak of 10.7 percent. □

FOOTNOTES

¹ This article uses data from two main sources: the Current Employment Statistics program and the Current Population Survey. Statistics on non-agricultural payroll employment and hours from the Current Employment Statistics program are collected by State agencies from payroll records of employers and are tabulated by the Bureau of Labor Statistics. Data on labor force, total employment, and unemployment are derived from the Current Population Survey, a sample survey of households conducted and tabulated by the Bureau of the Census for the Bureau of Labor Statistics. A description of the two surveys appears in the monthly Bureau of Labor Statistics publication, *Employment and Earnings*.

² The BLS diffusion index measures the percent of industries which posted increases in employment over a specified time span. The index is calculated from 172 unpublished seasonally adjusted employment series (two-digit nonmanufacturing industries and three-digit manufacturing industries) covering all nonagricultural payroll employment in the private sector.

³ For some attempts to analyze the (hypothesized) changing cyclical nature of several kinds of economic indicators, see Martin Neil Baily, "Stabilization Policy and Private Economic Behavior," *Brookings Papers on Economic Activity*, No. 1, 1978, pp. 11-60; Norman Bowers, "Have employment patterns in recessions changed?" *Monthly Labor Review*, February 1981, pp. 15-28; Jeffrey Sachs, "The Changing Cyclical Behavior of Wages and Prices: 1890-1976," *American Economic Review*, March 1980, pp. 78-90; and Charles L. Schultze, "Some Macro Foundations for Micro Theory," *Brookings Papers on Economic Activity*, No. 2, 1981, pp. 521-92.

⁴ Unless otherwise noted, the employment changes cited in the text refer to the November 1982 to December 1983 period. This is done to be consistent with National Bureau of Economic Research cycle dates.

⁵ For more information, see Douglas R. Fox, "Motor Vehicles, Model Year 1983," *Survey of Current Business*, October 1983, pp. 20-22.

⁶ For an excellent treatment of this issue, see Robert W. Bednarzik,

"Layoffs and permanent job losses: workers' traits and cyclical patterns," *Monthly Labor Review*, September 1983, pp. 3-12.

⁷ See Robert W. Bednarzik, "Short workweeks during economic downturns," *Monthly Labor Review*, June 1983, pp. 3-11; and Philip L. Rones, "Response to recession: reduce hours or jobs?" *Monthly Labor Review*, October 1981, pp. 3-11.

⁸ See Robert W. Bednarzik, "Short workweeks."

⁹ For a comprehensive review of teenage and youth unemployment, see Norman Bowers, "Tracking youth joblessness: persistent or fleeting?" *Monthly Labor Review*, February 1982, pp. 3-15.

¹⁰ See testimony of Commissioner of Labor Statistics Janet L. Norwood before the U.S. Senate Committee on Environment and Public Works, Apr. 18, 1983. Norwood's testimony was subsequently published as *Youth Unemployment: A Look at the Data*, Report 695 (Bureau of Labor Statistics, 1983).

¹¹ Beginning with January 1983, the Bureau of Labor Statistics began coding all occupational data in accordance with the classification system used in the 1980 decennial census which, among other changes, eliminated blue-collar and white-collar designations. The new occupational categories are so different from those previously published that their implementation represents a major break in historical data series. The full occupational titles for the six new major occupational groups are included in table 9. For a technical discussion of the occupational revision procedures, see Gloria Peterson Green and others, "Revisions in the Current Population Survey Beginning in January 1983," *Employment and Earnings*, February 1983, pp. 7-15.

¹² This was briefly alluded to by Robert W. Bednarzik and others in "The employment situation in 1981: new recession takes its toll," *Monthly Labor Review*, March 1982, p. 13. For a more comprehensive discussion of the subject, see Philip L. Rones, "The labor market problems of older workers," *Monthly Labor Review*, May 1983, pp. 3-12.

Employment in durable goods anything but durable in 1979–82

Durable goods manufacturers, particularly makers and industrial users of metal products, were hard hit by the recent back-to-back recessions; for some industries, cyclical jolts were aggravated by long-term declines in competitive position

DIANE M. NILSEN

The 1979–82 period was one of economic volatility, as the Nation underwent two recessions separated by a mild and brief expansionary period lasting but 1 year—the shortest on record. The brevity of the recovery reflected the uncertainty of prevailing economic conditions—particularly high interest rates and unrelenting inflation—which made consumers and businesses alike hesitant to make major purchases. As a result, job growth was quite limited during this period. The effect of the 1981–82 recession on the already weakened economy was especially disruptive in the cyclically sensitive manufacturing sector.

Durable goods manufacturing industries (along with construction) have historically borne the brunt of economic reversals, because of consumers' willingness to forgo purchases of large manufactured items during recessionary periods. In an attempt to offset eroding sales and profits, employers typically cut back first on hours of work and then on jobs, with the sharpest reductions taking place among those firms whose products are relatively high priced, are of a type which customers can postpone buying, and involve significant financial outlays for production as well as for research and development (for example, autos, large appliances, and furniture). During the 1980–82 period, pros-

pects were bleakest in the severely depressed auto and steel industries which, for most of the 20th century, have been among the pacesetters for the U.S. economy.

This article examines changes in employment, unemployment, and hours of work in manufacturing between 1979 and 1982, with particular focus on the five major metal using and producing industries within the durable goods division.¹ Although the economy officially underwent two downturns within this 4-year period—from January 1980 to July 1980, and from July 1981 to November 1982²—the 1979–82 period will be dealt with in its entirety for purposes of most of this analysis, in part because the important manufacturing industries had started to weaken prior to the January 1980 prerecession peak and also because the 1980–81 recovery was so short and limited in effect. Whereas a number of industries were affected by the downturn, the response of the five metals industries—primary metals, fabricated metals, machinery, electric and electronic equipment, and transportation equipment—to the recessions was particularly sharp and prolonged and yet, on the whole, as varied as the products they produce. Because of the difference in performance among these industries, the peak-to-trough changes in employment and hours discussed below will, in most cases, refer to the turning points for individual industries, and not the official turning points designated by the National Bureau of Economic Research for the total economy.

Diane M. Nilsen is an economist in the Division of Employment and Unemployment Analysis, Bureau of Labor Statistics.

Table 1. Changes in manufacturing employment during selected recessions, seasonally adjusted

[Employment in thousands]

Recession ¹	All manufacturing	Durable goods	Nondurable goods
1957–58:			
Level at peak (Aug. 1957)	17,411	10,032	7,379
Level at trough (Apr. 1958)	15,655	8,600	7,055
Change	-1,765	-1,432	-324
Percent change	-10.1	-14.3	-4.4
1960–61:			
Level at peak (Feb. 1960)	17,154	9,777	7,377
Level at trough (Feb. 1961)	16,073	8,870	7,203
Change	-1,081	-907	-174
Percent change	-6.3	-9.3	-2.4
1969–70:			
Level at peak (Aug. 1969)	20,287	11,979	8,308
Level at trough (Nov. 1970)	18,492	10,462	8,030
Change	-1,795	-1,517	-278
Percent change	-8.8	-12.7	-3.3
1974–75:			
Level at peak (Sept. 1974)	20,432	12,128	8,304
Level at trough (Apr. 1975)	18,060	10,484	7,576
Change	-2,372	-1,644	-728
Percent change	-11.6	-13.6	-8.8
1980:			
Level at peak (Jan. 1980)	21,165	12,857	8,308
Level at trough (July 1980)	19,784	11,793	7,991
Change	-1,381	-1,064	-317
Percent change	-6.5	-8.3	-3.8
1981–82:			
Level at peak (July 1981)	20,358	12,231	8,127
Level at trough (Nov. 1982)	18,222	10,577	7,645
Change	-2,136	-1,654	-482
Percent change	-10.5	-13.5	-5.9

¹Recessions are as designated by the National Bureau of Economic Research.

Job cutbacks in manufacturing

Manufacturing industries employed about one-fifth of the total nonagricultural work force in 1982. Although their employment share has been steadily declining—from one-third of the total in 1951 and one-fourth in 1971—these industries still play a major role in the economy, generating about a quarter of both the gross national product and total national income in the early 1980's. The cost of technological advancement, increased foreign competition, increasing productivity, and weakened product demand portend a continued reduction in manufacturing's overall share of total employment, although the outlook for some manufacturing industries is much more positive.

The 1970's were particularly troublesome years for manufacturing. During the 1973–75 recession, the most severe of the post-World War II downturns, manufacturing employment fell by 2.4 million to 18.1 million, a 12-percent drop.³ It was not until mid-1978, a full 3 years later, that employment levels returned to those that prevailed before the start of the recession. By 1979, however, employment growth in manufacturing again was sluggish and the economy was threatened with another downturn. In particular, the Nation was plagued by continuing high rates of interest and inflation, which dampened demand for such major consumer items as housing and automobiles and reduced capital spending by business firms.

The 1980's got off to a slow economic start as the Nation entered its seventh postwar recession. The 1980 downturn in payroll employment was the mildest recorded in the postwar era; it was shorter in length, shallower in depth, and not nearly as pervasive as its predecessors. In contrast, the 1981–82 recession, which hit the economy before the key manufacturing industries had had a chance to fully recover from the 1980 episode, was particularly severe—one of the deepest and longest in the postwar era. (See table 1.)

The labor market effects of the last two recessions were particularly pronounced in manufacturing. By July 1980, manufacturing employment had dropped by 1.4 million over the prior 13 months, and by the end of 1982, reductions totaled 3 million, or 14.0 percent. Job cutbacks were greatest in the durable goods division, with the primary metals and auto industries experiencing large declines over the course of the two recessions—36 and 39 percent, respectively. Employment problems in these hard-hit industries produced ripple effects throughout manufacturing, generating widespread cutbacks in jobs—especially among the auto and housing supplier industries such as steel, lumber, stone, textiles, and rubber and plastics.

A noteworthy aspect of the recessionary period was the sex composition of the work force that was laid off or terminated in the durable goods division. Men, as usual, made up the bulk of the employment declines in the durable goods industries. But in contrast to prior recessions, men also made up a *disproportionately* large share of the decline. Because women in durable goods industries have been hired more recently and, hence, have worked for shorter periods than men, they are usually the first to be let go during a recession⁴; this did not occur during the 1980–82 period. At the beginning of 1979, women held slightly less than one-fourth of all jobs in the durable industries, but they accounted for only one-fifth of the decline over the ensuing 4 years.

One explanation may be that, while women have made significant inroads into some areas of manufacturing, particularly the cyclically sensitive durable goods industries such as machinery, they are still not that prevalent in primary metals and transportation equipment, the two key industries in which 1980–82 employment declines were concentrated. (See table 2.) Thus, women were not as likely to feel the full impact of the recession in these industries. If primary metals and transportation equipment are excluded from the durable goods manufacturing total, women would then account for *two-fifths* of the employment declines, considerably above their proportion of the work force in the durables industries.

Decline in durables

Employment in the durable goods industries has tended to be more susceptible to cyclical influences than jobs in the nondurable goods division. The durable goods component accounted for 77 percent of the total decline in man-

Table 2. Women as a percent of total employment, manufacturing industries, 1982

Industry	Percent women
Durable goods industries	25.6
Lumber and wood products	15.0
Furniture and fixtures	30.1
Stone, clay, and glass products	19.9
Primary metal industries	11.3
Fabricated metal products	21.1
Machinery, except electrical	21.1
Electric and electronic equipment	42.2
Transportation equipment	16.5
Nondurable goods industries	40.9

ufacturing employment between June 1979 and December 1982. In particular, the five metal using and producing industries were quite sensitive to the recent downturns, although some fared worse than others. (See chart 1.) The most severely affected were the transportation equipment and primary metals industries.

Transportation equipment. Job cutbacks in the transportation equipment industry were evident early in 1979, before the official onset of the 1980 recession. In fact, this is the only one of the five metals industries that registered a larger decline in employment during the brief 1980 slump than during the longer and much more severe 1981-82 downturn. Almost 90 percent of the 460,000 jobs lost in the transportation equipment industry since the 1979 peak were in automobile manufacturing. (See table 3.)

The rest of the decline in transportation equipment reflected mostly small losses in aircraft and parts, railroad equipment, and ship and boat building and repairing. Employment in guided missiles, space vehicles, and parts, however, continued to grow throughout the recessions. Continued defense spending undoubtedly bolstered the aircraft and guided missiles industries, resulting in fewer employment cuts and even growth in some firms. Interestingly, the nonautomobile-related industries within transportation equipment manufacturing, which usually account for about 50 percent of its total employment, accounted for 60 percent of all workers in 1982 as a result of the heavy decline among auto workers.

The seriousness of conditions in automobile manufacturing resulted from a slump in domestic car sales, which plummeted from a selling rate of 9.2 million units in 1977 to a 20-year low of 5.8 million units during 1981 and 1982. In 1980, the U.S. auto industry posted a loss of \$4.2 billion, the worst 1-year performance in the history of any U.S. industry.⁵

Inflation and high interest rates, which eroded consumer buying power during 1980-82, were largely accountable for the resulting drop in car sales. However, longer-term factors were also at work, as U.S. consumers continued to react to the energy crisis of 1973-74, and the corresponding rise in gasoline prices, by purchasing smaller, more energy efficient cars. Domestic auto manufacturers have had trouble maintaining their share of this market niche over the last

several years in the face of aggressive foreign competition. As recently as 1976, imports accounted for only 15 percent of new-car sales in the United States, but by 1982, they claimed one-fourth of the market. Another long-term damper on U.S. auto sales is the phenomenon referred to as "sticker shock." Because of inflation and the cost of product improvements, the price of a new automobile has risen significantly over the last decade, and consumers have responded by keeping their old cars for longer periods or by purchasing used cars. Thus, both cyclical and secular influences contributed to the loss of more than 400,000 automobile jobs between March 1979 and November 1982.

The sharp decline in employment in auto manufacturing during the last two recessions undoubtedly represents some permanent reduction in jobs, as automakers struggle to make the technological improvements necessary to ensure a viable share of U.S. and world markets. Some analysts also believe that the new-car market will not expand as fast in the mid-to-late 1980's as during past recoveries because most households already have one or more vehicles (87 percent as of the 1980 census) and because owners have begun to keep their cars for longer periods.⁶

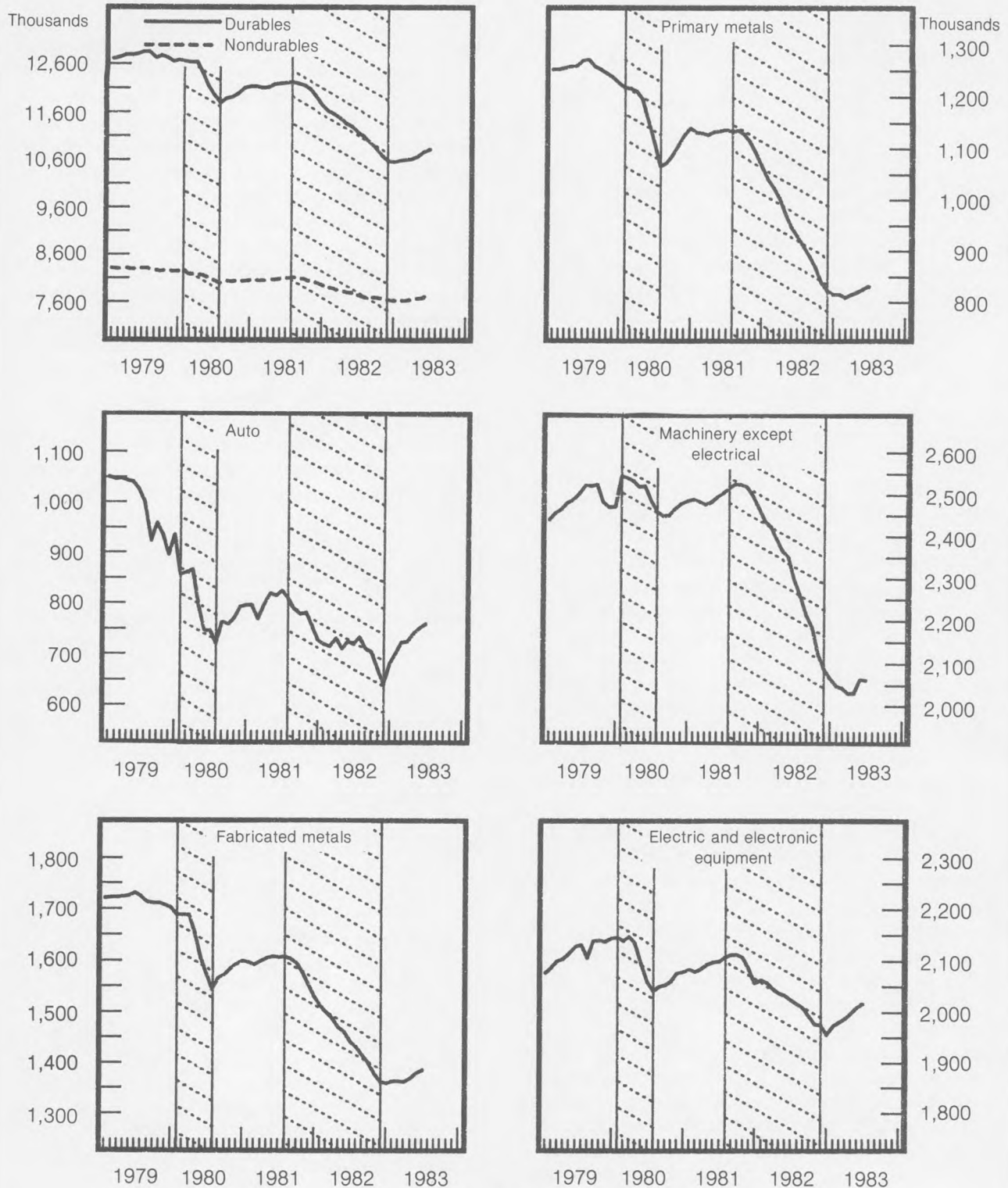
Still, the small upturn in new-car sales since the last quarter of 1982 has had some positive effect on employment in the auto industry; the number of jobs rose by about 75,000

Table 3. Peak-to-trough employment changes in selected durable goods manufacturing industries, 1980 and 1981-82, seasonally adjusted

[Numbers in thousands]

Industry	Peak	Trough	Change from peak (high) month to trough (low) month	
			Number	Percent
Total durable goods:				
1980	June 1979	July 1980	-1,064	-8.3
1981-82	July 1981	Dec. 1982	-1,672	-13.7
1980-82	June 1979	Dec. 1982	-2,298	-17.9
Primary metal industries:				
1980	July 1979	July 1980	-205	-16.1
1981-82	June 1981	Dec. 1982	-328	-28.8
1980-82	July 1979	Feb. 1983	-462	-36.3
Fabricated metal products:				
1980	June 1979	July 1980	-189	-10.9
1981-82	May 1981	Dec. 1982	-250	-15.5
1980-82	June 1979	Dec. 1982	-373	-21.5
Machinery, except electrical:				
1980	Sept. 1979	Aug. 1980	-74	-2.9
1981-82	Aug. 1981	Mar. 1983	-496	-19.6
1980-82	Sept. 1979	Jan. 1983	-493	-19.5
Electric and electronic equipment:				
1980	Mar. 1980	July 1980	-105	-4.9
1981-82	Aug. 1981	Dec. 1982	-155	-7.3
1980-82	Mar. 1980	Dec. 1982	-190	-8.8
Transportation equipment:				
1980	Mar. 1979	July 1980	-294	-13.9
1981-82	June 1981	Nov. 1982	-275	-14.2
1980-82	Mar. 1979	Nov. 1982	-459	-21.7
Automobile manufacturing:				
1980	Mar. 1979	July 1980	-327	-31.2
1981-82	June 1981	Nov. 1982	-184	-22.3
1980-82	Mar. 1979	Nov. 1982	-406	-38.8

Chart 1. Monthly nonfarm payroll employment in durable and nondurable goods manufacturing and in five major metals industries, seasonally adjusted, January 1979—June 1983



NOTE: Shaded areas are recessionary periods, as designated by the National Bureau of Economic Research.

during the first half of 1983. The increase in sales realized over this same period could eventually translate into better job prospects among auto parts suppliers—those producing tires, bearings, brakes, transmissions, and so forth. But gains realized by auto parts makers are not expected to be as great as in the past, because auto manufacturers have begun to produce certain technologically advanced components themselves and to purchase cheaper parts from foreign manufacturers, thereby reducing their dependence on domestic suppliers.⁷ To avoid buildups of unused inventories, auto manufacturers are also adopting the Japanese method of not ordering parts until they are needed. In the past, auto suppliers could be reasonably certain of the coming year's level of parts and equipment orders from car manufacturers, but with the concept of "just-in-time" inventory control, suppliers can never be sure just how much of their product will be needed, or when it will be wanted.⁸

Primary metals. The primary metals industries registered a stunning 36-percent drop in payroll jobs over the course of the last two recessions. These losses were attributable primarily to the weak performance of steel operations, which suffered from one of the lowest levels of demand for their product since World War II. Employment declines were evident in aluminum and other nonferrous metals as well, but these losses were considerably smaller than those that occurred in the steel producing and processing plants.

Between July 1979 and February 1983, employment levels in primary metals were reduced by 460,000, as capacity utilization rates within steel manufacturing fell to an unprecedented low of 30 percent; by comparison, the lowest utilization rate during the 1973–75 recession was considerably higher, 69 percent. (During nonrecessionary times, steel mills have generally operated at about 80 to 85 percent of capacity.) The bulk of the job reductions occurred during the 1981–82 downturn, which was the steepest recorded for steel since statistics of this type have been collected.

But the problems currently faced by steel manufacturers are not solely the result of the recession. Because steel is the most widely used metal, its fortunes are tied to developments in a wide variety of user industries—automotive, machinery, construction, and fabricated metals. The health of our economy is often reflected by the demand for steel. Over time, however, technological advances have yielded lighter, stronger, and less costly products that may be substituted for steel, and demand has fallen. For example, the automakers—faced with meeting Federal requirements for safety and a more fuel efficient car—have expanded their use of substitute materials—plastics, ceramics, and aluminum—for parts that were primarily steel, in an effort to make a lighter and more durable vehicle. Even when steel continues to be used, it is open rolled thinner, which means that less steel is required. These phenomena are actually part of a secular downtrend which also reflects several other factors, such as competition from foreign producers with

modern plants and lower unit labor costs. Foreign competition has proved a significant threat to the existence of a number of domestic steel mills, especially given the comparatively higher wages and benefits of American steel workers.⁹

All told, the steel industry must deal with a variety of problems if production levels and employment are to increase significantly. Its success is tied to more than just the auto industry's ability to rebound quickly from the effects of the recession. Auto manufacturers' orders account for only about 15 percent of total domestic steel production, and would not be strong enough by themselves to offset the long-term weakening of demand for steel. Some analysts feel that one possible road to recovery lies in industry diversification. For example, some steel producers have acquired one or more healthy businesses outside the industry, such as chemicals or utilities, to help offset declining revenues. Another development is the move toward smaller steel plants—mini-mills—that sell specialty steel. Mini-mills have an advantage over older mills in that they are not handicapped by obsolete plants and equipment; they use energy efficient electric furnaces rather than blast furnaces for production and are considerably less expensive to construct. However, they cannot process raw metal and instead must rely on the purchase of scrap metals for their operations. Mini-mills weathered the 1981–82 recession considerably better than other establishments but they presently account for only 15 to 20 percent of domestic steel production.¹⁰

In steel, as in autos, employment will eventually pick up, but it is unlikely that previous peak levels will be attained, due to slack demand for their products, foreign competition, and advanced technologies that boost productivity but may also reduce labor requirements.

Fabricated metals and machinery. Fabricated metals and machinery are two key durable goods industries supplying the auto and housing sectors with parts and products. The number of jobs in fabricated metals, which produces such items as plumbing and heating fixtures, hand tools and hardware, screw machine products (nuts, bolts, rivets), and automotive stampings, dropped by 375,000, or 21.5 percent, between its 1979 high and 1982 low. Likewise, machinery, which includes construction machinery, machine tools, engines, and office computing machines, showed a decline of 495,000, or 19.5 percent. (See table 3.) Throughout most of the 1980–82 period, however, makers of computing machines held their own, because of healthy demand for their products. Although the employment declines in machinery and fabricated metals were not as severe as those experienced in autos and primary metals, jobs have been rather slow to rebound as the industries that they serve have yet to recover to earlier levels of production and sales.

Electric and electronic equipment. Of the five major metal

producing and using industries, electric and electronic equipment was least affected by the prolonged downturn. Employment cutbacks totaled 190,000, or 8.8 percent, between March 1980 and December 1982. Overall, the declines in this industry were minimized by a boom in small computers which shored up the electronic components industry. Demand for small computers is expected to remain strong, as professionals and nonprofessionals alike purchase what is becoming a fundamental, if not essential, tool. While employment in the electric and electronic equipment industry is not impervious to the economic climate, secular trends caused by advances in technology currently are more influential than are business cycles.¹¹

Industries on the move

Defense. A number of firms spread throughout several industries produce components or products for the military. These defense-related establishments have had a substantial impact on employment in key durable goods industries. Employment in guided missiles and space vehicles and ordnance and accessories, for example, has shown steady, though slow, growth over the last several years, while the military's demand for communications equipment, electronic components, and aircraft parts helped to moderate the overall employment losses in these industries. But because firms producing military goods are often capital intensive, fewer jobs may be generated by an increase in orders than in other sectors of the economy. With total defense spending for goods and services being a relatively small part of the economy, the infusion of money budgeted for defense over the next few years is expected to stimulate only a few industries, in particular, the manufacture of electronic equipment, semiconductors, ships, aircraft, missiles, communications equipment, and machine tools.¹²

For many firms, the increased military spending promises to bolster employment and profits and offset their sagging commercial businesses. But these benefits may not be felt for some time, as defense spending does not have its greatest effect on manufacturing until prime contractors begin placing orders with subcontractors.¹³ In any event, the current level of defense spending is not expected to have the same broad economic impact that military expenditures did during the Korean or Vietnam wars. Today, the military does not need huge quantities of small items such as rifles, tents, and trucks, but instead has focused on military preparedness and better communications. Overall, the benefits that do derive from the increased defense spending will be realized almost totally within the durable goods division.

High tech. As noted earlier, economic activity in the postwar years has shifted away from the manufacturing sector—particularly primary metals and other producer goods industries—while expanding in the services industries and public sector. The manufacturing industries that have best resisted decline have been those producing “high technol-

ogy” equipment and those making synthetic materials.¹⁴ High-tech industries are generally considered to be those in which technical workers account for a high proportion of total employment (at least 1.5 times the average) and whose expenditures on research and development are at least twice the average for all industries.¹⁵ Industries commonly associated with high-tech development are makers of computers and other electronic equipment, drugs and medicines, aircraft and parts, laboratory equipment, and plastics and other synthetic materials.

In summary, some manufacturing industries have been better able to weather the recessions because they have a relatively modern plant and equipment, face less foreign competition, and because demand for their products was higher. Other durable goods industries will find it extremely difficult to recover their former positions of strength in the economy, as poor performance during the recession was exacerbated by longer term effects that have little to do with current business climate. The auto and steel industries are cases in point. Their weak performance, high production and labor costs, diminished productivity growth, and outlays for research and development have made them all the more vulnerable to foreign competition. Still, as evidenced during the first half of 1983, industrial production is up from recessionary levels and employment has begun to rise even among the hard-hit primary metals and auto industries.

Unemployment

When the economy worsens, firms inevitably respond to decreasing demand by reducing their work forces through layoffs and permanent separations. Although the impact of the 1980–82 economic contractions was initially concentrated in a few key industries, job cutbacks eventually became fairly widespread, but with different degrees of intensity. Reflective of these cutbacks, the unemployment rate for workers in manufacturing industries rose steadily from a low of 5.3 percent in June 1979 to 14.5 percent in November 1982—a postwar high, and considerably above the previous record of 12.3 percent reached during the 1973–75 downturn.

Within manufacturing, the incidence of unemployment was much greater in durable goods industries than in nondurables. (See table 4.) Durable goods such as autos, furniture, and appliances are often the expendable items on a shopper's list; the consumer will simply postpone the purchase of these large items until absolutely necessary to avoid paying the high interest rates associated with time purchase of such goods or because his or her future income is in doubt. On the other hand, food, apparel and other soft goods industries fare better because it takes less cash to replace worn-out clothing, sheets, and the like, and because these items are likely to be necessities that must be replaced periodically regardless of economic circumstances.

The overall unemployment rate was 9.7 percent in 1982;

within the durable goods sector, the rate averaged 13.3 percent, with rates varying substantially among the component industries. For example, the rate for autoworkers went from a low of 3.9 percent in early 1979 to a high of 29.1 percent just over a year later. And even though their jobless rate had fallen considerably by mid-1981—to a low of 11.8 percent—it was back up over 20 percent by the last quarter of 1982. Partly because of steel's dependence on the hard-hit auto industry, the rate for workers in primary metals soared to a record high of 28.7 percent in December 1982, more than 5 times the rate that prevailed in pre-recession 1979. The jobless rate for primary metals had risen astronomically in late 1982, when the industry could no longer rely on previously placed orders to provide work, and when it became clear that future orders from the auto industry were to be smaller for quite some time. Other traditional auto suppliers, such as rubber and glass manufacturers, were also hurt by their reliance on orders from the automakers. The jobless rate for workers in the stone, clay, and glass industry (also very closely linked to the hard-hit construction industry) was 5.9 percent at the beginning of the recession in January 1980 and 17.1 percent in November 1982, while the rate in rubber and plastics went from 7.2 to 12.3 percent over the same period.

Even with their high unemployment rates, workers in the manufacturing industries represented only about one-fourth of the total jobless during the 1981–82 recession. Similarly, when the jobless rate for autoworkers approached 30 percent in mid-1980, the number of unemployed workers, at 365,000, was only about 5 percent of the total unemployed. The important point is that the health of relatively small portions of the economy, such as primary metals and auto manufacturing, can have a substantial effect on the economic well-being of the entire country.

One way to measure the effects generated by the cutbacks in the auto and primary metal industries is to examine the responsiveness of other industries to changes in demand for their products. This can be accomplished by calculating a sensitivity ratio,¹⁶ which measures the impact of changes in demand on employment within a particular industry (direct) and in its supplier industries (indirect). Following are estimates of 1981 jobs generated per \$1 million sales (in 1972

dollars) by auto and steel manufacturing, and the corresponding ratios of total to direct employment:

	<i>Autos</i>	<i>Steel</i>
Direct	15.8	22.5
Indirect	31.7	35.7
Total	47.5	58.2
Ratio of total to direct	3.0	2.6

The estimated sensitivity ratio for autos was very high at 3 to 1, meaning that for every job lost in auto manufacturing in 1981, another two were adversely affected in industries supplying inputs to auto production. The reduction in demand for automobiles was not felt solely in other manufacturing industries such as primary metals, fabricated metals, and rubber and plastics, but also spilled over into the service-producing sector, affecting, for example, the transportation of steel and other materials to auto manufacturers and the wholesaling of these materials. Likewise, the sensitivity ratio for steel was a high 2.6 to 1. Suppliers to steel mills include mining, trucking and railroad transportation, business services used by steel mills, and the wholesaling of inputs used in production.

Sensitivity ratios do not reflect the number of jobs affected once a product leaves the plant, but it is safe to say that a number of other industries that rely on the finished product for their business were also adversely affected by the weakened demand for both autos and steel, including automobile dealerships, the retailing of parts and building supplies, gasoline stations, repair and maintenance shops, heating and plumbing services, and machinery. The ratios also cannot capture the multiplier effects on total economic demand of the forgone or reduced wages of auto and steel workers. With employment so adversely affected by the slackening demand for autos and steel, it is easier to understand why the total number of unemployed were widely distributed among both the goods- and service-producing sectors.

Weekly and aggregate hours

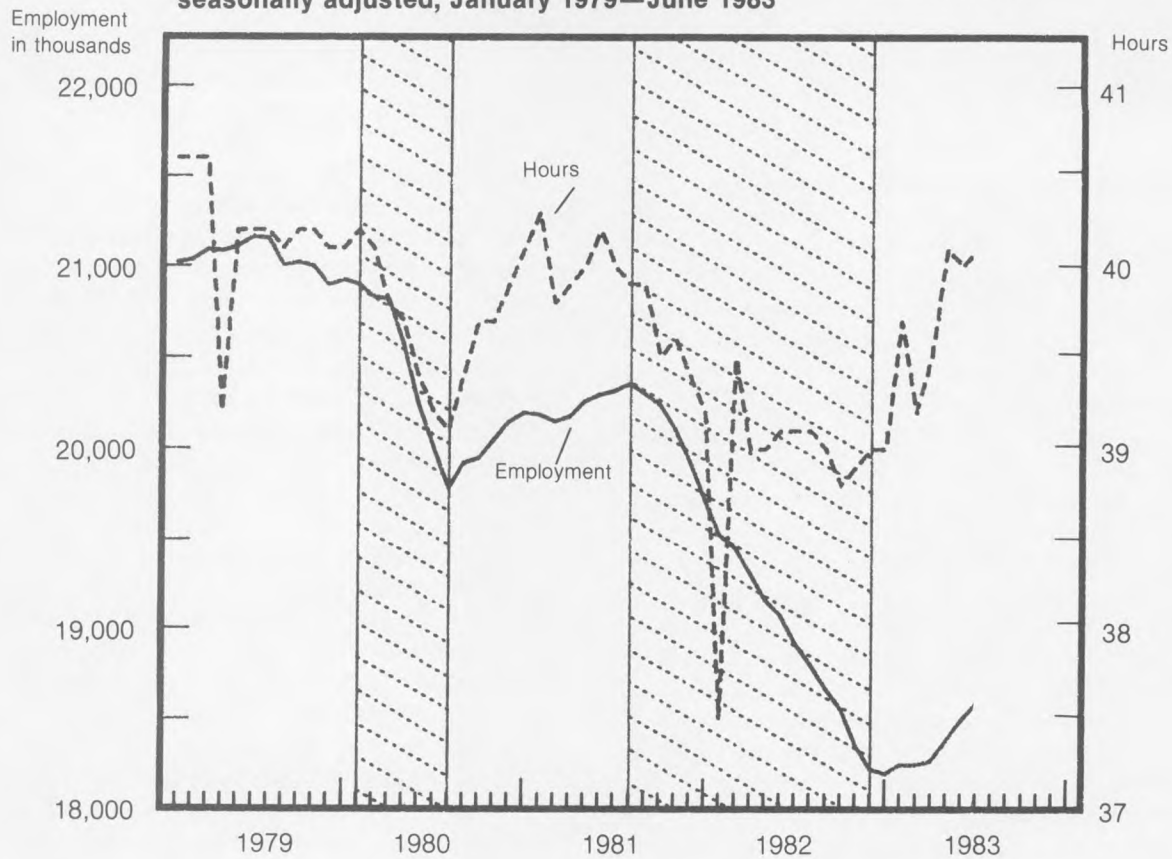
At the outset of an economic downturn, manufacturers generally shorten the hours employees work before resorting to job cuts. And in periods of expansion, employers tend to restore the hours of workers on shortened workweeks before recalling those on layoff. (See chart 2.) This phenomenon is so predictable that the manufacturing workweek is viewed as a leading cyclical indicator, in that changes in hours worked consistently precede those in employment. Within manufacturing, hours (as well as employment) in durable goods industries are generally more volatile, reflecting their dependence on consumer demand for hard goods and the outlook for capital investment. In fact, during the eight postwar business downturns, declines in average weekly hours among the major durable goods industries preceded employment reductions more than 80 percent of the time.¹⁷

Table 4. Unemployment rates in selected manufacturing industries, selected months, 1979–82, seasonally adjusted

Industry	January 1979 ¹	January 1980	November 1982
Total (all civilian workers)	5.9	6.3	10.7
Manufacturing	5.2	6.8	14.5
Durable goods	4.5	6.8	16.7
Primary metal industries	2.9	6.4	25.5
Fabricated metal products	5.6	6.8	18.2
Machinery, except electrical	2.2	3.7	16.3
Electric and electronic equipment	4.8	4.8	12.4
Transportation equipment	3.8	11.3	17.7
Automobile manufacturing	4.1	17.0	24.2
Nondurable goods	6.2	6.9	11.3

¹Although the downturn did not officially begin until January 1980, most durable goods manufacturing industries began experiencing recessionary problems early in 1979.

Chart 2. Employment and average weekly hours in manufacturing, seasonally adjusted, January 1979—June 1983



NOTE: Shaded areas are recessionary periods, as designated by the National Bureau of Economic Research.

Employers in the durable goods manufacturing industries followed the established pattern during the 1980 and 1981–82 recessions. The workweek fell 1.9 hours from the January 1979 high to a July 1980 low of 39.5 hours. During the brief recovery phase, hours rose somewhat, but failed to return to their prerecession high. Average weekly hours reached another low of 39.1 hours in September 1982, having fallen by 1.6 hours since May of 1981. In total, between 1979 and 1982, the workweek declined by 5.6 percent or 2.3 hours. It should be noted that the contraction in hours at the start of the 1981–82 recession preceded the downturn in employment by only 2 months, a rather short lead. This is largely attributable to the fact that the economy had experienced the briefest of recovery periods and had never fully rebounded from the 1980 episode. As in previous recessions, the drop in average weekly hours in the durable goods division exceeded that for overall manufacturing, while nondurable goods industries registered considerably smaller workweek declines.

Overtime hours are generally reduced first when cutbacks in hours are necessary, and indeed, they accounted for most of the workweek decline during the 1980–82 recessionary period. Overtime hours in the durable goods industries stood at a prerecession high of 4.0 hours in early 1979 and fell to 2.1 hours by late 1982. The drop in overtime hours accounted for 83 percent of the decline in total hours worked in durables, surpassing the 75-percent mark reached during 1973–75 downturn.

Workweek trends varied among the five metal using and producing industries. Primary metals, transportation equipment, and machinery all showed substantial reductions in hours beginning early in 1979. Average hours in primary metals showed the sharpest decline—4.4 hours overall between the 1979 high and 1982 low—as the capacity utilization rate in steel mills fell to its lowest average level in 44 years. The next steepest drop—3.9 hours—occurred in transportation equipment. Machinery recorded a relatively large decline of 3.4 hours, while fabricated metals and elec-

Table 5. Causes of the decline in aggregate weekly hours of production workers in the durable goods industries during the 1980 and 1981-82 recessions, seasonally adjusted

[Hours in millions]

Period	Effect			
	Total	Employment ¹	Hours ²	Residual ³
1980 recession:				
Hours decline	62,077	46,741	17,482	2,146
Percent of total effect	100.0	75.3	28.2	-3.5
1981-82 recession:				
Hours decline	73,566	61,701	13,446	1,579
Percent of total effect	100.0	83.9	18.3	-2.1

¹Employment effect (EE) is equal to the change in employment (ΔE) from peak to trough times the number of hours at peak: $EE = \Delta E \times \text{hours}$.

²Hours effect (HE) is equal to the change in the number of hours (ΔH) from peak to trough times employment at the peak: $HE = \Delta H \times \text{employment}$.

³The residual is that portion of employment and hours effects that cannot be isolated: $(EE - HE) - (\text{peak employment} \times \text{peak hours} - \text{trough employment} \times \text{trough hours})$.

NOTE: The declines in aggregate weekly hours are calculated from the high to low points of the employment and hours series for each individual industry during the combined 1980 and 1981-82 recessions.

tric and electronic equipment experienced much smaller reductions during the 1980-82 downturns. The cutback in electronics (2.3 hours) was the least severe, in keeping with the steady demand for and production of new and more advanced computer and telecommunications equipment.

A combined measure—aggregate weekly hours—may be used to examine the impact of the last two recessions on both employment and hours. Specifically, this measure indicates whether employers in a particular industry were more likely to terminate jobs or reduce hours worked in response to changing economic conditions.

During the course of the 1980 recession, aggregate weekly hours fell by 62.1 million in durable goods manufacturing, with 75 percent of this decline attributable to job cutbacks. (See table 5.) During the 1981-82 downturn, employment reductions accounted for almost 85 percent of the total drop of 73.6 million aggregate hours.

Although both hours and employment are reduced during economic downturns, as a recessionary period lengthens, it becomes more likely that jobs, rather than hours, will be cut. Hence, over the course of a downturn, changes in employment become an increasingly large proportion of the total change in aggregate weekly hours. Altering hours of work is primarily a short-term adjustment mechanism to reconcile manpower needs to production schedules, while changes in employment are the prime method of cutting costs in response to long-run changes in demand.

Aftermath

Recovery from one of the Nation's most severe recessions

since the 1930's was underway in the first half of 1983; inflation had abated and interest rates had fallen enough to induce some consumers to purchase large ticket items. The degree to which consumers continue to increase spending on a new car, house, or other major items will strongly influence the strength of the recovery. However, despite the step-up in production, capital spending has remained weak during the first half of 1983, perhaps because manufacturers recognize that consumer spending has not been consistently strong in recent years. For example, the auto industry had increased production levels substantially from a year earlier; but, while machine tool orders, often an early indicator of trends in capital spending, were on the rise during the first half of 1983, some manufacturers of autos and other goods were delaying taking delivery of (and thereby actually purchasing) new machine tools until demand for their own products strengthened or until interest rates improved.

Employment losses in steel and auto manufacturing, and in several of their supplier industries, are not solely the result of the last cyclical downturn but also reflect a restructuring of these basic industries to deal with increased foreign competition, high wages, plant inefficiencies, and reduced demand. Although recovery trends in autos and steel were evident by late 1983, neither is expected to reattain previous peak employment levels.¹⁸

Other durable goods industries, such as fabricated metals and machinery, are not experiencing long-run secular declines and are thus expected to resume their prerecession growth patterns. The electric and electronic equipment industry, in particular, is expected to grow quite rapidly during the 1980's, consistent with the strong demand for computers and telecommunications products. Despite projections of rapid growth, this industry is expected to account for only a small proportion of total future employment growth, because it has a relatively small workforce with high productivity. However, while there may not be a large number of jobs created in firms producing electronic components, there could be sizable job growth in industries using their products—computer and data processing services, defense-related industries, communications services, petroleum and natural gas extraction, and many more. Defense spending should also boost the effects of the recovery in a number of industries, but is more likely to benefit the community in which a defense contractor is based rather than an industry as a whole. In light of all these factors, the recovery of durable goods industries from the 1980-82 recessionary period could be slower and more calculated than during past expansions. □

FOOTNOTES

¹The Current Employment Statistics program, a monthly survey of non-agricultural business establishments, was the source of the employment and hours data used in this article. Unemployment statistics were derived from the Current Population Survey, a monthly survey of some 60,000 households across the Nation. For an explanation of the concepts and differences between the two surveys, see the *BLS Handbook of Methods*,

Vol. 1, Bulletin 2134-1 (Bureau of Labor Statistics, 1982); and John F. Stinson, Jr., "Comparison of Nonagricultural Employment Estimates from Two Surveys," *Employment and Earnings*, March 1983, pp. 6-9.

²These are the turning points designated by the National Bureau of Economic Research (NBER) for the 1980 and 1981-82 recessions.

³For an analysis of the effects of the 1974-75 recession on manufacturing, see Robert W. Bednarzik, "The plunge of employment during the recent recession," *Monthly Labor Review*, December 1975, pp. 3-10.

⁴For an indepth discussion of employment response to cyclical fluctuations, see Norman Bowers, "Have employment patterns in recessions changed?" *Monthly Labor Review*, February 1981, pp. 15-28.

⁵For a comprehensive source of various statistics relating to automobile production, see any issue of *Wards' Automotive Reports*; and the *U.S. Industrial Outlook*, 1980-82 editions (U.S. Department of Commerce, Bureau of Industrial Economics).

⁶See Vivian Brounstein, "How Far Will Car Sales Rebound?" *Fortune*, Nov. 5, 1982, pp. 70-87; and "Why Detroit Still Can't Get Going," *Business Week*, Nov. 9, 1981, pp. 106-10.

⁷See Steven Flax, "A Hard Road For Auto Parts Makers," *Fortune*, Mar. 7, 1983, pp. 108-13; and Mark Potts and Warren Brown, "Auto Revolution Hits Suppliers," *The Washington Post*, Jan. 9, 1983, p. G7.

⁸See Warren Brown, "Hard Times Force Cost-Cutting Effort With Suppliers," *The Washington Post*, Jan. 23, 1983, p. F4.

⁹"Time Runs Out For Steel," *Business Week*, June 13, 1983, pp. 84-94.

¹⁰For a thorough account of the long-term and current recessionary problems encountered by the steel industry, see Robert W. Crandall, *The U.S. Steel Industry in Recurrent Crisis* (Washington, The Brookings Institution, 1981).

¹¹See Thomas W. Lippman, "Personal Computers: An Explosion in the American Marketplace," *The Washington Post*, Jan. 9, 1983, p. G2; and

James L. Rowe, Jr., "Industry Bucks Recession With Big Gains," *The Washington Post*, Jan. 23, 1983, p. F2.

¹²For an analysis of the defense-related industries in the recession, see "Defense and the Economy," *Review of the U.S. Economy* (Data Resources, Inc.), May 1982, pp. 119-24.

¹³"Is Industry Ready for Work Defense Buildup?" *Business Week*, Feb. 8, 1982, pp. 94-96.

¹⁴Richard E. Caves, "The Structure of Industry," in Martin Feldstein, ed., *The American Economy in Transition* (Chicago, National Bureau of Economic Research, The University of Chicago Press, 1980), pp. 501-45.

¹⁵There is no universally accepted definition of a "high technology industry." For an indepth discussion of characteristics associated with high-tech industries, see Richard W. Riche, Daniel E. Hecker, and John U. Burgan, "High technology today and tomorrow: a small slice of the employment pie," *Monthly Labor Review*, November 1983, pp. 50-58.

¹⁶A sensitivity ratio is an industry's total—direct and indirect—employment generated per million dollars of demand divided by its direct employment per million dollars. These data were derived from the U.S. Department of Commerce's 1972 input-output table and a table on 1981 employment-output relationships.

¹⁷Philip L. Rones, "Response to recession: reduce hours or jobs?" *Monthly Labor Review*, October 1981, pp. 25-31.

¹⁸For projections of industry growth over the next decade, see Valerie Personick, "The job outlook through 1995: industry output and employment projections," *Monthly Labor Review*, November 1983, pp. 24-36.

Recent recessions swell ranks of the long-term unemployed

During the past seven recessions, joblessness lasting more than half a year has far outpaced the overall increase in unemployment and in 1981–82 reached the highest level of the postwar era

PHILIP L. RONES

The recent recession in the United States produced the highest unemployment rates in more than 40 years. It also produced unusually long periods of unemployment for a workforce that is normally among the most dynamic in the world.

Millions of Americans move into and out of each labor force category (employed, unemployed, or not in the labor force) every month. Generally, about half of the people who are unemployed in one month are no longer unemployed the next, some finding jobs and others ending their job search for other reasons. These people are then replaced by newly unemployed persons. Short-term unemployment is quite normal in a dynamic economy and, within limits, is necessary for the normal functioning of the job search process.

During 1982, however, as in any recessionary year, fewer unemployed people could find jobs, and, consequently, more remained unemployed from one month to the next. As a result, the number of persons out of work 15 weeks or more rose sharply.

Data on long-term unemployment provide a valuable addition to the more frequently reported unemployment data. This article will briefly investigate long-term unemployment and identify those worker groups most affected by this prob-

lem. Particular emphasis will be placed on the most recent recession.¹

While an assessment of the causes of lengthy unemployment is not the focus of this discussion, a few comments are appropriate. What is being examined here is largely a cyclical condition, that is, the sharp rise in long-duration unemployment brought about by the severe 1981–82 recession. It should be noted, however, that some long-term joblessness is structural in nature, a result of some basic problem in the functioning of labor markets unrelated to cyclical changes. For example, the persistently high unemployment rate and unemployment duration of some groups of racial and ethnic minorities are evidence of such structural unemployment.

It should be kept in mind, then, that in regard to long-term joblessness, both structural and cyclical forces may be at work simultaneously. Some cases are fairly obvious, such as joblessness among blacks. Some are not. For example, prior to the two recessions of the 1980's, the incidence of long-term unemployment among workers in the primary metals industries was quite low—half the national average. More recently, long-term unemployment among these workers has become among the worst of any worker group. While the timing corresponds to a cyclical downturn, considerable evidence indicates that the Nation's steel industry is suffering from some basic problems quite unrelated to cyclical declines in demand. Thus, when structural problems appear

Philip L. Rones is an economist with the Division of Employment and Unemployment Analysis, Bureau of Labor Statistics.

under the "cloak" of recession, unemployment problems will persist after economic recovery is well under way.

Unemployment duration and the unemployment level should not be viewed as completely separate entities. In fact, the unemployment level is really a function of two factors.² The "incidence" of unemployment refers to the number of people who begin a spell of joblessness. Assuming a constant duration, the number unemployed will decline if the incidence declines. Conversely, assuming a constant incidence (a steady flow into unemployment status), the number of jobless will rise as duration increases, that is, persons remain unemployed longer. Thus, the increase in the unemployment levels during the recent recession (or any recession) was due both to increasing duration and incidence.

The most widely used measures of unemployment duration are the mean and median duration of a spell of unemployment.³ While these indicators generally rise with increases in the unemployment rate (with some difference in timing), they may hide increases in long-term unemployment during certain periods of the business cycle. For instance, early in a recession, when there is extensive job loss, the large number of newly unemployed may actually lower these measures. It is not until the number of newly unemployed begins to decline as a proportion of the total that average duration measures begin a sustained rise. Similarly, during recoveries, the number of newly unemployed may begin to decline first, putting upward pressure on the mean and median durations. Thus, the long-term unemployed need to be examined directly.

Duration is key to jobless rise

Table 1 compares the number of newly unemployed (less than 5 weeks) to total unemployment since 1979. The number of persons in the two long-duration categories is also shown. Clearly, the newly unemployed are insufficient to account for the dramatic rise in overall joblessness. Since 1979, the average increase in the newly unemployed never exceeded 13 percent in any year and had totaled 32 percent through 1982. During the same period, total joblessness rose

by 74 percent and, at the extreme, unemployment of longer than half a year more than tripled.

A similar pattern occurs in every period of unemployment increases. During the last seven recessions (starting in the early 1950's), the total of unemployed persons rose, on average, 84 percent from its previous low to its recession high.⁴ However, as table 2 shows, the number unemployed 15 weeks or more rose almost 3 times as fast and the number unemployed more than a half year rose more than 4 times as fast. It should be noted that the recovery from the 1980 recession was so weak (the unemployment rate only improved half a point) that the percentage increase in long-term joblessness in the subsequent (1981-82) recession was somewhat low by historical standards; the actual levels, however, were far higher than those in any previous postwar recession.

Similarly, as a recession comes to an end, long-term unemployment continues to increase. Employers first stop laying off new workers and then begin recalling those workers most recently laid off. This helps to reduce unemployment of short and medium duration. Those workers who had become unemployed early in the downturn often have the least skills and the least seniority, and it typically requires a sustained period of recovery for them to obtain employment.

Thus, there is generally a time lag between when the unemployment rate peaks and when the number of long-term unemployed peaks. The nature of that lag, however, has changed. The following shows the number of months the high in long-duration unemployment followed the peak unemployment rate in the business cycles since 1948:

Peak year	Unemployed 15 weeks and over	Unemployed 27 weeks and over
1949	1	1
1954	0	1
1958	1	2
1961	2	2
1971	1	8
1975	2	6
1980	5	6
1982	0	6

Table 1. Total unemployed by selected duration, with percent change from previous year, 1979-82 annual averages

[Numbers in thousands]

Characteristic	1979		1980		1981		1982	
	Number	Percent change	Number	Percent change	Number	Percent change	Number	Percent change
Total	6,137	-1.0	7,637	24.4	8,273	8.3	10,678	29.1
Unemployed less than 5 weeks	2,950	3.0	3,295	11.7	3,449	4.7	3,883	12.6
Unemployed 15 to 26 weeks	706	-7.8	1,052	49.0	1,122	6.7	1,708	52.2
Unemployed 27 weeks and over	535	-17.4	820	53.3	1,162	41.7	1,776	52.8

Through the early 1960's, the number of long-term unemployed peaked within 1 or 2 months of the unemployment rate peak. The recessions were followed by relatively rapid and strong recoveries; the unemployment rate declined at least a percentage point, but generally much more, within 6 months of its peak. The recessions since 1970, however, have generally been followed by slower recoveries. In 1971, for instance, the rate did not fall a full point from its peak for a year and a half. After the 1980 recession, the rate did not even fall by as much as a full point (it recovered only six-tenths of a point). These weak recoveries do not provide many job opportunities for people who have experienced considerable unemployment. Thus, the ranks of those jobless at least 15 weeks have not tended to decline sufficiently

fast to offset those who become unemployed just prior to the unemployment peak and who subsequently join the ranks of the long-term unemployed. Movement out of the very long-term unemployed (27 weeks and over) is very slow, and hence this group sometimes peaks more than 3 months after the 15-week-and-over group peaks.

Recovery speeds jobless decline after lag

The 1983 recovery was somewhat different than those that preceded it. While the fall in the jobless rate was fairly slow for the first half year, long-term joblessness continued to rise until June. This pattern was similar to the three previous recoveries. In the second half, however, the recovery gained momentum, and by December the 12-month unemployment decline was faster than any previous recovery since the 1960–61 recession. Very long-term joblessness also declined rapidly in the second half to 2.1 million at yearend, compared with a peak of 2.9 million.

The extent of long-duration unemployment during the most recent recession is demonstrated here by comparing data for June 1983 with June 1979. Even though the recession bottomed in November 1982 (according to the National Bureau of Economic Research) and unemployment began to decline in January 1983, the June data are used because they represent the peak of unemployment of 27 or more weeks' duration. June 1979 is used for comparison because it is near the low point in unemployment between the 1975 and 1980 recessions. Because data for specific worker groups are not seasonally adjusted, the same month in any 2 years being compared should be used. This is particularly important in analyzing long-duration unemployment, which has a strong seasonal component. A date between the 1980 and 1982 recessions was not chosen because the recovery from the former recession was so weak, particularly in regard to long-term joblessness, that it could hardly be used as a comparison between relatively good and bad times. In fact, long-term joblessness in mid-1979 was half of what it was at its lowest point in 1981.

No single statistic adequately reflects the extent of long-term unemployment experienced by different labor force groups. For this reason, three types of measures are used which address different aspects of the problem.

1. The long-term unemployed as a proportion of a group's total unemployed answers the question, "If a person was unemployed, what was his or her likelihood of having been jobless at least 15 (or 27) weeks?"
2. The long-term unemployed as a proportion of a group's labor force combines two factors—the likelihood of being unemployed and the likelihood of the unemployment reaching long term. A group could have a high proportion of long-term unemployed under measure 1 (above) but have a low unemployment rate. (See, for example, persons age 55 and over in column 4, table 3.)

3. The percent distribution of the long-term unemployed provides the demographic and industry make-up of this group but is as much a function of the size of the labor force and the unemployment rate of a group as it is a function of the probability of becoming unemployed 15 weeks or more.

Demographic characteristics

In "good times," the long-duration unemployed are composed disproportionately of black workers and workers under 25 years of age, reflecting these groups' high unemployment rates. As a share of the unemployed, the long-term jobless are more likely to be male and over 25 years of age. As the economy worsens, some of these relationships intensify and others moderate. The complexity of these relationships is illustrated by focusing on men.

Once unemployed, men have a higher probability of staying unemployed at least 15 weeks, particularly those of prime working age and older. (See table 3.) This is due to several factors, including their greater likelihood (except for those in the oldest age groups) to be persistent in their job search. The lower duration of unemployment among young workers and women is not a result of their more successful job search. Rather, it is due to their greater tendency to end a period of job search by withdrawing from the job market. For instance, in 1979, 27 percent of women age 25 to 54 who were unemployed in 1 month had left the labor force the next. A comparable figure for persons age 16 to 24 was 25 percent. However, only 11 percent of men 25 to 54 left the labor force from unemployment in any given month. (For 1982, comparable percentages were 22 for women, 23 for youth, and 8 for men.)

For older unemployed persons, the high probability of long-term unemployment reflects the particularly low chance of finding a job for those who do persist in their job search. An unemployed man age 25 to 54 had a 50-percent better chance of finding a job in 1979 than did one age 55 and over. Even when many prime-working age men were out of work during the 1981–82 recession, they still stood a 25-percent better chance of finding a job in 1982 than their older counterparts.⁵

Table 2. Percent change in unemployment¹ between recession peak and previous low, 1954 to 1982

[In percent]

Peak year	Total unemployed	Unemployed 15 weeks or longer	Unemployed 27 weeks or longer
Average, 7 recessions	84	246	394
1954	146	505	846
1958	102	297	471
1961	50	130	150
1971	92	266	466
1975	104	289	483
1980	43	117	149
1982	53	119	174

¹Based on seasonally adjusted data.

The situation for blacks is somewhat different. The problem of long-duration unemployment for blacks is a result of their higher probability of becoming unemployed in the first place. Because the likelihood of reaching 15 (or 27) weeks of unemployment, once jobless, is roughly the same for blacks and whites (columns 5 and 6, table 3), the labor force differences (columns 7 and 8) are proportionate to the white/black differences in their unemployment rates. In both 1979 and 1982, blacks were from 2 to 3 times as likely to be long-term jobless as were whites, roughly the same as the relationship for overall unemployment.

Variations by industry

The statistics by industry show the effects of the recession most dramatically. In 1979, there was little difference among industries in the probability of a worker becoming unemployed for a long time. This probability was generally between 1 and 2 percent for 15 weeks or more and about 0.5 percent for 27 weeks and over. By 1983, there were dramatic differences in the long-term unemployment situation among the major industry groups. Finance and services continued to experience relatively low levels of long-term joblessness, although the levels were triple those in 1979. But some of the changes in other industry statistics were striking, most notably the cyclically sensitive construction and durable goods industries.

While about 4 percent of the civilian labor force was unemployed at least 15 weeks in June 1983, more than 7 percent of the construction and durable goods labor force had reached that level. And while the average worker was 5 times as likely to have been unemployed more than 6 months in June 1983 compared to 4 years earlier, workers

in construction were 8 times as likely and those in durable goods, 9 times. In primary metals (largely steel), a worker was nearly 20 times as likely to be jobless for 15 (or 27) weeks as 4 years earlier. Nearly three-fourths of all jobless workers in this industry had been jobless at least 15 weeks and 6 of 10 were jobless more than one half year. These figures demonstrate the combined effects of both cyclical and structural problems in the employment situation in steel. It should also be noted that auto manufacturing experienced a marked improvement in its unemployment situation during the first half of 1983. The long-term duration figures shown for June 1983, as bad as they are, actually represent a 50-percent improvement over February, the industry's worst month. These developments make it clearer why prime working age men (25-54 year-olds) were hardest hit by long-term unemployment. These men accounted for half of the wage and salary employment in durable goods and construction in 1979, compared with only one-third of wage and salary employment in the service-producing sector.

A job loser was far more likely to remain unemployed for long periods than was a job leaver or a labor force entrant. This makes sense, given the voluntary nature of a quit and the more marginal job market commitment of entrants as a group. Moreover, job losers are likely to have come from the cyclically sensitive goods-producing sector. Between June of 1979 and 1983, job losers had risen from one-half to almost three-fourths of the long-term jobless.

Work experience data

The duration measures discussed thus far come from the responses to the monthly Current Population Survey questionnaire. Another measure of unemployment duration ob-

Table 3. The long-term unemployed by selected characteristics, June 1979 and June 1983, not seasonally adjusted

[Numbers in thousands]

Characteristic	Total unemployed		Unemployed 15 weeks or longer								Unemployed 27 weeks or longer							
	June 1979	June 1983	Total		Percent of unemployed		Percent of labor force		Percent distribution		Total		Percent of unemployed		Percent of labor force		Percent distribution	
			June 1979	June 1983	June 1979	June 1983	June 1979	June 1983	June 1979	June 1983	June 1979	June 1983	June 1979	June 1983	June 1979	June 1983		
Total	6,235	11,570	1,085	4,447	17.4	38.4	1.0	3.9	100.0	100.0	492	2,842	7.9	24.6	.5	2.5	100.0	100.0
Men	2,993	6,498	601	2,939	20.1	45.2	.9	4.6	55.4	66.1	288	1,934	9.6	29.8	.5	3.3	58.5	68.1
Women	3,242	5,072	484	1,507	14.9	29.7	1.1	3.1	44.6	33.9	204	908	6.3	17.9	.5	1.9	41.5	31.9
16 to 19 years	2,034	2,527	136	313	6.7	12.4	1.2	3.2	12.5	7.0	44	148	2.2	5.9	.4	1.5	8.9	5.2
20 to 24 years	1,441	2,478	233	814	16.2	32.8	1.5	4.9	21.5	18.3	91	458	6.3	18.5	.6	2.7	18.5	16.1
25 to 54 years	2,372	5,780	589	2,889	24.8	50.0	.9	4.0	54.3	65.0	284	1,938	12.0	33.5	.5	2.7	57.7	68.2
55 years and over	389	785	128	431	32.9	54.9	.9	2.9	11.8	9.7	73	299	18.8	38.1	.5	2.0	14.8	10.5
White	4,677	8,598	790	3,317	16.9	38.6	.9	3.4	72.8	74.6	329	2,104	7.0	24.5	.4	2.1	66.9	74.0
Black	1,421	2,599	273	997	19.2	38.4	2.6	8.3	25.2	22.4	119	657	8.4	25.3	1.1	5.5	24.2	23.1
Hispanic origin	432	896	70	240	16.2	26.8	1.4	3.8	6.5	5.4	26	155	6.0	17.3	.5	3.0	5.3	5.5
Construction	456	919	97	438	21.3	47.7	1.6	7.0	8.9	9.8	32	262	7.0	28.5	.5	4.2	6.5	9.2
Manufacturing	1,158	2,500	304	1,429	26.3	57.2	1.3	6.4	28.0	32.1	128	1,006	11.1	40.2	.6	4.5	26.0	35.4
Durable goods	611	1,602	182	993	29.8	62.0	1.3	7.5	16.8	22.3	84	703	13.7	43.9	.6	5.3	17.1	24.7
Primary metals	32	195	10	142	31.3	72.8	.8	14.0	.9	3.2	7	115	21.9	59.0	.5	11.4	1.4	4.0
Autos	54	137	18	91	33.3	66.4	1.3	8.4	1.7	2.0	7	73	13.0	53.3	.5	6.7	1.4	2.6
Nondurable goods	547	898	121	436	22.1	48.6	1.3	4.9	11.2	9.8	44	303	8.0	33.7	.5	3.4	8.9	10.7
Trade	1,304	2,243	195	816	15.0	36.4	1.0	3.8	18.0	18.3	71	448	5.4	20.0	.4	2.1	14.4	15.8
Finance	1,462	2,434	258	860	17.6	35.3	.8	2.4	23.8	19.3	134	542	9.2	22.3	.4	1.5	27.2	19.1
Job losers	2,096	6,135	577	3,314	27.5	54.0	—	—	53.2	74.5	265	2,173	12.6	35.4	—	—	53.9	76.5
Job leavers	823	748	143	231	17.4	30.9	—	—	13.2	5.2	61	143	7.4	19.1	—	—	12.4	5.0
Entrants	3,314	4,686	363	884	11.0	18.9	—	—	33.5	19.9	165	522	5.0	11.1	—	—	33.5	18.4

tainable from the CPS comes from responses from a set of supplemental questions asked each March regarding the respondent's work experience during the prior calendar year. Each measure has advantages and disadvantages. The duration measure from the monthly CPS relates to a single, continuous spell of unemployment, while the March supplement counts the total weeks of unemployment over the course of a year regardless of the number of spells. The March data, therefore, understate the duration of unemployment for spells that begin before, or continue after, a calendar year. The monthly survey, by contrast, provides more reliable estimates of unemployment primarily because it does not entail the problems of recall associated with work experience questions. However, the monthly CPS may also understate the duration of unemployment when it is broken by a brief period of employment or labor force withdrawal.⁶

While neither the monthly nor the annual work experience data on duration of joblessness are without limitations, when combined, they provide a fairly thorough view of the problem. For a cyclical perspective, the monthly survey is generally better. To assess the extent of the problem on an individual basis, the work experience questionnaire is quite helpful. In this case, unemployment duration for 1982 will be compared to 1979, a year of relatively low unemployment.

Data from the work experience tabulations demonstrate much the same demographic patterns as the monthly surveys. In 1982, being male and being black each added 10 percentage points to the proportion of those jobless 15 weeks or more in each group. (See table 4.) In other words, the proportion of black women and white men jobless this long was about 10 points higher than the lowest group, white women, while the proportion of black men was 20 points higher. Hispanic men and women experienced long-term joblessness in proportions between their white and black counterparts.

Half of all unemployed persons reported at least 15 weeks

Table 4. Proportion of unemployed who experienced at least 15 weeks of unemployment during 1979 and 1982, by sex, race, and Hispanic origin

Characteristic	Duration of unemployment			
	15 weeks and over		27 weeks and over	
	1979	1982	1979	1982
Total	33.4	49.6	13.7	25.5
Men	35.9	54.1	14.9	27.6
White	33.8	52.6	13.3	26.0
Black	48.8	62.8	24.7	36.1
Hispanic origin	38.8	57.8	15.2	26.6
Women	30.5	43.2	12.3	22.6
White	28.2	41.3	11.1	21.5
Black	41.1	52.5	18.4	28.0
Hispanic origin	34.7	47.9	13.5	25.3

of unemployment in 1982. This figure is higher than the figure from the monthly CPS largely because it counts all spells of unemployment. The proportion unemployed 27 weeks or longer is severely limited by the time frame of the March supplement questionnaire—the half-year period had to fall entirely within the particular calendar year.

WHILE SHORT-TERM JOBLESSNESS is often part of the normal functioning of a market economy, long-term joblessness can have profound consequences for the individual and family—financial, emotional, and even physical. The 1981–82 recession resulted in levels of long-term unemployment far higher than any experienced since the Great Depression.

The hardest hit workers were men, who typically work in cyclically sensitive industries and who tend to persevere in their job search. Racial minorities, whose overall joblessness is extensive, experience a similarly large share of long-term unemployment.

Long-term unemployment is a critical policy area not only during recessions but also during expansions, when the focus shifts to the hard-core, or structurally, unemployed. This aspect of the unemployment picture receives less attention than the overall jobless rate or level but bears directly on the question of economic hardship. □

—FOOTNOTES—

¹ The source of data is the Current Population Survey, a monthly survey of about 60,000 households, conducted by the Bureau of the Census for the Bureau of Labor Statistics.

² The mathematical relationship between flow, duration, and the unemployment rate is discussed in Ronald S. Warren, Jr., "Measuring the flow and duration as jobless rate components," *Monthly Labor Review*, March 1977, pp. 71–72.

³ For a discussion of the issues involved in measuring the duration of unemployment, see Norman Bowers, "Probing the issues of unemploy-

ment duration," *Monthly Labor Review*, July 1980, pp. 23–32.

⁴ The 1949 recession is not included here because BLS data, dating to 1948, cannot be used to identify the "prerecession low."

⁵ Data on the probability of labor force withdrawal and of finding a job come from the Current Population Survey gross flows data. Annual averages are used to improve the reliability of the estimates.

⁶ In the monthly CPS, a period of 2 weeks or more during which a person is either employed or ceases job search is considered a break in a spell of unemployment.

Unemployment in 1982: the cost to workers and their families

The March 1983 work experience survey provides a close look at joblessness by extent and duration and the effect on family income and the incidence of poverty

PAUL O. FLAIM

Joblessness reached a postwar high in 1982. On "average," 10.7 million persons were unemployed during the year, 9.7 percent of the labor force. By the end of the year, when the economy finally ended its deep recessionary slide, unemployment had risen even higher, with the number of jobless persons (seasonally adjusted) reaching 12.0 million in December and with the rate of joblessness peaking at 10.8 percent.

What these numbers, based on data from the monthly Current Population Survey (CPS),¹ do not really tell us is how many different persons among the entire population encountered unemployment during the course of the year, how long they were unemployed, how many weeks they still managed to work, and how their earnings and family income compared with those of workers who remained free of unemployment. For this additional information on the "pervasiveness" of unemployment and for a glance at its impact on the economic well-being of American workers, we must turn to special data from the "work experience" survey.

The work experience survey, conducted each March as a special supplement to the CPS, relates to the activities of the entire civilian population over the previous calendar year. It obtains a complete count of all the persons with some employment or unemployment, as well as data on the

earnings of workers and the income of their families from other sources. Because there are many persons who change their labor force status during the course of a year, the number with some employment or unemployment as estimated through the work experience survey is generally much higher than the annual averages for employment and unemployment based on data from the monthly surveys.

For 1982, the work experience survey shows that the number of persons with a job for at least part of the year was 116.3 million. This number was 17 percent higher than the "average" civilian employment level for the year. And the number of persons with some unemployment, as measured through the same retrospective survey, was 26.5 million, about 2.5 times the "average" number for the year. Overall, 22.0 percent of all persons with any labor force activity during 1982 (in terms of having either worked or looked for work) were found to have experienced some unemployment during the year. This percentage was more than double the annual average employment rate for the same year (9.7 percent).

In this article, we look at how the work experience numbers for 1982 changed *vis-a-vis* similar data for previous years, particularly 1981. We then examine the earnings and family income of the workers who encountered some joblessness. Finally, we look at workers who, because of unfavorable economic conditions, had to work part time during the year or who, because of their perception of the job market, remained on the sidelines for at least part of the year.

Paul O. Flaim is chief of the Division of Data Development and Users' Services, Office of Employment and Unemployment Statistics, Bureau of Labor Statistics.

The recessionary impact on jobs

For most of 1982, the American economy was in the throes of a deep recession which had begun the previous year and which had brought about a substantial decline in the demand for goods and some services. For example, real GNP (the gross national product measured in constant dollars) declined by 3.0 percent from the third quarter of 1981 to the fourth quarter of 1982. Although the recession is considered to have bottomed as of November 1982,² it was not until the following January that any significant improvement was noticed in the monthly statistics on employment and unemployment. All of 1982 was thus a poor year in terms of the demand for workers, and the work experience data for the year are a reflection of this situation.

Of course, even 1980 and 1981, affected by a previous recession, were not banner years in terms of employment growth. This is clearly shown in the following tabulation, which contrasts the rather meager jobs gain over the 1979–

82 period with the much larger average gains posted during the 1970 decade when, except for the 1973–75 period, the economy was on a more steady upward path:

	1969	1979	1980	1981	1982
Persons with some employment during the year (millions)	92.5	115.0	115.8	116.8	116.3
Persons with year-round full-time jobs (millions)	52.8	64.7	64.9	65.3	64.0

Over the 1969–79 period, the year-to-year gains in the number of persons with some employment averaged 2.3 million. Of this average annual gain, a little more than half, or 1.2 million, was in year-round full-time jobs. In sharp contrast, over the 1979–82 period, which was plagued by two back-to-back recessions, the number of persons with

Table 1. Work experience of population during the year by extent of employment, gender, race, and Hispanic origin, 1981–82

[Numbers in thousands]

Extent of employment	Total		Men		Women	
	1981	1982	1981	1982	1981	1982
TOTAL						
Civilian noninstitutional population	171,666	173,656	81,231	82,260	90,436	91,395
Total who worked or looked for work	119,658	120,235	65,950	66,160	53,708	54,074
Percent of the population	69.7	69.2	81.2	80.4	59.4	59.2
Total who worked during the year	116,794	116,277	64,769	64,365	52,025	51,912
Percent of the population	68.0	67.0	79.7	78.2	57.5	56.8
Full time ¹ :						
50 to 52 weeks	65,292	63,973	41,806	40,129	23,486	23,844
48 to 49 weeks	2,446	2,317	1,567	1,381	880	936
40 to 47 weeks	5,888	5,772	3,436	3,377	2,452	2,395
27 to 39 weeks	6,102	6,017	3,335	3,575	2,767	2,441
14 to 26 weeks	6,138	6,263	3,286	3,654	2,852	2,609
1 to 13 weeks	4,804	5,233	2,379	2,800	2,425	2,433
Part time ² :						
50 to 52 weeks	9,133	9,812	2,946	3,118	6,187	6,694
48 to 49 weeks	827	815	215	253	612	562
40 to 47 weeks	2,425	2,416	811	912	1,614	1,503
27 to 39 weeks	3,345	3,463	1,059	1,210	2,286	2,253
14 to 26 weeks	4,711	4,623	1,782	1,714	2,929	2,910
1 to 13 weeks	5,684	5,574	2,149	2,241	3,535	3,332
White						
Civilian noninstitutional population	149,136	150,427	71,018	71,808	78,118	78,618
Total who worked or looked for work	104,668	104,942	58,378	58,560	46,290	46,381
Percent of the population	70.2	69.8	82.2	81.6	59.3	59.0
Total who worked during the year	102,825	102,192	57,615	57,273	45,210	44,918
Percent of the population	68.9	67.9	81.1	79.8	57.9	57.1
Black						
Civilian noninstitutional population	18,480	18,823	8,236	8,398	10,244	10,425
Total who worked or looked for work	12,153	12,276	6,030	5,994	6,123	6,282
Percent of the population	65.8	65.2	73.2	71.4	59.8	60.3
Total who worked during the year	11,211	11,168	5,653	5,521	5,558	5,647
Percent of the population	60.7	59.3	68.6	65.7	54.3	54.2
Hispanic origin						
Civilian noninstitutional population	9,227	9,384	4,393	4,406	4,834	4,978
Total who worked or looked for work	6,293	6,331	3,678	3,646	2,615	2,685
Percent of the population	68.2	67.5	83.7	82.7	54.1	53.9
Total who worked during the year	6,125	6,078	3,605	3,544	2,520	2,534

¹Usually worked 35 hours or more per week.

²Usually worked 1 to 34 hours per week.

Note: Detail for races 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.

any type of job during the year posted an average annual gain of only 0.4 million. And the proportion with year-round full-time jobs showed an actual decline for this period, reflecting primarily the severity of the 1981-82 recession.

As indicated in greater detail in table 1, the number of persons with some employment during the year was half a million lower in 1982 than it had been in 1981. There was an even bigger drop—of 1.3 million—in the number of year-round full-time workers, that is, those working 35 or more hours a week 50 to 52 weeks. The drop in their number reflects the sharp cutbacks in the workweek as well as actual layoffs of workers. The large increase—from 9.1 to 9.8 million—in the number of persons working mostly part time the entire year was a further reflection of the cyclical cutback in hours.

Table 1 also shows that it was men who accounted for nearly all of the employment declines between 1981 and 1982, particularly among those with year-round, full-time jobs. The number of women with some employment was almost the same for 1982 as for 1981—about 52 million. And there were actually more women with year-round full-time employment in 1982 than a year earlier. The relative stability in the employment of women reflects both their growing attachment to the job market as well as the fact that, in this as in other recessions, the sharpest rise in unemployment occurred in goods-producing industries—such as construction, autos, and steel—which are largely staffed by men. Although women have been moving gradually even into nontraditional fields, they are still concentrated in the less cyclically sensitive service-producing industries. However, even these industries did not show much growth during 1982, and this caused at least a pause in the historical rise in female employment.

The number of blacks and Hispanics with jobs was not significantly lower in 1982 than in 1981. However, the fact that their employment level did not increase at all means that there was a drop in their employment/population ratios as their populations increased at a relatively rapid pace.

The increase in joblessness

With employment showing a sizable decline for men and a virtual stalemate for women, it is not surprising that there was a sharp rise in 1982 in the number of persons with a period of unemployment during the year. The total rose to 26.5 million from 23.4 million in 1981, with an increase of 2.3 million among men and nearly 850,000 among women. Taken as a proportion of the labor force, these numbers represented 23.3 percent of all men and 20.4 percent of all women with some job market activity in 1982. (See table 2.)

Not only were there more persons with some unemployment in 1982 than in 1981, they were also unemployed for longer periods. As shown in table 2, of those with some work during the year—and they were the great majority of the unemployed—the proportion with relatively short unemployment spells of 1 to 4 weeks shrank from 4.0 to 3.5 million. At the same time, the proportions unemployed 27 weeks or more (that is, in excess of 6 months) increased from 3.6 to 5.0 million. Also of interest is the fact that the number of persons with two or more spells of unemployment during the year increased from 7.0 million to 7.6 million during 1982. Taking into account all spells, the average (median) duration of unemployment was 15.4 weeks in 1982 versus 13.3 weeks in 1981.

As a further reflection of the cyclical drop in the demand for labor, there were nearly 4.0 million persons in 1982,

Table 2. Extent of unemployment during the year by gender, 1981-82

[Numbers in thousands]

Extent of employment	Total		Men		Women	
	1981	1982	1981	1982	1981	1982
Total who worked or looked for work	119,658	120,235	65,950	66,160	53,708	54,074
Percent with unemployment	19.5	22.0	20.0	23.3	19.0	20.4
Total with unemployment	23,382	26,493	13,175	15,441	10,207	11,052
Did not work but looked for work	2,863	3,958	1,181	1,795	1,682	2,163
1 to 14 weeks	1,499	1,730	430	508	1,069	1,221
15 weeks or more	1,364	2,228	751	1,286	613	942
Worked during the year	20,518	22,535	11,994	13,646	8,525	8,889
Year-round workers ¹ with 1 or 2 weeks of unemployment	1,170	1,155	733	747	437	408
Part-year workers ² with unemployment	19,348	21,380	11,260	12,900	8,088	8,481
1 to 4 weeks	3,991	3,483	1,985	1,736	2,006	1,747
5 to 10 weeks	4,040	4,184	2,296	2,372	1,744	1,813
11 to 14 weeks	2,815	2,808	1,667	1,721	1,148	1,087
15 to 26 weeks	4,940	5,863	3,057	3,911	1,884	1,952
27 weeks or more	3,562	5,041	2,256	3,159	1,306	1,882
With 2 or more spells of unemployment	6,986	7,573	4,478	4,913	2,508	2,660
2 spells	3,750	3,854	2,329	2,421	1,421	1,433
3 or more spells	3,237	3,719	2,149	2,492	1,087	1,227
Median weeks of unemployment	13.3	15.4	14.2	16.9	12.0	13.5

¹Worked 50 weeks or more.

²Worked less than 50 weeks.

compared with about 2.9 million in 1981, who looked for work but found none during the year. While many may have been sporadic jobseekers, more than half reported that they had looked for work for 15 or more weeks.

The already high incidence of unemployment among blacks and Hispanics rose even higher in 1982. Among blacks, 33.4 percent of all those with some labor force activity reported some unemployment, up from 30.5 percent in 1981. Among Hispanics, the proportion with some unemployment was 27.1 percent, up from 23.7 percent in 1981. (See table 3.)

An even greater difference between unemployed blacks and other jobless workers was the proportion who, although

seeking work, failed to obtain any employment during the year. For white and Hispanic jobseekers, the proportions who never held a job in 1982 were very close, 13 and 15 percent. Among blacks, the proportion of jobseekers who apparently never found any work was much higher—27 percent.

Unemployment and family income

With unemployment generally longer in 1982 than in 1981, its effect on earnings and on family income became obviously more burdensome. However, even in the unfavorable labor market climate of 1982 there were many workers for whom unemployment was a rather fleeting problem,

Table 3. Extent of unemployment during the year by race, Hispanic origin, and gender, 1981–82

[Numbers in thousands]

Characteristic	Total		Men		Women	
	1981	1982	1981	1982	1981	1982
WHITE						
Total who worked or looked for work	104,668	104,942	58,378	58,560	46,290	46,381
Percent with unemployment	18.3	20.7	18.8	22.0	17.7	19.1
Total with unemployment	19,140	21,730	10,963	12,883	8,177	8,847
Did not work but looked for work	1,843	2,750	763	1,287	1,080	1,463
Worked during the year	17,297	18,981	10,200	11,596	7,097	7,384
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Year-round workers ¹ with 1 or 2 weeks of unemployment	6.0	5.3	6.5	5.6	5.4	4.8
Part-year workers ² with unemployment	94.0	94.7	93.5	94.4	94.6	95.2
1 to 4 weeks	20.2	16.2	17.0	13.3	24.6	20.7
5 to 14 weeks	33.6	31.6	33.2	30.5	34.2	33.4
15 weeks or more	40.2	46.9	43.3	50.6	35.8	41.1
With 2 or more spells of unemployment	33.8	33.3	37.2	35.7	29.0	29.5
Median weeks of unemployment	13.0	14.9	14.0	16.4	11.7	13.0
BLACK						
Total who worked or looked for work	12,153	12,276	6,030	5,994	6,123	6,282
Percent with unemployment	30.5	33.4	31.2	36.5	29.7	30.4
Total with unemployment	3,703	4,096	1,884	2,186	1,819	1,910
Did not work but looked for work	942	1,108	377	473	565	635
Worked during the year	2,761	2,988	1,507	1,713	1,254	1,275
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Year-round workers ¹ with 1 or 2 weeks of unemployment	4.1	4.0	4.1	4.6	4.0	3.3
Part-year workers ² with unemployment	95.9	96.0	95.9	95.4	96.0	96.7
1 to 4 weeks	15.4	10.8	13.5	8.7	17.7	13.5
5 to 14 weeks	31.8	27.5	31.5	26.7	32.1	28.7
15 weeks or more	48.7	57.6	50.8	60.0	46.2	58.5
With 2 or more spells of unemployment	34.7	36.2	37.1	38.3	31.9	33.4
Median weeks of unemployment	15.3	18.9	17.3	19.8	14.4	17.5
HISPANIC ORIGIN						
Total who worked or looked for work	6,293	6,331	3,678	3,646	2,615	2,685
Percent with unemployment	23.7	27.1	24.2	28.5	22.9	25.3
Total with unemployment	1,491	1,717	891	1,038	600	679
Did not work but looked for work	167	253	72	101	95	152
Worked during the year	1,324	1,464	819	937	505	527
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Year-round workers ¹ with 1 or 2 weeks of unemployment	4.4	2.9	4.8	3.4	3.7	2.0
Part-year workers ² with unemployment	95.6	97.1	95.2	96.6	96.3	98.0
1 to 4 weeks	17.2	13.0	13.8	10.6	22.9	17.1
5 to 14 weeks	32.2	31.2	31.8	30.1	32.9	33.0
15 weeks or more	46.2	53.0	49.6	55.9	40.6	47.9
With 2 or more spells of unemployment	37.6	33.9	40.4	36.6	33.0	29.2
Median weeks of unemployment	14.5	16.8	15.9	17.7	12.8	14.7

¹Worked 50 weeks or more.

²Worked less than 50 weeks.

NOTE: Detail for racial 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 4. Earnings and family income of workers by industry, unemployment status, and incidence of poverty, 1982

[Numbers in thousands]

Industry	Workers with no unemployment				Workers with some unemployment				
	Number	Median annual earnings	Median family income	Percent in poverty	Number	Percent of all workers	Median annual earnings	Median family income	Percent in poverty
Total	93,742	\$12,328	\$27,930	5.6	22,535	19.4	\$ 5,358	\$19,503	16.6
Agriculture, forestry, and fisheries	3,451	4,031	17,175	22.7	797	18.8	2,917	13,226	33.8
Mining	924	24,897	33,149	3.0	346	27.2	15,104	23,083	9.2
Construction	4,460	14,678	25,701	5.9	2,816	38.7	7,978	18,645	17.5
Manufacturing	17,248	17,243	29,010	2.8	5,914	25.5	8,563	21,210	10.5
Durable goods	9,932	18,658	30,156	2.1	3,718	27.2	10,184	22,369	7.7
Lumber, wood products, and furniture	821	12,004	22,568	6.5	475	36.7	6,841	18,671	18.3
Stone, clay, and glass products	429	17,739	29,534	2.3	203	32.1	12,469	20,863	6.0
Primary metal industries	645	22,999	30,467	1.6	404	38.5	13,064	24,644	4.5
Fabricated metal products	1,216	16,776	28,784	2.4	409	25.2	9,659	21,986	9.2
Machinery, except electrical	2,169	20,485	31,343	1.0	771	26.2	11,210	23,657	3.9
Electric machinery, equipment, and supplies	1,753	17,174	30,202	2.5	565	24.4	9,039	22,175	7.3
Automobiles	704	23,177	33,299	2.0	411	36.8	16,672	27,560	3.5
Aircraft and other transportation equipment	1,143	23,149	34,645	.9	221	16.2	10,204	23,090	4.8
Professional and photographic equipment, and watches	600	17,934	33,446	.4	104	14.7	8,094	22,722	10.5
Miscellaneous manufacturing industries	452	12,183	26,313	2.9	156	25.6	5,812	16,219	16.5
Nondurable goods	7,316	14,915	27,368	3.7	2,196	23.1	6,528	18,539	15.1
Transportation, communications, and other public utilities	6,465	20,245	30,838	2.6	1,103	14.6	8,133	21,831	12.2
Wholesale trade	4,122	16,426	30,088	3.4	715	14.8	6,722	21,033	12.3
Retail trade	15,859	6,515	25,700	7.9	4,322	21.4	2,833	19,038	19.3
Finance, insurance, and real estate	5,994	13,392	31,552	2.3	708	10.6	5,353	18,118	11.4
Business and repair services	4,378	11,367	26,520	7.0	1,250	22.2	4,458	19,088	19.6
Private households	1,340	920	17,080	20.6	332	19.9	551	11,671	37.5
Personal services, except private households	2,689	5,685	20,630	12.0	647	19.4	2,996	15,307	23.2
Entertainment and recreational services	1,177	4,528	27,333	7.5	423	26.4	2,898	17,514	21.4
Professional and related services	20,890	11,903	29,425	4.3	2,670	11.3	4,090	19,677	18.2
Public administration	4,746	17,295	30,748	2.6	492	9.4	5,015	18,645	18.5

although of some economic consequence. For example, 1.2 million were year-round workers, meaning they were employed for at least 50 weeks and were without work no more than a week or two. (See table 2.) An additional 3.5 million, classified as part-year workers, were unemployed up to 4 weeks. Altogether, nearly 5 million persons, or almost one-fifth of the unemployed in 1982, experienced relatively short spells of joblessness. The effect of such spells on earnings and total family income could not have been very large.

When spells of unemployment were much longer—and it should be reemphasized that the overall median exceeded 15 weeks—the losses in earnings and family income were obviously much larger. In such cases, the total income available for the year to the family of the affected worker depended on three factors: (1) the type of job lost and its wage level; (2) the amount of earnings that might accrue to the family from the jobs of other members; and (3) the income obtained from other sources, including unemployment insurance benefits and other transfer payments.

For workers with some unemployment in 1982, median annual pay was not much over \$5,000. Nevertheless, their family income averaged nearly \$20,000, reflecting the importance of having more than one jobholder in the family—which has become the rule rather than the exception—as well as possible transfer payments.

Table 4 also shows that only 17 percent of the workers with some unemployment in 1982 were in families whose income for the year fell below the Federally designated

poverty thresholds.³ What is also interesting is the association of the type of industry in which these jobless persons had worked with their annual earnings, family income, and the probability of falling into poverty. In general, the persons whose principal jobs were in the various durable goods manufacturing industries, in which average wages tend to be much higher than in most other industries,⁴ had the lowest probability of poverty. For example, of the workers who lost jobs in the auto industry, only 3.5 percent wound up with family income below the poverty line. In contrast, about one-third of the jobless agricultural workers and one-fifth of those who had been in the various service industries had family income below the poverty line. Indeed, there were some industries, notably agriculture, household services, and personal services, in which the probability of impoverishment was relatively high even for workers with no unemployment whatsoever during the year. This is primarily a reflection of the wide disparity in wages among the various industries.

The number of wage earners in a family also affects the likelihood of poverty among the unemployed. Altogether, 17.5 million families had one or more members out of work in 1982. About 18 percent of such families reported total income below the poverty line. (See table 5.) However, if the family was headed by a married couple and had two jobholders or more, the probability of poverty was only 6 percent. And about 10.5 million families, or well over half of these with some unemployment, were working couples,

or if one spouse did not work, had a second earner in the family, cushioning the effects of unemployment.

However, among the households maintained solely by a woman, the incidence of poverty was very high when unemployment struck. About 3.1 million such households experienced some unemployment, and 44 percent were in poverty, largely because they seldom had more than one earner. This highlights the financial vulnerability of families with only one working member, particularly a woman. Because women who head their own families are even more likely than women in general to be concentrated in relatively low paying jobs,⁵ the incidence of poverty among the families which they head was comparatively high (17 percent) even when these families escaped unemployment.

Workers living alone or with unrelated individuals also faced a relatively high incidence of poverty when they became unemployed. More than one-third reported annual income for 1982 below the poverty line. Obviously, such persons are also not likely to benefit from someone else's earnings during periods of joblessness.

Race and ethnic origin makes a considerable difference in terms of the incidence of unemployment-related poverty. As indicated below, black and Hispanic families with unemployment in 1982 were much more likely to be poor than were comparable white families:

Percent with income below poverty

Type of family	White	Black	Hispanic
All families	14.0	38.1	30.0
Married-couple families	10.6	17.6	25.8
One earner	23.2	38.1	44.3
Two or more earners	5.9	10.1	16.7
Families maintained by women	33.4	64.6	50.8
Families maintained by men	18.6	33.9	21.1
Persons not in families ..	32.7	49.9	52.5

Not all of the differences in the rates of poverty among these racial-ethnic groups can be ascribed to the degree of severity of unemployment. The differences are also related to wage levels, size of the family, and other factors, such as the amount of transfer payments the families may have drawn upon. It is important to note that, even when free of unemployment, black and Hispanic families had much higher rates of poverty than white families—15 percent versus 5 percent.

Involuntary part-time work

A total of 16.1 million workers reported that they had been limited involuntarily to part-time work for varying

Table 5. Income by family type, number of earners, unemployment status, and incidence of poverty, 1982

[Numbers in thousands]

Family type and number of earners	With a member in the labor force			With no member unemployed			With at least one member unemployed		
	Number	Median family income	Percent in poverty	Number	Median family income	Percent in poverty	Number	Median family income	Percent in poverty
All families	53,334	25,519	9.9	35,812	27,774	6.1	17,521	20,887	17.6
Married-couple families	43,732	27,917	6.6	30,039	29,902	4.4	13,693	23,485	11.4
No earners	262	7,160	61.4	4	(¹)	(¹)	258	7,153	61.7
One earner	13,636	21,411	11.2	10,702	23,636	7.5	2,934	14,562	24.9
Husband	11,236	22,435	10.8	8,937	24,720	7.4	2,299	15,022	24.1
Wife	1,832	16,191	12.9	1,393	17,650	8.2	439	12,496	28.0
Other family member	568	21,518	13.0	372	24,067	5.3	197	15,123	27.5
Two or more earners	29,834	31,209	4.0	19,334	33,693	2.7	10,500	26,714	6.3
Husband and wife	25,922	31,031	3.5	17,150	33,432	2.4	8,772	26,384	5.6
Husband and other family member	3,241	34,144	6.8	1,852	37,639	5.1	1,389	30,576	9.0
Husband is not an earner	672	25,449	8.9	333	29,614	3.7	339	21,844	14.0
Families maintained by women	7,772	13,618	27.9	4,635	15,672	17.0	3,137	9,900	44.1
No earners	558	3,755	92.0	2	(¹)	(¹)	556	3,746	92.3
One earner	4,488	11,514	30.3	3,197	13,143	21.7	1,291	7,786	51.6
Two or more earners	2,725	20,974	10.9	1,436	22,943	6.6	1,289	18,380	15.7
Families maintained by men	1,830	21,312	11.8	1,138	25,177	5.8	692	16,678	21.7
No earners	44	(¹)	(¹)	—	—	—	44	(¹)	(¹)
One earner	893	17,414	16.7	620	20,254	8.4	273	10,151	35.5
Two or more earners	893	26,705	3.9	518	30,999	2.7	375	21,395	5.6
Persons not living in families	18,019	13,162	15.1	13,987	14,989	9.3	4,032	7,190	35.3
With earnings	17,617	13,436	13.6	13,979	14,995	9.3	3,638	8,039	30.3
Living alone	10,668	14,941	9.9	8,848	16,259	6.8	1,820	9,135	25.2
Men	5,468	17,160	9.9	4,335	19,073	6.1	1,133	10,503	24.7
Women	5,199	13,340	10.0	4,512	14,286	7.5	687	7,848	26.1
Others with earnings	6,949	11,285	19.3	5,131	13,096	13.7	1,818	7,074	35.3
Men	4,209	12,585	16.7	3,054	14,873	11.6	1,155	8,007	30.1
Women	2,740	9,583	23.4	2,077	10,730	16.7	662	5,850	44.3
Without earnings	402	1,502	80.4	8	(¹)	(¹)	394	1,459	81.4

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

periods during 1982. (See table 6.) About two-thirds cited a reduction in their workweek due to "slack work or material shortages" as the main cause. The other third attributed their involuntary part-time work to the fact that they had simply been unable to secure a full-time job in their initial search and had reluctantly settled for part-time work. The great majority of the workers who had suffered cutbacks in their workweeks had been working either in construction or durable goods manufacturing, and their problems were an obvious consequence of the weak demand for housing and other goods associated with the recession. Those who took a part-time job involuntarily because they could not find full-time work were employed for the most part in the various service-producing industries that were not hit so hard by the recession.

About 7.4 million or nearly one-half of the persons with involuntary part-time work had also suffered some unemployment in 1982. Being beset with both of these labor market problems, their earnings and family income were obviously much lower than those of fully employed workers. Almost one-fourth of them wound up with family income below the poverty line.

Part-year workers

As already noted, of the 116.3 million persons with some employment in 1982, about 64 million worked all year in full-time jobs. An additional 9.8 million also worked the entire year but in jobs that were essentially of part-time nature. Thus, the total employed the entire year was 73.8 million. This means that there were 42.5 million persons with jobs for less than a full year or, more precisely, less than 50 weeks. About three-fifths of these part-year workers (25.6 million) had been in primarily full-time jobs, while two-fifths (16.9 million) had been in jobs that were both of a part-year or part-time nature.

Of the 42.5 million part-year workers, about two-fifths had been constrained by unemployment from working all year. The remainder cited a variety of reasons:

Reason for part-year work	Part-year workers (in thousands)	Percent distribution
Total	42,493	100.0
Unemployment	17,633	41.5
Illness or disability	2,690	6.3
Home responsibilities	6,741	15.9
School attendance	8,621	20.3
Military service	107	.3
Retirement	1,749	4.1
Other reasons	4,950	11.6

Table 6. Income and incidence of poverty of involuntary part-time workers by industry, gender, race, and Hispanic origin, 1982

(Numbers in thousands)

Characteristic	Total	Slack work or material shortage	Could not find full-time job	Median family income	Percent in poverty
Total with involuntary part-time work	16,064	10,400	5,664	\$18,400	18.0
With unemployment also	7,392	4,427	2,964	16,456	22.8
With no unemployment	8,672	5,973	2,700	(¹)	(¹)
Men	9,043	6,651	2,391	18,938	17.1
Women	7,022	3,749	3,273	17,679	19.2
White	13,555	8,927	4,628	19,299	15.8
Black	2,180	1,253	927	12,997	31.9
Hispanic origin	1,060	724	336	14,389	30.1
Agriculture, forestry, and fisheries	784	549	235	13,225	34.4
Mining	181	169	12	24,256	8.2
Construction	2,057	1,762	294	17,621	18.5
Manufacturing	3,528	3,143	385	19,984	10.2
Durable goods	1,787	1,588	199	21,524	7.9
Nondurable goods	1,741	1,555	186	18,173	12.7
Transportation, communication, and other public utilities	826	607	219	21,109	14.8
Wholesale trade	436	332	105	21,672	14.0
Retail trade	3,512	1,498	2,014	18,369	20.2
Finance, insurance, and real estate	403	241	163	22,485	8.7
Business and repair services	930	623	307	16,507	21.4
Private households	358	75	283	10,166	38.0
Personal services, except private household	683	418	265	14,690	25.9
Entertainment and recreational services	291	139	152	16,380	22.5
Professional and related services	1,789	717	1,072	20,010	17.1
Public administration	287	129	158	17,294	21.5

¹Not available.

NOTE: Detail for racial 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.

It should be noted that the number of persons citing unemployment as the main reason for working less than the full year—17.6 million—is considerably lower than the number with both employment and unemployment—22.5 million. There are two reasons for this. First, 1.2 million of these persons managed to work at least 50 weeks and were thus classified as employed the full year. Second, for many of the part-year workers with some unemployment, the *principal* reason for working less than the full year was not necessarily the period of joblessness but the fact that they left the labor force to go to school, to take care of their families, or for other personal reasons. As shown, "school attendance" and "home responsibilities" figure very prominently among the reasons for part-year work.

Discouraged part-year workers. An important subgroup of part-year workers was identified for the first time in the March 1983 survey. They are those who reported that their main reason for working only part of 1982 was that there was "no work available." Of the nearly 5 million part-year workers in the catchall "other reasons" category, about 2.2 million, or almost half, were found to have worded their answers in such a way as to indicate that the unavailability of jobs was their main reason for working only part of the year. While these persons were not actually reported as having "looked for work" during the year—and thus were not classified as unemployed—it would appear from their answers that they would have preferred to work all year and

that they would have looked had it not been for their "discouragement" over job prospects.

Of course, discouragement has long been measured on a current basis through a special set of questions in the Current Population Survey, with the data being published quarterly and annually. During 1982, the number of "discouraged workers," as measured monthly, averaged 1.6 million. The

March 1983 work experience survey was the first in which an attempt was made to measure "discouragement" retroactively, at least for the part-year workers. These statistics, although based on a different concept than those gathered during the course of the year, add a new perspective to our knowledge of the conditions of the labor market—and of the perception of these conditions on the part of American workers. □

—FOOTNOTES—

¹The Current Population Survey is a monthly household survey conducted by the Bureau of the Census for the Bureau of Labor Statistics for the primary purpose of determining the extent of employment and unemployment among the American population. The sample of households has been 60,000 in recent years.

²The National Bureau of Economic Research designated the 1981–82 recession as starting in July 1981 and ending in November 1982.

³The poverty thresholds, based primarily on a U.S. Department of Agriculture study of the consumption requirements of families by size, are updated each year to reflect changes in the Consumer Price Index. For 1982, the poverty threshold for a family of four was \$9,862. It should be

noted, however, that in determining whether or not a family falls below the poverty line, only cash income is taken into account. In-kind income, while important to many families, is very difficult to measure and is not yet included in the official measurements.

⁴The average (mean) weekly earnings for all production and nonsupervisory jobs in durable goods manufacturing was \$356 in 1982, while the mean for all private nonfarm production and nonsupervisory jobs was only \$267.

⁵For 1982, the median usual weekly earnings for all women working in full-time wage and salary jobs was \$241; for men, the median was \$371.

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.

Regional variations in employment and unemployment during 1970–82

Even when the jobless rate was relatively low, 5.8 percent in 1979, wide differences in rates for local areas existed, ranging from a high of 40 percent to a low of less than 1 percent

RICHARD J. ROSEN

National economic events often mask developments at the State and local area level which together make up national changes. The United States is actually composed of many distinct economic regions with their own industrial concentrations. This regional specialization results in unequal growth rates among different areas of the country and explains why regions may be more (or less) susceptible to short-term cyclical fluctuations.

This article focuses on employment and unemployment developments at the subnational level, using data from two Bureau of Labor Statistics' Federal-State cooperative programs. The Local Area Unemployment Statistics Program (LAUS) provides State and county unemployment rates, and the Current Employment Statistics Program (CES) provides employment estimates by industry and State. The data are analyzed over two periods—1970 to 1980, to provide a background perspective—and 1979 to 1982, to show recent trends.

Comparison measures

Measures of employment and unemployment are key barometers of the economic well-being of an area. The State employment figures from the Current Employment Statistics program provide a count of the number of nonagricultural jobs. When changes in employment are analyzed at the

industry level, one is provided insight into which sectors of the local economy are expanding and which are stable or contracting. Growth rates in area employment can be compared, and the relative concentration of industries can be analyzed.

As in the case of national unemployment rates, State and local unemployment rates represent the number of unemployed persons expressed as a percentage of the resident civilian labor force. The civilian labor force, in turn, is the sum of total civilian employment and the number of unemployed. Consequently, the unemployment rate is affected by changes in the size of the labor force and in the number of unemployed. The unemployed can be categorized as follows: (1) job losers; (2) job leavers; (3) reentrants; and (4) new entrants.

Job losers are persons whose employment ended involuntarily and who immediately began looking for work, including those on layoff. Job leavers are persons who quit or otherwise terminated their employment voluntarily and immediately began looking for work. Reentrants are persons who previously worked at a full-time job lasting 2 weeks or longer or had looked for work before dropping out of the labor force. New entrants are persons who never worked at a full-time job lasting 2 weeks or longer.

The following tabulation shows unemployment among these components during a prerecession year, 1979, and a recession year, 1982. The percent change between the 2 years is also shown. Job losers, both those on layoff and other terminations, increased dramatically—more than 100

Richard J. Rosen is an economist in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. Special editorial assistance was provided by the *Monthly Labor Review* staff.

percent. By contrast, the number of job leavers was relatively stable, and the number of new entrants and reentrants rose by about a third, as seen below (numbers in thousands):

	1979	1982	Percent change
Total	6,137	10,678	74.0
Job losers	2,653	6,268	137.9
Layoffs	851	2,127	153.5
Other	1,784	4,141	132.1
Job leavers	880	840	-4.5
Reentrants	1,806	2,384	32.0
New entrants	817	1,185	45.0

Thus, it is changes in the number of job losers which account for most of the rise in unemployment during recent as well as historic economic downturns. Movements in this group are the result of an employer terminating a worker (as opposed to the more voluntary act of leaving or deciding to enter or reenter the labor market). Therefore, areas experiencing rising joblessness during recent recessions should coincide with areas having employment losses.

Regional specialization

Changes in aggregate demand, such as the recent decline in sales of automobiles or an increasing need for domestic energy supplies, do not impact all regions in the same manner. Industries or particular types of natural resources are often concentrated in particular areas. For example, the contiguous North Central States of Michigan, Indiana, Ohio, and Wisconsin account for about 14 percent of the Nation's nonagricultural employment, but 62 percent of employment in motor vehicle manufacturing. Michigan alone has nearly 40 percent of motor vehicle manufacturing jobs—10 times its share of all jobs in the nonfarm economy. By contrast, six contiguous States (Texas, Oklahoma, Louisiana, New Mexico, Colorado, and Wyoming) account for more than three-fourths of U.S. employment in oil and gas extraction, but only 11 percent of all nonfarm jobs.

Table 1 shows the regional concentration of these industries, and two other "key" industries which are highly concentrated—lumber and textiles. The table's last column shows the "concentration ratio" of a State; the ratio is derived by dividing the State's share of national employment in an industry by its share of total nonfarm jobs. For example, textile employment in North Carolina accounts for 28.6 percent of nationwide textile employment and 2.6 percent of all U.S. nonfarm jobs. Thus, the relative concentration of textile jobs is 11.0 ($28.6 \div 2.6 = 11.0$). This means that North Carolina has 11 times more jobs in textiles than it would have if its textile employment matched its share of total nonfarm employment.

Regional specialization in terms of industries causes specific changes in demand to affect geographic areas quite differently. For example, a decline in textile employment

would have little impact in Idaho, while a drop in the demand for lumber would not materially affect Michigan.

The ability of a State or region to adapt to changes in demand depends on many factors, including the rate of population and labor force growth, the degree of diversification of the region's industrial structure, the concentration of "secondary" or "feeder" industries dependent on "primary" industries, and whether industries affected by changes in demand have significant multiplier effects.

California and Oregon provide a good comparison of the effect of industry diversification. Each State accounts for roughly the same share of the Nation's employment in the lumber and wood products industry—about 10 percent. Yet, changes in demand for the products of the industry affects the overall employment situation in California far less than they do in Oregon; less than 1 percent of California's employment is in this industry, compared with nearly 8 percent of Oregon's. This was the case in 1979-82, when the curtailment of construction resulted in a sharp decline in demand for lumber. Both States began the period with nearly identical unemployment rates (6.2 percent in California and 6.4 percent in Oregon in July 1979). However, by February 1981, Oregon's jobless rate topped 10 percent, while California's stood at 8 percent. It was not until mid-1982, when employment dropped in a broad range of industries—such as construction, numerous manufacturing industries (notably, aircraft), transportation, and public utilities, trade and government—that California's rate rose above 10 percent.

Ohio provides a good example of the effect of substantial "feeder" industries on State employment changes. While it has approximately 5 percent of all nonfarm jobs in the Nation, it accounts for 12 percent of all motor vehicle manufacturing jobs. However, Ohio also accounts for approximately 10 percent of jobs in several related industries (primary and fabricated metals), and nearly 25 percent of employment in tire and rubber manufacturing (another industry largely dependent on automobile production). Thus, a change in auto production has an impact on Ohio's employment far beyond what would be expected by looking at motor vehicle manufacturing alone. When the slump in domestic automobile production began in the second half of 1979, the unemployment rate in Ohio rose rapidly from 6.6 percent in July 1979 to 10.3 percent a year later. As the slump continued, the State's jobless rate rose further—to 12.2 percent in mid-1982.

County and State joblessness

During 1979, the national average unemployment rate was 5.8 percent, but county unemployment rates ranged from a high of 40 percent in Menominee County, Wisconsin to less than 1 percent in Sioux County, Nebraska. Even during a period of relatively low unemployment, 89 counties had rates of 12 percent or more, and 107 had rates between 10 and 11.9 percent. (See chart 1.) These areas are apt to have certain "structural" problems retarding economic

Table 1. Examples of key industry employment impact,¹ 1979

Key industry and State	Key industry employment (in thousands)	Total nonagricultural employment (in thousands)	Key industry employment as a percent of:		State nonagricultural employment as percent of U.S. total	Concentration ratio ²
			State total	U.S. industry total		
Motor vehicles:						
Michigan	392.7	3,637.1	10.8	39.7	4.0	9.9
Indiana	64.6	2,236.3	2.9	6.5	2.5	2.6
Ohio	120.1	4,484.7	2.7	12.1	5.0	2.4
Wisconsin	33.4	1,960.2	1.7	3.4	2.2	1.5
Lumber and wood products:						
California	68.7	9,664.6	0.7	9.0	10.8	0.8
Oregon	81.2	1,056.2	7.7	10.6	1.2	8.8
Washington	53.9	1,581.2	3.4	7.0	1.8	3.9
Idaho	18.8	338.0	5.6	2.5	0.4	6.3
Oil and gas extraction:						
Texas	194.1	5,601.8	3.5	40.9	6.2	6.6
Oklahoma	57.8	1,087.3	5.3	12.2	1.2	10.2
Louisiana	74.8	1,517.4	4.9	15.8	1.7	9.3
New Mexico	11.0	461.0	2.4	2.3	0.5	4.6
Colorado	14.6	1,218.0	1.2	3.1	1.4	2.2
Wyoming	15.7	200.7	7.8	3.3	0.2	16.5
Textiles:						
North Carolina	253.8	2,372.9	10.7	28.6	2.6	11.0
South Carolina	142.1	1,176.0	12.1	16.1	1.3	12.4
Georgia	123.7	2,127.5	5.8	14.0	2.4	5.8
Alabama	43.9	1,362.0	3.2	5.0	1.5	3.3

¹Data for 1979 are used for comparison to show the prerecession impact.²Represents the ratio of column 4 to column 5. A ratio greater than 1.0 indicates that industry employment is relatively more concentrated in the State than is total employment.

progress. Also, the counties tend to be clustered in certain regions. For example, the industrial Great Lakes States, and counties along the Appalachian mountains generally had above average unemployment, as did the Northwestern Pacific areas and parts of the Southwest. There is also a line of high unemployment in the Texas counties which border Mexico.

By contrast, the lower unemployment areas were concentrated through the central agricultural States (the Dakotas, Kansas, Minnesota, Iowa, and Wyoming) and many sunbelt areas where employment has soared.

In 1982, the U.S. unemployment rate averaged 9.7 percent. The high-unemployment area expanded and the low unemployment area contracted. This "spreading out" of unemployment is related to both industrial composition and secondary effects.

Industry composition. Adjacent areas may contain additional firms within the same industry or in industries related to those initially showing employment cutbacks in the wake of declines in demand. For example, declining demand for automobiles has secondary impacts on employment in related industries such as steel, tires, and glass, which sell a significant portion of their output to auto manufacturers and are concentrated in roughly the same geographic area.

Secondary effects. High unemployment, of course, results in reduced purchasing power. Workers on layoff, or those fearing possible layoff, curtail spending. There is a ripple effect because of commuting, work, and shopping patterns. Declining sales mean less hiring in other industries and in adjacent localities.

Overall, nearly one-third of the counties had jobless rates

of at least 12 percent in 1982. Nevertheless, one-fourth of the counties were below 6 percent, although they were concentrated in a very narrow band through the Nation's center.

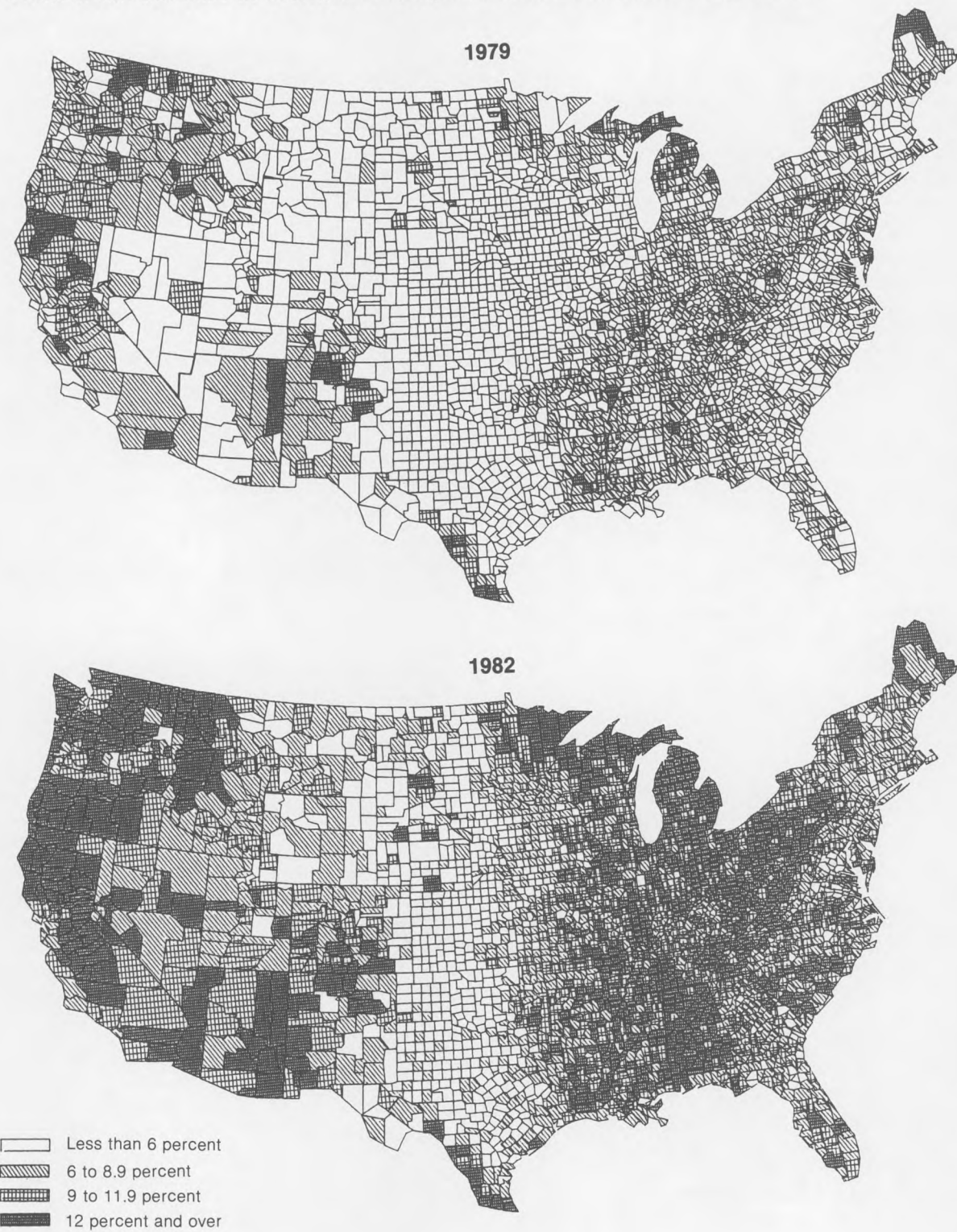
Industry employment trends, 1970-80

As noted, industry growth patterns have a substantial impact on regional economic performance. This section looks at industry employment trends during 1970-80 as they affected States. The period is illustrative of the general economic trends which prevailed prior to the 1980-82 recessions. It will be shown later that many of the industries and regions which evidenced lagging growth during the 1970's were hardest hit during the 1980 and 1981-82 recessions.

During the 1970's, overall employment rose by 28 percent, but growth rates varied considerably. Manufacturing jobs advanced by less than 5 percent, and transportation and public utilities by less than 5 percent. By contrast, mining grew by nearly 65 percent. In general, the service-producing sector of the economy has been growing rapidly, while the goods-producing sector, except for mining, has grown less rapidly. Seventy percent of the employment increase from 1970 to 1980 was in the private service-producing sector. Government employment grew at about the same pace as the average for all nonagricultural industries, with State and local government accounting for the bulk of the increase.

An examination of overall employment changes by State during 1970-80 shows that States with the slowest growth—2.5 percent or less per year—are confined in a solid band extending from Iowa and Missouri east through the Great Lakes to Pennsylvania, New York, Connecticut, and Massachusetts. Generally, these States are in the industrial heartland, with older manufacturing facilities. The majority of States fall into the second category having annual growth

Chart 1. The increase in county unemployment rates between 1979 and 1982¹



¹ Annual averages for counties in the contiguous United States.

between 2.6 and 5 percent. Job creation was fastest in Florida and the Western States, where rapid population and energy exploration growth have spurred demand for expanded services. Table 2 provides a comparison of population and employment trends by State from 1970 to 1980. The States are arranged by Census Bureau-designated regions and divisions so that patterns can be more readily discerned.

The relationship between employment growth and shifts in the population is demonstrated in table 3, which compares employment growth in the 10 fastest and slowest population growth States. Part of the employment shift reflects the movement of people to where the jobs are. However, businesses may also choose to locate where there is growing or surplus labor supply. Proximity to raw materials and available markets are both important factors in business location or expansion.¹ Thus, jobs often move to the people. This process of growth, once begun, appears to build up considerable momentum.

Underlying regional employment shifts are changes within industries. Energy exploration was a significant driving force behind employment gains in States such as Alaska, Colorado, New Mexico, Oklahoma, Texas, Utah, and Wyoming. Employment in mining, which includes oil and gas extraction as well as coal and metal mining, rose by 5.1 percent or more annually in 13 States during the 1970's, as the rapid increase in energy prices and the need to develop domestic energy sources spurred exploration.²

At the same time, however, mining employment declined in Maryland, in three Northeastern States (New Jersey, New York, and Vermont), and three Midwestern States (Wisconsin, Iowa, and Missouri). Mining is an insignificant portion of these States' economies—one-tenth to one-third the proportion nationally. By contrast, in 9 of the 13 States with annual gains above 5 percent, employment in mining was at least twice the proportion nationally; and in two other States it was about the same as the national average. (See table 4.)

In terms of jobs, manufacturing was the slowest growing industry division during the 1970's—advancing, as noted, by less than 5 percent over the decade. Among selected manufacturing industries, only employment in "instruments" increased more rapidly than the national average for all industries. Rubber and the expanding plastics industry and machinery except electrical (which includes agricultural, construction, and mining equipment) increased at rates close to the national average. Losing employment during the decade were such industries as leather, which declined by 30 percent, textiles, apparel, and primary metals.

Changes in manufacturing employment during the 1970's show a distinct regional pattern. The same band of States which experienced the slowest overall growth recorded declines in manufacturing. Manufacturing accounts for one-fifth to one-third of nonfarm employment in almost all of these States. These are the older manufacturing areas dom-

inated by "heavy" industry, such as autos, tires, steel, and machinery. By contrast, lighter manufacturing centers are emerging in Florida and the Southwest, where employment gains have occurred in electronics, instruments, petroleum refining, or other high technology industries.

As discussed earlier, the fastest growth during the postwar period has been in industries which provide services—wholesale and retail trade; finance, insurance, and real estate; public utilities; business, medical, educational, and other services. Legal, business, and health services increased at 2.5 to 3 times the average for all industries. Transportation and public utilities registered the smallest increase, largely because of the continued decline in rail transportation. Expansion of service-related employment also shows regional differences. Florida and most of the Southwestern States posted annual gains of at least 5.1 percent. Because many service industries are consumer oriented, the geographic distribution of service-related employment growth looks very similar to that for population. Service employment gains are smallest in the States with the slowest population growth and greatest in New Hampshire, Florida, and the Western States which gained population. Table 2 contrasts employment growth in the private service-producing sector with population growth by State. The correlation becomes quite apparent when examining the rankings (in descending order).

Industry employment trends, 1979–82

Unlike the 1970's, when employment advanced by nearly 2.5 percent per year, employment growth was virtually at a standstill from 1979 to 1982. As noted, the period included two economic downturns, with only a brief recovery between them. In general, employment gains in mining, services, finance, and trade were offset by heavy losses in manufacturing and construction, and modest declines in government and transportation and public utilities. The decrease in transportation and public utilities is, in part, related to its historically slow growth, but also to the slump in manufacturing and construction, as fewer heavy goods were transported. Federal, State, and local government job losses during 1979–82 are in marked contrast with the longer period (1970–80) when government employment grew at about the average for all industries:³

	<i>Percent, 1970–80</i>	<i>Change, 1979–82</i>
All nonagricultural industries..	27.5	-.3
Mining	64.8	16.2
Services	54.9	10.2
Finance	41.6	6.8
Trade	35.0	1.0
Government	29.4	-.9
Construction	21.1	-14.1
Transportation and public utilities	14.0	-1.1
Manufacturing	4.7	-11.6

Table 2. Selected measures of employment by State, 1970-80 and 1979-82

Region and State	1970-1980						1979-1982				
	Population		Nonagricultural employment		Private service-producing employment		Nonagricultural employment		Unemployment rate ²		
	Percent change ¹	Rank	Percent change ¹	Rank	Percent change ¹	Rank	Percent change ¹	Rank	1979	1982	Change
United States	1.1	—	2.4	—	3.4	—	³	—	5.8	9.7	3.9
Northeast:											
<i>New England:</i>											
Connecticut	0.2	45	1.8	39	3.4	35	0.7	14	5.1	6.9	1.8
Maine	1.2	28	2.3	37	3.9	28	-0.4	25	7.2	8.6	1.4
Massachusetts	0.1	47	1.7	41	2.4	47	0.2	22	5.5	7.9	2.4
New Hampshire	2.2	13	4.1	12	5.1	11	1.3	10	3.1	7.4	4.3
Rhode Island	0.0	49	1.5	44	2.5	46	-0.8	29	6.6	10.2	3.6
Vermont	1.4	23	3.1	27	3.8	33	0.7	16	5.1	6.9	1.8
<i>Mid-Atlantic:</i>											
New Jersey	0.3	44	1.6	43	2.8	42	0.6	17	6.9	9.0	2.1
New York	-0.4	50	0.1	50	0.8	50	0.3	20	7.1	8.6	1.5
Pennsylvania	0.1	48	0.9	49	2.2	49	-1.7	39	6.9	10.9	4.0
South:											
<i>South Atlantic:</i>											
Delaware	0.8	31	1.8	40	2.9	40	0.2	21	8.0	8.5	0.5
Florida	3.7	3	5.2	6	6.0	6	3.6	4	6.0	8.2	2.2
Georgia	1.8	16	3.3	24	4.5	19	1.1	11	5.1	7.8	2.7
Maryland	0.7	32	2.4	35	3.2	37	-0.4	26	5.9	8.4	2.5
North Carolina	1.5	21	2.9	31	3.9	29	-0.5	28	4.8	9.0	4.2
South Carolina	1.9	15	3.5	21	5.0	12	-0.4	25	5.0	10.8	5.8
Virginia	1.4	24	3.6	19	4.6	18	0.2	23	4.7	6.9	2.2
West Virginia	1.1	30	2.3	38	3.2	39	-2.6	46	6.7	13.9	7.2
<i>East South Central:</i>											
Alabama	1.2	29	3.0	28	3.9	27	-1.2	32	7.1	14.4	7.3
Kentucky	1.3	26	2.9	30	3.8	31	-2.2	43	5.6	10.6	5.0
Mississippi	1.3	25	3.6	18	4.4	22	-1.8	41	5.8	11.0	5.2
Tennessee	1.6	20	2.8	32	4.0	26	-1.7	40	5.8	11.8	6.0
<i>West South Central:</i>											
Arkansas	1.7	17	3.3	23	4.3	24	-1.4	33	6.2	9.8	3.6
Louisiana	1.4	22	4.3	11	4.9	14	2.1	7	6.7	10.3	3.6
Oklahoma	1.7	19	4.1	14	4.6	17	4.3	2	3.4	5.7	2.3
Texas	2.4	10	4.9	7	5.3	8	3.8	3	4.2	6.9	2.7
North Central:											
<i>East North Central:</i>											
Illinois	0.3	43	1.1	48	2.3	48	-2.0	42	5.5	11.3	5.8
Indiana	0.6	36	1.4	45	2.9	41	-3.5	49	6.4	11.9	5.5
Michigan	0.4	40	1.4	46	2.6	43	-4.3	50	7.8	15.5	7.7
Ohio	0.1	46	1.2	47	2.6	45	-2.6	45	5.9	12.5	6.6
Wisconsin	0.6	34	2.4	36	3.5	34	-1.6	36	4.5	10.7	6.2
<i>West North Central:</i>											
Iowa	0.3	42	2.4	34	3.2	36	-3.1	47	4.1	8.5	8.4
Kansas	0.5	38	3.4	22	3.8	30	-1.0	30	3.4	6.3	2.9
Minnesota	0.7	33	3.0	29	4.0	25	-1.1	31	4.2	7.8	3.6
Missouri	0.5	39	1.7	42	2.6	44	-1.6	36	4.5	9.2	4.7
Nebraska	0.6	35	2.6	33	3.2	38	-1.5	35	5.1	6.1	1.0
North Dakota	0.5	37	4.1	13	4.5	20	0.9	12	3.7	5.9	2.2
South Dakota	0.4	41	3.1	26	3.8	32	-1.6	37	3.5	5.5	2.0
West:											
<i>Mountain:</i>											
Arizona	4.4	2	6.4	3	7.2	3	1.7	9	5.1	9.9	4.8
Colorado	2.7	8	5.2	5	6.1	5	2.5	6	4.8	7.7	2.9
Idaho	2.8	6	4.7	9	5.9	7	-2.6	44	5.7	9.8	4.1
Montana	1.3	27	3.5	20	4.4	23	-1.4	33	5.1	8.6	3.5
Nevada	5.0	1	7.0	1	7.5	2	1.9	8	5.1	10.1	5.0
New Mexico	2.5	9	4.8	8	5.2	9	0.9	12	7.4	9.2	1.8
Utah	2.8	5	4.4	10	5.2	10	0.7	15	4.3	7.8	3.5
Wyoming	3.3	4	6.9	2	6.6	4	2.7	5	3.9	5.8	1.9
<i>Pacific:</i>											
Alaska	2.8	7	6.2	4	8.0	1	6.1	1	9.2	9.9	0.7
California	1.7	18	3.6	17	4.4	21	0.6	17	6.2	9.9	3.7
Hawaii	2.3	12	3.3	25	4.7	16	0.6	18	6.3	6.7	0.4
Oregon	2.3	11	3.9	16	4.8	15	-3.1	48	6.8	11.5	4.7
Washington	1.9	14	4.1	15	5.0	13	-0.3	24	6.8	12.1	5.3

¹Percent changes are shown at annualized rates to facilitate comparison between time periods.

²Percent of civilian labor force.

³Less than -0.1 percent.

Table 3. Comparison of population and employment changes in selected States, 1970-80

Fastest-growing States	Employment		Population	
	Percent change	Rank	Percent change	Rank
Nevada	96.8	1	63.5	1
Wyoming	94.1	2	41.6	4
Arizona	85.2	3	53.1	2
Alaska	82.0	4	32.4	7
Colorado	66.8	5	30.7	8
Florida	65.9	6	43.4	3
Texas	61.4	7	27.1	10
Idaho	58.8	8	32.4	6
New Mexico	58.0	9	27.8	9
Utah	54.3	10	37.9	5

Slowest-growing States	Employment		Population	
	Percent change	Rank	Percent change	Rank
New York	0.7	50	-3.8	50
Pennsylvania	9.2	49	0.6	48
Illinois	11.6	48	2.8	43
Ohio	12.5	47	1.3	46
Michigan	14.6	46	4.3	40
Indiana	15.2	45	5.7	36
Rhode Island	15.8	44	-0.3	49
New Jersey	17.4	43	2.7	44
Missouri	18.1	42	5.1	39
Massachusetts	18.2	41	0.8	47

SOURCE: Population data are from U.S. Bureau of the Census, 1970 and 1980 decennial census.

As a result of these divergent trends, nonagricultural employment declined by 0.3 percent from 1979 to 1982. Decreases were recorded in 28 States, while growth in the other States was significantly below 1970-80 averages. Most of the Southwestern States had employment gains, while most of the Great Lakes and Southern States experienced losses. Not surprisingly, States having the largest employment declines were those experiencing the highest rates of joblessness. (See table 2.)

In comparing State employment changes over the two periods, several conclusions can be drawn. First, many of the States—primarily the industrial North Central and Mid-Atlantic States—with the slowest growth during the 1970's had the steepest losses over the more recent period. Thus, in these areas the recession struck an already weak economy. At the same time, job losses in many Southern States during 1979-82 contrast sharply with gains during the 1970's. The same can be said for the Pacific Northwestern States (Washington, Oregon, Idaho, and Montana). Finally, no State was immune from the slowdown. Growth rates in all States were lower during 1979-82 than in the 1970's. For example six States had annual employment gains in excess of 5 percent per year during the 1970's. Only one State (Alaska) was able to match this level of performance during 1979-82.

Employment declines were particularly steep in the construction industry, where high interest rates and the movement of funds out of savings and loan institutions affected both the cost and availability of mortgage lending. Only five States registered job gains in this sector during 1979-82—Alaska, Florida, Massachusetts, New York, and Texas. Annual reductions of 5.1 percent or more occurred in one-

third of the States, with the largest declines in Iowa, Michigan, Nebraska, Oregon, South Dakota, and Washington.

While construction employment accounts for only 4 to 10 percent of employment at the State level, construction activity has a significant "multiplier effect." For every 10,000 jobs within the construction industry, 12,000 to 14,000 jobs are required in industries which produce, sell, and deliver materials and equipment in support of the construction.⁴ These industries include lumber, furniture, concrete, appliances, and textiles.

Manufacturing employment was also hard hit during this period, rising in only four States—Arizona, Colorado, Florida, and Texas. Declines were steepest in the industrial belt stretching from Iowa eastward to Pennsylvania, and in Idaho. In comparing the current situation with the 1970-80 trend, it is evident that those States where manufacturing continued to expand during 1979 to 1982 are essentially the same as those which exhibited the strongest growth during the 1970's—Florida and the Southwestern States. However, growth rates were cut about in half. The New England States, which had posted modest gains during the 1970's, experienced declines during the recent period.

To illustrate the severity of the situation in States largely dependent on manufacturing, Michigan, Indiana, Ohio, and Illinois combined had been losing approximately 40,000 manufacturing jobs per year during the 1970's. From 1979 to 1982, their losses totaled 320,000 jobs per year.

Much of the decline in the industrial Midwest is related to the slump in domestic automobile production, which began in the second half of 1979. The motor vehicle industry also exhibits a sizable multiplier effect. For every 10,000

Table 4. Mining employment in selected States, 1980

Slowest-growing States, 1970-80 ¹	Mining employment (In thousands)	Percent of nonagricultural employment	Percent of U.S. mining employment
United States	1,020.0	1.1	100.0
Iowa	2.2	0.2	0.2
Maryland	1.4	0.1	0.1
Missouri	7.6	0.4	0.7
New Jersey	2.4	0.1	0.2
New York	6.1	0.1	0.6
Vermont	0.7	0.3	0.1
Wisconsin	2.6	0.1	0.3

Fastest-growing States, 1970-80 ²	Mining employment (In thousands)	Percent of nonagricultural employment	Percent of U.S. mining employment
Alaska	6.5	3.8	0.6
Alabama	16.9	1.2	1.7
Colorado	36.2	2.9	3.5
Kentucky	52.8	4.4	5.2
Louisiana	87.3	5.6	8.9
Mississippi	10.8	1.3	1.1
New Mexico	29.4	6.3	2.9
North Dakota	7.8	3.2	0.8
Oklahoma	74.9	6.6	7.3
Oregon	2.3	0.2	0.2
Texas	241.7	4.1	23.7
Washington	3.2	0.2	0.3
Wyoming	35.5	16.9	3.5

¹States with annual employment declines in mining from 1970 to 1980.

²States with annual employment gains in mining of 5.1 percent or more from 1970 to 1980.

jobs within the industry, about 20,000 are required in other industries, including 2,300 in fabricated metals, 2,200 in primary metals, 2,500 in wholesale trade, and 900 in business services.⁵

A look at the magnitude of the employment decline in 2-digit manufacturing industries from 1979 to 1982 reveals the only major industry groups to post gains were printing and instruments. These two were also among the fastest growing manufacturing industries during 1970–80. Stone, clay, and glass and lumber experienced declines of about 20 percent over the 1979–82 period. This coincides with a 14-percent decline in construction employment, as these industries are closely tied to the building trades. Primary metals recorded the largest employment loss—nearly 30 percent.

In contrast with the goods-producing sector of the economy, service-producing industries continued to expand na-

tionally during 1979–82. However, in many of the States most directly affected by the recession, service employment declined—Michigan, Indiana, Iowa, South Dakota, Idaho, and Oregon. Service-related employment is usually the last to experience a decline during a recession, as higher unemployment reduces consumer spending. Employment growth in the other States was considerably below the 1970–80 trend. Only Alaska posted an annual gain of more than 5 percent, compared with 10 States during the 1970's.

FOR AN ECONOMY of distinct regions and diverse industries, aggregate statistics do not tell the full story of the Nation's employment and unemployment. The recent economic slowdown did not affect all areas equally. State and local data reveal sharp variations in job growth and joblessness during this period, as well as from the longer perspective of a decade. □

—FOOTNOTES—

¹ Philip L. Rones, "Moving to the sun: regional job growth, 1968 to 1978," *Monthly Labor Review*, March 1980, pp. 12–19.

² Richard Greene, "Employment trends in energy extraction," *Monthly Labor Review*, May 1981, pp. 3–8.

³ John Tucker, "Government employment: an era of slow growth,"

Monthly Labor Review, October 1981, pp. 19–25.

⁴ Robert Ball, "Employment created by construction expenditures," *Monthly Labor Review*, December 1981, pp. 38–44, table 1.

⁵ Derived from the latest "employment inverse" tables prepared by the Office of Economic Growth and Employment Projections, Bureau of Labor Statistics.

Changes in unemployment insurance legislation during 1983

In response to continued high levels of unemployment, the Federal Supplemental Compensation Program was extended through March 1985; many States raised their taxable wage bases and amended laws dealing with selected worker groups to comply with new Federal standards

DIANA RUNNER

The Federal Supplemental Compensation (FSC) program, established by the Tax Equity and Fiscal Responsibility Act of 1982, was amended by the Surface Transportation Act of 1982 to increase the minimum and maximum weeks of unemployment benefits available and to change the triggers for which each level of benefits was payable. To ensure that the long-term unemployed will continue to receive assistance while looking for work, the FSC program was further amended by the Social Security Amendments and the Federal Supplemental Compensation Amendments of 1983 to extend the program through March 1985, but the maximum weeks of benefits available were reduced from 16 to 14.

Also as a result of the Tax Equity and Fiscal Responsibility Act, 35 States¹ amended their laws to deny unemployment benefits to nonteaching, nonresearch, and nonadministrative employees of colleges and universities during periods between academic years or terms, if there is reasonable assurance that such individuals will be employed by the institution at the beginning of the forthcoming academic year or term. If a school employee is denied interim benefits and is not offered an opportunity for reemployment during the succeeding school year or term, such individual

shall be entitled to retroactive payment for each week for which a timely claim for benefits was filed and for which compensation was denied based solely on the between-terms criterion. Thirty-two States² amended their laws to round unemployment benefits down to the next lower dollar. Fifteen States³ extended the period of time during which a State may use Reed Act⁴ funds for costs of administration. Nineteen States⁵ removed the age-22 limitation for exclusion from coverage of services performed by students in a work-study program. The exclusion from coverage of aliens performing agricultural labor was extended to January 1, 1984, by six States.⁶

The Tax Equity and Fiscal Responsibility Act also boosted the Federal taxable wage base from \$6,000 to \$7,000, effective January 1, 1983. In response, 18 States⁷ increased their taxable wage bases to \$7,000. Twenty-six States already have taxable wage bases that exceed \$7,000, and the remaining eight States have an automatic provision to increase the wage base when the Federal base is increased. Also effective January 1, 1983, the residual tax rate⁸ was increased from 0.7 to 0.8 percent. On January 1, 1985, the Federal tax will increase from 3.5 to 6.2 percent. However, the residual tax will remain at 0.8 percent.

The following is a summary of some significant changes in State unemployment insurance laws during 1983.

Diana Runner is an unemployment program specialist in the Office of Research, Legislation, and Program Policies, Employment and Training Administration, U.S. Department of Labor.

Alabama

Benefits. The maximum and minimum weekly benefit amounts were increased to \$120 and \$22, respectively. The base-period wages needed to qualify for benefits were raised to \$774.01. The amount of earnings disregarded in computing the weekly benefit for partial benefits was changed from \$6 to \$15.

Coverage. Excluded from coverage are services performed by qualified real-estate agents and direct sellers.

Disqualification. The disqualification for misconduct was changed to date from the week of discharge, and to last for not less than 3 nor more than 7 following weeks. An addition to the duration disqualification for gross misconduct specifies that an individual must earn wages equal to at least 10 times the weekly benefit amount and must have been separated from such employment for a nondisqualifying reason in order to purge the earlier disqualification.

Financing. The taxable wage base was increased from \$6,600 to \$8,000. The maximum basic tax rate for employers was increased from 3.6 to 5.0 percent, and to 5.4 percent as of 1985. The employee tax rate was increased from 0.5 to 1.0 percent. However, the employee tax will be abolished if at the end of any fiscal year beginning January 1, 1983, the trust fund balance reaches at least 75 percent of the minimum normal amount. The amount of a surety bond or cash deposit filed with the Director of the Department of Industrial Relations by a reimbursing nonprofit organization shall be a percentage of the organization's covered payroll (previously 2.7 percent) but not higher than the maximum percentage charged to contributing employers.

Penalties. No action to enforce recovery or recoupment of any overpayment may begin after 6 years from the date of final determination; the director is authorized to waive overpayments under regulatory authority.

Arizona

Benefits. The shared-work benefit program was extended indefinitely.

Disqualification. A National Guard member who is unemployed may not be considered employed or unavailable for work even though participating in drill, training, or other National Guard reserve activity that occurs on not more than one weekend per month or in lieu of a weekend drill or the equivalent.

Arkansas

Benefits. To qualify for benefits for the period July 1, 1983, through December 31, 1985, an individual must have earned wages equal to at least 35 times the weekly benefit amount and must have earned wages in at least two quarters of the base period. Beginning January 1, 1986, the qualifying requirement will be 30 times the weekly benefit amount and wages in at least two quarters. For benefit years beginning July 1, 1983, and ending December 31, 1985, an individual may requalify in a second benefit year if he or she has been paid wages of 35 (beginning January 1, 1986, 30) times the weekly benefit amount and has been paid wages in at least two quarters of the base period, with paid wages equal to 10 (beginning January 1, 1986, 6) times the weekly benefit amount subsequent to filing the claim in the previous benefit year. An individual's weekly benefit amount will be determined as $\frac{1}{2}$ of the wages paid during the two highest quarters of the base period. The maximum weekly benefit amount for benefit years beginning July 1, 1984, will be determined as 60 percent of the 1982 State average weekly wage; beginning July 1, 1985, and ending December 31, 1985, 60 percent of the 1984 State average weekly wage; beginning January 1, 1986, and ending June 30, 1986, 66 $\frac{2}{3}$ percent of the 1984 State average weekly wage; and beginning July 1, 1986, and thereafter, 66 $\frac{2}{3}$ percent of the State average weekly wage for the previous calendar year. A seasonal employment provision was added to the law.

Coverage. The employment exemption for domestic service was changed from employers having fewer than three employees and paying less than \$500 in any quarter to employers paying less than \$1,000 in a quarter.

Disqualification. The temporary provision which requires an individual's maximum potential benefits to be reduced by an amount equal to 8 times the individual's weekly benefit amount if disqualified for misconduct or refusal of suitable work has been extended through December 31, 1985. The exemption from disqualification for voluntarily leaving work to accompany, follow, or join a spouse in a new place of residence if individuals demonstrated their availability for work no longer applies. An individual who refuses to report to work within 1 week after receiving notice of recall to the same job or to a job similar to the one from which he or she was laid off will be disqualified until, subsequent to filing claim, the individual has had at least 30 days of employment. However, no disqualification will apply if he or she refuses to report for recall because of being em-

ployed full time or because of circumstances of such nature and compelling urgency that it would be contrary to good conscience to apply it.

Financing. The taxable wage base was increased from \$6,900 to \$7,500. Employers who are not eligible for experience rating will pay a basic rate of 2.9 percent. A new tax rate (5.0 percent) was added for employers who have less than 2 years of negative account balances; however, an employer with more than 2 years of negative account balances shall continue to pay 6.0 percent. An advance interest tax of 0.3 percent for 1983 and 1984 and 0.14 percent for 1985 will be assessed on experience-rated employers, to be used to pay any interest incurred on advances from the Federal Government. Benefits paid to an individual shall not be charged to the experience rating account of a base-period employer if the individual remained employed by that employer without a reduction in the number of hours worked or wages paid. Regulations providing for the non-charging of benefits paid in combined wage claims were repealed.

Administration. The period for appealing an appeal tribunal, board of review and judicial review decisions, and determinations in labor dispute cases was extended from 15 to 20 days.

California

Benefits. The shared-work benefits program was extended until December 31, 1986.

Connecticut

Benefits. The base period of an individual who is properly absent from work under the terms of the employer's sick leave or disability leave policy may be extended up to four quarters prior to the individual's benefit year. Holiday pay is included in the remuneration for determining partial benefits.

Disqualification. An individual will not be considered unavailable for work solely because of attending school as a regularly enrolled student during separation from work and will not be considered to be lacking in efforts to obtain work if, as a student, the individual restricts job search efforts to employment that does not conflict with regular class hours. However, this provision will not apply to any claimant who attends school as a regularly enrolled full-time student at any time during the 2 years prior to the date of separation from work, unless the individual was employed on a full-time basis during those 2 years.

Financing. The taxable wage base was increased from \$7,000 to \$7,100. A tax will be assessed on contributing employers at a rate established by the Administrator of the Employment Security Division for the payment of interest due on advances from the Federal Government.

Delaware

Benefits. The maximum weekly benefit amount was increased from \$150 to \$165. The computation of the weekly benefit amount was changed from $\frac{1}{104}$ of base-period wages to $\frac{1}{78}$ of wages during the highest three quarters of the base period. A provision to compute the maximum weekly benefit amount as $66\frac{2}{3}$ percent of the statewide average weekly wage was delayed until 1985.

Coverage. Excluded from coverage were services performed by corporate officers when one-half or more of the ownership interest is owned or controlled directly or indirectly by the individual's spouse, child, or parent (if the individual is under 18); when one-fourth or more of the ownership interest is owned or controlled directly or indirectly by the individual; or when no more than four officers of a corporation request exemption from coverage.

Financing. The taxable wage base was increased from \$7,200 to \$8,000.

Administration. The number of individuals on the Unemployment Compensation Advisory Council was increased from 7 to 10.

District of Columbia

Benefits. The maximum weekly benefit amount has been frozen at \$206 until January 1, 1986. Deleted was the requirement that the maximum weekly benefit amount be computed at $66\frac{2}{3}$ percent of the State average weekly wage. The duration of benefit payments was decreased from 34 to 26 weeks. The amount of qualifying wages was changed from \$300 in the high quarter and \$450 in the base period to \$600 in the high quarter and \$900 in the base period.

Disqualification. The duration disqualification for voluntary leaving was increased to the duration of the claimant's unemployment and until he or she has been employed in 10 weeks and has earned remuneration equal to 10 times the weekly benefit amount. The disqualification for misconduct and refusal of suitable work was changed from a variable number of weeks (6 to 12 for misconduct and 4 to 9 for refusal of suitable work) to a duration disqualification and until the claimant has been

employed 10 weeks and has earned remuneration equal to 10 times the weekly benefit amount.

Financing. The taxable wage base was increased from \$7,500 to \$8,000. The rate of contributions for new employers will be the higher of 2.7 percent (previously, 1.0 percent) or the average rate on taxable wages of all employers for the preceding year. The maximum contribution rate of 5.4 percent was deleted and the rates will range from 0.8 to 4.5 percent. Contributing employers shall be charged for extended benefits.

Administration. An Unemployment Compensation Study Commission was established to review all matters relating to the solvency of the unemployment fund and to make recommendations to the District of Columbia Council no later than December 31, 1983, to eliminate the deficit of the fund.

Florida

Benefits. The maximum weekly benefit amount was increased from \$125 to \$150. A temporary short-time compensation program was established, to expire December 31, 1989.

Financing. New legislation excludes from wages the value of meals or lodgings furnished to an employee or the employee's spouse or dependents by the employer on the business premises for the convenience of the employer and when lodging is included as a condition of employment. The probationary period during which an employer may discharge an employee for unsatisfactory work performance without subsequently incurring benefit charges was extended from 60 to 90 days. Also, good cause for refusal of suitable work will not, for noncharging purposes, include distance to work due to the individual's change of residence.

Georgia

Benefits. The maximum weekly benefit amount was increased from \$115 to \$125. However, if the Unemployment Trust Fund falls below \$175 million, the maximum will revert to \$115. The provision that \$1 be added to the dollar amount of the quotient was deleted from the computation of the weekly benefit amount.

Idaho

Benefits. The maximum weekly benefit amount of \$159 has been frozen until June 30, 1984, and until July 1 of any year in which the trust fund has not borrowed for two preceding quarters. Qualifying wages

were increased to \$1,144.01 in the high quarter and total base-period wages to at least $1\frac{1}{2}$ times the high-quarter wages. The ratio of base-period wages to high-quarter wages for determining duration of benefits was changed to 1.50 for a minimum of 10 weeks and to 3.50 for a maximum of 26 weeks. The amount that an individual must have earned subsequent to the beginning of the first benefit year in order to qualify for benefits in a second benefit year was changed from 3 times the weekly benefit amount to $5\frac{1}{2}$ times the weekly benefit amount.

Coverage. Aliens performing agricultural labor were excluded from coverage unless coverage is required by the Federal Unemployment Tax Act.

Disqualification. The amount of earnings needed to purge a duration disqualification for voluntary leaving, discharge for misconduct, or refusal of suitable work was increased from 8 to 20 times the weekly benefit amount. Claimants must be willing to expand their job search beyond their normal trade or occupation and to accept work at a lower rate of pay in order to remain eligible for benefits as their unemployment lengthens.

Financing. The fund requirements for the most favorable schedule will be 5.00 percent of payrolls, with rates ranging from 0.1 to 4.0 percent. The least favorable schedule will be less than 1.50 percent of payrolls with rates ranging from 2.9 to 6.8 percent. All contributing employers will be assessed a Federal advance interest repayment tax which shall be a percentage of the contribution payable for the quarter but not less than \$1.

Illinois

Benefits. For weeks beginning April 24, 1983, and before July 7, 1986, an individual's weekly benefit amount will be computed as 48 percent of the claimant's average weekly wage up to 48 percent of the State average weekly wage. For the same period, the formula for dependents' allowances shall be either 7 percent of the claimant's prior average weekly wage (but not to exceed 55 percent of the State average weekly wage) if the claimant has a nonworking spouse or 14.4 percent (but not to exceed 62.4 percent of the State average) if he or she has any dependent children. For benefit years beginning April 24, 1983, and ending January 31, 1984, the statewide average weekly wage shall be \$321 and beginning February 1, 1984, and ending June 30, 1986, \$335. Therefore, the maximum weekly benefit payable to claimants without dependents will be limited to \$154 and \$161, respectively.

Financing. The taxable wage base was raised from \$6,000 to \$7,000 for the first quarter of 1983; \$8,000 beginning April 1, 1983, and for 1984; \$8,500 for 1985 and the first half of 1986; and \$7,000 thereafter. The rate for new employers is the greater of 2.7 percent or 2.7 percent times the current adjusted State experience factor. For 1984 and 1985 and the first half of 1986, the benefit-wage ratio shall be determined on the liability in each of the 2 years (normally 3 years) preceding the year for which the contribution rate is determined.

Indiana

Benefits. The base period for individuals who have received workers' compensation for 52 weeks or less and who, as a result, did not earn sufficient wages to qualify for unemployment benefits will be extended up to four quarters preceding the last day the individual was able to work. A seasonal employment provision was added to the law.

Disqualification. An individual will be considered unavailable for work if he or she attends a regular established public or private school during the customary hours of the occupation or is in any vacation period between regular school terms during which the individual is a student. However, this does not apply to an individual who is attending school and has been regularly employed and upon becoming unemployed makes an effort to secure full-time work and remains available for full-time work with the last employer or for any other suitable employment.

Financing. If an individual voluntarily leaves a base-period employer without good cause connected to the work and later becomes employed by another base-period employer and is subsequently laid off, benefits paid to the individual based on wage credits of the employer from whom the individual quit shall be charged to the experience or reimbursable account of the base-period employer who laid the individual off. Also, if an individual who earns wages during the base period through employment with two or more employers is laid off by one of the employers but continues to work for one or more of the other employers after the end of the base period and continues to work during the benefit year on the same basis as during the base period, benefits shall be charged to the account of the employer who laid the individual off.

Iowa

Benefits. The maximum weekly benefit amounts were reduced to range from \$143 with no dependents, determined as 53 percent of the statewide average weekly wage,

to \$176 with four or more dependents, determined as 65 percent of the statewide average weekly wage. To qualify for benefits, an individual must be paid high-quarter wages totaling at least 3.5 percent of the State average weekly wage in the high quarter and 1.75 percent of the State's average weekly wage outside the high quarter. The additional qualifying requirements in a second benefit year were changed from 10 times the weekly benefit amount to \$250 in wages earned subsequent to the beginning of the individual's preceding benefit year. An individual's benefit year may be extended three or more quarters if he or she received workers' compensation or weekly indemnity insurance benefits for three or more quarters.

Coverage. Services performed by an individual as a licensed real-estate agent are excluded from coverage if substantially all of the remuneration for the services is directly related to sales or other output rather than the number of hours worked, and the services are performed pursuant to a written contract that provides that the individual will not be treated as an employee for Federal tax purposes.

Disqualification. The voluntary leaving disqualification and the "able to work," "available for work," and "actively seeking work" requirements will not be applied if an individual has left work in lieu of exercising a right to bump or oust a fellow employee with less seniority or priority from that employee's job.

Financing. The taxable wage base, which is determined annually as 66 $\frac{2}{3}$ percent of the State average annual wage, will be further increased by \$600 for 1984, \$1,100 for 1985, and \$1,600 for 1986. However, if on January 1, 1986, a contribution rate table other than the highest is in effect, the added increase in the taxable wage base will be repealed. The contribution rates for the least favorable schedule will range from 0.5 to 7.0 percent. Construction employers who have not qualified for experience rating will pay the maximum contribution rate assigned to any employer for the year, plus the additional surcharge required from certain negative-balance employers.

Kansas

Benefits. The maximum weekly benefit amount will be frozen at \$163 until July 1, 1984.

Financing. Negative-account-balance employers will pay contributions at the rate of 5.4 percent. New employers shall pay contributions at an assigned rate equal to the sum of 1 percent plus the greater of the average rate assigned in the preceding year

to all employers or the average rate assigned to the individual employer in the previous year, but in no instance shall the assigned rate be less than 2 percent.

Louisiana

Benefits. The maximum and minimum weekly benefit amounts shall be frozen indefinitely at \$205 and \$10, respectively. Wages in excess of 50 percent of an individual's weekly benefit amount or \$50, whichever is lower, shall be disregarded when computing partial benefits. The maximum duration of benefits was reduced from 28 to 26 weeks. The qualifying wages were changed from 30 times the weekly benefit amount to 1 $\frac{1}{2}$ times the high-quarter wages. Repealed was the waiting week provision that allowed benefits to be paid for such week if the individual had been unemployed for 6 consecutive weeks or longer, and provided that there would be no interruption of benefits for consecutive weeks of unemployment continuing into a new benefit year.

Disqualification. A disqualification for voluntary leaving will not apply if an individual left part-time or interim employment to protect full-time or regular employment. No individual may be disqualified for refusing suitable work if the offered work pays less than 60 percent of the individual's highest rate of pay in the base period.

Financing. Any benefits paid to an individual who left part-time or interim work to protect full-time or regular employment shall not be charged to the experience-rating account of a part-time or interim employer. The contribution rates for positive-balance employers shall range from 0.3 to 3.9 percent. Negative-balance employers will pay a maximum rate that will escalate from 4.5 percent in 1983 to 5.0 percent in 1984, 5.4 percent in 1985, and 6.0 percent for 1986 and thereafter. Beginning in 1983, the minimum rate will be 4.0 percent.

Maine

Disqualification. No individual will be ineligible for benefits nor disqualified for refusing suitable work if he or she is unable to accept employment on a shift, the greater part of which falls between the hours of midnight to 5 a.m., because of marital obligation, the need to care for an immediate family member, or the unavailability of a personal care attendant required to assist the unemployed handicapped individual. Also, an individual may not be denied benefits for refusal of suitable work if the position offered is the same one previously vacated by the claimant for good cause

attributable to that employment or is the position which the employee left for reasons attributable to that employment but which were found insufficient to relieve disqualification for voluntary leaving, provided that, in either instance, the specific good cause or specific reasons for leaving have not been removed or changed. The wages needed to purge a disqualification for discharge for conviction of a felony or misdemeanor in connection with an individual's work were increased from \$400 to \$600.

Penalties. The penalty for fraudulent misrepresentation will be a Class D crime.

Administration. The period for appealing a claim redetermination was increased from 15 to 20 days. An Unemployment Fund Study Commission was created to study the financial condition of the fund.

Maryland

Benefits. The maximum weekly benefit amount for new claims filed after July 3, 1983, was raised from \$153 to \$160 and will increase to \$165 for claims filed after December 25, 1983. The earnings disregarded for computing partial benefits were raised from \$10 to \$25. The State additional benefits program was extended until June 9, 1984.

Financing. The computation date for new rates was changed from March 31 to May 31 of each year.

Administration. The Department of Employment and Training was established to administer the unemployment insurance program under the direction and supervision of the Secretary of Employment and Training. Currently the program is administered by the Department of Human Resources.

Massachusetts

Benefits. An individual's weekly benefit amount will not be reduced if an individual received holiday pay in any week of total or partial unemployment.

Michigan

Benefits. The maximum weekly benefit amount will be frozen at \$197 until January 1, 1987. The weekly benefit amount will be computed as 65 percent (increases to 70 percent for 1987 and thereafter) of the claimant's after-tax earnings up to a maximum of 58 percent (53 percent for 1987, 55 percent for 1988, and 58 percent for 1989 and thereafter) of the State average weekly wage. For the period beginning Jan-

uary 2, 1983, through December 31, 1986, the qualifying requirements will be 20 weeks of employment at 30 times the State minimum hourly wage, and for 1987 and thereafter, 20 weeks of employment at 20 times the State minimum hourly wage. Added was an alternate qualifying requirement for 15 weeks of regular benefits and 7½ weeks of extended benefits for individuals having at least 14 weeks of employment at 20 times the State average weekly wage. A 10-week limit was placed on benefits payable based on services performed in a family corporation of which the individual or his or her son, daughter, spouse, or parent owns more than 50 percent of the proprietary interest.

Disqualification. An individual will not be disqualified for voluntary leaving if he or she left unsuitable work within 30 (previously, 60) days after beginning work. An individual shall be disqualified for 13 weeks and until he or she returns to work and earns 30 times the State minimum hourly wage in each week, if the individual committed a theft which occurred subsequent to a notice of layoff or discharge resulting in loss or damage to the employer of more than \$25. The disqualification for voluntary leaving and discharge for misconduct was changed from the week of occurrence plus 13 weeks to the duration of the claimant's unemployment and until the claimant earns the lesser of 7 times the weekly benefit amount, or 40 times the State minimum hourly wage times 7. Also, the disqualification for an individual discharged for theft connected with work resulting in loss or damage of \$25 or less or for willful destruction of property in an amount of \$25 or less was changed from the week of occurrence plus 12 weeks to a duration disqualification and until claimant earns the lesser of 7 times the weekly benefit amount or 40 times the State minimum hourly wage times 7.

Financing. The taxable wage base was increased to \$8,000 in 1983, \$8,500 in 1984, \$9,000 in 1985, and \$9,500 thereafter. All newly liable construction employers will pay a tax rate equal to the average rate for all construction employers for 2 years, be partially experienced for the next 2 years, and be rated as fully experienced-rated thereafter. Any benefits paid to an individual disqualified for voluntary leaving, discharge for misconduct, and gross misconduct shall be noncharged to the account of the employer who was involved in the disqualification.

Administration. The period for appealing a monetary determination and referee and board of review decisions has been extended from 20 to 30 days.

Penalties. The fine for fraudulent misrepresentation was increased from \$100 to \$1,000 and claimants must pay restitution of benefits plus a penalty of 100 percent of restitution, not to exceed \$1,000 in a benefit year established within 2 years after cancellation before receiving additional benefits.

Minnesota

Benefits. When computing an individual's partial weekly benefit amount, up to \$200 in earnings from service in the National Guard or military reserves and pay received for jury duty will be excluded from the benefit computation. The base period may be lengthened up to 52 weeks if the claimant received compensation due to illness under a worker's compensation law or under any other State law for more than 7 weeks within the base period.

Disqualification. An individual serving as a juror will be considered available for work and actively seeking work for each day the individual is on jury duty. An individual will not be disqualified for voluntary leaving if the separation occurred under a collective bargaining agreement or if the individual left part-time work with a base-period employer while continuing full-time work and subsequently attempted to return to part-time work that was not available after being separated from the full-time work. Abuse of a patient or resident of a health care facility was included in the definition of gross misconduct. An individual shall be disqualified for refusal of suitable work if he or she fails to accept reemployment with a base-period employer offering the same or better hourly wages and if the same conditions of work apply.

Financing. The standard rate of contributions will increase from 2.7 to 5.4 percent on January 1, 1985. Also, beginning January 1, 1985, new employers, except employers in construction, will pay a contribution rate determined as the higher of 1.0 percent or the State's 5-year benefit cost rate but not more than 5.4 percent. All contributing employers will be assessed a surcharge equal to 10 percent of contributions due, which will be used to pay interest on loans advanced from the Federal Government.

Administration. The first-stage appeals body and judicial review were changed to a referee and the court of appeals, respectively.

Mississippi

Benefits. Cotton ginning was established as a seasonal industry.

Montana

Benefits. If an individual fails to meet the qualifying wage requirements because of a temporary total disability, the base period will be extended up to four quarters preceding the disability if the claim was filed within 18 months of the individual's last employment.

Disqualification. An extended-benefit claimant who is disqualified under the regular program for gross misconduct will be denied extended benefits until the individual earns 8 times the weekly benefit amount. If an individual voluntarily leaves work to attend school under the regular program and requalifies for regular benefits, such individual may not receive extended benefits unless he or she earns at least 6 times the weekly benefit amount.

Nebraska

Benefits. The maximum weekly benefit amount was increased from \$106 to \$120.

Disqualification. An individual who voluntarily leaves work to accept a better job will be disqualified for the week of leaving and 1 additional week.

Nevada

Disqualification. The disqualification for refusal of suitable work was changed from a variable number of weeks (1 to 15) to the duration and until the individual earns wages equal to or exceeding the weekly benefit amount in each of the number of weeks determined by the director, but not to exceed 15 weeks.

Financing. On January 1, 1985, the maximum contribution rate will increase from 3.6 to 5.4 percent.

New Hampshire

Benefits. The maximum weekly benefit amount was increased from \$132 to \$141. Excluded from wages for benefit purposes are payments from a supplemental unemployment plan. Also, partial benefits may not be reduced if an individual receives supplemental unemployment payments. The pension offset provision will apply only if both the unemployment benefits and the pension payments are based on the same period of unemployment.

Disqualification. An individual will not be disqualified if a work stoppage was caused by a lockout or the failure of the employer to live up to a provision of any agreement or contract entered into between the employer and the employees.

New Mexico

Disqualification. No individual may be denied benefits for voluntary leaving solely on the basis of pregnancy or termination of pregnancy.

New York

Benefits. The maximum and minimum weekly benefit amounts were increased from \$125 and \$25 to \$170 and \$35, respectively, and will increase to \$180 and \$40 on July 9, 1984. The minimum average weekly wage necessary to qualify for benefits was increased from \$42 to \$67 and will increase to \$90 on July 19, 1984. The qualifying requirements were changed to 20 weeks of employment at the minimum average weekly wage, or 40 weeks of employment in the period of 104 consecutive weeks preceding the filing of a claim and earnings of at least the minimum weekly wage. The provision suspending the waiting period requirement during a period of natural disaster was repealed.

Disqualification. The amount of work and wages needed to purge a disqualification for voluntary leaving, misconduct, or refusal of suitable work was changed to at least 3 days' work in each of 5 weeks and earnings of at least 5 times the weekly benefit amount. A new provision specifies that the period of suspension of accumulated benefit rights during a strike will also be triggered by concerted activity not authorized or sanctioned by the collective bargaining unit.

Financing. The present experience rating system was extended indefinitely.

North Carolina

Benefits. The fraction used to compute the weeks of duration was changed from the individual's base period wages divided by high-quarter wages multiplied by $8\frac{2}{3}$ to that quotient multiplied by 8. An individual's weekly benefit amount will be computed as $\frac{1}{2}$ of the wages paid during the highest two quarters (previously, $\frac{1}{26}$ of high-quarter wages) of the base period. The maximum weekly benefit amount will be computed as 60 percent of the average weekly insured wage rather than $66\frac{2}{3}$ percent if, on August 1, 1983, or on any August 1 thereafter, the fund ratio is less than 5.5 percent. However, in no event may the maximum weekly benefit amount be less than the maximum in effect during the preceding 12 months. The earnings disregarded in computing the weekly benefit for partial unemployment will be 10 percent of the average weekly wage in the highest two quarters (previously the high quarter).

Disqualification. An individual is disqualified for substantial fault on the part of the claimant that is work-related but not rising to the level of misconduct. The disqualification may vary from 4 to 13 weeks, depending on the circumstances.

Financing. Effective January 1, 1984, the taxable wage base will be the greater of the tax base required by Federal law or 60 percent of the average yearly insured wage, rounded to the nearest multiple of \$100. The amount allocated (previously charged) to a base-period employer's account will be multiplied by 120 percent and charged to that employer's account. An employer's account will not be charged for benefits paid if an individual is discharged for substantial fault, or for the inability to do the work for which hired pursuant to a job order with the agency for a probationary period of 60 days. Also, benefits will be noncharged as a result of a reversed decision.

Administration. The period for appealing an Employment Security Commission decision was extended from 10 to 30 days after notification or mailing. The commission may waive overpayments if good cause is found.

North Dakota

Benefits. The maximum weekly benefit amount will be computed as 62 percent (previously 67 percent) of the State average weekly wage. The percentage will increase to 65 percent on July 1, 1984, and to 67 percent on July 1, 1985. The base-period qualifying requirements changed from 40 times the minimum weekly benefit amount to $1\frac{1}{2}$ times the individual's high-quarter wages. The ratio of base-period wages to high-quarter wages for determining weeks of duration changed to 1.5 for a minimum of 18 weeks and to 3.5 or more for a maximum of 26 weeks.

Disqualification. The beginning date of a disqualification for voluntary leaving or discharge for misconduct will be the week of leaving or discharge. An individual may not be disqualified for voluntary leaving if the individual left employment or remains away from employment but furnishes sick leave notification from a physician; however, no benefits may be paid unless the employee notifies the employer of the physician's finding and offers to return to work when capable within 60 days of the last day of work.

Financing. The contribution rates for positive-balance employers will range from 0.5 to 4.3 percent, and from 0.5 to 5.0 percent for negative-balance employers.

Ohio

Benefits. The maximum weekly benefit amount will be frozen within a range of \$147 to \$233 until January 1986. For 1985 and 1986, the maximum weekly benefit amount will be computed with an additional increase equal to one-half of the percentage increase in the average weekly earnings of all covered workers in Ohio over the year ending June 30, 1983. For the period beginning December 26, 1982, and ending December 31, 1985, an individual must work 20 weeks at 37 times the minimum hourly wage to qualify for benefits. For 1984 and 1985, an individual will not be paid benefits for the waiting week.

Disqualification. For 1984 and 1985, a duration disqualification will be 6 weeks of work and earnings of 6 times the amount required to establish a credit week. An individual will meet the able, available, and actively seeking work requirements if he or she is participating and advancing in a training program for which an enterprise is paying all or part of the cost with the intention of employing the individual for at least 90 days after completion of the training.

Financing. The taxable wage base for 1984 and 1985 will be \$8,000.

Administration. The Advisory Council was changed to the Unemployment Compensation Advisory Commission and the number of members was increased from 7 to 12.

Oklahoma

Benefits. The maximum weekly benefit amount decreased from \$197 to \$185. Beginning July 1, 1984, the maximum weekly benefit amount will be the greater of \$197 or 60 percent, 57.5 percent, 55 percent, 52.5 percent, or 50 percent of the State average weekly wage of the second preceding calendar year, depending on the condition of the unemployment fund. The weekly benefit amount will be computed as $\frac{1}{25}$ of the taxable wages (previously $\frac{1}{25}$ of total wages up to 66 $\frac{2}{3}$ percent of the State average weekly wage) paid during the high quarter of the individual's base period. The formula for determining weeks of duration changed from the lesser of 26 times the weekly benefit amount or $\frac{1}{3}$ of base-period wages to the lesser of 26 times the weekly benefit amount or 50 percent of the taxable wage. Beginning January 1, 1986, it will be the lesser of 26 times the weekly benefit amount or 40 percent of the taxable wage. Also beginning January 1, 1984, the weeks of duration shall be no greater than the number of weeks worked in the base period.

The base-period wages needed to qualify for benefits increased from \$1,000 to \$3,000. Beginning January 1, 1986, an individual will need 40 percent of the taxable wages and $1\frac{1}{2}$ times high-quarter wages to qualify for benefits. For the period January 1, 1986, through December 31, 1987, notwithstanding any other provision, an individual will be eligible for benefits if he or she worked at least 20 hours in each of 20 weeks.

Financing. The maximum contribution rate increased from 3.0 to 5.4 percent. Beginning January 1, 1986, the taxable wage base will be computed as 50 percent of the average annual wage for the preceding calendar year, rounded to the nearest \$100. If an employer recalls a laid-off or separated employee and the employee continues to be employed, or voluntarily terminates employment or is discharged for misconduct within the benefit year, benefit charges may be reduced by the ratio of remaining weeks of eligibility to the total weeks of entitlement.

Oregon

Benefits. A temporary State additional benefits program, which will expire on June 29, 1985, was established.

Disqualification. An individual will not be disqualified for voluntary leaving, failure to accept work, or because of a labor dispute if he or she ceases to work or fails to accept work when a collective bargaining agreement between the bargaining unit and employer is in effect and the employer unilaterally modifies the amount of wages payable under the agreement, in breach of the agreement. Deleted from the definition of disqualifying income are dismissal or separation allowances and guaranteed wage payments. Holiday and vacation pay may or may not be deductible depending on the circumstances under which the claimant received them.

Financing. The maximum rate of contributions for the most favorable schedule increased from 2.7 to 5.4 percent and for the least favorable schedule, from 4.0 to 5.4 percent. A base-period employer's account will not be charged for benefits if the employer furnished part-time work to the individual during the base period and if the individual was collecting benefits due to loss of employment with one or more employers, so long as the employer continues to employ the individual in part-time work to the same extent as in the base period and the employer requests relief of charges.

Administration. The period for appealing an appeals board decision to the courts was

increased from 20 days after the decision is final to 30 days after the decision is served.

Pennsylvania

Benefits. The maximum duration of benefits was reduced from 30 to 26 weeks (if claimant had 18 or more weeks of work), and an individual with 16 or 17 weeks of work can now collect 16 weeks of benefits. Deleted were provisions suspending the waiting week if the Governor declares a state of emergency because of a major disaster, and those specifying that the waiting week would become compensable after receipt of benefits equaling 4 times the weekly benefit amount.

Coverage. Officers of a corporation deemed to be self-employed because they exercise a substantial degree of control over the corporation who become unemployed because of bankruptcy will be entitled to receive unemployment benefits, provided that the wages paid to the officers were mandatorily subject to the law.

Financing. The taxable wage base will be increased to \$8,000 on January 1, 1984. A tax on all employees of 0.1 percent of all wages paid for employment was imposed. Successor employers may pay the maximum tax rate if the transferring employer elected to transfer the business. Also added was an interest tax on contributing employers at the rate of 1.25 percent in 1984, 0.5 percent in 1985, and 1 percent in 1986 for the payment of interest on outstanding advances from the Federal Government. The maximum contribution rate (excluding interest or solvency taxes) increased to 8.5 percent for 1984, 8.8 percent for 1985, and 9.2 percent for 1986 and thereafter, based on a combination of the reserve-ratio factor, benefit-ratio factor, and the State adjustment factor (currently based on funding, experience, and State adjustment factor).

Administration. The advisory council, which formerly had no specific number of members, now is required to have 13 members.

South Carolina

Benefits. The minimum weekly benefit amount increased from \$10 to \$20.

South Dakota

Benefits. The maximum weekly benefit will be frozen at \$129 until July 1, 1984. Any individual who receives primary social security retirement benefits or payments made under a plan contributed to by a base-period employer will have his or her unemployment benefits reduced by the prorated weekly amount of such pension.

Financing. The maximum contribution rate for negative-balance employers was increased to 9.0 percent and the minimum rate will be 0.1 percent. The rate for employers not qualifying for a reduced rate based on experience also was raised to 3.5 percent. The maximum contribution rate will increase to 10.5 percent on January 1, 1984.

Tennessee

Benefits. The maximum weekly benefit amount will increase from \$110 to \$115 on January 1, 1984, and to \$120 on January 7, 1985. The minimum weekly benefit amount was increased from \$20 to \$30. An individual must earn \$754.01 in the highest two quarters of the base period in order to qualify for benefits. Also, for benefit years beginning July 4, 1983, through July 6, 1985, claimants must have base-period wages outside the two high quarters which equal or exceed \$135. The requirement that an individual must have earned in some quarter other than the high quarter wages equal to or more than 6 times the weekly benefit amount to qualify for the maximum weekly benefit amount was deleted. For benefit years beginning July 4, 1983, and through July 6, 1985, the proportion of base-period wages for computing weeks of duration will be one-fourth. An individual will not be eligible for benefits if 65 percent of the wages were earned in the highest quarter of the base period.

Financing. The rates for the most favorable schedule will range from 0.15 percent to 10.0 percent, and from 0.50 percent to 10.0 percent for the least favorable schedule.

Texas

Coverage. An individual will not be eligible for benefits from the date of the sale of a business until reemployed and eligible for benefits based on the wages received through new employment if the business was a corporation and the individual was an officer or a majority or controlling shareholder in the corporation and was involved in the sale of the corporation; if the business was a limited or general partnership and the individual was a limited or general partner who was involved in the sale of the partnership; or if the business was a sole proprietorship and the individual was the proprietor who sold the business.

Financing. The fund requirements for the least favorable schedule were increased from \$225 million to an amount equal to the greater of \$400 million or 1 percent of the taxable wages for the four quarters ending the preceding June 30. The fund requirements for the most favorable schedule changed from

over \$500 million to 2 percent of the total taxable wages for the four calendar quarters ending the preceding June 30. Nonprofit organizations, the State, and political subdivisions which elect to be reimbursable employers shall pay a fee for each valid claim for payment of administrative costs.

Utah

Benefits. The maximum weekly benefit amount will be frozen at \$166 until July 1, 1984, at which time the maximum will be computed as 60 percent (currently 65 percent) of the State average weekly wage. The computation for potential weeks of duration changed from a ratio of base-period wages to high-quarter wages, to 27 percent of base period wages. Beginning July 1, 1984, an individual must have earned 1½ times the high-quarter wages and total base period wages of 8 percent of the State average annual wage to qualify for benefits. Beginning January 5, 1986, the base period will be the first four of the last five completed calendar quarters; until that time, it will remain the four completed calendar quarters preceding the benefit year. Beginning October 1, 1984, the State will change from wage request to wage reporting.

Disqualification. The pension offset provision will apply to pensions maintained or contributed to by a base-period employer.

Financing. The taxable wage base will increase from \$12,000 to \$13,300 on January 1, 1984. The rate of contributions for new employers will be 4.5 percent for 1983 and 1984 and an amount equal to the average benefit cost rate experienced by employers of the major industry to which new employers belong for 1985 and thereafter. A contributing employer's account will not be charged for benefits paid to an individual who was discharged for misconduct, or who voluntarily quit after December 31, 1984, and who would have been denied benefits but subsequently requalified for and actually received benefits. Also, base-period employers shall not be charged with the State's share of extended benefits, uncollectible benefit overpayments, and reimbursements on combined wage claims when the claimant could not have qualified solely on the basis of Utah wages. The following changes will become effective on January 1, 1985: the taxable wage base will be computed as 75 percent (currently, 100 percent) of the State insured average annual wage, rounded to the higher multiple of \$100; an employer's tax rate shall be based on three factors—the reserve factor, social tax, and experience; benefits shall be charged against all base-period employers in proportion to the wages earned by the claimant with each

employer; and the contribution rate for employers who do not qualify for a rate based on experience will be decreased from 10 to 8 percent.

Vermont

Benefits. The maximum weekly benefit amount will be frozen at \$146 until June 30, 1986. On the first Sunday in July of subsequent years, the maximum shall be adjusted by a percentage equal to the percentage change in the State average weekly wage during the preceding calendar year.

Financing. The taxable wage base was increased from \$6,000 to \$8,000.

Virginia

Disqualification. An individual will not be deemed to have voluntarily quit work when the separation is in accordance with a seniority-based policy. The Director of the Virginia Employment Commission may modify the active search-for-work requirement if such modification is warranted due to economic conditions.

Washington

Benefits. The State additional benefit program was extended to March 31, 1984. A shared-work compensation plan was established.

Coverage. A corporation may elect not to cover all of its corporate officers, and if it does not elect coverage, the employer must notify the corporate officers that they are ineligible for benefits; if the employer fails to notify any corporate officer, that person shall not be considered a corporate officer.

West Virginia

Disqualification. An individual who is unemployed and a member of the State National Guard or other reserve component of the Armed Forces may not be considered to be employed or unavailable for work because he or she is engaged in inactive duty for training; any remuneration the individual receives for participation in such training may not be deducted from the unemployment benefits to which he or she may otherwise be entitled.

Wisconsin

Benefits. The minimum and maximum weekly benefit amounts will be frozen indefinitely at \$196 and \$37, respectively. The following changes will be effective January 1, 1984: The number of weeks of employment needed to qualify for benefits will increase from 15 to 18 in 1984 and 1985, and to 19 in 1986 and thereafter; an

individual will have to earn weekly wages equal to 30 percent of the State average weekly wage in each of the qualifying weeks; and the maximum potential duration will be reduced from 34 to 26 weeks. Effective with weeks of unemployment beginning after June 1, 1984, the partial benefit formula will change so that if an individual earns weekly wages totaling less than his or her weekly benefit amount, the first \$20 per week will be disregarded and the weekly benefit amount will be reduced by 67 percent of the wages over \$20. If the individual's wages are at least one-half of his or her weekly benefit amount, the individual may not be paid less than one-half of that amount, and if the wages are less than one-half of the weekly benefit amount, the individual must be paid the full weekly benefit amount. A supplemental benefits program will begin on January 1, 1984, and end with the week beginning May 27, 1984.

Disqualification. A number of changes will become effective January 1, 1984. The requalifying requirement for purging a duration disqualification for voluntary leaving will change from 4 weeks of work and wages of \$200 to 8 weeks of work and wages equaling at least 16 times the weekly benefit amount. Potential weeks of benefits are reduced to 1. An individual will not be subject to the voluntary quit disqualification if he or she terminates part-time employment of no more than 30 hours per week with

weekly wages of less than his or her weekly benefit amount based on wages earned with an earlier employer; after benefits are exhausted based on the previous job, the individual may then claim benefits based on the part-time employment. The requalifying requirement for purging a duration disqualification for failure to apply for or accept employment without good cause or failure to accept a recall from a layoff that occurred within the preceding 52 weeks will change from 4 weeks with wages of at least \$200 to 8 weeks and wages equaling at least 16 times the weekly benefit amount, and the potential weeks of benefits will be reduced to 1.

Financing. The taxable wage base was increased from \$6,000 to \$8,000; it will increase to \$9,500 for 1984 and 1985, and to \$9,700 for 1986 and thereafter.

Penalties. The penalties for fraudulent misrepresentation were changed from a fine of not less than \$25 or more than \$100 or imprisonment for not longer than 30 days, or both, to a fine of not less than \$100 or more than \$500 or imprisonment for not more than 90 days, or both.

Wyoming

Benefits. Effective September 5, 1983, whenever trust fund revenues are insufficient to pay benefits or repay loans, the

weekly benefit amount received by any individual normally entitled to more than \$90 will be reduced to 3.4 percent of the individual's high-quarter wages. Also, until the trust fund solvency is restored, the maximum weekly benefit amount will be reduced from 55 to 46.75 percent of the State average weekly wage. The earnings disregarded when computing partial benefits will be the greater of \$15 or 50 percent (formerly 25 percent) of the weekly benefit amount.

Disqualification. An individual who leaves the most recent job voluntarily without good cause or fails to apply for or accept available suitable work will be disqualified for a period equal to 90 percent of the number of weeks of entitlement and will forfeit 90 percent of all benefits. The provision which required an individual, after 4 weeks of unemployment, to seek and accept employment other than his or her customary occupation if it paid 75 percent of the wage received in the previous employment was repealed. Also, when considering the suitability of work, the Employment Security Commission may not consider the individual's customary occupation, previous earnings, experience, or training.

Financing. The taxable wage base was increased from \$7,000 to \$9,525. The maximum basic contribution rate was increased from 2.7 to 5.4 percent. □

—FOOTNOTES—

¹ Alabama, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

² Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Iowa, Kansas, Maine, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Mexico, North Dakota, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Washington, West Virginia, and Wyoming.

³ Alabama, Arkansas, Colorado, Idaho, Indiana, Kansas, Minnesota, Mississippi, New Mexico, Oregon, Pennsylvania, Utah, Washington, Wis-

consin, and Wyoming.

⁴ By the terms of the 1954 Reed Act, funds in excess of the legal maximum in the Federal Unemployment Account are distributed to the States to be used for administrative costs.

⁵ Alabama, Colorado, Florida, Illinois, Indiana, Iowa, Maryland, Minnesota, Nebraska, Nevada, New Mexico, North Dakota, Rhode Island, South Dakota, Tennessee, Texas, Virginia, Wisconsin, and Wyoming.

⁶ Alabama, Colorado, Nebraska, Tennessee, Virginia, and Wyoming.

⁷ California, Florida, Indiana, Kansas, Maine, Maryland, Mississippi, Nebraska, New Hampshire, New Jersey, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, Virginia, and Wyoming.

⁸ The residual tax is what remains of an employer's obligation to the program after receiving a tax offset credit for payment of the State tax.

Workers' compensation: significant enactments in 1983

Most States increased maximum weekly compensation for total disability and death, and eight raised allowances for burial expenses; other important changes dealt with occupational disease and rehabilitation benefits

LAVERNE C. TINSLEY

It was a heavy year for State workers' compensation legislation, except in Kentucky where the legislature did not meet.¹ More than 1,100 proposals were introduced and 232 enacted. The enactments dealt primarily with coverage, benefits, occupational disease, rehabilitation, insurance, and the creation of various funds.

Beginning January 1, 1984, Alaska will become the third State, after Iowa and Michigan, to establish maximum weekly benefit levels for disability and death at 80 percent of spendable earnings. Spendable earnings are defined as the employee's gross wage less State and Federal income taxes and social security, where appropriate. Previously, maximum weekly compensation in these States was established at 66 $\frac{2}{3}$ percent of the employee's average weekly wages before taxes. In New Hampshire, the percentage of the State's average weekly wage used in determining maximum weekly compensation for disability and death was raised from 100 to 150 percent.

Forty-five States and the Virgin Islands increased their maximum weekly compensation for total disability and death while eight jurisdictions increased allowances for burial expenses. One State's law was amended to change compensation for death from a statutory amount to 100 percent of

the State's average weekly wage.

Legislation in Louisiana increased the maximum weekly benefits for injured workers from two-thirds to three-fourths of the State's average weekly wage and established a supplemental earnings benefit system. Also, the State now compensates disfigurement for any part of the body, and requires that employers or their insurance carriers provide prompt rehabilitation services for at least 26 weeks to injured workers who are unable to earn wages equal to preinjury wages.

Three States specifically broadened medical care coverage to include chiropractors, and mandated coverage of domestic workers employed by a single employer for 40 or more hours per week, or 5 or more days per week. Several jurisdictions passed legislation extending their statutes-of-limitations for the filing of occupational disease claims.

Minnesota became the first State in more than 50 years to establish a competitive State fund. The State also created a competitive system for setting workers' compensation insurance rates and reformed procedures for compensating permanent impairments.

A moratorium was placed on increases in insurance premium rates through December 31, 1984, in Hawaii, while an enactment in North Carolina permits insurers to deviate from workers' compensation and employer liability insurance rates.

In California, workers' compensation will now be the sole and exclusive remedy against the employer when a work-related injury or death occurs. This means that injured

LaVerne C. Tinsley is a State Standards Adviser in the Division of State Workers' Compensation Programs, Office of State Liaison and Legislative Analysis, Employment Standards Administration, U.S. Department of Labor.

employees or their dependents, in cases of death, can no longer bring court actions against the employer for damages.

Following is a summary of legislation enacted by individual States.

Alabama

Corporate officers have the option of being exempted from coverage; however, such an election does not relieve corporate officers of their coverage liability to their employees.

Alaska

The percentage of the worker's wages upon which benefits are based for disability and death is now 80 percent of the worker's spendable earnings. Previously, it was 66 $\frac{2}{3}$ percent of the worker's gross weekly wages.

The minimum weekly compensation for disability is increased from \$65 to \$110. Death benefits, which previously had ranged from \$45 to \$75, are now between \$75 and \$125. The maximum compensation for scheduled injuries is also increased.

The burial allowance is increased to \$2,500 from \$1,000.

Arizona

Real-estate licensees whose remuneration is based on commission and is directly related to sales and service, rather than the number of hours worked, were excluded from coverage.

Liability for compensation of injuries to public employees is now initially the responsibility of the primary employer.

Employees working temporarily outside of the State may now be compensated by the State Fund for their work-related injuries, if the Fund insures employees of the same employer working in the State.

Arkansas

Injured employees are now permitted to receive treatment from certified chiropractors after the carrier or employer has been notified of the treatment.

The Workers' Compensation Fund, the Second Injury Trust Fund, and the Death and Permanent Total Disability Trust Fund are newly established to be administered by the Workers' Compensation Commission. Certain similar preexisting funds are incorporated into the new funds. The purpose is to improve the financial operations of the workers' compensation system.

All workers' compensation and employer liability insurance carriers in the State must participate in apportionment of rejected risks.

California

Workers' compensation is the sole and exclusive remedy against employers when work-related injury or death occurs. Therefore, injured employees, or dependents in

cases of death, are forbidden from bringing court actions against the employer for damages.

Colorado

Mandatory coverage is established for domestic workers employed by a single employer for 40 or more hours per week, or 5 or more days per week; however, a private homeowner is not required to cover a contractor who is hired to work about the home.

Educational institutions that sponsor students in job training programs where no remuneration is paid must either insure the students under their liability policies, or enter into agreements with the job training employers to provide the required coverage.

Corporate officers may reject coverage for themselves by filing a written notice with the insurer.

The maximum allowance for medical expenses from the Medical Disaster Fund is increased from \$35,000 to \$55,000.

Connecticut

The Workers' Compensation Commission is now required to notify claimants of their entitlements to annual cost-of-living increases.

The additional weekly allowance (\$40) paid to injured employees during rehabilitation was eliminated.

Third-party claims are not allowed for worksite injuries involving certain mobile equipment designed for use principally off public roads.

Delaware

Sole proprietors and partners are permitted elective coverage. Another amendment now allows as many as four officers of a corporation who are also stockholders to be exempt from coverage upon written agreement.

Florida

Coverage is extended to include contractors and subcontractors of certain public utilities.

The burden of proof is the responsibility of claimants who file for wage-loss and temporary partial disability benefits. Wage-loss benefits are no longer reduced at age 62 by the total amount of any social security retirement benefits not exceeding 50 percent, or terminated at age 65. Social Security benefits are primary and wage-loss benefits are supplemental when an injured employee is entitled to both; however, total compensation must not exceed the prein-

jury wages of the employee. Also, temporary partial disability benefits are offset against unemployment compensation benefits.

The medical fee schedule is applicable and must be uniform throughout the State.

Health care providers are subject to deauthorization by insurance carriers to provide remedial treatment, care, and attendance services to injured employees, if a deputy commissioner determines the deauthorization to be in the best interest of the injured employee.

The Division of Workers' Compensation must establish minimum qualifications, standards, and requirements for rehabilitation providers, and maintain a directory of approved providers. Injured employees will be referred only to providers listed in the Division's directory.

Employers who pay excess compensation for an injury, subsequent to a preexisting injury, that results in permanent total disability will be reimbursed from the Special Disability Trust Fund.

The discount factor used in computing the present value of compensation for lump sums is increased from 4 to 8 percent. Advance payments may be made up to a maximum of \$47,500, or 26 weeks of compensation, in a 48-month period, whichever is greater.

The reporting time is increased from 7 to 10 days during which the employer must notify the Division of Workers' Compensation of an injury causing 7 or more consecutive lost workdays, or of an injury resulting in death. The reporting time is retained for minor injuries and for cases in which fewer than 7 days were lost from work due to injury.

Procedures for obtaining coinsurance policies were modified and the penalties for late compensation payments were stiffened.

Georgia

Licensed real-estate salespersons or associate brokers with a written contract of employment indicating that all their services will be performed as independent contractors are exempt from coverage.

The burial expenses are raised to \$1,500 from \$750.

Upon receipt of an employer's report of injury, the Workers' Compensation Board notifies the injured worker of his or her rights, benefits, and obligations under the law, and briefly explains the law.

Hawaii

A moratorium has been placed on increases in workers' compensation premium

rates for the period January 1, 1983, through December 31, 1984.

Certain workers' compensation studies were authorized, to be conducted under the direction of the legislative auditor. One study puts special emphasis on ways to reduce or stabilize costs, and the other examines the financial impact and feasibility of creating a competitive State fund under competitive rating law.

Illinois

A sole proprietor or partner of a business may elect coverage under the law.

The Industrial Commission was granted authority to establish claims administration procedures for claims filed by employees of defaulting self-insured employers. Group self-insurance is allowed.

Indiana

The maximum average weekly wage of an employee to be used in computing compensation for total disability with respect to injuries occurring on or after July 1, 1983, increased from \$210 to \$234; on July 1, 1984, the amount will increase to \$249. Total maximum compensation allowable for injury, excluding medical benefits, was raised from \$70,000 to \$78,000 on July 1, 1983; on July 1, 1984, the maximum will become \$83,000.

Burial expenses are increased from \$1,500 to \$2,000.

Iowa

The total number of officers in a corporation who elect exemption from coverage may not exceed four, except for family farm corporations.

The State Department of Social Services may set liens against medical benefits to recover monies paid for hospital and medical services provided injured workers.

The State treasurer has sole authority for operational control of the Second Injury Fund.

Kansas

The maximum expenses allowed for burial are \$3,200, previously \$2,000. Additionally, any child of a deceased employee who is adopted is no longer eligible for compensation as a dependent of the employee.

Five or more employers participating in the same trade or professional organization for at least 5 years may establish group self-insurance pools for workers' compensation and employers' liability coverage.

Louisiana

Coverage is broadened to include quadriplegia, paraplegia, and loss of physical function of the respiratory system, gastro-

intestinal system, or genito-urinary system as contained in the thoracic or abdominal cavities.

The maximum weekly benefit level for disability and for death is 75 percent of the State average weekly wage. Minimum weekly benefits for total disability and death remain at 20 percent of the State average weekly wage, while the minimum for scheduled injury and supplemental earnings benefits is eliminated.

Benefits based on supplemental earnings are now computed at 74 percent (formerly 66 $\frac{2}{3}$ percent) of the difference between 90 percent of the employee's preinjury average monthly wages and his or her postinjury average monthly wages, but must not be less than the employee's actual wages prior to injury.

Compensation is allowable for any bodily disfigurement. Previously, only disfigurement of the head and face was compensable.

Scheduled injury compensation will only be awarded if a determination is made that an anatomical loss of use, amputation, or loss of physical function of at least 50 percent exists, as established in the *American Medical Association Guides to the Evaluation of Permanent Impairment*. Previously, no percentage was statutorily prescribed. Another requirement specifies that an employee must be unable to engage in any self-employment to qualify for total disability compensation.

Workers' compensation benefit payments are prohibited during any week in which an employee is receiving or is entitled to receive unemployment compensation benefits.

Workers injured on the job are entitled to prompt vocational rehabilitation services when they are unable to earn wages equal to their preinjury wages. The employer or insurer is required to provide up to 26 weeks of rehabilitation services, which may be extended for an additional 26 weeks. Upon request, board, lodging, or travel costs will be provided. For each week an injured employee refuses to accept rehabilitation services, his or her compensation will be reduced up to 50 percent.

The Office of Workers' Compensation Administration is created within the State Department of Labor to administer the workers' compensation law. Rules and regulations are also established for the agency concerning administration of the workers' compensation law and operation of the office.

In third-party cases, employers may recover up to 50 percent of a compensation award.

Costs of medical examinations are set by the State agency director based on prevailing rates, rather than a statutory amount.

The director is also authorized to set attorney fees and method of payment.

New legislation requires that the first payment of compensation for total disability or death be made within 14 days after the employer receives notification of injury or death, and within 30 days of receipt of the medical report.

Maine

Volunteer firefighters and emergency medical services workers are covered for workers' compensation. Coverage is eliminated for real-estate brokers or salespersons whose services are based on commission only.

All (rather than a previous few) services performed by chiropractors are covered.

Injury or death from asbestosis occurring on or after November 30, 1967, may now be compensated; the employer in whose employment the last exposure to asbestos occurred will be liable for any compensation due.

The 2-year statute of limitations for claim filing will not begin to run until the employer, if he or she has knowledge of the injury, files a report.

A direct payment compensation system is established and the agreement system eliminated for injuries that occur on or after January 1, 1984.

Benefits for injuries occurring on or after July 1, 1983, will be adjusted on the anniversary date of the injury. Under prior law, all benefits were adjusted concurrently with the State average weekly wage.

The Workers' Compensation Commission is required to actively monitor the State's workers' compensation system to ensure that it operates efficiently and with maximum benefit to both employees and employers.

Maryland

Coverage was amended to exclude licensed real-estate salespersons or associate brokers whose services are based on commission only, and those who qualify as independent contractors for Federal tax purposes.

Requests for compensation are to be made to the Uninsured Employers' Fund Board in cases where the employer fails to make such payments. Previously, requests were made to the Workmen's Compensation Commission.

Massachusetts

Maximum weekly compensation for death is no longer a statutory amount (\$110) but is set at 100 percent of the State's average weekly wage. Minimum weekly compensation is set at \$110; formerly, no statutory amount was prescribed. Weekly compensation for a dependent spouse and a spouse

with children will be determined at 66⅔ percent of the employee's average weekly wage. Formerly, no percentage was established in the law. The maximum period of 400 weeks during which surviving spouses were entitled to receive compensation is eliminated. Dependent surviving spouses may receive compensation payments for as long as they do not remarry.

The previous \$32,000 cap on total maximum compensation is removed and the aggregate benefit set at an amount not to exceed 250 times the State average weekly wage in effect at the time of injury. An additional allowance of \$6 per week for each child is included, to be applied in cases where the combined weekly compensation of the spouse and children falls below \$150.

Michigan

Employees of police and fire departments who waive their rights to workers' compensation benefits, in lieu of benefits from their municipality or village, will maintain their rights under the State law to medical benefits that are not provided for by the municipality or village.

A new provision permits benefits to be redeemed after certain criteria are met; formerly, any redemption of benefits was prohibited.

Employers are permitted to waive any reduction in the benefits of certain volunteer employees who are also entitled to disability benefits under a disability insurance program paid for by the employer.

Minnesota

Coverage is elective for independent contractors and for employers of individuals who participate in ridesharing arrangements.

The permanent partial disability provision concerning scheduled injuries is repealed. Compensation for a scheduled injury will be determined according to the percentage of body function lost. Awards will consist of impairment compensation and economic recovery compensation. A schedule has been formulated which provides for compensation awards between \$75,000 and \$400,000, according to percentage of disability.

The Labor Commissioner has authority to determine an employee's eligibility for rehabilitation, and to make all subsequent decisions concerning the rehabilitation of injured workers. Retraining during rehabilitation is limited to 156 weeks; previously, no time limit was established. Day-care services, travel, and reasonable moving expenses are added as costs of rehabilitation. Within 90 days after maximum medical improvement, or after the employee has completed a retraining program,

compensation for temporary total disability will be terminated. Health care services rendered to injured employees must be monitored by the Commissioner of Labor.

Any health care provider who violates regulations concerning health care services will be penalized, suspended, or disqualified.

The burial allowance is increased from \$1,000 to \$2,500.

A new requirement makes the employer in whose employ a worker was last exposed to a hazard causing an occupational disease the responsible employer for compensation.

The State Compensation Insurance Fund has been established as a nonprofit independent public corporation for the purpose of insuring employers against their workers' compensation liabilities.

Missouri

Sole proprietors, partners, and copartners may elect coverage; and real-estate agents are exempt from coverage.

The percentage of the State average weekly wage used in computing maximum weekly benefits for total disability, temporary partial disability, and death is increased from 66⅔ percent to 70 percent for all injuries or deaths occurring after September 28, 1983. Compensation for permanent partial disability is increased from 40 to 45 percent of the State average weekly wage. Beginning September 28, 1986, maximum compensation for total disability, temporary partial disability, and death will be based on 75 percent of the State average weekly wage.

Injured employees are no longer entitled to an additional 52 weeks of compensation during the healing period.

Awards for disfigurement will be made up to a maximum of 40 weeks; previously, awards were payable up to a statutory maximum of \$4,000.

Employers are responsible for replacement of prosthetic devices of injured employees whenever necessary.

Liability for compensation resulting from occupational disease must, without exception, be borne by the employer in whose employment a worker was last exposed to the cause of the disease, regardless of the time since last exposure. Prior to this legislation, certain occupational diseases were excluded. Firefighters who receive remuneration for their services are covered for exposure to smoke, gases, inadequate oxygen, and for psychological stress.

All injuries and deaths must be immediately reported to the Division of Workers' Compensation upon occurrence; formerly, up to 3 days of lost worktime could elapse before notification had to be made.

Montana

Coverage is compulsory for certain sole proprietors and working members of a partnership who consider themselves independent contractors.

The coverage of medical services is expanded to include nurse specialists as providers of medical treatment services. Medical practitioners and hospitals are now permitted to attach liens against compensation awards for services rendered.

Nebraska

The maximum weekly benefit level for disability and for death is raised from \$180 to \$200.

The statutes concerning payment of attorney fees in appealed cases have been revised.

Nevada

Volunteers serving as police officers in the Nevada highway patrol, and apprentices in an apprenticeship program who are injured during the course of instruction are covered for workers' compensation.

The monthly wage levels used to determine compensation of volunteer firefighters are raised from \$600 to \$900, and from \$250 to \$900 for volunteer peace officers while they are serving as State employees.

Indemnity benefits for permanent partial disability will be gradually extended from age 65 to 70. Additionally, compensation awards of less than 25 percent may now be received in a lump sum payment; however, all rights to additional benefits in such cases will be forfeited.

Employers may no longer require employees to waive the confidentiality of their medical records. Fees for medical services must be uniform within communities and be revised at least annually. The occupational disease statutes concerning exclusive remedy and medical examinations were revised. The administrator of the industrial insurance system is authorized to rescind an employer's self-insurance status under certain conditions.

New Hampshire

Household employees who are not covered by the Federal Social Security Act and volunteer members of rescue squads are included for coverage.

The percentage of the State average weekly wage used in determining maximum weekly compensation for disability and death is raised from 100 to 150. Minimum compensation is changed from a statutory amount to 40 percent of the State average weekly wage, or the actual wage of the worker if less. The wage and compensation schedule used in computing benefits is deleted from the law.

Table 1. Jurisdictions which changed maximum weekly temporary total disability benefits during 1983

Jurisdiction	Former maximum	New maximum	Jurisdiction	Former maximum	New maximum
Alabama	\$174.00	\$184.00	New Hampshire	\$279.00	\$418.00
Alaska	\$942.00	\$996.00	New Jersey	\$217.00	\$236.00
California	\$175.00	\$196.00	New Mexico	\$246.44	\$271.76
Colorado	\$283.71	\$296.80	New York	\$215.00	\$255.00
Connecticut	\$326.00, plus \$10 for each dependent under 18 years of age, not to exceed 75 percent of employee's wage	\$345.00, plus \$10 for each dependent under 18 years of age, not to exceed 75 percent of employee's wage	North Carolina	\$228.00	\$248.00
Delaware	\$208.45	\$223.78	North Dakota	\$261.00, plus \$5 for each dependent child; aggregate not to exceed worker's net wages	\$278.00, plus \$5 for each dependent child; aggregate not to exceed worker's net wages
District of Columbia	\$496.70	\$396.78	Ohio	\$298.00	\$321.00
Florida	\$253.00	\$271.00	Oklahoma	\$196.00	\$212.00
Hawaii	\$252.00	\$266.00	Oregon	\$304.60	\$316.23
Idaho	\$217.80 to \$302.50, according to number of dependents, plus 7 percent of the State average weekly wage for each child up to 5 children	\$238.50 to \$331.25, according to number of dependents, plus 7 percent of the State average weekly wage for each child up to 5 children	Pennsylvania	\$284.00	\$306.00
Illinois	\$446.40	\$456.33	Rhode Island	\$257.00, plus \$9 for each dependent; aggregate not to exceed 80 percent of worker's average weekly wage	\$275.00, plus \$9 for each dependent; aggregate not to exceed 80 percent of worker's average weekly wage
Indiana	\$140.00	\$156.00	South Carolina	\$235.00	\$254.38
Iowa	\$542.00	\$563.00	South Dakota	\$227.00	\$238.00
Kansas	\$204.00	\$218.00	Texas	\$182.00	\$189.00
Kentucky	\$254.33	\$277.66	Utah	\$284.00, plus \$5 for dependent spouse and each dependent child up to 4 children, but not to exceed 100 percent of the State average weekly wage	\$300.00, plus \$5 for dependent spouse and each dependent child up to 4 children, but not to exceed 100 percent of the State average weekly wage
Louisiana	\$230.00	\$245.00	Vermont	\$243.00, plus \$10 for each dependent under age 21	\$262.00, plus \$10 for each dependent under age 21
Maine	\$396.48	\$426.43	Virgin Islands	\$153.00	\$165.00
Maryland	\$267.00	\$292.00	Virginia	\$253.00	\$277.00
Massachusetts	\$297.85, plus \$6 for each dependent, if weekly benefits are below \$150	\$320.29, plus \$6 for each dependent, if weekly benefits are below \$150	Washington	\$243.10	\$249.33
Michigan	\$307.00	\$330.00	West Virginia	\$301.00	\$318.87
Minnesota	\$290.00	\$313.00	Wisconsin	\$269.00	\$294.00
Missouri	\$202.09	\$212.19	Wyoming	\$346.62	\$346.17
Montana	\$263.00	\$277.00			
Nebraska	\$180.00	\$200.00			
Nevada	\$297.21	\$314.18			

NOTE: Most benefit increases are based on the applicable jurisdiction's average weekly or monthly wage; and formerly on the national average weekly wage in the District of Columbia. However, nine States (Arizona, Arkansas, California, Georgia, Indiana, Mississippi, Nebraska, New York, and Tennessee) and Puerto Rico prescribe statutory amounts.

Five States (Arizona, Arkansas, Georgia, Mississippi, and Tennessee) and Puerto Rico are not listed because no changes for temporary total disability were legislated during 1983.

Modifications have been made in the dollar amounts and the number of weeks that compensation is payable for certain permanent partial disabilities. The provision which allowed compensation for the loss of two hands, two feet, or one hand and one foot for a maximum of 341 weeks has been repealed. A loss of one or more scheduled members is to be compensated weekly, based on a percentage loss of the whole person as defined in the *American Medical Association Guides*, subject to a 350-week limit. Scheduled awards are required to be compensated no later than 14 days after maximum medical improvement.

The maximum benefit level for sole proprietors and partnerships under special coverage is changed from \$300 to 150 percent of the State average weekly wage.

The 400-week limit on benefits of a widow or widower without dependent children who does not remarry is removed. Burial allowances are raised from \$1,200 to \$3,000.

Civil penalties are increased for employers who fail to secure compensation payments from \$10 to \$100 per day. An additional \$100 will be assessed for each day of noncompliance.

Revisions have been made regarding assessments to the Special Fund and to the Administration Fund.

The new title of the statute is "Workers' Compensation Law" and all references to "workmen's" have been changed to "workers'" throughout the act.

New Jersey

Awards to claimants under age 62 who are entitled to benefits for a permanent total disability or subsequent injury that occurred after December 31, 1979 (formerly June 1, 1965), are subject to reduction by social security benefit payments.

New Mexico

Coverage is extended to State mounted patrol members while they are serving at the request of law enforcement agencies.

The statutory graduated limit on payments for disability or death due to asbestosis or silicosis is eliminated.

A claimant may seek the services of another health care provider when the services being rendered are unsatisfactory.

New York

All officers of a corporation may elect an exemption from coverage; formerly, only the officers holding a combination of offices could be excluded.

Injury sustained in or caused by any voluntary participation in an off-duty athletic

activity will not be covered unless the employer (1) requires the employee to be a participant; (2) compensates the employee for his or her participation; or (3) sponsors the activity.

Maximum weekly benefit levels for disability and death are to be increased in steps between July 1, 1983, and July 1, 1985.

Compensation for the permanent partial loss or loss of use of an eye will be awarded on the basis of an uncorrected loss of vision resulting from an injury.

Licensed physical therapists have been authorized to provide medical treatment to an injured employee upon referral by a physician or podiatrist. All health care providers are prohibited from collecting medical fees directly from claimants. The Worker's Compensation Board is authorized to direct one or more insurers to pay for medical services rendered by a physician, hospital, podiatrist, or chiropractor, pending a determination of the liable party.

The assessment paid by employers to the Uninsured Employers' Fund is increased from \$100 to \$200.

North Carolina

Coverage is extended to include deputy sheriffs. The definition of "injury and personal injury" is amended to include back

injury caused by a work-related accident.

The law is amended to permit injured employees to use sick or other leave during the statutory waiting period prior to commencement of compensation.

Insurers are allowed to deviate from workers' compensation and employer liability insurance rates; however, such deviations are only effective for 1 year. Payment of dividends to members of self-insurance groups will not be contingent upon the maintenance or continuance of membership in the group.

North Dakota

The maximum weekly benefit level for death is raised from \$105 to \$210, and a lifetime maximum of \$175,000 established. The weekly compensation rate for permanent impairment and scheduled injury is increased from \$40 to \$60. The burial allowance is raised from \$2,000 to \$2,500.

Supplementary compensation for permanent total disability and death is based on 50 percent (formerly 25 percent) of the difference between the benefits the claimant was originally receiving and the maximum compensation rate, effective July 1, 1975.

Claimants entitled to Federal coal workers' pneumoconiosis benefits may receive benefits under the North Dakota Workmen's Compensation Act, provided the disease was contracted or aggravated as the result of employment as a coal miner in the State.

The distribution of compensation benefits when there is no surviving spouse or dependent child has been redesignated.

Oregon

Volunteer employees in the ACTION programs have been eliminated from coverage. Previously, volunteers receiving stipends or nominal reimbursements for time and travel were covered.

Farm labor contractors in the business of forestation or reforestation of lands are required to cover each worker performing manual labor, regardless of any contractual relationship which may exist between the contractor and workers. Each worker must be provided with a written statement of his or her rights and remedies under the law.

The denial of a claim for compensation for any condition or impairment to the health of a firefighter must be determined from clear and convincing medical evidence.

Rhode Island

The term "widow" has been changed to "surviving spouse."

A legislative commission has been created to study the feasibility of an exclusive State fund. The commission will expire on April 1, 1984.

South Carolina

Coverage of volunteer firefighters and rescue squad members is now mandatory. The average weekly wage used in determining compensation for national guard members, volunteer firefighters, and rescue squad members is changed from \$84 to 15 percent of the State average weekly wage in the preceding year.

The term "widow" has been replaced with "surviving spouse."

For compensation purposes, the average weekly wage of members of the National Guard is set at 75 percent of the State average weekly wage; and the wages of volunteer firefighters and rescue squad members were reduced from 75 percent to 37½ percent of the State average weekly wage.

South Dakota

Annual rates of interest on lump sum payments equaling the total sum of the probable future compensation payments will be determined according to Department of Labor rules or regulations, in lieu of the 5-percent per annum rate.

New reporting requirements concerning medical care of injured employees were established for employers.

Tennessee

Injured employees are covered for emergency medical care services up to \$300 (formerly \$100), and for prescription eyeglasses or eyewear when necessary.

The burial allowance is raised from \$1,250 to \$2,000.

Texas

Coverage is broadened for State employees who are injured while working outside the State. A subcontractor and prime contractor are permitted to enter into a written contract which establishes that the prime contractor will provide coverage for the subcontractor and his or her employees.

The offset of death benefits against compensation the employee had been awarded prior to death will now be applicable only to legal beneficiaries, who are entitled to benefits for a maximum of 360 weeks. Benefits of widows, widowers, and children are excluded.

The funeral allowance is increased from \$1,250 to \$2,500.

The claim filing period for compensation is increased from 6 months to 1 year. Within 20 days from receipt of notice of injury, the insurer or self-insurer must either initiate benefits or file with the Industrial Accident Board a statement of controversion, or in case of death, a statement of position.

Lump sum attorney fees in death cases where the Texas Employers' Insurance As-

sociation controverts the claim may not exceed 25 percent of the recovery.

Procedures have been established for handling disputes relating to medical benefits under a compromise settlement agreement approved by the Industrial Accident Board, or a judgment approved by the court. The penalty assessed against employers who fail to keep on file certain reports of employee injuries is decreased.

Utah

Workers' compensation will be the exclusive remedy when an injury occurs to volunteers serving as State employees under the "Volunteer State Workers' Act." Agricultural employers of five or fewer persons (other than immediate family members) are no longer required to have coverage. Also exempted are agricultural employers of four or fewer persons, if the cash payments to employees amounted to less than \$2,500 during the preceding calendar year.

The minimum weekly benefit payment to permanently and totally disabled employees from the Second Injury Fund is increased from \$10 to \$110.

The frequencies used in determining binocular hearing loss are now at levels of 500, 1,000, 2,000, and 3,000 cycles per second. Previously, only frequencies of 500, 1,000, and 2,000 were used. The number of decibels used in hearing loss cases is increased to 25 from 15.

Virginia

Coverage of certain public officials is permitted by the governing bodies of any county, city, or town. Hernia injuries are no longer covered under the law.

The Industrial Commission is authorized to require that an employer furnish certain medical equipment for an injured employee if necessary, including remodeling of the employee's principal home, not to exceed a cost of \$10,000.

A 2-year time limit is established within which claims for asbestosis must be filed.

The title "Virginia Workmen's Compensation Act" is changed to "Virginia Workers' Compensation Act," and the term "workmen's" replaced with "workers'" throughout the statute.

New rules governing the reporting of injuries require that any change of address by an injured employee be reported immediately. Any unreasonable justification for noncompliance will result in suspension of compensation payments.

An informative guide on the rights of injured workers under the State's workers' compensation law must be published by the Commission.

Washington

Services performed by musicians or entertainers under contract for a specific engagement or engagements have been eliminated from mandatory coverage.

A cost-of-living adjustment will begin in July 1984 for persons whose entitlement to compensation started on or after July 1, 1971.

Workers are entitled to reimbursement for loss or damage to personal clothing, footwear, or protective equipment caused by industrial accidents or while receiving emergency medical treatment.

The allowance for rehabilitation during a 52-week period is increased from \$1,500 to \$3,000. All injured workers are now entitled to rehabilitation or retraining services, regardless of injury date, except for persons who reopen their cases solely for purposes of receiving rehabilitation.

West Virginia

Claims for compensation can no longer be denied by an employer based on defenses of willful self-exposure and failure to use protective or safety appliances.

A new voluntary "Employers' Excess Liability Fund" insures employer liabilities in excess of amounts covered by workers' compensation.

The term "workmen's" is changed to "workers'" wherever it appears in the act.

Wyoming

Coverage is broadened to include recreational guides involved in hazardous outdoor service.

Dependent children of permanently and totally disabled workers are entitled to \$100 per month each (formerly \$60), until the age of majority.

The burial allowance is increased from \$1,100 to \$1,800.

Permanent partial disability compensation for any one accident may not exceed compensation payable for permanent total disability.

The statute of limitations for an injury occurring over a substantial period of time is broadened to allow a claim to be filed within 3 years from the date of last injurious exposure to the condition causing the injury, or 1 year after diagnosis of injury is first communicated to the employee, whichever occurs last (formerly whichever occurs first).

Attorney fees will be set by the district court; previously, 10 percent of the claimant's award was recoverable by the attorney. □

—FOOTNOTE—

¹The legislatures of California, Mississippi, Ohio, Oklahoma, Pennsylvania, Vermont, Wisconsin, and the District of Columbia convened in 1983 but workers' compensation changes were relatively minor, and are

not discussed in the State-by-State summary of significant amendments to workers' compensation laws. Kentucky was the only State in which the legislature did not meet in 1983.



Major Agreements Expiring Next Month

This list of selected collective bargaining agreements expiring in March is based on contracts on file in the Bureau's Office of Wages and Industrial Relations. The list includes agreements covering 1,000 workers or more.

Employer and location	Industry	Labor organization ¹	Number of workers
Acme Boot Company, Inc. (Clarksville, Tenn.)	Leather	Rubber Workers	2,750
Allied Chemical Corp., Chesterfield Fibers Plant (Hopewell, Va.)	Chemicals	Teamsters (Ind.)	2,200
Arizona Public Service Company (Phoenix, Ariz.)	Utilities	Electrical Workers (IBEW)	2,950
Associated General Contractors of America, Inc.:			
Connecticut Chapter	Construction	Laborers	6,000
Houston Chapter and 1 other, 2 agreements (Texas)	Construction	Laborers and Carpenters	12,600
Jefferson County, Inc. Chapter (Texas)	Construction	Carpenters	1,800
New Mexico Building Branch	Construction	Carpenters; Cement Masons and Plasterers; Laborers; and Teamsters (Ind.)	3,550
Association of Bituminous Contractors, Inc. (Interstate)	Mining	Mine Workers (Ind.)	12,000
Automotive Parts Distributors Association, Inc. (New York)	Wholesale trade	Teamsters (Ind.)	2,000
Builders' Association of Missouri, 2 agreements (Missouri)	Construction	Carpenters and Painters	7,900
Connecticut Construction Industries Association, Inc. (Connecticut)	Construction	Laborers	3,500
Continental Can Co., U.S.A. (Interstate)	Fabricated metal products	Machinists	2,000
Crouse-Hinds Company (Syracuse, N.Y.)	Electrical products	Electrical Workers (IBEW)	2,000
Exxon Corporation, Exxon Company, U.S.A. and Exxon Chemical Americas Divisions (Baton Rouge, La.)	Petroleum	Oil, Chemical and Atomic Workers	2,400
Exxon Corporation, Exxon Research and Engineering Company and Exxon Chemical Company Divisions (New Jersey)	Services	Independent Laboratory Employees' Union, Inc. (Ind.)	1,400
FMC Corp., Crane and Excavator Division (Cedar Rapids, Iowa)	Machinery	Auto Workers	1,850
General Mills, Inc., master agreement (Interstate)	Food products	Grain Millers	3,900
Gulf Coast Constructors Association and 2 others (Texas)	Construction	Plumbers	3,900
International Silver Company (Meriden and Wallingford, Conn.)	Miscellaneous manufacturing	Steelworkers	1,200
Kaiser Foundation Hospitals, Southern California Permanente Medical Group, and Kaiser Foundation Health Plan (Southern California)	Hospitals	Service Employees	8,000
Lever Brothers Company, master agreement (Interstate)	Chemicals	Chemical Workers	2,000
Mechanical Contractors Association of New Mexico, Inc. (New Mexico)	Construction	Plumbers	1,500
Metropolitan Life Insurance Company, sales representatives (Interstate)	Insurance	Insurance Workers	3,000
Milwaukee Transport Services, Inc. (Milwaukee, Wis.)	Transit	Transit Union	1,300
Mobil Oil Corporation producing areas (Texas, Louisiana, and Oklahoma)	Crude petroleum and natural gas	Associated Petroleum Employees Union (Ind.)	1,700
New York News, Inc. (New York, N.Y.)	Printing and publishing	Newspaper Guild	1,100
New York Times Company (New York, N.Y.)	Printing and publishing	Newspaper Guild	2,100
Outboard Marine Corporation, O.M.C. Evenrude Division (Milwaukee, Wis.)	Machinery	Steelworkers	1,100
Publishers Association of New York City (New York, N.Y.)	Printing and publishing	Graphic Communications	1,500
Puget Sound Power & Light Company (Washington)	Utilities	Electrical Workers (IBEW)	1,650
Rock Products and Ready Mixed Concrete Employers of Southern California	Mining and quarrying	Teamsters (Ind.)	5,000

See footnote at end of table.

Continued—Major Agreements Expiring Next Month

Employer and location	Industry	Labor organization ¹	Number of workers
Samsonite Corporation (Denver, Colo.)	Leather	Rubber Workers	1,200
Southern California Gas Company	Utilities	Utility Workers and Chemical Workers	6,550
Standard Oil Company (Indiana) and Amoco Oil Company (Illinois and Indiana)	Petroleum	Central States Petroleum Union (Ind.)	1,000
Sun Refining and Marketing Company (Marcus Hook, Pa.)	Petroleum	Oil, Chemical and Atomic Workers	1,150
Tampa Electric Company (Florida)	Utilities	Electrical Workers (IBEW)	1,250
Textile Rental Services Association (Southern California)	Services	Laundry and Dry Cleaning	2,800
Textron Inc., cwc Castings Division (Muskegon, Mich.)	Primary metals	Auto Workers	1,050
Transport of New Jersey (Maplewood, N.J.)	Transit	Transit Union	3,200
Union Carbide Corporation (Texas City, Tex.)	Chemicals	Metal Trades Council	2,150
Vought Corporation (Dallas, Tex.)	Transportation equipment	Auto Workers	4,100
Weyerhaeuser Company (Oregon and Washington)	Paper	Western Pulp and Paper Workers (Ind.)	1,950
Wisconsin Electric Power Company (Milwaukee, Wis.)	Utilities	Office, Sales and Technical Employees (Ind.)	1,550

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

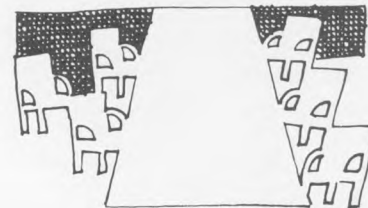
Shiskin award nominations

The Washington Statistical Society invites nominations for the fifth annual Julius Shiskin Award in recognition of outstanding achievement in the field of economic statistics.

The award, in memory of the former Commissioner of Labor Statistics, is designed to honor an unusually original and important contribution in the development of economic statistics, or in the use of economic statistics in interpreting the economy. The contribution could be in statistical research, in the development of statistical tools, in the application of computers, in the use of economic statistics to analyze and interpret the economy, in the management of statistical programs, or in developing public understanding of measurement issues, to all of which Mr. Shiskin contributed. Either individuals or groups can be nominated.

The prize will be presented, with an honorarium of \$250, at the Washington Statistical Society's annual dinner in June 1984. A nomination form may be obtained by writing to the Julius Shiskin Award Committee, American Statistical Association, 806 15th Street, N.W., Washington, D.C. 20005. Completed nomination forms must be received by April 1, 1984.

Developments in Industrial Relations



Airline update

Eastern Airlines, which has not shown a profit since 1979, moved near a cutoff of its line of credit, but the crisis was eased when members of three unions agreed to concessions which would reduce labor costs in exchange for company stock and a voice in management. Eastern Chairman Frank Borman announced that the company earlier had considered seeking protection from its creditors under Chapter 11 of the Federal Bankruptcy Code, which could have resulted in abrogation of its labor contracts, but had decided that the best course would be for employees to agree to a pay cut and cost-saving changes in work rules. This proposal drew bitter responses from union leaders, but they agreed to negotiate after an independent examination of the company confirmed Eastern's financial difficulties.

The settlement provides that during 1984, 18 percent of earnings will be withheld from the 13,500 ground service employees represented by the International Association of Machinists, 6,000 flight attendants represented by the Transport Workers, and 13,500 nonunion employees. The 4,000 cockpit crew members represented by the Air Line Pilots Association agreed to a 22-percent earnings cut. In exchange for the cuts, which were expected to total \$292 million during the year, the employees will receive about 25 percent of Eastern's common stock and 3 million shares of a new series of convertible junior preferred stock. The new preferred shares will carry dividends equal to 20 percent of any future company profit up to a maximum of \$26.2 million a year.

The new pay cut-investment plan superseded several types of company-aid plans that had called for withholding part of employee earnings. (See *Monthly Labor Review*, January 1984, pp. 36-37.) This settlement does not cancel the general wage increases already scheduled for 1984 under earlier settlements with the unions.

The changes in work rules remained to be worked out. An Eastern official said they could total \$75 million during the year. One way of attaining the saving would be to have workers perform some related functions that are not part of their usual designated duties.

An increased employee voice in management was in two

forms. Eastern agreed to increase its board of directors to 21 people, including one member from the Transport Workers and one from the Machinists. The Air Line Pilots and the nonunion employees already had one member each on the previous 19-member board. The other move toward greater employee involvement in company operation was establishment of a union-management advisory committee to review past and future management decisions. A Machinists' official said that one of the immediate issues was Eastern's aircraft purchase program, which the unions viewed as too ambitious.

Borman indicated that additional concessions by the unions might be necessary in the future, saying, "We'd prefer to have gotten it all at once, but that's just not realistic. This is a first step."

Elsewhere in the industry, the Air Line Pilots agreed on contract concessions expected to save Trans World Airlines more than \$60 million over an 18-month period. The concessions included a 10-percent pay cut effective November 1, 1983, through January 31, 1985; deferral to June 30, 1985, of a 4-percent pay increase that had been scheduled for December 1, 1983; a 20-percent reduction in paid vacation in 1985; and an increase in the monthly limit on flight hours.

In return, the 2,300 pilots will be covered by a new profit-sharing plan which will give them 100 percent of the airline's first \$10 million in pretax earnings, 20 percent of the next \$50 million, 25 percent of the next \$50 million, and 30 percent of any additional earnings.

TWA, however, has been unprofitable for several years, reporting a \$44.5 million pretax loss for 1982. The airline's financial condition was also indicated by the fact that the parent Trans World Corp. recently "spun off" TWA. C. E. Meyer, president of TWA, said the parent company's directors feared that TWA's large debts endangered Trans World Corp.

TWA also was seeking concessions totaling \$60 million from 9,400 ground service workers represented by the Machinists, and 6,800 workers represented by the Independent Federation of Flight Attendants.

Also in the airline industry, the Department of Labor implemented requirements of the Airline Deregulation Act of 1978 by issuing rules requiring 38 air carriers to give hiring preference to workers laid off after the effective date of the Act. The laid-off employees are required to have at least 4 years of service with any of the nine airlines that

"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.

existed prior to the Act. The layoff need not to have been caused by deregulation. The airlines are permitted to recall all of their own laid-off workers before hiring from the pool of "protected" workers. The nine airlines have laid off 7.5 percent of their workers since the deregulation law was enacted.

The new rules, expected to become effective early in 1984, could be followed by adoption of rules giving displaced workers monthly payments for up to 72 months. This benefit will start only if the Civil Aeronautics Board determines that the job terminations resulted from deregulation.

UMW delegates accept some rule changes

At the United Mine Workers triennial convention, President Richard Trumka pressed for changes in the union's constitution and operating rules which would give him more control of the union and its collective bargaining procedure. The delegates rejected the package of changes, but subsequently considered the parts separately and approved certain items after making some revisions.

One of the new approaches permits Trumka to call selective strikes against coal operators, a major departure from the union's tradition of striking all operators simultaneously under a "no contract, no work" policy. However, Trumka's decisions can be reversed by a two-thirds vote of the union's 24-person international executive board. Trumka had been seeking a constitutional change requiring a two-thirds vote by the board to overturn *any* decisions he made regarding union affairs, replacing the current majority vote rule.

Another resolution adopted by the 1,400 delegates established a strike fund not to exceed \$70 million, financed by an assessment of 2.5 percent of each miner's pay. (Trumka had been seeking a 5-percent assessment to continue for periods of up to 2 years). This resolution also eliminated a 41-member bargaining council which approved collective bargaining settlements before they were submitted to working miners for a final decision. In recent years, UMW bargainers had negotiated several contracts that were rejected by the council, leading to charges that some members' votes were motivated by union political considerations.

In another departure from past practice backed by Trumka, the delegates did not adopt specific goals for the coming bargaining session with the Bituminous Coal Operators' Association. Instead, they adopted a resolution saying simply, "No backward steps. No takeaway contracts." The union's contract with the BCOA is scheduled to expire on September 30, 1984, but several small contracts in the western coal field will expire earlier.

Workers aid production switch to radial tires

In Tyler, Tex., employees of a Kelly-Springfield Tire Co. plant agreed to reductions in labor costs in return for company assurances to spend \$250 million to convert the facility to production of radial tires. The plant has been operating at about 80 percent of capacity producing bias ply tires,

which are declining in popularity. John Nash, president of Local 746 of the Rubber Workers, said he did not anticipate any layoffs of the 1,100 employees during the conversion process.

The new contract calls for changes in work rules, health insurance, and other benefits; conversion to an hourly pay system, from a piecework system; and changes in work schedules to permit a 7-day-a-week operation at straight-time pay rates. The parties also established a savings plan under which Kelly-Springfield, a subsidiary of Goodyear Tire & Rubber Co., will contribute 25 cents for each \$1 invested by employees, whose investment is limited to 6 percent of their pay.

The major rubber companies generally operated at a profit in 1983, unlike in 1982, but profit levels were not as high as predicted at the beginning of the year. Despite a surge in sales of tires, the domestic companies encountered several events which held down price hikes, including hard bargaining on prices by the auto manufacturers, price cutting on replacement tires, and increased low-cost imports from Korea, East Germany, Brazil, and other countries.

Trucking companies still requesting concessions

Although members of the Teamsters union earlier rejected changes in their national contract that would have cut compensation for some workers recalled from layoff, there continued to be instances of employee agreements to aid individual trucking companies.

In one instance, 85 percent of the 3,500 employees of Interstate Motor Freight System agreed to accept company stock in exchange for a 15-percent wage reduction lasting 5 years. An official of the Grand Rapids, Mich., firm said that acceptance of the plan will reduce annual operating costs by \$14 million. At least 90 percent of the workers are expected to eventually participate in the voluntary plan.

An Employee Stock Ownership Plan was initiated at Transcon Inc., the Nation's 10th largest general trucking company. In return for a 12-percent cut in pay over a 5-year period, the 3,200 participating employees will receive shares of company stock giving them 49-percent ownership. A company official acknowledged that the concession would probably total more than twice the value of the stock, based on the current share price, but the impact would be eased somewhat by tax reductions. This action did not undermine or change the existing Teamsters contract because the purchase plan was voluntary and strictly between the company and the employees.

Meat processing developments

ConAgra acquired 13 meatpacking plants from Armour and Co., dismissed 1,800 employees, and began hiring replacements at lower pay and benefit levels. In June 1983, when Armour announced plans to sell its plants, the United Food and Commercial Workers union was informed that the employees would be retained only if they agreed to com-

pensation cuts needed to enable ConAgra to compete effectively. (See *Monthly Labor Review*, September 1983, p. 40.) In the following months, Armour and the union negotiated on the demand without success—union members rejected a proposal that included a \$2.44 cut in their \$10.69 an hour typical pay rate.

Wilson & Co. announced a settlement with the last units of workers it had been bargaining with on wage and benefit cuts. The final accords covered 20 members of the Teamsters union in Logansport, Ind., and 530 members of the United Food and Commercial Workers union at the Fischer Packing Co. unit in Louisville, Ky. Wilson lost \$42.9 million in the fiscal year that ended July 30, 1983. According to a company official, these settlements mean that Wilson could emerge from Chapter 11 bankruptcy proceedings early in 1984. The bankruptcy proceedings had been initiated to shed costly labor contracts with the unions and gain protection from creditors while the company developed a reorganization plan. This action led to a strike which ended when the Food and Commercial Workers union agreed to compensation cuts at a number of plants. (See *Monthly Labor Review*, September 1983, p. 40.)

Sunshine Biscuit accord

The Bakery, Confectionery and Tobacco Workers union and Sunshine Biscuit, Inc., negotiated their first "national" agreement, covering 1,600 employees at facilities in New York City, Columbus, Ga., and Los Angeles and Oakland, Calif. The union valued the 2-year contract package at \$2.16 an hour.

Wages were increased by 70 cents an hour effective immediately and by 60 cents in the second year. The parties also agreed to additional pay adjustments in some job classifications and to begin working toward standardization of pay rates among the facilities.

Benefit changes included \$25,000 lifetime major medical coverage for retirees (formerly \$10,000); a new provision permitting workers to retire when their age plus years of service total 80; and improvements in the vacation plan that will provide the employees with annual paid leave ranging from 2 to 6 weeks, varying by length of service.

Arbitrator says benefit reductions proper

In a ruling that could save the seven Coordinating Committee Steel Companies as much as \$80 million, arbitrator Benjamin Aaron held that the temporary pay cuts provided in the companies' March settlement with the United Steelworkers should trigger corresponding reductions in "wage-related" benefits. Aaron apparently agreed with the companies' position that under their contracts with the union, vacation pay and other benefits tied to wage scales are to be adjusted to reflect "intervening general wage changes." The union had contended that cuts in the wage-related benefits were improper because the parties did not bargain on reducing the benefits. (See *Monthly Labor Review*, Septem-

ber 1983, pp. 37-38, for information on the dispute, and May 1983, pp. 47-48, for the March settlement.)

Elsewhere in the industry, the Steelworkers' executive board warned steel companies that it will reject further demands for wage and benefit concessions. The union contended that the companies were overstepping their contractual right to bargain locally on work rules by pressing for additional concessions on top of those provided by the March national accord. The union also contended that the companies were unduly pressuring the local unions by threatening to move work to those plants where workers accept cuts. The executive board, which is composed of the union's top 29 officers, moved to counter the alleged company tactic by setting up procedures for assuring that all locals are aware of bargaining developments at other locals.

The board's action apparently was triggered by U.S. Steel Corp.'s announcement that if the workers did not agree to concessions, it would eliminate as many as 4,700 jobs at five mills located in Cleveland, Ohio; Chicago, Ill.; Trenton, N.J.; Birmingham, Ala.; and Johnstown, Pa.

Washington's comparable worth case

A federal district judge ordered the State of Washington to immediately raise the salaries of 15,000 workers in predominantly female categories of State workers. The ruling implemented an earlier oral decision in which it was found that the State had discriminated "against women in employment" and "that discrimination has been manifested, according to the evidence, by direct, overt and institutionalized discrimination." (See *Monthly Labor Review*, November 1983, p. 75.)

The State, which indicated that it will appeal the decision, said that the decision could cost it nearly \$1 billion, consisting of pay adjustments retroactive to September 16, 1979, and increased costs for pensions and other benefits that vary with pay levels. If upheld, the ruling could set a precedent for cases underway in other States based on the principle of comparable worth, which holds that workers in different classes or types of jobs should be paid the same if their performance requires degrees of aptitude, training, and diligence of comparable worth to society. In addition to these cases, several other States are reviewing their pay structures to determine if such pay inequities exist. Validation of this recent ruling would apparently open many private employers to charges of discrimination in employee compensation.

Briggs and Stratton walkout ends

A 3-month strike against Briggs and Stratton Corp. plants in the Milwaukee area ended when members of Local 232 of the Allied Industrial Workers accepted a 3-year contract with several provisions intended to hold down labor costs. The company, which is the world's largest manufacturer of four-cycle small engines, contended that moderation was necessary to improve its ability to compete with foreign competitors in the United States and overseas.

The company is now permitted to contract out work without consulting the union if such action could lead to the loss of fewer than 50 jobs. Discussions are required if more than 50 jobs are endangered, but the company would still make the final decision.

Another change reduces pay rates as much as \$2.50 an hour for new employees, who will now take 78 weeks (formerly 65 weeks) to progress to the same maximum pay grade as incumbents. In two heavily populated grades, starting and maximum pay rates will be lower for new employees than for incumbents.

Some medical benefits were cut and new employees will

attain eligibility for supplementary benefits such as paid vacations and insurance in stages over a 5-year period. Previously, new employees were eligible for full benefits after 60 days of service.

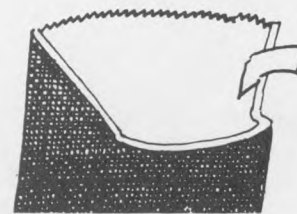
Provisions favorable to the 7,500 employees included a 2-percent pay increase in November 1984 and a \$200-a-month pension supplement to employees with 30 years of service who retire in July 1984 or June 1986. The supplement ceases when the retiree becomes eligible for unreduced social security benefits. A new profit-sharing plan provides for each employee to receive at least \$2,250 in distributions over the term, including an immediate \$500.

Negotiating through a crystal ball

The uncertain character of the forces determining the cost of living makes it very difficult to predict with certainty its future trends. The difficulty inherent in using the cost of living as a determinant in wage negotiations is simply this: Wages are negotiated for a *future* period, whereas cost-of-living data are *historical* in character. It is a comparatively simple task to adjust wages for historical trends in the cost of living if this is the desire of the negotiators. The criterion is of limited usefulness, however, in the attempt to orient wage rates to future trends in the Consumer Price Index. The capricious character of the index makes forecasting extremely hazardous. In any event, for intelligent utilization of this wage determinant, it becomes necessary not only to have accurate information on historical trends, but also to make an assessment of the future trends of the factors that determine the Consumer Price Index. It cannot be emphasized too much that such predictions are fraught with difficulties and uncertainties.

—ARTHUR A. SLOANE AND FRED WITNEY
Labor Relations, 4th ed.
(Englewood Cliffs, N.J., Prentice-Hall,
Inc., 1981), p. 292.

Book Reviews



A guide for the perplexed

Economic Effects of Social Security. By Henry J. Aaron. Washington, D.C., The Brookings Institution, 1982. 107 pp. \$12.95, cloth; \$5.95, paper.

To the average American, social security is a simple topic. The worker and employer jointly make contributions to a somewhat mysterious fund. These contributions (a nice euphemism for taxes) entitle the worker and his or her dependents to a set of cash benefits in the event of premature death, total disability, or retirement, and to medical care at age 65. The key word is "entitle," which explains why the system became so politically popular once it had been in operation long enough for a few generations of workers to have paid their share of the contribution, and, thus, to expect the benefits.

Alas, the topic is not all that simple. Any reader of the *Social Security Handbook* will find that the mere institutional details of eligibility determination and benefit computation are arcane beyond belief. As for the economics of social security, this, too, has become complex and confusing. Until the 1970's, relatively few academic economists paid much attention to social security. Henry J. Aaron was an important exception! Research on social security soon became a growth industry with the resulting studies being both controversial and confusing. For policymakers, controversy may be helpful; confusion is not.

The confusion stems from the nature of the analytical framework chosen by researchers who sought to estimate the effect of social security on saving and labor force participation. Aaron leads the reader step-by-step through the three predominant models in use: the life-cycle model, the multigeneration model, and the short-horizon model. In the first of these, the planning horizons of individuals or households extend to their estimates of their lifespans. In the second, the planning horizons extend beyond death and encompass bequests to heirs. The third views individuals or households as having short-planning horizons. As can be expected, these approaches lead to differing conclusions.

Empirical studies, as Aaron notes, have not been any clearer in their results. The most outstanding example of conflicting evidence is the controversy over whether social security reduces saving. The proposition that it does was adduced by Martin Feldstein (using the life-cycle model). This rapidly became an article of faith among opponents of

social security and thus achieved policy importance in the debates over social security reforms. The econometric debris (to use Aaron's felicitous phrase) that came out of the spate of studies that followed leaves us where we were before Feldstein raised the issue: we still do not know the effect, if any, of social security on saving.

With a clarity that is exceptional for an economist, Aaron leads us through other patches of the social security jungle, including studies of labor supply and income distribution. His main concern, throughout the book, is policy implications of the research. This has the desirable effect of forcing the reader to confront his or her value judgments. For example, is it a good or a bad thing to encourage people to extend their work lives? If it is a good thing, are changes in social security the likeliest place to achieve the desired result?

The value of Aaron's book is its clear explanation of why the existing body of research has failed to provide policymakers with the information they need in order to make rational policy decisions. Whether or not policymakers would respond to clear evidence, if it were available, is another matter. However, I agree with Aaron that the difficult task of dealing with social security's financing problems need not be encumbered with economic myth.

The book is highly recommended as a guide for the perplexed, which should encompass anybody—both expert and layperson—who is not ideologically adept and who wishes to examine the social security program with a tolerable degree of objectivity. It is not recommended for converts to a cause or peddlers of panaceas, as it would only disturb them or give them second thoughts.

—BRUNO STEIN
Professor of Economics
New York University

Book notes

The Measurement of Labor Cost. Edited by Jack E. Triplett. Cambridge, Mass., The National Bureau of Economic Research, 1983. 539 pp. \$55, The University of Chicago Press, Chicago, Ill.

This volume contains the papers and discussion presented at the Conference on the Measurement of Labor Cost held in Williamsburg, Va., December 3–4, 1981. The work rep-

resents the first efforts to join the theory of economic measurement with empirical research on labor cost and worker compensation. In the introduction, Jack E. Triplett points out "that neither the labor economists' idea that the subject is too complex nor the theorists' notion that it is too simple, justifies the neglect of labor market measurement issues."

What are the emerging research issues in the analysis of the employer's behavior toward its workforce? And what data are needed to facilitate the research? The essays and accompanying commentary presented by the 26 contributors give new insights into models for analyzing employer and entrepreneurial behavior, accounting for the nonwage elements of labor compensation, the effect of pensions and other benefits, and the wage-measurement queries raised by income policies.

American Working Class History: A Representative Bibliography. By Maurice F. Neufeld, Daniel J. Leab, Dorothy Swanson. New York, R. R. Bowker Co., 1983, 356 pp. \$29.95.

This is the first major bibliography in the field of labor history and industrial relations in 20 years. More than 7,200 bibliographic entries covering labor activity from colonial times to the present are arranged by a system of more than 80 subject headings.

An unprecedented range of materials are covered: popular and technical books, scholarly monographs, Ph.D. dissertations and M.A. theses, films, State and Federal legislation, union documents, and biographies.

An extensive index covering all authors, agencies, organizations, and institutions cited under each classification is provided at the end of this bibliography.

Publications received

Economic growth and development

Bird, Graham, "Should Developing Countries Use Currency Depreciation as a Tool of Balance of Payments Adjustment: A Review of the Theory and Evidence, and a Guide for the Policy Maker," *The Journal of Development Studies*, July 1983, pp. 461-84.

Canada, Economic Council, "Highlights from the Council's Review of the Canadian Economy for 1983: Twentieth Annual Review," *Au Courant*, Vol. 4, No. 2, 1983, pp. 2-10.

Jennings, A., "The Recurrent Cost Problem in the Least Developed Countries," *The Journal of Development Studies*, July 1983, pp. 504-21.

Kuhn, James W., David Lewin, Paul J. McNulty, "Neil W. Chamberlain: A Retrospective Analysis of His Scholarly Work and Influence," *British Journal of Industrial Relations*, July 1983, pp. 143-60.

Economic and social statistics

Prins, Rienk, "Utilizing Labor Accident Statistics: A Comparative Approach," *International Social Security Review*, Vol. 2, 1983, pp. 222-32.

Russell, Mark S., "Veterans on the Move," *American Demographics*, November 1983, pp. 36-38.

Health and safety

Crapnell, Stephen G., "Meeting the Challenge of Changing Plant Processes," *Occupational Hazards*, October 1983, pp. 69-75.

"Occupational Disease: Elusive Target for Statisticians," *Occupational Hazards*, October 1983, pp. 103-06.

Sheridan, Peter J., "American Industry in Transition: Its Implications for Safety Management," *Occupational Hazards*, October 1983, pp. 67-69.

"The Office Revolution: Health Hazards Coming into Focus," *Occupational Hazards*, October 1983, pp. 79-83.

Industrial relations

American Enterprise Institute for Public Policy Research, *Natural Gas Proposals*. Washington, American Enterprise Institute for Public Policy Research, 1983, 66 pp. (AEI Legislative Analysis, 34, 98th Cong., 1st sess.) \$4.95, paper.

—*Reauthorization of the Clean Water Act*. Washington, American Enterprise Institute for Public Policy Research, Inc., 1983, 48 pp. (AEI Legislative Analysis, 33, 98th Cong., 1st sess.) \$3.95, paper.

Blau, Francine D. and Lawrence M. Kahn, "Unionism, Seniority, and Turnover," *Industrial Relations*, Fall 1983, pp. 362-73.

Lawler, John J. and Greg Hundley, "Determinants of Certification and Decertification Activity," *Industrial Relations*, Fall 1983, pp. 335-48.

McGoldrick, James, "Industrial Relations and the Division of Labor in the Shipbuilding Industry Since the War," *British Journal of Industrial Relations*, July 1983, pp. 197-220.

Poole, Michael and others, "Why Managers Join Unions: Evidence from Britain," *Industrial Relations*, Fall 1983, pp. 426-44.

Porter, Andrew A. and Kent F. Murman, "A Survey of Employer Union Avoidance Practices," *Personnel Administrator*, November 1983, beginning on p. 66.

Rawson, D. W., "British and Australian Labor Law: The Background to the 1982 Bills," *British Journal of Industrial Relations*, July 1983, pp. 161-80.

Walsh, Kenneth, *Strikes in Europe and the United States: Measurement and Incidence*. New York, St. Martin's Press, 1983, 230 pp., bibliography. \$25.

Labor force

"Labor Supply and Spouse's Health: The Effects of Illness, Disability, and Mortality," *Social Science Quarterly*, September 1983, pp. 494-509.

Briggs, Vernon M., Jr., "Non-Immigrant Labor Policy in the United States," *Journal of Economic Issues*, September 1983, pp. 609-30.

Coberly, Sally, "Incentives for Hiring Older Workers—Are Employers Interested?" *Aging and Work*, Vol. 6, No. 1, 1983, pp. 37-48.

Cooney, Rosemary Santana and Vilma Ortiz, "Nativity, National Origin, and Hispanic Female Participation in the Labor Force," *Social Science Quarterly*, September 1983, pp. 510-23.

- Gill, Stephen Joel, Larry C. Coppard, Malcolm A. Lowther, "Mid-life Career Development Theory and Research: Implications for Work and Education," *Aging and Work*, Vol. 6, No. 1, 1983, pp. 15-29.
- Great Britain, Department of Employment, "Equal Opportunities for Women in Employment," by Michael Webb, *Employment Gazette*, September 1983, pp. 397-99.
- "Women—The Vulnerable Group: Microelectronics at Work in the Office," *Employment Gazette*, September 1983, pp. 392-96.
- Leavitt, Roy L., ed., *The Path to Employment: Implications of Recent Research on Placing Disadvantaged Youths in Private Sector Jobs (Proceedings of a Research Utilization Workshop, Nov. 5, 1982)*. New York, Community Council of Greater New York, 1983, 31 pp.
- Martin, Jack K. and Daniel T. Lichter, "Geographic Mobility and Satisfaction with Life and Work," *Social Science Quarterly*, September 1983, pp. 524-35.
- Morrison, Malcolm H., "Aging and the Work Force: Focusing on the Realities," *Aging and Work*, Vol. 6, No. 1, 1983, pp. 49-56.
- Mitchell, Olivia S. and Gary S. Fields, *Rewards to Continued Work: The Economic Incentives for Postponing Retirement*. Cambridge, Mass., National Bureau of Economic Research, Inc., 1983, 26 pp. (NBER Working Paper Series, 1204.) \$1.50.
- Organization for Economic Cooperation and Development, *OECD Employment Outlook*. Paris, Organization for Economic Cooperation and Development, 1983, 103 pp. Available in the United States from the OECD Publications and Information Center, Washington 20006.
- Queen's University, *Termination of Employment: Proceedings of a Symposium Held at Queen's University, Oct 3-4, 1981*. Kingston, Ontario, Queen's University, Industrial Relations Center, 1983, 92 pp. \$5, paper.
- Riche, Martha Farnsworth, "The Blue-Collar Blues . . . Or Whiter than White," *American Demographics*, November 1983, pp. 20-23.
- U.S. Bureau of Labor Statistics, *Workers, Jobs, and Statistics: Questions and Answers on Labor Force Statistics*. Prepared by Diane M. Nilsen. Washington, 1983, 39 pp., bibliography. (Report, 698.)

Management and organization theory

- Abraham, Katharine G. and James L. Medoff, *Years of Service and Probability of Promotion*. Cambridge, Mass., National Bureau of Economic Research, Inc., 1983, 29 pp. (NBER Working Paper Series, 1191.) \$1.50.
- Great Britain, Department of Employment, "Quality of Working Life—A Report for 1982," *Employment Gazette*, August 1983, beginning on p. 338.
- Heisel, W. D., "Alternatives to Traditional Civil Service," *Public Personnel Management Journal*, Fall 1983, pp. 277-81.
- Human Resource Management and Computerization," *Personnel Administrator*, September 1983, beginning on p. 21.
- Jackall, Robert, "Moral Mazes: Bureaucracy and Managerial Work," *Harvard Business Review*, September-October 1983, pp. 118-30.

- Koehn, Hank E., "The Post-Industrial Worker," *Public Personnel Management Journal*, Fall 1983, pp. 244-48.
- Manz, Charles C., *The Art of Self-Leadership: Strategies for Personal Effectiveness in Your Life and Work*. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1983, 115 pp. \$13.95, cloth; \$5.95, paper.
- Rubin, Murray, *Federal-State Relations in Unemployment Insurance: A Balance of Power*. Kalamazoo, Mich., W. E. Upjohn Institute for Employment Research, 1983, 258 pp.
- Souder, William E. and Anna Mae Leksich, "Assessment Centers are Evolving Toward a Bright Future," *Personnel Administrator*, November 1983, pp. 80-87.

Monetary and fiscal policy

- Auerbach, Alan J., "Taxation, Corporate Financial Policy and the Cost of Capital," *The Journal of Economic Literature*, September 1983, pp. 905-40.
- Duncan, Marvin, "Government Lending: Some Insights from Agriculture," *Economic Review*, Federal Reserve Bank of Kansas City, September-October 1983, pp. 3-6.
- Garrison, Charles B., "The 1964 Tax Cut: Supply-Side Economics or Demand Stimulus?" *Journal of Economic Issues*, September 1983, pp. 681-96.
- Mitchell, Karlyn, "Taxation of Corporate Income," *Economic Review*, Federal Reserve Bank of Kansas City, September-October 1983, pp. 7-23.

Urban affairs

- Baker, Carole, "Tracking Washington's Metro," *American Demographics*, November 1983, pp. 30-35.
- Fulton, Philip N., "Are We Solving the Commuting Problem?" *American Demographics*, November 1983, beginning on p. 16.

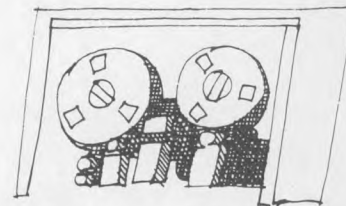
Wages and compensation

- Abowd, John M. and Mark R. Killingsworth, "Sex Discrimination, Atrophy, and the Male-Female Wage Differential," *Industrial Relations*, Fall 1983, pp. 387-402.
- Wisconsin, Department of Industry, *Labor and Human Relations, Wages and Contributions Covered by Wisconsin U.C. Law, Table 211, 1982*. Madison, Wisconsin Department of Industry, Labor and Human Relations, 1983, 28 pp. (Issue, 45.)

Welfare programs and social insurance

- Bane, Mary Jo and David T. Ellwood, *Slipping Into and Out of Poverty: The Dynamics of Spells*. Cambridge, Mass., National Bureau of Economic Research, Inc., 1983, 38 pp. (NBER Working Paper Series, 1199.) \$1.50.
- Berlin, Sharon B. and Linda E. Jones, "Life After Welfare: AFDC Termination Among Long-Term Recipients," *Social Service Review*, September 1983, pp. 378-402.
- Canada, Department of Health and Welfare, "Canadian Approaches to Social Security," *International Social Security Review*, Vol. 2, 1983, pp. 233-56.
- Grana, John M., "Disability Allowances for Long-Term Care in Western Europe and the United States," *International Social Security Review*, Vol. 2, 1983, pp. 207-21. □

Current Labor Statistics



Notes on Current Labor Statistics	72
Schedule of release dates for major BLS statistical series	72
Employment data from household survey. Definitions and notes	73
1. Employment status of the noninstitutional population, 16 years and over, selected years, 1950-83	73
2. Employment status of the population, including Armed Forces in the United States, by sex, seasonally adjusted	74
3. Employment status of the civilian population, by sex, age, race, and Hispanic origin, seasonally adjusted	75
4. Selected employment indicators, seasonally adjusted	76
5. Selected unemployment indicators, seasonally adjusted	76
6. Unemployment rates, by sex and age, seasonally adjusted	77
7. Unemployed persons, by reason for unemployment, seasonally adjusted	77
8. Duration of unemployment, seasonally adjusted	77
Employment, hours, and earnings data from establishment surveys. Definitions and notes	78
9. Employment by industry, selected years, 1950-82	79
10. Employment by State	79
11. Employment by industry division and major manufacturing group, seasonally adjusted	80
12. Hours and earnings, by industry division, selected years, 1950-82	81
13. Weekly hours, by industry division and major manufacturing group, seasonally adjusted	82
14. Hourly earnings, by industry division and major manufacturing group	83
15. Hourly Earnings Index, by industry division	83
16. Weekly earnings, by industry division and major manufacturing group	84
17. Indexes of diffusion: industries in which employment increased	84
Unemployment insurance data. Definitions	85
18. Unemployment insurance and employment service operations	85
Price data. Definitions and notes	86
19. Consumer Price Index, 1967-82	87
20. Consumer Price Index, U.S. city average, general summary and selected items	87
21. Consumer Price Index, cross-classification of region and population size class	93
22. Consumer Price Index, selected areas	94
23. Producer Price Indexes, by stage of processing	95
24. Producer Price Indexes, by commodity groupings	96
25. Producer Price Indexes, by special commodity groupings	98
26. Producer Price Indexes, by durability of product	98
27. Producer Price Indexes for the output of selected SIC industries	99
Productivity data. Definitions and notes	100
28. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years, 1950-82	100
29. Annual changes in productivity, hourly compensation, unit costs, and prices, 1972-82	101
30. Quarterly indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted	101
31. Percent change from preceding quarter and year in productivity, hourly compensation, unit costs, and prices	102
Wage and compensation data. Definitions and notes	103
32. Employment Cost Index, total compensation, by occupation and industry group	104
33. Employment Cost Index, wages and salaries, by occupation and industry group	105
34. Employment Cost Index, private nonfarm workers, by bargaining status, region, and area size	106
35. Wage and compensation change, major collective bargaining settlements, 1978 to date	107
36. Effective wage adjustments in collective bargaining units covering 1,000 workers or more, 1978 to date	107
Work stoppage data. Definition	108
37. Work stoppages involving 1,000 workers or more, 1947 to date	108

NOTES ON CURRENT LABOR STATISTICS

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics. A brief introduction to each group of tables provides definitions, notes on the data, sources, and other material usually found in footnotes.

Readers who need additional information are invited to consult the BLS regional offices listed on the inside front cover of this issue of the *Review*. Some general notes applicable to several series are given below.

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might otherwise mask short-term movements of the statistical series. Tables containing these data are identified as "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 labor force data in tables 3-8 were revised in the February 1984 issue of the *Review*, to reflect experience through 1983.

Beginning in January 1980, the BLS introduced two major modifications in the seasonal adjustment methodology for labor force data. First, the data are being seasonally adjusted with a new procedure called X-11/ARIMA, which was developed at Statistics Canada as an extension of the standard X-11 method. 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 now being calculated for use during the first 6 months of the year, rather than for the entire year, and then are calculated at mid-year for the July-December period. Revisions of historical data continue to be made only at the end of each calendar year.

Annual revision of the seasonally adjusted payroll data shown in tables 11, 13, and 15 were made in August 1981 using the X-11 ARIMA seasonal adjustment methodology. New seasonal factors for productivity data in tables 29 and 30 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 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 resulting values are described as "real," "constant," or "1967" dollars.

Availability of information. Data that supplement the tables in this section are published by the Bureau of Labor Statistics in a variety of sources. Press releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule given below. More information from household and establishment surveys is provided in *Employment and Earnings*, a monthly publication of the Bureau. Comparable household information is published in a two-volume data book—*Labor Force Statistics Derived From the Current Population Survey*, Bulletin 2096. Comparable establishment information appears in two data books—*Employment and Earnings, United States*, and *Employment and Earnings, States and Areas*, and their annual supplements. More detailed information on wages and other aspects of collective bargaining appears in the monthly periodical, *Current Wage Developments*. More detailed price information is published each month in the periodicals, the *CPI Detailed Report* and *Producer Prices and Price Indexes*.

Symbols

- p = preliminary. To improve 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.

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	February 3	January	March 9	February	April 6	March	1-11
U.S. Import and Export Price Indexes	February 8	4th quarter	.....	.....	.....	.....	.....
Producer Price Index	February 10	January	March 16	February	April 13	March	23-27
Consumer Price Index	February 24	January	March 23	February	April 24	March	19-22
Real earnings	February 24	January	March 23	February	April 24	March	12-16
Productivity and costs:							
Nonfinancial corporations	February 28	4th quarter	.....	.....	.....	.....	28-31
Nonfarm business and manufacturing . . . . .	.....	.....	.....	.....	April 26	1st quarter	28-31
Major collective bargaining settlements . . . . .	.....	.....	.....	.....	April 27	1st quarter	35-36
Employment Cost Index . . . . .	.....	.....	.....	.....	April 30	1st quarter	32-34

EMPLOYMENT DATA FROM THE HOUSEHOLD SURVEY

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 60,000 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 **unemployment**

rate for all civilian workers 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 presented in table 1. 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 2-8 are seasonally adjusted, based on the seasonal experience through December 1983.

1. Employment status of the noninstitutional population, 16 years and over, selected years, 1950-83

[Numbers in thousands]

Year	Noninstitutional population	Labor force										Not in labor force
		Number	Percent of population	Employed						Unemployed		
				Total	Percent of population	Resident Armed Forces	Civilian			Number	Percent of labor force	
							Total	Agriculture	Nonagricultural industries			
1950	106,164	63,377	59.7	60,087	56.6	1,189	58,918	7,160	51,758	3,288	5.2	42,787
1955	111,747	67,087	60.0	64,234	57.5	2,064	62,170	6,450	55,722	2,852	4.3	44,660
1960	119,106	71,489	60.0	67,639	56.8	1,861	65,778	5,458	60,318	3,852	5.4	46,617
1965	128,459	76,401	59.5	73,034	56.9	1,946	71,088	4,361	66,726	3,366	4.4	52,058
1966	130,180	77,892	59.8	75,017	57.6	2,122	72,895	3,979	68,915	2,875	3.7	52,288
1967	132,092	79,565	60.2	76,590	58.0	2,218	74,372	3,844	70,527	2,975	3.7	52,527
1968	134,281	80,990	60.3	78,173	58.2	2,253	75,920	3,817	72,103	2,817	3.5	53,291
1969	136,573	82,972	60.8	80,140	58.7	2,238	77,902	3,606	74,296	2,832	3.4	53,602
1970	139,203	84,889	61.0	80,796	58.0	2,118	78,678	3,463	75,215	4,093	4.8	54,315
1971	142,189	86,355	60.7	81,340	57.2	1,973	79,367	3,394	75,972	5,016	5.8	55,834
1972	145,939	88,847	60.9	83,966	57.5	1,813	82,153	3,484	78,669	4,882	5.5	57,091
1973	148,870	91,203	61.3	86,838	58.3	1,774	85,064	3,470	81,594	4,355	4.8	57,667
1974	151,841	93,670	61.7	88,515	58.3	1,721	86,794	3,515	83,279	5,156	5.5	58,171
1975	154,831	95,453	61.6	87,524	56.5	1,678	85,845	3,408	82,438	7,929	8.3	59,377
1976	157,818	97,826	62.0	90,420	57.3	1,668	88,752	3,331	85,421	7,406	7.6	59,991
1977	160,689	100,669	62.6	93,673	58.3	1,656	92,017	3,283	88,734	6,991	6.9	60,255
1978	153,541	103,882	63.5	97,679	59.7	1,631	96,048	3,387	92,661	6,202	6.0	59,659
1979	166,460	106,559	64.0	100,421	60.3	1,597	98,824	3,347	95,477	6,137	5.8	59,900
1980	169,349	108,544	64.1	100,907	59.6	1,604	99,303	3,364	95,938	7,637	7.0	60,806
1981	171,775	110,315	65.2	102,042	59.4	1,645	100,397	3,368	97,030	8,273	7.5	61,460
1982	173,939	111,872	64.3	101,194	58.2	1,668	99,526	3,401	96,125	10,578	9.5	62,067
1983	175,891	113,226	64.4	102,510	58.3	1,676	100,834	3,383	97,450	10,717	9.5	62,665

2. Employment status of the population, including Armed Forces in the United States, by sex, seasonally adjusted

[Numbers in thousands]

Employment status and sex	Annual average		1983												
	1982	1983	1982 Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
TOTAL															
Noninstitutional population ^{1,2}	173,939	175,891	174,864	175,021	175,169	175,320	175,465	175,622	175,793	175,970	176,122	176,297	176,474	176,636	176,809
Labor force ²	111,872	113,226	112,538	112,344	112,352	112,399	112,646	112,619	113,573	113,489	113,799	113,924	113,561	113,720	113,824
Participation rate ³	64.3	64.4	64.4	64.2	64.1	64.1	64.2	64.1	64.6	64.5	64.6	64.6	64.3	64.4	64.4
Total employed ²	101,194	102,510	100,644	100,821	100,836	100,980	101,277	101,431	102,411	102,889	103,166	103,571	103,665	104,291	104,629
Employment-population rate ⁴	58.2	58.3	57.6	57.6	57.6	57.6	57.7	57.8	58.3	58.5	58.6	58.7	58.7	59.0	59.2
Resident Armed Forces ¹	1,668	1,676	1,665	1,667	1,664	1,664	1,671	1,669	1,668	1,664	1,682	1,695	1,695	1,685	1,688
Civilian employed	99,526	100,834	98,979	99,154	99,172	99,316	99,606	99,762	100,743	101,225	101,484	101,876	101,970	102,606	102,941
Agriculture	3,401	3,383	3,429	3,420	3,415	3,386	3,392	3,374	3,479	3,499	3,449	3,308	3,240	3,257	3,356
Nonagricultural industries	96,125	97,450	95,550	95,734	95,757	95,930	96,214	96,388	97,264	97,726	98,035	98,568	98,730	99,349	99,585
Unemployed	10,678	10,717	11,894	11,523	11,516	11,419	11,369	11,188	11,162	10,600	10,633	10,353	9,896	9,429	9,195
Unemployment rate ⁵	9.5	9.5	10.6	10.3	10.2	10.2	10.1	9.9	9.8	9.3	9.3	9.1	8.7	8.3	8.1
Not in labor force	62,067	62,665	62,326	62,677	62,817	62,921	62,819	63,003	62,220	62,481	62,323	62,373	62,913	62,916	62,985
Men, 16 years and over															
Noninstitutional population ^{1,2}	83,052	84,064	83,581	83,652	83,720	83,789	83,856	83,931	84,014	84,099	84,173	84,261	84,344	84,423	84,506
Labor force ²	63,979	64,580	64,263	64,017	64,077	64,096	64,311	64,348	64,778	64,840	64,807	64,877	64,709	64,846	64,838
Participation rate ³	77.0	76.8	76.9	76.5	76.5	76.5	76.7	76.7	77.1	77.1	77.0	77.0	76.7	76.8	76.7
Total employed ²	57,800	58,320	57,294	57,334	57,321	57,423	57,589	57,744	58,369	58,592	58,607	58,828	58,950	59,389	59,580
Employment-population rate ⁴	69.6	69.4	68.5	68.5	68.5	68.5	68.7	68.8	69.5	69.7	69.6	69.8	69.9	70.3	70.5
Resident Armed Forces ¹	1,527	1,533	1,529	1,531	1,528	1,528	1,530	1,528	1,525	1,521	1,538	1,549	1,543	1,534	1,537
Civilian employed	56,271	56,787	55,765	55,803	55,793	55,895	56,059	56,216	56,844	57,071	57,069	57,279	57,407	57,855	58,043
Unemployed	6,179	6,260	6,969	6,683	6,756	6,673	6,722	6,604	6,409	6,248	6,200	6,049	5,759	5,457	5,258
Unemployment rate ⁵	9.7	9.7	10.8	10.4	10.5	10.4	10.5	10.3	9.9	9.6	9.6	9.3	8.9	8.4	8.1
Women, 16 years and over															
Noninstitutional population ^{1,2}	90,887	91,827	91,283	91,369	91,449	91,532	91,609	91,691	91,779	91,871	91,949	92,036	92,129	92,214	92,302
Labor force ²	47,894	48,646	48,275	48,327	48,275	48,303	48,335	48,271	48,795	48,649	48,992	49,047	48,852	48,874	48,986
Participation rate ³	52.7	53.0	52.9	52.9	52.8	52.8	52.8	52.6	53.2	53.0	53.3	53.3	53.0	53.0	53.1
Total employed ²	43,395	44,190	43,350	43,487	43,515	43,557	43,688	43,687	44,042	44,297	44,559	44,743	44,715	44,902	45,049
Employment-population rate ⁴	47.7	48.1	47.5	47.6	47.6	47.6	47.7	47.6	48.0	48.2	48.5	48.6	48.5	48.7	48.8
Resident Armed Forces ¹	139	143	136	136	136	136	141	141	143	143	144	146	152	151	151
Civilian employed	43,256	44,047	43,214	43,351	43,379	43,421	43,547	43,546	43,899	44,154	44,415	44,597	44,563	44,751	44,898
Unemployed	4,499	4,457	4,925	4,840	4,760	4,746	4,647	4,584	4,753	4,352	4,433	4,304	4,137	3,972	3,937
Unemployment rate ⁵	9.4	9.2	10.2	10.0	9.9	9.8	9.6	9.5	9.7	8.9	9.0	8.8	8.5	8.1	8.0

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

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

³Labor force as a percent of the noninstitutional population.

⁴Total employed as a percent of the noninstitutional population.

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

NOTE: Monthly data have been revised based on the seasonal experience through December 1983.

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

[Numbers in thousands]

Employment status	Annual average		1982		1983											
	1982	1983	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
TOTAL																
Civilian noninstitutional population ¹	172,271	174,215	173,199	173,354	173,505	173,656	173,794	173,953	174,125	174,306	174,440	174,602	174,779	174,951	175,121	
Civilian labor force	110,204	111,550	110,873	110,677	110,688	110,735	110,975	110,950	111,905	111,825	112,117	112,229	111,866	112,035	112,136	
Participation rate	64.0	64.0	64.0	63.8	63.8	63.8	63.9	63.8	64.3	64.2	64.3	64.3	64.0	64.0	64.0	
Employed	99,526	100,034	98,979	99,154	99,172	99,316	99,606	99,762	100,743	101,225	101,484	101,876	101,970	102,606	102,941	
Employment-population ratio ²	57.8	57.9	57.1	57.2	57.2	57.2	57.3	57.3	57.9	58.1	58.2	58.3	58.3	58.6	58.8	
Unemployed	10,678	10,717	11,894	11,523	11,516	11,419	11,369	11,188	11,162	10,600	10,633	10,353	9,896	9,429	9,195	
Unemployment rate	9.7	9.6	10.7	10.4	10.4	10.3	10.2	10.1	10.0	9.5	9.5	9.2	8.8	8.4	8.2	
Not in labor force	62,067	62,665	62,326	62,677	62,817	62,921	62,819	63,003	62,220	62,481	62,323	62,373	62,913	62,916	62,985	
Men, 20 years and over																
Civilian noninstitutional population ¹	73,644	74,872	74,236	74,339	74,434	74,528	74,611	74,712	74,814	74,927	75,012	75,115	75,216	75,327	75,433	
Civilian labor force	57,980	58,744	58,319	58,131	58,225	58,268	58,512	58,546	58,844	58,982	58,954	59,012	58,949	59,053	59,050	
Participation rate	78.7	78.5	78.6	78.2	78.2	78.2	78.4	78.4	78.7	78.7	78.6	78.6	78.4	78.4	78.3	
Employed	52,891	53,489	52,483	52,508	52,508	52,673	52,830	52,963	53,492	53,765	53,804	53,947	54,140	54,457	54,658	
Employment-population ratio ²	71.8	71.4	70.7	70.6	70.5	70.7	70.8	70.9	71.5	71.8	71.7	71.8	72.0	72.3	72.5	
Agriculture	2,422	2,429	2,419	2,436	2,402	2,425	2,421	2,440	2,497	2,521	2,475	2,431	2,376	2,336	2,374	
Nonagricultural industries	50,469	51,058	50,064	50,072	50,106	50,248	50,409	50,523	50,995	51,244	51,329	51,516	51,764	52,121	52,284	
Unemployed	5,089	5,257	5,836	5,623	5,717	5,595	5,682	5,583	5,352	5,217	5,150	5,065	4,809	4,596	4,392	
Unemployment rate	8.8	8.9	10.0	9.7	9.8	9.6	9.7	9.5	9.1	8.8	8.7	8.6	8.2	7.8	7.4	
Women, 20 years and over																
Civilian noninstitutional population ¹	82,864	84,069	83,383	83,490	83,593	83,699	83,794	83,899	84,008	84,122	84,224	84,333	84,443	84,553	84,666	
Civilian labor force	43,699	44,636	44,188	44,234	44,248	44,259	44,311	44,331	44,684	44,647	44,896	45,062	44,936	44,953	45,024	
Participation rate	52.7	53.1	53.0	53.0	53.0	52.9	52.9	52.8	53.2	53.1	53.3	53.4	53.2	53.2	53.2	
Employed	40,086	41,004	40,162	40,255	40,315	40,368	40,531	40,583	40,847	41,123	41,298	41,550	41,570	41,738	41,843	
Employment-population ratio ²	48.4	48.8	48.2	48.2	48.2	48.2	48.4	48.4	48.6	48.9	49.0	49.3	49.2	49.4	49.4	
Agriculture	601	620	610	617	640	632	621	605	634	613	627	581	597	638	653	
Nonagricultural industries	39,485	40,384	39,552	39,638	39,675	39,736	39,910	39,978	40,213	40,510	40,671	40,969	40,973	41,100	41,190	
Unemployed	3,613	3,632	4,026	3,979	3,933	3,891	3,780	3,748	3,837	3,524	3,598	3,512	3,366	3,215	3,183	
Unemployment rate	8.3	8.1	9.1	9.0	8.9	8.8	8.5	8.5	8.6	7.9	8.0	7.8	7.5	7.2	7.1	
Both sexes, 16 to 19 years																
Civilian noninstitutional population ¹	15,763	15,274	15,580	15,525	15,478	15,429	15,389	15,342	15,303	15,257	15,204	15,154	15,120	15,072	15,022	
Civilian labor force	8,526	8,171	8,366	8,312	8,215	8,208	8,152	8,073	8,377	8,196	8,267	8,155	7,981	8,029	8,062	
Participation rate	54.1	53.5	53.7	53.5	53.1	53.2	52.6	52.6	54.7	53.7	54.4	53.8	52.8	53.3	53.7	
Employed	6,549	6,342	6,334	6,391	6,349	6,275	6,245	6,216	6,404	6,337	6,382	6,379	6,260	6,411	6,440	
Employment-population ratio ²	41.5	41.5	40.7	41.2	41.0	40.7	40.6	40.5	41.8	41.5	42.0	42.1	41.4	42.5	42.9	
Agriculture	378	334	400	367	373	329	350	329	348	365	347	296	267	283	329	
Nonagricultural industries	6,171	6,008	5,934	6,024	5,976	5,946	5,895	5,887	6,056	5,972	6,035	6,083	5,993	6,128	6,111	
Unemployed	1,977	1,829	2,032	1,921	1,866	1,933	1,907	1,857	1,973	1,859	1,885	1,776	1,721	1,618	1,622	
Unemployment rate	23.2	22.4	24.3	23.1	22.7	23.6	23.4	23.0	23.6	22.7	22.8	21.8	21.6	20.2	20.1	
White																
Civilian noninstitutional population ¹	149,441	150,805	150,056	150,129	150,187	150,382	150,518	150,671	150,810	150,959	151,003	151,021	151,175	151,324	151,484	
Civilian labor force	96,143	97,021	96,613	96,287	96,238	96,265	96,450	96,472	97,235	97,255	97,498	97,507	97,339	97,559	97,724	
Participation rate	64.3	64.3	64.4	64.1	64.1	64.0	64.0	64.0	64.5	64.4	64.6	64.6	64.4	64.5	64.5	
Employed	87,903	88,893	87,292	87,481	87,367	87,530	87,854	88,004	88,836	89,260	89,503	89,693	89,851	90,430	90,779	
Employment-population ratio ²	58.8	58.9	58.2	58.3	58.2	58.2	58.4	58.4	58.9	59.1	59.3	59.4	59.4	59.8	59.9	
Unemployed	8,241	8,128	9,321	8,806	8,871	8,735	8,596	8,468	8,399	7,995	7,995	7,814	7,488	7,129	6,945	
Unemployment rate	8.6	8.4	9.6	9.1	9.2	9.1	8.9	8.8	8.6	8.2	8.2	8.0	7.7	7.3	7.1	
Black																
Civilian noninstitutional population ¹	18,584	18,925	18,740	18,768	18,796	18,823	18,851	18,880	18,911	18,942	18,966	18,994	19,026	19,057	19,086	
Civilian labor force	11,331	11,647	11,547	11,544	11,561	11,573	11,651	11,645	11,718	11,741	11,724	11,720	11,565	11,623	11,650	
Participation rate	61.0	61.5	61.6	61.5	61.5	61.5	61.8	61.7	62.0	62.0	61.8	61.7	60.8	61.0	61.0	
Employed	9,189	9,375	9,128	9,158	9,272	9,249	9,245	9,277	9,339	9,443	9,408	9,504	9,449	9,563	9,582	
Employment-population ratio ²	49.4	49.5	48.7	48.8	49.3	49.1	49.0	49.1	49.4	49.9	49.6	50.0	49.7	50.2	50.2	
Unemployed	2,142	2,272	2,419	2,386	2,289	2,324	2,406	2,368	2,379	2,298	2,316	2,216	2,116	2,060	2,068	
Unemployment rate	18.9	19.5	20.0	20.7	19.8	20.1	20.7	20.3	20.3	19.6	19.8	18.9	18.3	17.7	17.8	
Hispanic origin																
Civilian noninstitutional population ¹	9,400	12,771	9,301	9,328	9,368	9,551	9,665	9,747	9,738	9,640	9,690	9,700	9,745	9,677	9,735	
Civilian labor force	5,983	8,119	5,938	5,986	6,001	6,070	6,161	6,139	6,202	6,090	6,145	6,202	6,165	6,232	6,267	
Participation rate	63.6	63.6	63.8	64.2	64.1	63.6	63.7	63.0	63.7	63.2	63.4	63.9	63.3	64.4	64.4	
Employed	5,158	6,995	5,016	5,063	5,071	5,114	5,259	5,284	5,336	5,339	5,350	5,392	5,398	5,463	5,540	
Employment-population ratio ²	54.9	54.8	53.9	54.3	54.1	53.5	54.4	54.2	54.8	55.4	55.2	55.6	55.4	56.5	56.9	
Unemployed	825	1,124	922	923	930	956	902	855	866	751	795	810	767	769	727	
Unemployment rate	13.8	13.8	15.5	15.4	15.5	15.7	14.6	13.9	14.0	12.3	12.9	13.1	12.4	12.3	11.6	

¹The population figures are not seasonally adjusted.

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

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

NOTE: Monthly data have been revised based on the seasonal experience through December 1983.

4. Selected employment indicators, seasonally adjusted

[In thousands]

Selected categories	Annual average		1983												
	1982	1983	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CHARACTERISTIC															
Civilian employed, 16 years and over	99,526	100,834	98,979	99,154	99,172	99,316	99,606	99,762	100,743	101,225	101,484	101,876	101,970	102,606	102,941
Men	56,271	56,787	55,765	55,803	55,793	55,895	56,059	56,216	56,844	57,071	57,069	57,279	57,407	57,855	58,043
Women	43,256	44,047	43,214	43,351	43,379	43,421	43,547	43,546	43,899	44,154	44,415	44,597	44,563	44,751	44,898
Married men, spouse present	38,074	37,967	37,492	37,498	37,491	37,545	37,602	37,616	37,911	38,254	38,281	38,232	38,240	38,388	38,494
Married women, spouse present	24,053	24,603	24,129	24,182	24,129	24,220	24,361	24,304	24,416	24,618	24,905	24,921	24,953	25,057	25,140
Women who maintain families	5,099	5,091	4,985	5,029	5,016	5,093	4,969	4,991	5,029	5,071	5,096	5,124	5,172	5,236	5,254
MAJOR INDUSTRY AND CLASS OF WORKER															
Agriculture:															
Wage and salary workers	1,505	1,579	1,567	1,616	1,617	1,558	1,578	1,588	1,624	1,631	1,628	1,572	1,505	1,481	1,512
Self-employed workers	1,636	1,565	1,609	1,589	1,562	1,584	1,595	1,558	1,591	1,573	1,564	1,515	1,527	1,556	1,572
Unpaid family workers	261	240	224	231	230	265	219	233	252	251	240	236	227	224	265
Nonagricultural industries:															
Wage and salary workers	88,462	89,500	87,827	87,865	87,916	88,078	88,390	88,584	89,345	89,687	90,032	90,743	90,617	91,094	91,422
Government	15,562	15,537	15,486	15,428	15,510	15,479	15,524	15,530	15,514	15,593	15,671	15,560	15,578	15,585	15,481
Private industries	72,945	73,963	72,341	72,437	72,406	72,599	72,866	73,054	73,831	74,094	74,361	75,183	75,039	75,509	75,941
Private households	1,207	1,247	1,181	1,180	1,222	1,234	1,221	1,238	1,295	1,276	1,270	1,279	1,278	1,216	1,241
Other	71,738	72,716	71,160	71,257	71,184	71,365	71,645	71,816	72,536	72,818	73,091	73,904	73,761	74,293	74,700
Self-employed workers	7,262	7,575	7,355	7,440	7,403	7,456	7,504	7,448	7,510	7,595	7,641	7,656	7,695	7,800	7,734
Unpaid family workers	401	376	373	374	354	344	354	345	352	322	375	380	405	474	450
PERSONS AT WORK¹															
Nonagricultural industries	90,552	92,038	90,064	90,726	90,276	90,450	92,233	91,070	90,913	92,126	91,953	93,322	93,273	93,834	94,173
Full-time schedules	72,245	73,624	71,470	71,764	71,703	72,035	73,567	72,949	73,071	73,844	73,499	74,666	75,047	75,398	75,802
Part time for economic reasons	5,852	5,997	6,367	6,678	6,362	6,169	6,077	5,965	5,886	5,700	5,866	6,027	5,724	5,848	5,712
Usually work full time	2,169	1,826	2,103	2,138	2,059	1,934	1,888	1,748	1,777	1,781	1,742	1,771	1,617	1,719	1,672
Usually work part time	3,683	4,171	4,264	4,540	4,303	4,235	4,189	4,217	4,109	3,919	4,124	4,256	4,107	4,129	4,040
Part time for noneconomic reasons	12,455	12,417	12,227	12,284	12,211	12,246	12,589	12,156	11,956	12,582	12,588	12,629	12,502	12,588	12,659

¹ Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

NOTE: Monthly data have been revised based on the seasonal experience through December 1983.

5. Selected unemployment indicators, seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		1983												
	1982	1983	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CHARACTERISTIC															
Total, all civilian workers	9.7	9.6	10.7	10.4	10.4	10.3	10.2	10.1	10.0	9.5	9.5	9.2	8.8	8.4	8.2
Both sexes, 16 to 19 years	23.2	22.4	24.3	23.1	22.7	23.6	23.4	23.0	23.6	22.7	22.8	21.8	21.6	20.2	20.1
Men, 20 years and over	8.8	8.9	10.0	9.7	9.8	9.6	9.7	9.5	9.1	8.8	8.7	8.6	8.2	7.8	7.4
Women, 20 years and over	8.3	8.1	9.1	9.0	8.9	8.8	8.5	8.5	8.6	7.9	8.0	7.8	7.5	7.2	7.1
White, total	8.6	8.4	9.6	9.1	9.2	9.1	8.9	8.8	8.6	8.2	8.2	8.0	7.7	7.3	7.1
Both sexes, 16 to 19 years	20.4	19.3	21.6	20.3	20.1	21.1	20.3	19.9	20.1	19.4	19.5	18.2	18.5	17.2	17.0
Men, 16 to 19 years	21.7	20.2	22.8	21.5	21.4	22.6	21.4	20.4	20.3	20.3	20.7	18.9	19.8	17.6	17.5
Women, 16 to 19 years	19.0	18.3	20.4	19.0	18.7	19.6	19.1	19.4	19.7	18.4	18.2	17.4	16.9	16.6	16.5
Men, 20 years and over	7.8	7.9	9.1	8.5	8.8	8.5	8.5	8.4	7.9	7.7	7.7	7.7	7.3	6.9	6.7
Women, 20 years and over	7.3	6.9	8.1	7.9	7.7	7.5	7.3	7.2	7.4	6.8	6.7	6.6	6.3	6.0	5.9
Black, total	18.9	19.5	20.9	20.7	19.8	20.1	20.7	20.3	20.3	19.6	19.8	18.9	18.3	17.7	17.8
Both sexes, 16 to 19 years	48.0	48.5	49.1	47.0	46.5	45.1	49.1	48.4	49.8	48.4	51.4	51.1	48.7	47.3	49.0
Men, 16 to 19 years	48.9	48.8	52.1	48.0	47.2	46.5	48.6	52.1	50.7	48.3	53.7	52.7	45.6	44.9	46.4
Women, 16 to 19 years	47.1	48.2	45.8	45.7	45.7	43.5	49.6	44.1	48.7	48.4	48.8	49.2	52.2	50.0	51.9
Men, 20 years and over	17.8	18.1	20.7	19.9	18.8	19.1	20.0	19.5	18.9	18.6	18.2	16.9	16.3	15.6	15.1
Women, 20 years and over	15.4	16.5	16.7	17.4	16.9	17.4	16.9	17.0	16.9	16.2	16.4	16.1	15.9	15.6	15.9
Hispanic origin, total	13.8	13.8	15.5	15.4	15.5	15.7	14.6	13.9	14.0	12.3	12.9	13.1	12.4	12.3	11.6
Married men, spouse present	6.5	6.5	7.5	7.2	7.2	7.1	7.1	7.0	6.7	6.2	6.3	6.1	5.7	5.5	5.2
Married women, spouse present	7.4	7.0	8.1	7.8	7.6	7.5	7.4	7.4	7.6	7.0	6.9	6.8	6.3	6.0	6.1
Women who maintain families	11.7	12.2	13.3	13.2	13.2	13.3	13.0	12.7	12.5	11.8	11.8	12.0	11.4	10.5	10.9
Full-time workers	9.6	9.5	10.7	10.3	10.4	10.2	10.2	10.0	9.7	9.4	9.3	9.1	8.7	8.2	8.0
Part-time workers	10.5	10.4	11.1	10.7	10.1	10.6	10.5	10.9	11.8	10.2	10.2	10.1	10.0	9.8	9.8
Unemployed 15 weeks and over	3.2	3.8	4.2	4.2	4.2	4.1	4.0	4.1	4.0	3.9	3.6	3.5	3.3	3.1	3.0
Labor force time lost ¹	11.0	10.9	12.2	11.7	11.9	11.7	11.5	11.5	11.1	10.7	10.7	10.5	10.0	9.7	9.4
INDUSTRY															
Nonagricultural private wage and salary workers	10.1	9.9	11.5	10.9	10.8	10.7	10.5	10.4	10.1	9.7	9.8	9.4	9.0	8.6	8.3
Mining	13.4	17.0	18.2	17.6	19.1	19.2	20.3	20.8	17.9	16.6	14.9	16.9	12.1	12.8	12.4
Construction	20.0	18.4	21.6	20.2	19.9	20.2	20.0	20.0	18.4	18.0	17.9	18.1	15.8	15.6	16.3
Manufacturing	12.3	11.2	14.2	13.1	13.1	12.8	12.5	12.3	11.6	10.7	11.2	10.2	9.6	8.9	8.3
Durable goods	13.3	12.1	16.1	14.7	14.5	14.3	13.7	13.5	12.5	11.4	11.7	10.9	10.2	9.0	8.3
Nondurable goods	10.8	10.0	11.4	10.8	11.0	10.8	10.8	10.6	10.2	9.7	10.5	9.3	8.7	8.7	8.2
Transportation and public utilities	6.8	7.4	8.0	7.8	8.0	7.6	7.7	7.3	7.8	7.3	7.7	7.4	7.2	6.7	6.5
Wholesale and retail trade	10.0	10.0	11.1	10.8	10.9	10.9	10.4	10.2	10.2	9.8	9.8	9.5	9.8	9.1	8.8
Finance and service industries	6.9	7.2	8.0	7.6	7.4	7.3	7.3	7.5	7.2	7.3	7.2	7.0	6.9	6.7	6.6
Government workers	4.9	5.3	5.3	5.6	5.8	5.7	5.8	5.6	5.1	5.4	5.1	5.0	5.1	4.9	5.0
Agricultural wage and salary workers	14.7	16.0	16.3	15.7	16.3	15.9	16.8	16.8	16.5	15.0	15.1	16.5	16.2	15.7	15.6

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

NOTE: Monthly data have been revised based on the seasonal experience through December 1983.

6. Unemployment rates by sex and age, seasonally adjusted

[Civilian workers]

Sex and age	Annual average		1982												
	1982	1983	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total, 16 years and over	9.7	9.6	10.7	10.4	10.4	10.3	10.2	10.1	10.0	9.5	9.5	9.2	8.8	8.4	8.2
16 to 24 years	17.8	17.2	18.9	18.4	18.3	18.2	18.1	18.0	17.6	16.8	17.2	16.5	16.3	15.4	14.9
16 to 19 years	23.2	22.4	24.3	23.1	22.7	23.6	23.4	23.0	23.6	22.7	22.8	21.8	21.6	20.2	20.1
16 to 17 years	24.9	24.5	27.5	24.5	24.0	25.4	25.8	25.6	25.6	25.1	24.8	24.0	24.0	21.9	22.9
18 to 19 years	22.1	21.1	22.7	22.0	21.8	22.6	21.9	21.3	22.3	20.8	21.6	20.5	20.3	19.3	18.8
20 to 24 years	14.9	14.5	16.1	16.0	16.1	15.4	15.4	15.5	14.5	13.9	14.4	13.8	13.6	13.0	12.2
25 years and over	7.4	7.5	8.4	8.1	8.2	8.1	8.0	7.9	7.9	7.4	7.3	7.2	6.8	6.5	6.4
25 to 54 years	7.9	8.0	9.0	8.7	8.7	8.7	8.5	8.5	8.3	7.9	7.8	7.7	7.2	6.9	6.8
55 years and over	5.0	5.3	5.7	5.4	5.4	5.4	5.5	5.3	5.5	5.3	5.1	5.2	5.0	4.9	4.9
Men, 16 years and over	9.9	9.9	11.1	10.7	10.8	10.7	10.7	10.5	10.1	9.9	9.8	9.6	9.1	8.6	8.3
16 to 24 years	19.1	18.4	20.5	19.8	19.8	19.4	19.5	19.5	18.6	18.4	18.6	17.6	17.3	15.9	15.6
16 to 19 years	24.4	23.3	25.7	24.3	24.0	25.1	24.4	23.9	24.0	23.8	24.3	22.8	22.5	20.2	20.4
16 to 17 years	26.4	25.2	28.7	24.8	24.4	26.3	26.9	26.7	26.0	27.3	26.0	23.9	24.3	22.0	23.3
18 to 19 years	23.1	22.2	24.2	23.7	23.5	24.4	22.9	22.3	22.8	21.2	23.2	22.2	21.6	19.6	18.9
20 to 24 years	16.4	15.9	17.9	17.6	17.6	16.6	17.0	17.3	15.9	15.8	15.7	15.0	14.7	13.8	13.3
25 years and over	7.5	7.8	8.7	8.3	8.5	8.4	8.4	8.2	7.9	7.6	7.5	7.5	7.0	6.8	6.5
25 to 54 years	8.0	8.2	9.2	8.8	9.0	9.0	8.9	8.8	8.4	8.1	8.0	8.0	7.4	7.1	6.7
55 years and over	5.1	5.6	6.2	5.8	5.8	5.8	6.1	5.8	5.5	5.5	5.4	5.6	5.4	5.4	5.4
Women, 16 years and over	9.4	9.2	10.2	10.0	9.9	9.9	9.6	9.5	9.8	9.0	9.1	8.8	8.5	8.2	8.1
16 to 24 years	16.2	15.8	17.1	16.8	16.7	16.8	16.6	16.3	16.4	15.0	15.7	15.2	15.1	14.7	14.0
16 to 19 years	21.9	21.3	22.8	21.8	21.3	21.9	22.3	22.0	23.1	21.5	21.1	20.6	20.5	20.1	19.8
16 to 17 years	23.2	23.7	26.1	24.1	23.6	24.4	24.7	24.4	25.2	22.6	23.4	24.0	23.6	21.8	22.5
18 to 19 years	21.0	19.9	21.2	20.1	19.9	20.6	20.7	20.2	21.7	20.5	19.9	18.5	18.8	19.0	18.7
20 to 24 years	13.2	12.9	14.1	14.2	14.3	14.1	13.6	13.4	12.9	11.7	12.8	12.5	12.3	12.0	11.0
25 years and over	7.3	7.2	8.1	8.0	7.8	7.7	7.5	7.5	7.8	7.1	7.0	6.9	6.5	6.2	6.3
25 to 54 years	7.7	7.7	8.8	8.6	8.3	8.3	8.0	8.1	8.1	7.6	7.5	7.3	7.0	6.6	6.8
55 years and over	4.8	4.7	5.1	4.9	4.9	4.8	4.6	4.7	5.5	5.1	4.7	4.5	4.4	4.1	4.3

7. Unemployed persons by reason for unemployment, seasonally adjusted

[Numbers in thousands]

Reason for unemployment	Annual average		1982												
	1982	1983	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Job losers	6,258	6,258	7,114	6,810	6,864	6,848	6,767	6,753	6,525	6,235	6,133	5,938	5,601	5,226	5,017
On layoff	2,127	1,780	2,335	2,151	2,084	2,005	1,979	1,958	1,841	1,735	1,660	1,562	1,392	1,321	1,283
Other job losers	4,141	4,478	4,779	4,659	4,780	4,843	4,788	4,795	4,684	4,500	4,473	4,376	4,209	3,905	3,734
Job leavers	840	830	826	826	830	888	816	808	799	752	799	858	866	868	855
Reentrants	2,384	2,412	2,684	2,557	2,505	2,460	2,491	2,404	2,436	2,415	2,479	2,362	2,322	2,250	2,246
New entrants	1,185	1,216	1,282	1,199	1,188	1,182	1,251	1,246	1,412	1,229	1,214	1,234	1,127	1,154	1,150
PERCENT DISTRIBUTION															
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	58.7	58.4	59.8	59.8	60.3	60.2	59.8	60.2	58.4	58.6	57.7	57.1	56.5	55.0	54.1
On layoff	19.9	16.6	19.6	18.9	18.3	17.6	17.5	17.5	16.5	16.3	15.6	15.0	14.0	13.9	13.8
Other job losers	38.8	41.8	40.1	40.9	42.0	42.6	42.3	42.8	41.9	42.3	42.1	42.1	42.4	41.1	40.3
Job leavers	7.9	7.7	6.9	7.3	7.3	7.8	7.2	7.2	7.2	7.1	7.5	8.3	8.7	9.1	9.2
Reentrants	22.3	22.5	22.5	22.4	22.0	21.6	22.0	21.4	21.8	22.7	23.3	22.7	23.4	23.7	24.2
New entrants	11.1	11.3	10.8	10.5	10.4	10.4	11.0	11.1	12.6	11.6	11.4	11.9	11.4	12.1	12.4
PERCENT OF CIVILIAN LABOR FORCE															
Job losers	5.7	5.6	6.4	6.2	6.2	6.2	6.1	6.1	5.8	5.6	5.5	5.3	5.0	4.7	4.5
Job leavers	.8	.7	.7	.7	.7	.8	.7	.7	.7	.7	.7	.8	.8	.8	.8
Reentrants	2.2	2.2	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0
New entrants	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.3	1.1	1.1	1.1	1.0	1.0	1.0

8. Duration of unemployment, seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		1982												
	1982	1983	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Less than 5 weeks	3,883	3,570	3,898	3,600	3,732	3,535	3,595	3,568	3,630	3,529	3,633	3,740	3,504	3,328	3,382
5 to 14 weeks	3,311	2,937	3,419	3,331	3,169	3,173	3,139	3,012	2,950	2,841	2,951	2,784	2,725	2,616	2,504
15 weeks and over	3,485	4,210	4,660	4,623	4,613	4,587	4,396	4,510	4,486	4,398	4,078	3,889	3,655	3,527	3,369
15 to 26 weeks	1,708	1,652	2,077	1,954	1,928	1,861	1,691	1,774	1,593	1,794	1,597	1,383	1,372	1,337	1,284
27 weeks and over	1,776	2,559	2,583	2,669	2,685	2,726	2,705	2,736	2,893	2,604	2,481	2,506	2,283	2,190	2,085
Mean duration in weeks	15.6	20.0	18.4	19.4	19.1	19.2	19.2	20.2	21.4	21.3	19.9	20.2	20.1	20.2	19.6
Median duration in weeks	8.7	10.1	10.4	11.3	9.8	10.4	10.8	11.9	10.8	10.1	9.4	9.4	9.5	9.4	9.0

NOTE: Monthly data have been revised based on the seasonal experience through December 1983.

EMPLOYMENT, HOURS, AND EARNINGS DATA FROM ESTABLISHMENT SURVEYS

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 189,000 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

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 blue-collar worker supervisors and all nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 12-16 include production workers in manufacturing and mining; construction workers in construction; and nonsupervisory workers in transportation and public utilities; in wholesale and retail trade; in finance, insurance, and real estate; and in services industries. 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 table 17 of the May 1983 issue, represents the percent of 186 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 3-, 6-, and 9-month spans are seasonally adjusted, while that for the 12-month span is 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 1983 data, published in the July 1983 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 1981; seasonally adjusted data have been revised back to January 1978. Unadjusted data from April 1982 forward, and seasonally adjusted data from January 1979 forward are subject to revision in future benchmarks. Earlier comparable unadjusted and seasonally adjusted data are published in a *Supplement to Employment and Earnings* (unadjusted data from April 1977 through February 1983 and seasonally adjusted data from January 1974 through February 1983) and in *Employment and Earnings, United States, 1909-78*, BLS Bulletin 1312-11 (for prior periods).

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. See also *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982).

9. Employment by industry, selected years, 1950-82

[Nonagricultural payroll data, in thousands]

Year	Total	Private sector	Goods-producing				Service-producing									
			Total	Mining	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale and retail trade			Finance, insurance, and real estate	Services	Government		
									Total	Wholesale trade	Retail trade			Total	Federal	State and local
1950	45,197	39,170	18,506	901	2,364	15,241	26,691	4,034	9,386	2,635	6,751	1,888	5,357	6,026	1,928	4,098
1955	50,641	43,727	20,513	792	2,839	16,882	30,128	4,141	10,535	2,926	7,610	2,298	6,240	6,914	2,187	4,727
1960 ¹	54,189	45,836	20,434	712	2,926	16,796	33,755	4,004	11,391	3,143	8,248	2,629	7,378	8,353	2,270	6,083
1964	58,283	48,686	21,005	634	3,097	17,274	37,278	3,951	12,160	3,337	8,823	2,911	8,660	9,596	2,348	7,248
1965	60,765	50,589	21,926	632	3,232	18,062	38,839	4,036	12,716	3,466	9,250	2,977	9,036	10,074	2,378	7,696
1966	63,901	53,116	23,158	627	3,317	19,214	40,743	4,158	13,245	3,597	9,648	3,058	9,498	10,784	2,564	8,220
1967	65,803	54,413	23,308	613	3,248	19,447	42,495	4,268	13,606	3,689	9,917	3,185	10,045	11,391	2,719	8,672
1968	67,897	56,058	23,737	606	3,350	19,781	44,160	4,318	14,099	3,779	10,320	3,337	10,567	11,839	2,737	9,107
1969	70,384	58,189	24,361	619	3,575	20,167	46,023	4,442	14,706	3,907	10,798	3,512	11,169	12,195	2,758	9,437
1970	70,880	58,325	23,578	623	3,588	19,367	47,302	4,515	15,040	3,993	11,047	3,645	11,548	12,554	2,731	9,823
1971	71,214	58,331	22,935	609	3,704	18,623	48,278	4,476	15,352	4,001	11,351	3,772	11,797	12,881	2,696	10,185
1972	73,675	60,341	23,668	628	3,889	19,151	50,007	4,541	15,949	4,113	11,836	3,908	12,276	13,334	2,684	10,649
1973	76,790	63,058	24,893	642	4,097	20,154	51,897	4,656	16,607	4,277	12,329	4,045	12,857	13,732	2,663	11,068
1974	78,265	64,095	24,794	697	4,020	20,077	53,471	4,725	16,987	4,433	12,554	4,148	13,441	14,170	2,724	11,446
1975	76,945	62,259	22,600	752	3,525	18,323	54,345	4,542	17,060	4,415	12,645	4,165	13,892	14,686	2,748	11,937
1976	79,382	64,511	23,352	779	3,576	18,997	56,030	4,582	17,755	4,546	13,209	4,271	14,551	14,871	2,733	12,138
1977	82,471	67,344	24,346	813	3,851	19,582	58,125	4,713	18,516	4,708	13,808	4,467	15,303	15,127	2,727	12,399
1978	86,697	71,026	25,585	851	4,229	20,505	61,113	4,923	19,542	4,969	14,573	4,724	16,252	15,672	2,753	12,919
1979	89,823	73,876	26,461	958	4,463	21,040	63,363	5,136	20,192	5,204	14,989	4,975	17,112	15,947	2,773	13,147
1980	90,406	74,166	25,658	1,027	4,346	20,285	64,748	5,146	20,310	5,275	15,035	5,180	17,890	16,241	2,866	13,375
1981	91,156	75,126	25,497	1,139	4,188	20,170	65,659	5,165	20,547	5,358	15,189	5,298	18,619	16,031	2,772	13,259
1982	89,596	73,793	23,907	1,143	3,911	18,853	65,689	5,081	20,401	5,280	15,122	5,340	19,064	15,803	2,739	13,064

¹ Data include Alaska and Hawaii beginning in 1959.

10. Employment by State

[Nonagricultural payroll data, in thousands]

State	November 1982	October 1983	Nov. 1983 ^P	State	November 1982	October 1983	Nov. 1983 ^P
Alabama	1,312.3	1,322.5	1,323.4	Montana	273.8	276.3	276.0
Alaska	198.2	216.5	209.7	Nebraska	603.3	605.9	605.4
Arizona	1,039.5	1,067.6	1,076.9	Nevada	407.0	425.2	424.2
Arkansas	720.8	752.4	752.2	New Hampshire	391.9	400.8	400.5
California	9,801.8	10,047.8	10,066.0	New Jersey	3,094.0	3,135.8	3,146.7
Colorado	1,316.4	1,350.3	1,352.1	New Mexico	475.3	485.5	485.1
Connecticut	1,436.1	1,449.7	1,457.7	New York	7,263.6	7,271.0	7,309.5
Delaware	258.2	264.6	265.6	North Carolina	2,351.8	2,411.4	2,413.8
District of Columbia	592.7	594.2	596.3	North Dakota	254.1	258.9	257.0
Florida	3,793.7	3,916.5	3,962.9	Ohio	4,121.4	4,179.8	4,187.6
Georgia	2,217.1	2,278.7	2,289.2	Oklahoma	1,215.7	1,207.0	1,205.8
Hawaii	401.4	396.5	400.5	Oregon	957.6	971.7	966.4
Idaho	314.2	326.7	325.5	Pennsylvania	4,515.4	4,531.0	4,535.9
Illinois	4,548.2	4,513.7	4,549.2	Rhode Island	394.2	398.8	401.8
Indiana	1,987.0	2,023.6	2,021.2	South Carolina	1,160.9	1,182.1	1,180.7
Iowa	1,028.6	1,030.5	1,030.3	South Dakota	231.0	237.9	235.6
Kansas	910.8	919.4	917.9	Tennessee	1,673.1	1,713.2	1,720.0
Kentucky	1,170.5	1,182.0	1,181.6	Texas	6,215.2	6,211.7	6,230.6
Louisiana	1,609.2	1,597.1	1,597.4	Utah	564.1	570.5	571.7
Maine	411.0	422.3	415.6	Vermont	202.8	209.1	206.1
Maryland	1,680.4	1,692.2	1,701.8	Virginia	2,139.3	2,186.4	2,190.8
Massachusetts	2,635.9	2,650.8	2,665.9	Washington	1,568.6	1,606.1	1,598.3
Michigan	3,167.3	3,258.5	3,268.6	West Virginia	600.5	593.9	595.5
Minnesota	1,702.7	1,744.3	1,742.2	Wisconsin	1,867.0	1,883.5	1,895.4
Mississippi	793.5	799.3	798.8	Wyoming	215.5	217.5	215.3
Missouri	1,918.7	1,940.3	1,935.4	Virgin Islands	35.8	34.7	35.5

p = preliminary.

11. Employment by industry division and major manufacturing group, seasonally adjusted

[Nonagricultural payroll data, in thousands]

Industry division and group	Annual average		1983												
	1981	1982	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. P	Dec. P
TOTAL	91,156	89,596	88,665	88,885	88,746	88,814	89,101	89,421	89,844	90,152	89,735	90,851	91,087	91,413	91,644
PRIVATE SECTOR	75,126	73,793	72,907	73,132	73,004	73,090	73,377	73,677	74,123	74,472	74,074	74,990	75,312	75,628	75,849
GOODS-PRODUCING	25,497	23,907	23,061	23,186	23,049	23,030	23,159	23,347	23,518	23,724	23,830	23,935	24,168	24,322	24,434
Mining	1,139	1,143	1,053	1,037	1,014	1,006	997	994	1,003	1,017	1,023	1,026	1,044	1,044	1,053
Construction	4,188	3,911	3,815	3,905	3,790	3,757	3,786	3,860	3,933	3,974	4,014	4,038	4,060	4,096	4,110
Manufacturing	20,170	18,853	18,193	18,244	18,245	18,267	18,376	18,493	18,582	18,733	18,793	18,871	19,064	19,182	19,271
Production workers	14,020	12,790	12,241	12,291	12,303	12,323	12,435	12,531	12,615	12,756	12,803	12,859	13,043	13,150	13,229
Durable goods	12,109	11,100	10,559	10,594	10,608	10,617	10,689	10,788	10,844	10,961	11,022	11,081	11,235	11,326	11,394
Production workers	8,294	7,350	6,892	6,931	6,949	6,961	7,035	7,115	7,169	7,278	7,329	7,378	7,522	7,600	7,661
Lumber and wood products	666	603	614	625	631	638	651	662	679	688	699	703	712	715	712
Furniture and fixtures	464	433	429	430	427	433	440	446	450	459	457	459	465	470	472
Stone, clay, and glass products	638	578	554	557	557	559	565	570	573	577	582	585	590	591	594
Primary metal industries	1,122	922	816	817	810	816	820	828	830	839	840	849	867	876	881
Fabricated metal products	1,590	1,435	1,359	1,364	1,364	1,362	1,369	1,379	1,384	1,391	1,410	1,411	1,430	1,438	1,448
Machinery, except electrical	2,498	2,267	2,066	2,048	2,042	2,030	2,031	2,064	2,066	2,094	2,109	2,115	2,131	2,160	2,169
Electric and electronic equipment	2,094	2,016	1,957	1,974	1,981	1,988	1,999	2,010	2,030	2,047	2,043	2,082	2,107	2,129	2,146
Transportation equipment	1,898	1,744	1,696	1,710	1,729	1,723	1,743	1,757	1,762	1,794	1,807	1,801	1,848	1,856	1,873
Instruments and related products	730	716	695	695	693	691	690	689	687	687	692	696	699	702	705
Miscellaneous manufacturing	408	386	373	374	374	377	381	383	383	385	383	380	386	389	394
Nondurable goods	8,061	7,753	7,634	7,650	7,637	7,650	7,687	7,705	7,738	7,772	7,771	7,790	7,829	7,856	7,877
Production workers	5,727	5,440	5,349	5,360	5,354	5,362	5,400	5,416	5,446	5,478	5,474	5,481	5,521	5,550	5,568
Food and kindred products	1,671	1,638	1,626	1,626	1,620	1,619	1,633	1,632	1,643	1,638	1,627	1,630	1,628	1,635	1,638
Tobacco manufactures	70	68	69	69	67	67	66	66	65	65	62	63	64	61	58
Textile mill products	823	750	727	726	726	730	733	736	745	746	752	753	759	759	761
Apparel and other textile products	1,244	1,164	1,140	1,150	1,148	1,143	1,149	1,153	1,159	1,180	1,175	1,177	1,191	1,200	1,211
Paper and allied products	689	662	653	653	652	652	654	656	657	658	659	662	665	666	668
Printing and publishing	1,266	1,269	1,263	1,266	1,265	1,269	1,274	1,276	1,281	1,284	1,289	1,290	1,297	1,301	1,302
Chemicals and allied products	1,109	1,079	1,059	1,057	1,056	1,056	1,058	1,058	1,056	1,059	1,056	1,060	1,061	1,061	1,062
Petroleum and coal products	214	201	199	200	199	199	199	198	198	197	195	195	193	193	192
Rubber and miscellaneous plastics products	737	701	685	688	691	699	707	716	721	732	739	742	753	762	769
Leather and leather products	238	221	213	215	214	216	214	214	213	213	217	218	218	218	216
SERVICE-PRODUCING	65,659	65,689	65,604	65,699	65,697	65,784	65,942	66,074	66,326	66,428	65,905	66,916	66,919	67,091	67,210
Transportation and public utilities	5,165	5,081	5,008	4,979	4,966	4,963	4,988	4,993	4,992	4,984	4,341	5,031	5,019	5,027	5,024
Wholesale and retail trade	20,547	20,401	20,256	20,355	20,343	20,350	20,329	20,356	20,494	20,529	20,580	20,612	20,666	20,705	20,732
Wholesale trade	5,358	5,280	5,192	5,185	5,181	5,176	5,180	5,197	5,222	5,229	5,249	5,274	5,287	5,289	5,304
Retail trade	15,189	15,122	15,064	15,170	15,162	15,174	15,149	15,159	15,272	15,300	15,331	15,338	15,379	15,416	15,428
Finance, insurance, and real estate	5,298	5,340	5,367	5,374	5,384	5,391	5,423	5,435	5,451	5,465	5,488	5,499	5,503	5,523	5,537
Services	18,619	19,064	19,215	19,238	19,262	19,356	19,478	19,546	19,668	19,770	19,835	19,913	19,956	20,051	20,122
Government	16,031	15,803	15,758	15,753	15,742	15,724	15,724	15,744	15,721	15,680	15,661	15,861	15,775	15,785	15,795
Federal	2,772	2,739	2,747	2,748	2,742	2,742	2,749	2,756	2,742	2,738	2,733	2,773	2,764	2,771	2,771
State and local	13,259	13,064	13,011	13,005	13,000	12,982	12,975	12,988	12,979	12,942	12,928	13,083	13,011	13,014	13,024

p = preliminary.

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

12. Hours and earnings, by industry division, selected years, 1950-82

[Gross averages, production or nonsupervisory workers on nonagricultural payrolls]

Year	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings
	Private sector			Mining			Construction			Manufacturing		
1950	\$53.13	39.8	\$1.34	\$67.16	37.9	\$1.77	\$69.68	37.4	\$1.86	\$58.32	40.5	\$1.44
1955	67.72	39.6	1.71	89.54	40.7	2.20	90.90	37.1	2.45	75.30	40.7	1.85
1960 ¹	80.67	38.6	2.09	105.04	40.4	2.60	112.57	36.7	3.07	89.72	39.7	2.26
1964	91.33	38.7	2.36	117.74	41.9	2.81	132.06	37.2	3.55	102.97	40.7	2.53
1965	95.45	38.8	2.46	123.52	42.3	2.92	138.38	37.4	3.70	107.53	41.2	2.61
1966	98.82	38.6	2.56	130.24	42.7	3.05	146.26	37.6	3.89	112.19	41.4	2.71
1967	101.84	38.0	2.68	135.89	42.6	3.19	154.95	37.7	4.11	114.49	40.6	2.82
1968	107.73	37.8	2.85	142.71	42.6	3.35	164.49	37.3	4.41	122.51	40.7	3.01
1969	114.61	37.7	3.04	154.80	43.0	3.60	181.54	37.9	4.79	129.51	40.6	3.19
1970	119.83	37.1	3.23	164.40	42.7	3.85	195.45	37.3	5.24	133.33	39.8	3.35
1971	127.31	36.9	3.45	172.14	42.4	4.06	211.67	37.2	5.69	142.44	39.9	3.57
1972	136.90	37.0	3.70	189.14	42.6	4.44	221.19	36.5	6.06	154.71	40.5	3.82
1973	145.39	36.9	3.94	201.40	42.4	4.75	235.89	36.8	6.41	166.46	40.7	4.09
1974	154.76	36.5	4.24	219.14	41.9	5.23	249.25	36.6	6.81	176.80	40.0	4.42
1975	163.53	36.1	4.53	249.31	41.9	5.95	266.08	36.4	7.31	190.79	39.5	4.83
1976	175.45	36.1	4.86	273.90	42.4	6.46	283.73	36.8	7.71	209.32	40.1	5.22
1977	189.00	36.0	5.25	301.20	43.4	6.94	295.65	36.5	8.10	228.90	40.3	5.68
1978	203.70	35.8	5.69	332.88	43.4	7.67	318.69	36.8	8.66	249.27	40.4	6.17
1979	219.91	35.7	6.16	365.07	43.0	8.49	342.99	37.0	9.27	269.34	40.2	6.70
1980	235.10	35.3	6.66	397.06	43.3	9.17	367.78	37.0	9.94	288.62	39.7	7.27
1981	255.20	35.2	7.25	439.75	43.7	10.04	299.26	36.9	10.82	318.00	39.8	7.99
1982	266.92	34.8	7.67	459.23	42.6	10.78	426.45	36.7	11.62	330.65	38.9	8.50
	Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services		
1950				\$44.55	40.5	\$1.10	\$50.52	37.7	\$1.34			
1955				55.16	39.4	1.40	63.92	37.6	1.70			
1960 ¹				66.01	38.6	1.71	75.14	37.2	2.02			
1964	\$118.78	41.1	\$2.89	74.66	37.9	1.97	85.79	37.3	2.30	\$70.03	36.1	\$1.94
1965	125.14	41.3	3.03	76.91	37.7	2.04	88.91	37.2	2.39	73.60	35.9	2.05
1966	128.13	41.2	3.11	79.39	37.1	2.14	92.13	37.3	2.47	77.04	35.5	2.17
1967	130.82	40.5	3.23	82.35	36.6	2.25	95.72	37.1	2.58	80.38	35.1	2.29
1968	138.85	40.6	3.42	87.00	36.1	2.41	101.75	37.0	2.75	83.97	34.7	2.42
1969	147.74	40.7	3.63	91.39	35.7	2.56	108.70	37.1	2.93	90.57	34.7	2.61
1970	155.93	40.5	3.85	96.02	35.3	2.72	112.67	36.7	3.07	96.66	34.4	2.81
1971	168.82	40.1	4.21	101.09	35.1	2.88	117.85	36.6	3.22	103.06	33.9	3.04
1972	187.86	40.4	4.65	106.45	34.9	3.05	122.98	36.6	3.36	110.85	33.9	3.27
1973	203.31	40.5	5.02	111.76	34.6	3.23	129.20	36.6	3.53	117.29	33.8	3.47
1974	217.48	40.2	5.41	119.02	34.2	3.48	137.61	36.5	3.77	126.00	33.6	3.75
1975	233.44	39.7	5.88	126.45	33.9	3.73	148.19	36.5	4.06	134.67	33.5	4.02
1976	256.71	39.8	6.45	133.79	33.7	3.97	155.43	36.4	4.27	143.52	33.3	4.31
1977	278.90	39.9	6.99	142.52	33.3	4.28	165.26	36.4	4.54	153.45	33.0	4.65
1978	302.80	40.0	7.57	153.64	32.9	4.67	178.00	36.4	4.89	163.67	32.8	4.99
1979	325.58	39.9	8.16	164.96	32.6	5.06	190.77	36.2	5.27	175.27	32.7	5.36
1980	351.25	39.6	8.87	176.46	32.2	5.48	209.60	36.2	5.79	190.71	32.6	5.85
1981	382.18	39.4	9.70	190.62	32.2	5.92	229.05	36.3	6.31	208.97	32.6	6.41
1982	401.70	39.0	10.30	198.10	31.9	6.21	245.44	36.2	6.78	224.94	32.6	6.90

¹ Data include Alaska and Hawaii beginning in 1959.

13. Weekly hours, by industry division and major manufacturing group, seasonally adjusted

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual average		1982		1983										
	1981	1982	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P	Dec. ^P
PRIVATE SECTOR	35.2	34.8	34.8	35.1	34.5	34.8	34.9	35.1	35.1	35.0	35.0	35.2	35.3	35.2	35.2
MANUFACTURING	39.8	38.9	39.0	39.7	39.2	39.5	40.1	40.0	40.1	40.2	40.3	40.8	40.6	40.6	40.5
Overtime hours	2.8	2.3	2.3	2.4	2.4	2.6	2.9	2.7	2.9	3.0	3.1	3.3	3.3	3.3	3.4
Durable goods	40.2	39.3	39.3	40.1	39.7	39.9	40.5	40.4	40.6	40.8	40.8	41.5	41.2	41.2	41.1
Overtime hours	2.8	2.2	2.2	2.2	2.3	2.5	2.8	2.6	2.8	3.0	3.1	3.4	3.4	3.4	3.6
Lumber and wood products	38.7	38.0	38.8	40.5	39.5	39.5	40.0	39.8	40.0	39.9	40.2	40.5	40.3	39.8	39.9
Furniture and fixtures	38.4	37.2	37.8	38.6	37.9	38.3	39.3	39.2	39.6	39.7	39.7	40.1	39.8	39.8	40.5
Stone, clay, and glass products	40.6	40.0	40.1	41.4	40.5	40.6	41.0	41.2	41.6	41.7	41.7	42.1	41.7	41.7	41.8
Primary metal industries	40.5	38.6	38.8	38.9	39.1	39.4	39.9	40.3	40.3	40.8	40.9	41.2	41.7	41.6	41.2
Fabricated metal products	40.3	39.2	39.2	39.9	39.6	39.7	40.5	40.4	40.5	40.7	40.9	41.6	41.2	41.4	41.3
Machinery, except electrical	40.9	39.7	39.3	39.6	39.4	39.7	40.2	40.0	40.4	40.7	40.7	41.2	41.3	41.4	41.1
Electric and electronic equipment	40.0	39.3	39.4	39.9	39.5	39.8	40.4	40.3	40.5	40.8	40.7	41.1	41.1	41.1	41.0
Transportation equipment	40.9	40.5	40.1	41.6	41.2	41.7	42.3	41.6	41.9	42.0	41.8	43.5	42.5	42.4	41.8
Instruments and related products	40.4	39.8	39.7	40.4	39.7	40.0	40.5	40.4	40.1	40.7	40.4	41.0	40.7	40.5	40.9
Nondurable goods	39.1	38.4	38.6	39.1	38.5	39.0	39.5	39.4	39.6	39.5	39.5	39.9	39.7	39.7	39.7
Overtime hours	2.8	2.5	2.5	2.6	2.6	2.7	3.0	2.9	3.0	3.0	3.1	3.1	3.1	3.1	3.2
Food and kindred products	39.7	39.4	39.1	39.3	39.0	39.2	39.6	39.4	39.8	39.4	39.6	39.9	39.7	39.6	39.4
Textile mill products	39.6	37.5	38.9	39.7	39.0	39.6	40.6	40.4	40.7	40.7	40.9	41.3	40.7	40.7	41.0
Apparel and other textile products	35.7	34.7	35.1	36.6	35.2	35.6	36.2	36.1	36.1	35.8	36.2	36.8	36.5	36.4	36.5
Paper and allied products	42.5	41.8	41.7	41.8	41.4	42.1	42.4	42.7	42.8	42.9	42.9	43.3	43.2	43.0	43.0
Printing and publishing	37.3	37.1	37.1	37.5	37.1	37.4	37.7	37.4	37.6	37.7	37.5	37.8	38.0	38.0	37.7
Chemicals and allied products	41.6	40.9	40.9	41.0	41.0	41.2	41.5	41.6	41.9	41.8	41.6	41.7	41.7	41.9	42.0
Petroleum and coal products	43.2	43.9	44.4	44.5	44.4	44.9	43.5	43.6	43.8	43.7	43.5	43.2	43.5	43.7	45.6
Leather and leather products	36.7	35.6	35.8	36.3	34.9	36.0	37.0	36.8	36.8	37.4	37.2	37.7	37.5	37.1	37.2
TRANSPORTATION AND PUBLIC UTILITIES	39.4	39.0	38.9	38.6	38.6	38.8	38.8	38.9	38.9	38.9	39.3	39.4	39.4	39.2	39.6
WHOLESALE AND RETAIL TRADE	32.2	31.9	32.1	31.9	31.4	31.7	31.7	31.9	32.0	31.9	31.8	31.8	32.1	32.0	32.1
WHOLESALE TRADE	38.5	38.4	38.4	38.5	38.2	38.4	38.5	38.6	38.7	38.6	38.5	38.7	38.7	38.7	38.7
RETAIL TRADE	30.1	29.9	30.1	29.9	29.3	29.7	29.6	29.9	29.9	29.8	29.7	29.7	30.0	30.0	30.0
SERVICES	32.6	32.6	32.6	32.9	32.5	32.7	32.7	32.9	32.7	32.6	32.7	32.8	32.9	32.7	32.7

p = preliminary.

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

14. Hourly earnings, by industry division and major manufacturing group

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual average		1983												
	1981	1982	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^p	Dec. ^p
PRIVATE SECTOR	\$7.25	\$7.67	\$7.82	\$7.90	\$7.92	\$7.90	\$7.94	\$7.97	\$7.97	\$8.00	\$7.94	\$8.11	\$8.15	\$8.15	\$8.16
Seasonally adjusted	(¹)	(¹)	7.82	7.88	7.91	7.91	7.95	7.97	8.00	8.03	7.98	8.08	8.13	8.13	8.17
MINING	10.04	10.78	11.03	11.21	11.25	11.19	11.28	11.20	11.25	11.29	11.28	11.35	11.35	11.42	11.42
CONSTRUCTION	10.82	11.62	11.96	11.95	12.00	11.95	11.90	11.80	11.74	11.78	11.84	12.03	12.04	11.88	12.02
MANUFACTURING	7.99	8.50	8.68	8.71	8.75	8.74	8.77	8.78	8.81	8.86	8.79	8.90	8.92	8.98	9.05
Durable goods	8.54	9.06	9.24	9.26	9.31	9.29	9.31	9.34	9.37	9.40	9.34	9.48	9.49	9.55	9.62
Lumber and wood products	6.99	7.46	7.55	7.68	7.72	7.68	7.74	7.78	7.85	7.82	7.83	7.88	7.87	7.79	7.78
Furniture and fixtures	5.91	6.31	6.46	6.49	6.50	6.51	6.51	6.52	6.60	6.65	6.67	6.73	6.71	6.73	6.82
Stone, clay, and glass products	8.27	8.86	9.08	9.10	9.10	9.13	9.16	9.20	9.28	9.34	9.31	9.43	9.39	9.40	9.44
Primary metal industries	10.81	11.33	11.49	11.56	11.53	11.24	11.25	11.28	11.23	11.37	11.28	11.33	11.28	11.35	11.36
Fabricated metal products	8.19	8.78	8.96	8.98	9.04	9.05	9.07	9.08	9.11	9.10	9.12	9.21	9.22	9.26	9.35
Nondurable goods	7.18	7.73	7.95	7.97	7.99	8.00	8.03	8.03	8.04	8.11	8.05	8.11	8.11	8.17	8.22
Food and kindred products	7.44	7.89	8.06	8.09	8.11	8.16	8.20	8.18	8.17	8.17	8.12	8.14	8.13	8.22	8.25
Tobacco manufactures	8.88	9.78	9.63	9.87	9.96	10.43	10.61	10.74	10.91	10.84	10.24	9.90	9.67	10.57	10.41
Textile mill products	5.52	5.83	6.04	6.08	6.10	6.11	6.14	6.14	6.16	6.17	6.19	6.23	6.24	6.26	6.30
Apparel and other textile products	4.97	5.20	5.28	5.33	5.33	5.33	5.35	5.33	5.36	5.35	5.35	5.39	5.43	5.45	5.48
Paper and allied products	8.60	9.32	9.65	9.65	9.65	9.67	9.72	9.81	9.91	10.06	10.02	10.11	10.10	10.19	10.17
Printing and publishing	8.19	8.75	9.00	8.97	8.99	9.03	9.03	9.05	9.06	9.10	9.14	9.25	9.24	9.27	9.32
Chemicals and allied products	9.12	9.96	10.32	10.34	10.41	10.39	10.43	10.50	10.52	10.58	10.61	10.69	10.78	10.85	10.83
Petroleum and coal products	11.38	12.46	12.71	13.16	13.25	13.28	13.27	13.17	13.17	13.20	13.16	13.36	13.36	13.47	13.72
Rubber and miscellaneous plastics products	7.17	7.65	7.91	7.91	7.91	7.92	7.95	7.97	7.96	8.06	8.03	8.08	8.12	8.08	8.17
Leather and leather products	4.99	5.32	5.44	5.50	5.50	5.52	5.52	5.51	5.49	5.52	5.50	5.56	5.55	5.56	5.58
TRANSPORTATION AND PUBLIC UTILITIES	9.70	10.30	10.62	10.69	10.72	10.68	10.72	10.74	10.73	10.86	10.68	10.90	10.93	11.01	11.04
WHOLESALE AND RETAIL TRADE	5.92	6.21	6.27	6.42	6.45	6.43	6.45	6.46	6.46	6.48	6.47	6.54	6.57	6.58	6.55
WHOLESALE TRADE	7.56	8.02	8.20	8.31	8.28	8.27	8.34	8.36	8.35	8.42	8.41	8.48	8.54	8.53	8.57
RETAIL TRADE	5.25	5.47	5.54	5.65	5.69	5.68	5.69	5.71	5.71	5.72	5.71	5.77	5.78	5.81	5.78
FINANCE, INSURANCE, AND REAL ESTATE	6.31	6.78	7.01	7.19	7.22	7.19	7.23	7.31	7.26	7.30	7.25	7.33	7.45	7.39	7.42
SERVICES	6.41	6.90	7.12	7.18	7.19	7.17	7.20	7.23	7.20	7.18	7.18	7.31	7.39	7.40	7.43

¹ Not available.
p = preliminary.

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

15. Hourly Earnings Index, for production workers on private nonagricultural payrolls, by industry

[1977 = 100]

Industry	Not seasonally adjusted					Seasonally adjusted						Percent change from: Nov. 1983 to Dec. 1983
	Dec. 1982	Oct. 1983	Nov. 1983 ^p	Dec. 1983 ^p	Percent change from: Dec. 1982 to Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983 ^p	Dec. 1983 ^p	
PRIVATE SECTOR (in current dollars)	152.0	156.9	157.0	157.6	3.7	151.9	155.0	155.9	156.8	156.8	157.6	0.5
Mining	163.0	168.7	169.8	170.0	4.3	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Construction	144.5	147.0	144.8	146.0	1.0	144.0	144.1	145.5	145.1	144.4	145.4	.7
Manufacturing	156.2	158.9	159.6	160.3	2.7	155.8	158.1	158.3	158.9	159.6	160.0	.2
Transportation and public utilities	153.9	158.9	159.9	160.4	4.3	153.1	155.4	157.2	158.4	158.8	159.8	.6
Wholesale and retail trade	147.4	153.7	153.8	153.8	4.4	148.1	152.3	153.1	154.1	154.1	154.6	.4
Finance, insurance, and real estate	153.0	162.1	161.1	161.8	5.8	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Services	152.0	158.2	158.2	159.1	4.7	152.0	155.9	157.1	158.4	157.9	159.1	.7
PRIVATE SECTOR (in constant dollars)	94.5	94.5	94.5	(²)	(²)	94.1	94.0	94.2	94.4	94.3	(²)	(²)

¹This 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.

²Not available.

p = preliminary.

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

16. Weekly earnings, by industry division and major manufacturing group

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual average		1983												
	1981	1982	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^p	Dec. ^p
PRIVATE SECTOR															
Current dollars	\$255.20	\$266.92	\$273.70	\$273.34	\$270.86	\$274.13	\$275.52	\$278.15	\$280.54	\$283.20	\$281.08	\$286.28	\$287.70	\$286.07	\$289.68
Seasonally adjusted	(¹)	(¹)	272.14	276.59	272.90	275.27	277.46	279.75	280.80	281.05	279.30	284.42	286.99	286.18	287.58
Constant (1977) dollars	170.13	167.87	170.11	169.88	168.24	169.85	169.55	170.33	171.37	172.37	170.35	172.77	173.31	172.23	(¹)
MINING	438.75	459.23	465.47	476.43	464.63	467.74	469.25	472.64	478.13	475.31	481.66	489.19	490.32	489.92	493.34
CONSTRUCTION	399.26	426.45	440.13	440.96	424.80	434.98	436.73	441.32	444.95	450.00	449.92	455.94	449.09	430.06	444.74
MANUFACTURING															
Current dollars	318.00	330.65	344.60	341.43	339.50	346.10	349.05	350.32	355.04	354.40	353.36	363.12	363.04	366.38	372.86
Constant (1977) dollars	212.00	207.96	214.17	212.20	210.87	214.44	214.80	214.53	216.88	215.70	214.16	219.14	218.70	220.58	(¹)
Durable goods															
Lumber and wood products	270.51	283.48	293.70	300.29	299.54	302.59	308.05	312.76	320.28	313.58	319.46	320.72	318.74	309.26	311.20
Furniture and fixtures	226.94	234.73	250.00	243.38	243.10	251.29	253.89	254.28	263.34	258.69	267.47	271.22	271.08	270.55	282.35
Stone, clay, and glass products	335.76	354.40	366.83	364.91	358.54	368.85	374.64	380.88	390.69	391.35	391.95	399.83	395.32	394.80	397.42
Primary metal industries	437.81	437.34	450.41	450.84	450.82	456.23	451.13	452.33	454.82	460.49	457.97	469.06	464.74	472.16	472.58
Fabricated metal products	330.06	344.18	359.30	354.71	354.37	361.10	364.61	366.83	371.69	365.82	372.10	381.29	380.79	385.22	394.57
Machinery except electrical	360.33	368.81	380.97	372.24	371.94	377.40	379.20	382.64	388.09	386.97	387.28	399.08	400.31	409.08	417.78
Electric and electronic equipment	304.80	322.65	342.95	338.64	336.41	344.00	344.86	345.72	350.38	350.21	349.92	358.75	358.80	363.08	370.82
Transportation equipment	424.95	450.36	474.35	468.54	469.94	480.28	484.26	482.69	491.95	484.55	475.04	505.04	506.09	513.60	522.29
Instruments and related products	299.77	322.38	338.55	337.64	335.81	340.49	339.25	341.74	340.90	344.51	343.76	353.01	350.02	352.15	364.00
Miscellaneous manufacturing	231.64	247.56	260.13	260.06	253.72	263.25	263.64	264.62	264.91	264.62	266.27	270.58	272.63	272.34	278.88
Nondurable goods															
Food and kindred products	295.37	310.87	319.18	315.51	312.24	316.61	318.98	321.47	325.17	322.72	324.80	328.86	323.57	327.98	329.18
Tobacco manufactures	344.54	369.68	364.98	360.26	339.64	378.61	395.75	401.68	420.04	398.91	386.05	380.16	370.36	412.23	377.88
Textile mill products	218.59	218.63	236.77	237.12	236.07	242.57	246.83	248.67	253.18	248.03	254.41	257.92	256.46	256.66	260.19
Apparel and other textile products	177.43	180.44	186.38	188.68	185.48	190.28	192.07	192.41	196.18	193.14	195.81	198.35	199.82	200.02	201.12
Paper and allied products	365.50	389.58	410.13	402.41	396.62	406.14	410.18	415.94	425.14	429.56	428.86	439.79	436.32	440.21	445.45
Printing and publishing	305.49	324.63	341.10	332.79	330.83	338.63	337.72	337.57	338.84	341.25	344.58	351.50	351.12	354.11	358.82
Chemicals and allied products	379.39	407.36	427.25	421.87	425.77	428.07	432.85	435.75	440.79	440.13	439.25	447.91	449.53	457.87	460.28
Petroleum and coal products	491.62	546.99	563.05	572.46	573.73	584.32	581.23	575.73	579.48	584.76	572.46	591.85	585.17	592.68	624.26
Rubber and miscellaneous plastics products	288.95	302.94	319.56	317.19	314.03	321.55	326.75	327.57	328.75	329.65	330.84	338.55	340.23	339.36	347.23
Leather and leather products	183.13	189.39	196.38	196.90	190.30	197.06	201.48	204.42	207.52	207.00	206.25	208.50	206.46	206.83	209.25
TRANSPORTATION AND PUBLIC UTILITIES	382.18	401.70	416.30	409.43	411.65	413.32	413.79	415.64	419.54	425.71	421.86	429.46	430.64	432.69	440.50
WHOLESALE AND RETAIL TRADE	190.62	198.10	203.15	201.59	199.31	201.90	203.18	205.43	207.37	210.60	209.63	209.28	210.24	209.90	212.22
WHOLESALE TRADE	291.06	307.97	317.34	318.27	313.81	316.74	319.42	321.86	323.15	326.70	325.47	328.18	331.35	330.96	334.23
RETAIL TRADE	158.03	163.55	168.97	164.98	163.30	166.42	167.29	169.59	171.87	175.03	174.16	172.52	172.82	173.14	175.71
FINANCE, INSURANCE, AND REAL ESTATE	229.05	245.44	254.46	262.44	260.64	258.84	261.00	265.35	262.09	264.99	261.73	263.88	270.44	266.04	267.12
SERVICES	208.97	224.94	232.11	234.79	232.96	233.74	234.72	236.42	236.88	237.66	237.66	239.04	242.39	241.24	242.96

¹ Not available.
p = preliminary.

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

17. Indexes of diffusion: industries in which employment increased

[In percent]

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981	57.8	52.4	52.2	65.6	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982	28.5	45.4	36.0	39.0	47.6	32.8	38.4	37.1	34.1	29.3	32.0	42.2
	1983	56.5	45.7	62.4	69.1	71.0	64.5	68.5	68.0	60.8	70.7	P64.2	P62.9
Over 3-month span	1981	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	33.3	30.1	24.5	23.4
	1982	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983	45.4	55.1	65.6	75.8	76.1	77.2	73.9	79.6	79.6	P75.0	P70.4	—
Over 6-month span	1981	68.5	65.3	63.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982	20.2	23.7	25.3	29.8	26.1	26.1	23.4	19.1	21.2	26.1	26.6	35.8
	1983	50.5	63.2	73.4	76.3	79.3	83.6	82.5	P82.0	P80.6	—	—	—
Over 12-month span	1981	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	25.3	23.1
	1982	22.0	20.7	18.0	19.4	18.3	20.7	20.7	22.8	24.2	31.5	37.6	44.1
	1983	48.9	58.3	62.6	73.4	P76.3	P80.9	—	—	—	—	—	—

p = preliminary.

are counted as rising.) Data are centered within the spans. See the "Definitions" in this section.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components

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

UNEMPLOYMENT INSURANCE DATA

NATIONAL UNEMPLOYMENT INSURANCE DATA are compiled monthly by the Employment and Training Administration of the U.S. Department of Labor from monthly reports of unemployment insurance activity prepared by State agencies. Railroad unemployment insurance data are prepared by the U.S. Railroad Retirement Board.

Definitions

Data for **all programs** represent an unduplicated count of insured unemployment under State programs, Unemployment Compensation for Ex-Servicemen, and Unemployment Compensation for Federal Employees, and the Railroad Insurance Act.

Under both State and Federal unemployment insurance programs for civilian employees, insured workers must report the completion of at least 1 week of unemployment before they are defined as unemployed. Persons not covered by unemployment insurance (about 10 percent of the labor force) and those who have exhausted or not yet earned benefit rights are excluded from the scope of the survey. **Initial claims** are notices filed by

persons in unemployment insurance programs to indicate they are out of work and wish to begin receiving compensation. A claimant who continued to be unemployed a full week is then counted in the insured unemployment figure. The **rate of insured unemployment** expresses the number of insured unemployed as a percent of the average insured employment in a 12-month period.

Average weekly seasonally adjusted insured unemployment data are computed by BLS' Weekly Seasonal Adjustment program. This procedure incorporated the X-11 Variant of the Census Method II Seasonal Adjustment program.

An **application** for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year. **Number of payments** are payments made in 14-day registration periods. The **average amount of benefit payment** is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments. However, **total benefits paid** have been adjusted.

18. Unemployment insurance and employment service operations

[All items except average benefits amounts are in thousands]

Item	1982		1983										
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P
All programs:													
Insured unemployment	4,635	5,074	5,459	5,437	5,134	4,642	3,947	3,481	3,275	2,917	2,580	2,478	2,620
State unemployment insurance program: ¹													
Initial claims ²	2,661	3,080	3,143	2,065	2,075	1,874	1,666	1,740	1,804	1,668	1,381	1,519	1,612
Insured unemployment (average weekly volume)	4,156	4,581	4,923	4,759	4,401	3,906	3,361	3,063	3,049	2,766	2,449	2,358	2,508
Rate of insured unemployment	4.7	5.2	5.6	5.5	5.0	4.5	3.9	3.5	3.5	3.2	2.8	2.7	2.9
Weeks of unemployment compensated	15,136	17,873	18,307	16,895	19,529	14,986	13,133	12,819	10,959	11,305	9,383	8,484	9,264
Average weekly benefit amount for total unemployment	\$123.46	\$123.42	\$124.29	\$124.47	\$125.47	\$124.85	\$124.49	\$123.44	\$121.59	\$121.42	\$121.36	\$123.06	109.33
Total benefits paid	\$1,820,019	\$2,135,302	\$2,205,551	\$2,052,415	\$2,367,752	\$1,816,539	\$1,587,888	\$1,549,758	\$1,298,189	\$1,337,442	\$1,104,362	\$1,010,786	1,094,196
State unemployment insurance program: ¹ (Seasonally adjusted data)													
Initial claims ²	2,680	2,586	2,187	2,138	2,148	1,952	1,993	1,836	1,723	1,841	1,664	1,653	1,576
Insured unemployment (average weekly volume)	4,618	4,355	3,980	3,979	3,884	3,774	3,538	3,301	3,303	3,026	3,088	2,617	2,677
Rate of insured unemployment	5.3	5.0	4.6	4.6	4.5	4.3	4.1	3.8	3.8	3.5	3.6	3.1	3.1
Unemployment compensation for ex-servicemen: ³													
Initial claims ¹	17	24	21	16	18	15	14	16	16	19	17	16	15
Insured unemployment (average weekly volume)	14	26	37	37	34	30	26	25	25	26	27	28	28
Weeks of unemployment compensated	33	90	132	143	156	117	104	107	94	108	106	103	115
Total benefits paid	\$4,006	\$11,191	\$16,807	\$18,032	\$19,588	\$14,776	\$13,111	\$13,588	\$12,118	\$13,855	\$13,519	\$13,876	15,144
Unemployment compensation for Federal civilian employees: ⁴													
Initial claims	14	15	16	10	11	10	9	13	12	11	11	15	13
Insured unemployment (average weekly volume)	31	33	35	33	31	26	22	21	23	22	22	25	27
Weeks of unemployment compensated	126	146	142	131	146	109	93	90	85	94	83	87	109
Total benefits paid	\$14,043	\$16,114	\$16,045	\$15,083	\$16,871	\$12,422	\$10,603	\$10,272	\$9,640	\$10,760	\$9,522	10,157	12,390
Railroad unemployment insurance:													
Applications	17	17	20	7	8	94	4	30	55	14	9	7	8
Insured unemployment (average weekly volume)	81	83	102	72	65	79	90	49	49	46	41	48	40
Number of payments	162	172	219	158	169	172	183	123	92	107	103	92	92
Average amount of benefit payment	\$216.55	\$217.00	\$220.32	\$214.54	\$213.44	\$203.87	\$215.15	\$203.54	\$199.87	\$214.21	\$214.77	\$211.41	\$212.36
Total benefits paid	\$35,061	\$39,500	\$44,514	\$33,100	\$36,243	\$27,783	\$29,411	\$14,984	\$17,551	\$21,789	\$20,239	\$19,531	\$19,536
Employment service: ⁵													
New applications and renewals		4,527			8,381			11,987			15,595		
Nonfarm placements		642			1,184			1,921			3,012		

¹ Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.

² Excludes transition claims under State programs.

³ Excludes data on claims and payments made jointly with other programs.

⁴ Excludes data on claims and payments made jointly with State programs.

⁵ Cumulative total for fiscal year (October 1-September 30). Data computed quarterly.

NOTE: Data for Puerto Rico and the Virgin Islands included. Dashes indicate data not available.

p = preliminary.

r = revised.

PRICE DATA

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).

Definitions

The Consumer Price Index is a monthly statistical measure of the average change in prices in a fixed market basket of goods and services. Effective with the January 1978 index, the Bureau of Labor Statistics began publishing CPI's for two groups of the population. It introduced a CPI for All Urban Consumers, covering 80 percent of the total noninstitutional population, and revised the CPI for Urban Wage Earners and Clerical Workers, covering about half the new index population. The All Urban Consumers index covers in addition to wage earners and clerical workers, 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 is kept essentially unchanged between major revisions so that only price changes will be measured. Data are collected from more than 24,000 retail establishments and 24,000 tenants in 85 urban areas across the country. All taxes directly associated with the purchase and use of items are included in the index. Because the CPI's are based on the expenditures of two population groups in 1972-73, they may not accurately reflect the experience of individual families and single persons with different buying habits.

Though the CPI is often called the "Cost-of-Living Index," it measures only price change, which is just one of several important factors affecting living costs. Area indexes do not measure differences in the level of prices among cities. They only measure the average change in prices for each area since the base period.

Producer Price Indexes measure average changes in prices received in primary markets of the United States by products of commodities in all stages of processing. The sample used for calculating these indexes contains about 2,800 commodities and about 10,000 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 universe includes all commodities produced or imported for sale in commercial transactions in primary markets in the United States.

Producer Price Indexes can be organized by stage of processing or by commodity. The stage of processing structure organizes products by degree of fabrication (that is, finished goods, intermediate or semifinished goods, and crude materials). The commodity structure 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.

In calculating Producer Price Indexes, price changes for the various commodities are 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 groupings.

Price indexes for the output of selected SIC industries measure average price changes in commodities produced by particular industries, as defined in the *Standard Industrial Classification Manual 1972* (Washington, U.S. Office of Management and Budget, 1972). These indexes are derived from several price series, combined to match the economic activity of the specified industry and weighted by the value of shipments in the industry. They use data from comprehensive industrial censuses conducted by the U.S. Bureau of the Census and the U.S. Department of Agriculture.

Notes on the data

Regional CPI's cross classified by population size were introduced in the May 1978 *Review*. These indexes enable users in local areas for which an index is not published to get a better approximation of the CPI for their area by using the appropriate population size class measure for their region. The cross-classified indexes are published bimonthly. (See table 20.)

For details concerning the 1978 revision of the CPI, see *The Consumer Price Index: Concepts and Content Over the Years*, Report 517, revised edition (Bureau of Labor Statistics, May 1978).

As of January 1976, the Producer Price Index incorporated a revised weighting structure reflecting 1972 values of shipments.

Additional data and analyses of price changes are provided in the *CPI Detailed Report* and *Producer Prices and Price Indexes*, both monthly publications of the Bureau.

For a discussion of the general method of computing producer, and industry price indexes, see *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982), chapter 7. For consumer prices, see *BLS Handbook of Methods for Surveys and Studies* (1976), chapter 13. See also John F. Early, "Improving the measurement of producer price change," *Monthly Labor Review*, April 1978. For industry prices, see also Bennett R. Moss, "Industry and Sector Price Indexes," *Monthly Labor Review*, August 1965.

19. Consumer Price Index for Urban Wage Earners and Clerical Workers, annual averages and changes, 1967-82

[1967 = 100]

Year	All items		Food and beverages		Housing		Apparel and upkeep		Transportation		Medical care		Entertainment		Other goods and services	
	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change
1967	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...
1968	104.2	4.2	103.6	3.6	104.0	4.0	105.4	5.4	103.2	3.2	106.1	6.1	105.7	5.7	105.2	5.2
1969	109.8	5.4	108.8	5.0	110.4	6.2	111.5	5.8	107.2	3.9	113.4	6.9	111.0	5.0	110.4	4.9
1970	116.3	5.9	114.7	5.4	118.2	7.1	116.1	4.1	112.7	5.1	120.6	6.3	116.7	5.1	115.8	5.8
1971	121.3	4.3	118.3	3.1	123.4	4.4	119.8	3.3	118.6	5.2	128.4	6.5	122.9	5.3	122.4	4.8
1972	125.3	3.3	123.2	4.1	128.1	3.8	122.3	2.1	119.9	1.1	132.5	3.2	126.5	2.9	127.5	4.2
1973	133.1	6.2	139.5	13.2	133.7	4.4	126.8	3.7	123.8	3.3	137.7	3.9	130.0	2.8	132.5	3.9
1974	147.7	11.0	158.7	13.8	148.8	11.3	136.2	7.4	137.7	11.2	150.5	9.3	139.8	7.5	142.0	7.2
1975	161.2	9.1	172.1	8.4	164.5	10.6	142.3	4.5	150.6	9.4	168.6	12.0	152.2	8.9	153.9	8.4
1976	170.5	5.8	177.4	3.1	174.6	6.1	147.6	3.7	165.5	9.9	184.7	9.5	159.8	5.0	162.7	5.7
1977	181.5	6.5	188.0	8.0	186.5	6.8	154.2	4.5	177.2	7.1	202.4	9.6	167.7	4.9	172.2	5.8
1978	195.3	7.6	206.2	9.7	202.6	8.6	159.5	3.4	185.8	4.9	219.4	8.4	176.2	5.1	183.2	6.4
1979	217.7	11.5	228.7	10.9	227.5	12.3	166.4	4.3	212.8	14.5	240.1	9.4	187.6	6.5	196.3	7.2
1980	247.0	13.5	248.7	8.7	263.2	15.7	177.4	6.6	250.5	17.7	287.2	11.3	203.7	8.5	213.6	8.8
1981	272.3	10.2	267.8	7.7	293.2	11.4	186.6	5.2	281.3	12.3	295.1	10.4	219.0	7.5	233.3	9.2
1982	288.6	6.0	278.5	4.0	314.7	7.3	190.9	2.3	293.1	4.2	326.9	10.8	232.4	6.1	257.0	10.2

20. Consumer Price Index for All Urban Consumers and revised CPI for Urban Wage Earners and Clerical Workers, U.S. city average—general summary and groups, subgroups, and selected items

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers						
	1982		1983					1982		1983				
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.
All items	293.6	298.1	299.3	300.3	301.8	302.6	303.1	293.2	297.2	298.2	299.5	300.8	301.3	301.4
Food and beverages	279.1	284.7	284.7	284.9	285.3	285.7	285.3	279.4	285.0	285.0	285.1	285.6	285.9	285.6
Housing	319.0	323.1	324.5	324.8	326.4	326.8	327.0	319.6	322.3	323.1	324.3	325.3	325.2	324.5
Apparel and upkeep	195.4	195.6	195.0	197.3	200.4	200.7	200.7	194.4	194.7	194.0	196.3	199.3	199.8	199.7
Transportation	295.8	298.3	300.4	302.4	303.7	305.0	306.3	297.3	299.6	301.9	304.1	305.5	306.9	308.2
Medical care	342.2	355.4	357.7	360.0	361.2	362.9	364.9	339.8	353.3	355.6	357.9	359.2	360.9	362.9
Entertainment	239.9	245.4	246.0	246.6	247.5	249.1	249.5	236.1	241.9	242.5	243.1	244.1	245.4	245.7
Other goods and services	273.8	284.5	287.5	289.0	294.4	296.8	298.1	270.9	282.8	286.4	288.0	292.0	294.1	295.5
Commodities	267.8	271.6	272.5	273.4	274.5	275.0	275.2	268.2	273.3	274.2	275.1	275.9	276.1	276.2
Commodities less food and beverages	258.2	260.9	262.3	263.6	265.1	265.8	266.3	258.9	263.7	264.9	266.1	267.2	267.3	267.5
Nondurables less food and beverages	271.4	272.3	273.5	274.7	275.8	275.2	274.5	276.9	273.3	274.4	275.7	276.9	277.9	277.4
Durables	246.6	251.2	252.9	254.3	256.4	258.7	261.0	246.2	253.7	254.8	256.0	257.0	257.7	258.7
Services	338.6	344.0	345.6	346.8	349.0	350.2	351.0	339.3	341.4	342.8	344.8	346.9	348.1	348.2
Rent, residential	230.2	235.9	237.1	238.2	239.5	240.4	241.3	229.7	235.3	236.5	237.6	238.9	239.8	240.7
Household services less rent of shelter (12/82 = 100)	...	104.2	104.8	104.8	105.1	104.8	104.2	...	...	...	...	...	...	...
Transportation services	299.9	301.4	302.3	304.0	305.4	307.8	310.1	297.5	297.5	298.4	300.2	301.4	303.9	306.0
Medical care services	371.0	384.6	387.2	389.8	391.0	392.9	395.0	367.7	381.7	384.4	387.0	388.3	390.2	392.3
Other services	269.2	275.6	276.3	276.9	282.5	285.2	286.5	266.8	273.5	274.2	274.8	279.6	282.2	283.6
Special indexes:														
All items less food	293.6	297.8	299.3	300.5	302.3	303.2	303.9	293.5	297.2	298.5	300.0	301.5	302.1	302.3
All items less homeowners' costs	...	101.9	102.3	102.7	103.2	103.5	103.6	...	...	...	...	...	...	...
All items less mortgage interest costs	...	...	...	...	...	...	...	278.1	283.5	285.3	286.3	287.5	288.1	288.3
Commodities less food	256.0	258.9	260.2	261.4	262.9	263.6	264.1	256.7	261.6	262.7	263.9	264.9	265.1	265.3
Nondurables less food	266.1	267.3	268.4	269.6	270.6	270.2	269.5	267.9	269.3	270.6	271.7	272.8	272.3	271.5
Nondurables less food and apparel	306.2	308.4	310.4	310.9	311.0	310.2	309.3	307.5	309.9	312.1	312.7	312.8	311.9	310.9
Nondurables	276.4	279.7	280.3	281.0	281.8	281.7	281.1	277.4	280.8	281.4	282.1	282.8	282.7	282.1
Services less rent of shelter (12/82 = 100)	...	102.7	103.1	103.5	104.2	104.5	104.7	...	...	...	...	...	...	...
Services less medical care	332.9	337.4	338.9	339.9	342.2	343.3	344.1	334.0	334.9	336.1	338.1	340.2	341.3	341.3
Domestically produced farm foods	265.3	269.6	269.6	269.2	269.2	268.5	267.7	264.4	268.7	268.5	268.0	268.1	267.4	266.7
Selected beef cuts	271.9	278.5	275.8	270.5	267.5	265.6	265.3	273.2	279.8	277.2	271.6	268.9	266.7	266.4
Energy ¹	422.6	427.3	430.1	429.8	429.3	425.1	419.9	423.7	428.1	430.9	430.7	430.2	425.8	420.8
Energy commodities ¹	431.6	420.7	423.4	423.7	422.1	418.2	414.4	431.8	421.7	424.5	424.9	423.4	419.6	415.8
All items less energy	283.6	288.2	289.2	290.3	292.1	293.4	294.4	282.5	286.5	287.4	288.8	290.3	291.3	291.8
All items less food and energy	281.2	285.5	286.8	288.2	290.2	291.8	293.2	280.2	283.8	284.9	286.6	288.3	289.5	290.3
Commodities less food and energy	236.6	241.5	242.7	244.2	246.2	247.6	248.9	236.2	242.9	243.8	245.1	246.4	247.1	247.8
Services less energy	333.1	336.4	337.9	339.3	341.6	343.3	344.9	333.7	333.2	334.5	336.8	339.0	340.8	341.6
Purchasing power of the consumer dollar, 1967 = \$1	\$0.341	\$0.335	\$0.334	\$0.333	\$0.331	\$0.330	\$0.330	\$0.341	\$0.336	\$0.335	\$0.334	\$0.332	\$0.332	\$0.332

See footnotes at end of table.

20. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers							
	1982	1983					1982	1983						
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.
FOOD AND BEVERAGES	279.1	284.7	284.7	284.9	285.3	285.7	285.3	279.4	285.0	285.0	285.1	285.6	285.9	285.6
Food	286.4	292.0	292.0	292.2	292.6	292.9	292.5	286.6	292.2	292.1	292.2	292.6	292.9	292.6
Food at home	278.3	283.0	282.8	282.5	282.5	282.3	281.4	277.4	282.1	281.8	281.5	281.5	281.3	280.5
Cereals and bakery products	285.5	292.4	293.7	294.0	293.7	294.0	295.7	284.1	291.0	292.3	292.5	292.3	292.6	294.3
Cereals and cereal products (12/77 = 100)	153.2	157.9	158.3	158.6	158.5	158.1	157.9	154.1	158.7	159.2	159.5	159.3	158.8	158.6
Flour and prepared flour mixes (12/77 = 100)	139.2	142.2	142.8	143.9	142.9	141.4	140.8	139.5	142.7	143.3	144.6	143.4	141.9	141.3
Cereal (12/77 = 100)	167.2	176.4	176.7	177.2	177.5	177.6	177.3	169.4	178.5	178.8	179.5	179.7	179.8	179.4
Rice, pasta, and cornmeal (12/77 = 100)	146.1	146.2	146.5	145.6	146.0	145.5	146.1	147.3	147.3	147.7	146.8	147.1	146.6	147.2
Bakery products (12/77 = 100)	150.3	153.7	154.4	154.5	154.4	154.8	156.0	149.1	152.4	153.2	153.3	153.1	153.5	154.8
White bread	246.8	253.1	254.3	253.1	252.9	254.4	257.0	242.6	248.8	249.9	248.7	248.5	250.0	252.7
Other breads (12/77 = 100)	147.3	149.8	149.5	150.1	149.8	149.8	151.9	149.4	151.8	151.6	152.2	151.9	151.8	154.1
Fresh biscuits, rolls, and muffins (12/77 = 100)	150.9	151.7	153.2	153.4	152.6	154.4	155.7	146.9	148.0	149.6	149.6	148.7	150.6	151.7
Fresh cakes and cupcakes (12/77 = 100)	150.5	154.6	155.4	154.9	155.2	156.2	157.9	148.8	152.9	153.6	153.3	153.5	154.5	156.2
Cookies (12/77 = 100)	153.6	155.7	157.0	157.6	157.6	156.0	157.6	154.5	156.4	157.9	158.5	158.6	158.8	158.4
Crackers, bread, and cracker products (12/77 = 100)	143.3	149.5	150.3	151.4	148.3	147.7	147.8	144.6	151.0	151.8	152.8	149.5	149.1	149.2
Fresh sweetrolls, coffeecake, and donuts (12/77 = 100)	149.6	153.7	154.1	155.3	155.9	155.8	156.8	152.3	156.6	156.9	158.0	158.6	158.5	159.6
Frozen and refrigerated bakery products and fresh pies, tarts, and turnovers (12/77 = 100)	155.8	158.8	159.4	159.4	161.3	161.9	160.6	148.6	152.0	152.5	152.5	154.3	154.9	154.0
Meats, poultry, fish, and eggs	263.6	261.5	260.4	258.8	258.7	257.1	256.6	263.5	261.3	260.1	258.4	258.4	256.6	256.1
Meats, poultry, and fish	270.8	268.7	267.2	265.0	264.2	261.9	260.8	270.6	268.3	266.8	264.4	263.8	261.4	260.2
Meats	273.6	270.2	267.8	264.2	262.6	260.4	258.6	273.2	269.7	267.3	263.7	262.2	260.0	258.1
Beef and veal	272.0	278.6	275.8	270.7	268.0	266.2	265.7	272.5	279.2	276.5	271.1	268.7	266.7	266.1
Ground beef other than canned	263.0	264.5	261.4	256.5	254.3	250.9	251.6	264.2	265.7	262.7	258.0	255.9	252.1	252.5
Chuck roast	281.7	277.4	277.6	272.4	269.5	265.8	266.2	290.3	285.7	286.3	280.6	277.4	273.1	274.0
Round roast	241.4	245.6	240.7	232.4	230.3	234.4	235.3	244.3	249.1	243.8	235.0	232.8	237.2	238.1
Round steak	257.1	262.1	257.8	250.3	247.4	251.5	250.0	255.1	260.5	256.5	248.5	245.7	250.9	248.6
Sirloin steak	259.8	286.1	285.2	280.9	277.3	268.4	265.3	260.6	287.5	287.5	281.8	280.1	270.1	266.9
Other beef and veal (12/77 = 100)	164.1	170.5	168.8	166.6	164.8	164.0	163.2	162.4	169.1	167.4	165.3	163.7	162.6	161.8
Pork	274.2	254.1	251.2	249.6	250.2	246.4	241.1	273.4	253.9	250.8	249.3	249.7	246.0	240.7
Bacon	298.7	267.4	267.3	264.7	269.5	262.5	253.7	304.0	271.9	271.6	268.8	273.6	266.4	256.8
Chops	249.0	234.3	232.9	232.4	229.6	227.2	222.3	247.0	232.5	231.1	230.5	227.9	225.6	220.3
Ham other than canned (12/77 = 100)	127.3	110.3	108.3	109.6	111.0	111.6	109.1	124.2	107.5	105.5	106.8	108.1	108.8	106.4
Sausage	337.7	326.5	318.9	313.9	311.3	307.4	305.0	338.5	327.3	320.0	315.3	312.2	308.4	305.9
Canned ham	270.5	260.9	256.8	254.0	252.8	251.9	248.0	275.0	266.4	262.6	259.8	258.8	257.7	254.3
Other pork (12/77 = 100)	149.6	141.7	140.0	138.4	139.0	134.4	131.5	148.6	141.1	139.3	137.8	138.2	133.9	131.1
Other meats	271.6	267.4	266.9	264.6	262.6	262.2	262.6	271.5	266.9	266.6	264.4	262.4	262.0	262.4
Frankfurters	274.4	265.8	265.9	266.7	259.8	260.8	259.7	273.8	264.9	264.9	265.9	258.6	259.7	258.8
Bologna, liverwurst, and salami (12/77 = 100)	156.6	155.6	154.0	153.2	153.0	152.8	152.8	156.4	155.6	154.1	153.3	152.9	152.8	152.8
Other luncheonmeats (12/77 = 100)	141.3	136.6	137.1	136.4	136.1	135.2	135.8	139.1	134.6	135.2	134.5	134.2	133.3	133.9
Lamb and organ meats (12/77 = 100)	135.4	139.3	138.4	133.8	133.9	133.7	134.6	138.5	142.3	141.6	136.6	136.9	136.8	137.8
Poultry	192.0	193.6	191.1	200.5	204.4	199.6	201.7	190.0	191.8	196.1	198.5	202.6	197.6	199.7
Fresh whole chicken	189.3	192.1	198.7	202.1	209.6	199.1	207.6	187.4	190.4	196.6	200.0	207.2	196.7	205.1
Fresh and frozen chicken parts (12/77 = 100)	125.3	126.3	129.6	131.7	135.9	132.2	134.1	123.5	124.7	127.7	129.9	134.2	130.5	132.1
Other poultry (12/77 = 100)	125.4	125.3	126.0	125.7	122.9	126.0	120.6	124.6	124.7	125.3	125.1	122.7	125.5	120.3
Fish and seafood	366.6	371.2	368.9	372.7	372.6	374.1	374.9	365.3	369.8	367.3	370.8	370.7	372.0	373.4
Canned fish and seafood	139.0	138.6	135.7	135.9	133.9	133.5	132.6	138.4	138.1	135.2	135.4	133.4	132.9	132.1
Fresh and frozen fish and seafood (12/77 = 100)	140.0	143.0	143.3	145.5	146.7	147.8	148.8	139.6	142.5	142.8	144.8	146.0	147.1	148.5
Eggs	175.0	173.8	177.9	183.7	193.3	200.1	208.2	176.2	174.8	178.7	184.6	194.3	201.0	209.3
Dairy products	247.4	249.8	249.8	250.2	250.2	250.1	250.2	246.7	249.1	249.0	249.4	249.4	249.2	249.3
Fresh milk and cream (12/77 = 100)	135.1	136.3	136.2	136.5	136.1	135.9	135.9	134.6	135.9	135.7	135.9	135.5	135.2	135.3
Fresh whole milk	220.9	222.9	222.8	223.2	222.6	221.9	222.1	220.1	222.1	222.0	222.3	221.7	220.9	221.2
Other fresh milk and cream (12/77 = 100)	135.4	136.8	136.4	136.8	136.4	136.6	136.4	134.9	136.3	135.8	136.2	135.8	136.0	135.8
Processed dairy products	146.6	148.1	148.2	148.4	149.0	149.2	149.3	146.9	148.3	148.5	148.6	149.3	149.4	149.5
Butter	252.5	252.7	253.3	254.2	253.9	256.2	254.8	255.1	255.4	255.8	256.8	256.4	258.7	257.4
Cheese (12/77 = 100)	144.5	146.0	146.9	146.4	146.8	146.7	146.8	144.8	146.3	147.3	146.7	147.1	147.0	147.1
Ice cream and related products (12/77 = 100)	152.4	154.0	151.6	152.5	154.4	154.9	155.3	151.5	153.0	150.7	151.5	153.5	154.0	154.2
Other dairy products (12/77 = 100)	140.9	143.1	144.5	145.9	146.0	145.2	145.7	141.5	143.7	145.1	146.5	146.5	148.8	146.1
Fruits and vegetables	276.1	298.2	298.7	299.4	297.6	296.7	288.9	271.3	294.5	294.7	295.1	293.3	292.7	285.1
Fresh fruits and vegetables	268.3	310.9	310.6	310.7	306.6	304.9	288.7	261.0	305.4	304.8	304.3	300.3	298.9	283.4
Fresh fruits	288.9	310.5	326.5	328.9	316.7	304.4	279.5	275.4	299.7	315.3	317.5	305.9	293.4	269.3
Apples	239.4	281.9	287.5	310.0	320.2	271.8	265.9	239.9	283.4	288.8	311.9	321.3	273.8	267.3
Bananas	243.7	318.1	325.2	291.0	278.6	272.8	233.1	241.9	316.7	323.1	290.7	276.5	270.3	230.7
Oranges	399.6	309.1	347.9	359.8	337.0	299.0	307.8	360.4	280.1	321.5	329.9	307.1	271.3	279.3
Other fresh fruits (12/77 = 100)	143.3	166.3	173.3	173.2	164.1	171.1	148.5	137.5	160.0	166.6	166.3	157.7	164.7	142.9
Fresh vegetables	249.1	311.3	295.8	293.8	297.2	305.5	297.4	248.1	310.8	295.5	292.5	295.4	303.9	296.2
Potatoes	240.8	304.7	320.7	342.2	336.1	316.9	305.0	235.9	301.3	318.2	338.2	330.9	311.7	300.1
Lettuce	259.2	363.5	280.5	293.9	337.0	360.4	329.8	259.8	360.8	280.6	294.2	338.2	360.9	330.0
Tomatoes	242.9	262.3	243.1	200.5	212.2	241.9	243.0	246.6	267.1	247.3	204.0	216.2	246.8	246.9
Other fresh vegetables (12/77 = 100)	137.6	169.4												

20. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers						
	1982	1983						1982	1983					
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.
FOOD AND BEVERAGES—Continued														
Food—Continued														
Food at home—Continued														
Fruits and vegetables—Continued														
Processed vegetables—Continued														
Cut corn and canned beans except lima (12/77 = 100)	140.8	140.5	140.9	142.0	141.8	142.4	143.2	138.4	138.1	138.6	139.5	139.3	140.0	140.8
Other canned and dried vegetables (12/77 = 100)	133.0	131.2	131.7	132.9	134.0	135.7	136.0	131.6	129.8	130.2	131.5	132.6	134.2	134.5
Other foods at home	334.3	338.8	338.7	339.1	340.7	342.7	343.4	335.1	339.5	339.3	339.9	341.5	343.5	344.2
Sugar and sweets	370.3	374.5	376.1	375.8	376.4	375.5	376.0	370.1	374.1	376.0	375.7	376.2	375.3	375.7
Candy and chewing gum (12/77 = 100)	149.6	151.3	151.8	151.6	151.9	151.8	152.0	149.5	151.2	151.8	151.8	151.6	151.6	151.8
Sugar and artificial sweeteners (12/77 = 100)	165.2	168.5	169.7	169.7	170.3	169.3	170.4	166.6	169.8	171.0	171.0	171.6	170.8	171.7
Other sweets (12/77 = 100)	152.5	152.5	153.0	152.8	152.7	152.2	151.7	150.2	150.2	150.8	150.6	150.5	150.1	149.5
Fats and oils (12/77 = 100)	258.6	258.3	259.0	258.1	264.8	271.1	275.4	258.5	258.0	258.7	257.8	264.7	271.2	275.5
Margarine	257.5	259.3	259.5	257.2	259.3	264.6	268.9	256.8	257.5	257.6	255.1	257.3	262.6	267.1
Nondairy substitutes and peanut butter (12/77 = 100)	152.0	149.4	150.5	149.8	148.9	151.6	151.8	150.3	147.7	148.8	148.1	147.2	149.8	150.1
Other fats, oils, and salad dressings (12/77 = 100)	129.8	130.1	130.3	130.3	136.9	140.7	143.8	130.3	130.7	130.9	130.9	137.5	141.5	144.5
Nonalcoholic beverages	426.2	431.0	428.7	430.7	431.2	436.4	435.2	427.9	432.6	430.3	432.5	433.1	438.4	437.3
Cola drinks, excluding diet cola	308.8	312.3	310.3	312.4	312.7	317.2	315.7	306.2	309.7	307.8	309.9	310.2	314.7	313.2
Carbonated drinks, including diet cola (12/77 = 100)	144.8	146.3	145.1	146.3	147.6	150.8	149.4	142.4	143.9	142.6	144.1	145.3	148.7	147.5
Roasted coffee	360.0	359.3	356.6	356.0	353.7	352.8	355.4	354.8	354.3	351.7	350.8	348.4	347.6	350.2
Freeze dried and instant coffee	344.2	352.2	351.4	352.3	348.3	350.2	352.4	343.7	351.6	350.7	351.5	347.5	349.3	351.6
Other noncarbonated drinks (12/77 = 100)	138.8	140.5	140.4	140.5	141.0	141.9	141.8	139.1	140.7	140.7	140.8	141.3	142.2	142.1
Other prepared foods	270.2	276.1	276.8	276.9	277.8	276.8	277.9	271.9	277.7	278.4	278.5	279.4	278.2	279.4
Canned and packaged soup (12/77 = 100)	136.6	141.6	141.9	141.8	141.4	141.3	142.0	138.5	143.4	143.7	143.7	143.3	143.2	143.9
Frozen prepared foods (12/77 = 100)	149.7	153.8	154.4	155.1	155.7	154.7	156.4	149.2	153.1	153.5	154.2	154.9	153.7	155.7
Snacks (12/77 = 100)	153.1	159.0	159.3	159.3	159.9	159.0	158.6	155.2	161.1	161.3	161.4	162.0	160.8	160.7
Seasonings, olives, pickles, and relish (12/77 = 100)	157.1	158.5	158.3	158.9	159.6	160.7	156.2	157.6	157.5	157.4	158.1	158.7	159.9	159.9
Other condiments (12/77 = 100)	151.7	155.4	156.1	156.0	156.3	156.0	155.4	153.4	157.2	157.9	157.9	158.2	157.9	157.2
Miscellaneous prepared foods (12/77 = 100)	150.2	151.2	151.6	151.5	152.2	151.8	152.8	150.3	151.5	151.8	151.8	152.5	152.0	153.0
Other canned and packaged prepared foods (12/77 = 100)	145.0	146.2	146.8	146.5	147.2	146.2	147.0	146.4	147.6	148.0	147.7	148.4	147.4	148.2
Food away from home	311.4	319.3	319.8	321.0	322.2	323.9	324.8	314.6	322.5	323.0	324.3	325.4	327.2	328.0
Lunch (12/77 = 100)	151.6	154.9	154.9	155.4	155.9	156.7	157.1	153.2	156.5	156.5	157.1	157.5	158.3	158.7
Dinner (12/77 = 100)	149.7	153.1	153.4	153.9	154.9	155.5	156.2	151.4	154.8	155.1	155.6	156.6	157.2	157.9
Other meals and snacks (12/77 = 100)	152.7	158.2	158.6	159.5	159.4	160.7	160.8	153.3	158.7	159.1	160.0	159.9	161.2	161.2
Alcoholic beverages	210.9	217.0	217.2	217.1	218.4	218.9	218.6	213.0	219.6	219.8	219.7	221.3	221.8	221.5
Alcoholic beverages at home (12/77 = 100)	136.2	140.3	140.7	140.3	141.2	141.4	140.9	137.5	142.0	142.5	142.1	143.2	143.4	143.0
Beer and ale	212.5	224.1	224.8	224.4	225.4	226.1	225.9	211.7	222.8	223.6	223.2	224.8	225.3	225.2
Whiskey	150.7	151.6	152.1	151.6	153.7	153.5	152.9	151.2	152.1	152.6	152.1	154.2	154.0	153.4
Wine	235.9	236.3	237.1	234.8	235.7	237.1	234.8	243.7	244.1	245.2	242.4	243.7	245.5	242.3
Other alcoholic beverages (12/77 = 100)	120.4	122.1	121.7	122.4	122.5	122.3	121.5	120.4	122.0	121.8	122.4	122.3	122.2	121.5
Alcoholic beverages away from home (12/77 = 100)	143.6	147.1	146.1	147.3	148.4	148.7	149.9	144.8	148.3	147.1	148.5	149.6	149.8	150.9
HOUSING	319.0	323.1	324.5	324.8	326.4	326.8	327.0	319.6	322.3	323.1	324.3	325.3	325.2	324.5
Shelter (CPI-U)	340.7	343.6	345.3	346.6	348.5	349.8	351.1	...	...	...	...	...	...	...
Renters' costs	...	102.5	103.1	103.7	104.4	104.8	105.0	...	...	...	...	...	...	...
Rent, residential	230.2	235.9	237.1	238.2	239.5	240.4	241.3	...	...	...	...	...	...	...
Other renters' costs	337.8	347.9	352.3	355.8	361.3	362.0	359.8	...	...	...	...	...	...	...
Homeowners' costs ²	...	102.2	102.7	103.0	103.5	103.9	104.3	...	...	...	...	...	...	...
Owners' equivalent rent	...	102.2	102.7	103.0	103.5	103.8	104.2	...	...	...	...	...	...	...
Household insurance	...	102.4	102.7	103.5	104.0	105.5	106.1	...	...	...	...	...	...	...
Maintenance and repairs	339.0	345.1	346.1	347.9	346.6	351.1	353.4	...	...	...	...	...	...	...
Maintenance and repair services	373.4	381.6	383.3	388.6	387.6	397.2	398.5	...	...	...	...	...	...	...
Maintenance and repair commodities	257.8	262.3	262.6	261.2	259.9	259.5	262.3	...	...	...	...	...	...	...
Shelter (CPI-W)	...	...	...	...	...	...	...	343.0	343.3	344.1	346.4	347.5	347.6	347.1
Rent, residential	...	...	...	...	...	...	...	229.7	235.3	236.5	237.6	238.9	239.8	240.7
Other renters' costs	...	...	...	...	...	...	...	335.6	345.8	350.4	354.0	358.6	359.3	357.3
Lodging while out of town	...	...	...	...	...	...	...	349.3	363.5	370.7	375.7	374.8	374.2	370.9
Tenants' insurance (12/77 = 100)	...	...	...	...	...	...	...	149.1	153.5	153.8	155.4	156.2	158.6	159.4
Homeownership	...	...	...	...	...	...	...	383.7	381.9	382.5	385.2	386.1	385.9	384.9
Home purchase	...	...	...	...	...	...	...	290.4	303.5	303.3	304.1	303.4	301.3	300.0
Financing, taxes, and insurance	...	...	...	...	...	...	...	514.6	490.0	491.3	496.6	500.0	500.6	499.2
Property insurance	...	...	...	...	...	...	...	409.7	430.6	430.8	430.8	434.9	437.4	438.0
Property taxes	...	...	...	...	...	...	...	227.5	234.6	235.1	237.1	238.5	239.1	239.6
Contracted mortgage interest costs	...	...	...	...	...	...	...	663.4	620.8	622.5	629.8	634.2	634.7	632.2
Mortgage interest rates	...	...	...	...	...	...	...	226.6	203.0	203.8	205.5	207.2	208.8	208.6
Maintenance and repairs	...	...	...	...	...	...	...	334.9	341.0	342.0	344.3	343.7	348.1	349.1
Maintenance and repair services	...	...	...	...	...	...	...	374.0	380.0	381.4	385.1	385.5	392.5	393.3
Maintenance and repair commodities	...	...	...	...	...	...	...	251.6	257.5	258.0	257.5	255.2	254.7	255.9
Paint and wallpaper, supplies, tools, and equipment (12/77 = 100)	...	...	...	...	...	...	...	145.9	149.4	149.2	147.6	145.8	145.7	147.3
Lumber, awnings, glass, and masonry (12/77 = 100)	...	...	...	...	...	...	...	120.8	124.2	125.8	126.8	125.3	124.2	123.8
Plumbing, electrical, heating, and cooling supplies (12/77 = 100)	...	...	...	...	...	...	...	135.3	138.8	138.7	139.5	140.7	141.3	139.1
Miscellaneous supplies and equipment (12/77 = 100)	...	...	...	...	...	...	...	141.6	144.1	143.3	143.3	142.2	141.9	144.0

20. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers							
	1982	1983					1982	1983						
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	
Fuel and other utilities	362.2	373.6	375.5	375.1	376.4	374.4	371.3	363.6	375.5	377.3	376.8	378.1	375.7	372.8
Fuels	461.9	475.2	477.7	476.5	478.3	474.4	468.1	461.7	475.6	477.9	476.6	478.3	474.0	467.8
Fuel oil, coal, and bottled gas	691.3	620.0	619.3	619.0	623.2	624.7	623.9	693.7	622.4	621.7	621.5	625.6	627.2	626.4
Fuel oil	712.8	628.5	627.2	626.5	631.2	632.6	631.5	714.7	630.7	629.5	628.9	633.7	635.1	633.9
Other fuels (6/78 = 100)	189.0	188.6	189.3	190.0	190.2	191.0	191.4	190.3	189.5	190.2	190.8	191.0	191.9	192.4
Gas (piped) and electricity	407.6	437.4	440.5	439.1	440.5	435.6	428.2	406.9	437.4	440.3	438.7	440.0	434.5	427.5
Electricity	318.4	337.4	341.1	340.7	342.3	339.2	331.8	317.3	337.9	341.6	341.2	342.6	338.8	330.8
Utility (piped) gas	543.1	591.8	593.0	589.8	590.5	582.4	576.3	541.6	588.8	589.5	585.8	586.4	578.3	574.0
HOUSING														
Fuel and other utilities														
Other utilities and public services	205.1	213.2	214.2	214.8	215.4	215.8	217.3	205.9	214.1	215.3	215.9	216.4	216.9	218.4
Telephone services	166.6	173.4	173.8	173.9	174.4	174.1	175.4	167.0	173.9	174.3	174.5	175.0	174.7	176.0
Local charges (12/77 = 100)	135.4	141.8	141.8	142.1	142.6	142.2	143.8	135.9	142.2	143.8	142.6	143.1	142.8	144.4
Interstate toll calls (12/77 = 100)	119.7	121.8	121.9	121.9	121.9	121.5	121.5	120.2	122.2	122.3	122.4	122.3	121.9	121.9
Intrastate toll calls (12/77 = 100)	111.1	117.4	118.2	118.3	118.6	119.0	119.8	110.9	117.4	118.2	118.3	118.7	119.1	119.8
Water and sewerage maintenance	335.1	348.9	353.5	355.9	356.8	361.7	363.6	338.2	352.6	357.7	360.2	361.0	366.2	367.8
Household furnishings and operations	235.1	238.6	238.9	238.0	238.9	239.4	239.9	231.8	235.5	235.8	234.8	235.8	236.2	236.7
Housefurnishings	195.1	197.8	198.1	196.7	197.6	198.0	198.4	193.0	195.9	196.1	194.7	195.6	196.0	196.4
Textile housefurnishings	222.6	226.8	227.3	226.1	231.2	228.8	229.6	225.8	230.5	231.1	229.6	234.6	232.0	233.0
Household linens (12/77 = 100)	133.8	135.4	134.4	133.4	138.1	136.0	135.7	135.0	136.4	135.6	134.5	139.0	137.0	136.4
Curtains, drapes, slipcovers, and sewing materials (12/77 = 100)	144.0	147.7	149.3	149.0	150.5	149.6	151.1	147.5	152.1	154.0	153.3	154.8	153.6	155.6
Furniture and bedding	214.1	220.0	220.5	217.2	217.9	219.8	220.1	210.3	216.5	217.6	214.3	215.1	216.6	217.1
Bedroom furniture (12/77 = 100)	146.2	152.3	156.5	151.3	152.5	152.9	152.6	142.1	148.9	153.0	148.2	148.9	149.0	149.5
Sofas (12/77 = 100)	116.4	118.0	117.7	117.3	117.6	118.8	119.8	117.0	118.3	118.0	117.6	118.1	119.2	120.0
Living room chairs and tables (12/77 = 100)	122.1	124.2	123.9	123.5	124.2	125.4	125.6	122.5	124.9	125.0	124.5	125.2	126.5	126.6
Other furniture (12/77 = 100)	140.1	143.8	141.1	139.8	139.4	141.2	141.4	135.3	139.0	137.1	135.6	135.8	137.2	137.1
Appliances including TV and sound equipment	151.7	151.4	150.9	150.6	151.0	151.2	151.0	151.5	151.9	151.2	150.8	151.2	151.7	151.6
Television and sound equipment	108.1	105.9	105.2	105.1	105.1	104.9	105.0	107.3	105.0	104.3	104.3	104.2	103.9	104.1
Television	102.9	100.8	100.1	100.1	99.6	99.1	98.8	101.7	99.6	99.0	99.0	98.3	97.8	97.4
Sound equipment (12/77 = 100)	113.9	111.6	110.8	110.6	111.1	111.0	111.6	113.1	110.5	109.8	109.7	110.2	110.0	110.7
Household appliances	185.2	188.4	188.6	188.0	189.2	190.3	189.2	185.6	189.5	189.0	188.0	189.1	190.5	190.1
Refrigerators and home freezers	192.7	194.0	192.7	191.4	192.4	194.0	193.0	198.4	200.2	199.2	197.2	198.0	200.0	198.9
Laundry equipment	140.0	144.6	143.0	142.0	142.7	144.1	144.1	143.0	145.2	143.5	144.2	143.6	144.1	145.2
Other household appliances (12/77 = 100)	122.7	124.7	125.6	125.4	126.2	127.0	125.9	120.7	123.2	123.6	123.4	124.2	125.2	124.6
Stoves, dishwashers, vacuums, and sewing machines (12/77 = 100)	120.7	123.9	124.0	123.7	125.4	125.9	125.8	119.2	122.8	122.6	122.1	123.6	124.1	124.6
Office machines, small electric appliances, and air conditioners (12/77 = 100)	124.7	125.7	127.3	127.2	127.3	128.3	126.2	122.4	123.7	124.8	124.8	124.9	126.4	124.6
Other household equipment (12/77 = 100)	139.1	141.2	142.0	141.2	141.0	141.3	142.1	137.1	139.0	139.7	138.9	138.8	138.9	139.7
Floor and window coverings, infants', laundry, cleaning, and outdoor equipment (12/77 = 100)	142.6	142.2	145.1	144.4	144.2	146.5	147.3	134.5	134.3	137.3	136.4	136.0	138.2	138.8
Clocks, lamps, and decor items (12/77 = 100)	131.3	133.0	133.6	132.3	132.9	134.0	135.5	126.8	128.8	129.3	128.3	128.4	129.3	131.0
Tableware, serving pieces, and nonelectric kitchenware (12/77 = 100)	144.6	149.2	149.1	148.7	147.7	145.6	146.2	141.0	145.0	144.9	144.4	143.6	141.7	142.4
Lawn equipment, power tools, and other hardware (12/77 = 100)	134.2	135.0	135.5	134.2	134.7	135.9	136.6	139.5	139.9	140.4	139.3	140.2	141.2	141.8
Housekeeping supplies	290.3	296.3	296.8	295.8	295.7	296.6	297.0	287.1	293.2	293.5	292.7	293.1	293.6	293.9
Soaps and detergents	283.5	294.9	294.6	294.4	296.1	295.2	296.7	279.9	290.9	290.3	290.2	291.1	292.7	292.7
Other laundry and cleaning products (12/77 = 100)	147.3	151.5	151.4	151.0	152.0	151.6	151.5	146.2	150.4	150.2	149.8	150.9	150.5	150.2
Cleansing and toilet tissue, paper towels and napkins (12/77 = 100)	148.2	147.3	148.1	148.1	148.0	147.8	148.2	148.1	147.4	148.2	148.1	148.2	148.0	148.3
Stationery, stationery supplies, and gift wrap (12/77 = 100)	138.3	139.9	140.3	139.5	139.5	139.5	140.9	141.4	142.8	143.2	142.5	142.6	142.4	144.0
Miscellaneous household products (12/77 = 100)	151.6	154.0	153.9	154.1	154.9	155.9	155.5	146.2	148.7	148.6	148.8	149.5	150.4	150.0
Lawn and garden supplies (12/77 = 100)	141.9	145.8	146.6	144.6	140.8	144.1	143.0	134.9	139.4	139.7	137.8	134.9	137.2	136.0
Housekeeping services	314.3	318.5	318.7	319.3	320.9	321.6	322.3	313.7	318.0	318.3	319.1	320.8	321.7	322.3
Postage	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5	337.5
Moving, storage, freight, household laundry, and drycleaning services (12/77 = 100)	157.7	162.3	162.2	162.8	165.9	167.1	168.1	157.8	162.3	162.3	163.1	166.0	167.3	168.2
Appliance and furniture repair (12/77 = 100)	139.5	143.3	144.0	144.9	145.4	145.8	146.2	137.9	141.6	142.2	143.1	143.6	144.0	144.3
APPAREL AND UPKEEP	195.4	195.6	195.0	197.3	200.4	200.7	200.7	194.4	194.7	194.0	196.3	199.3	199.8	199.7
Apparel commodities	184.3	183.6	182.8	185.3	188.5	188.7	188.6	183.8	183.2	182.4	184.7	188.0	188.4	188.2
Apparel commodities less footwear	180.6	179.7	179.3	181.9	185.3	185.4	185.2	179.8	179.2	178.7	181.2	184.6	185.0	184.5
Men's and boys'	189.0	189.1	188.2	188.3	190.8	192.1	193.0	188.9	189.0	188.1	188.3	191.1	192.5	193.4
Men's (12/77 = 100)	119.3	118.8	118.3	118.5	120.1	120.8	121.6	119.7	119.2	118.7	118.9	120.7	121.4	122.2
Suits, sport coats, and jackets (12/77 = 100)	111.5	111.2	110.7	111.4	112.3	113.7	114.8	104.2	103.9	103.3	104.4	105.5	106.9	107.7
Coats and jackets	103.4	100.7	98.2	99.5	104.4	105.7	105.5	105.4	103.3	100.7	101.7	107.5	108.9	108.8
Furnishings and special clothing (12/77 = 100)	142.4	144.3	145.3	144.8	145.4	145.7	147.3	139.1	140.3	141.3	140.8	141.6	141.9	143.6
Shirts (12/77 = 100)	125.8	122.6	120.9	121.6	125.6	125.1	125.2	128.7	125.8	124.2	124.7	128.6	127.8	127.8
Dungarees, jeans, and trousers (12/77 = 100)	112.6	113.0	112.8	112.3	112.4	113.1	113.9	118.1	118.6	118.4	118.1	118.2	119.1	120.1
Boys' (12/77 = 100)	121.6	123.7	123.0	122.6	124.1	125.4	125.2	119.7	121.6	120.9	120.7	122.4	123.9	123.8
Coats, jackets, sweaters, and shirts (12/77 = 100)	113.7	116.3	114.9	115.4	119.0	120.9	119.9	114.6	116.6	115.5	116.2	120.5	122.7	122.1
Furnishings (12/77 = 100)	132.6	135.8	134.9	134.2	135.1	136.2	137.6	128.5	131.2	130.4	129.9	130.7	131.9	133.3
Suits, trousers, sport coats, and jackets (12/77 = 100)	123.4	124.7	124.6	123.5	123.7	124.7	124.4	120.5	121.9	121.6	120.7	120.8	121.8	121.6
Women's and girls'	162.2	159.7	158.8	164.2	168.8	168.6	167.0	163.8	161.5	160.8	165.8	170.2	170.4	168.6
Women's (12/77 = 100)	107.3	106.1	105.5	109.5										

20. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers							
	1982	1983					1982	1983						
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.
APPAREL AND UPKEEP—Continued														
Apparel Commodities—Continued														
Apparel commodities less footwear—Continued														
Women's—Continued														
Separates and sportswear (12/77 = 100)	100.1	97.7	96.3	99.4	102.5	103.9	102.0	100.9	98.4	96.9	99.7	102.9	104.2	102.4
Underwear, nightwear, and hosiery (12/77 = 100)	130.6	132.8	131.7	133.2	135.1	135.6	136.1	130.2	132.4	131.4	132.9	134.8	135.3	135.7
Suits (12/77 = 100)	87.4	77.2	81.0	87.3	94.3	89.9	85.7	105.8	93.9	99.8	108.1	115.0	112.6	105.8
Girls' (12/77 = 100)	110.4	106.5	106.2	107.7	104.5	111.4	111.8	109.6	107.4	106.6	106.8	108.3	110.4	110.8
Coats, jackets, dresses, and suits (12/77 = 100)	103.9	96.3	100.1	101.9	101.6	105.8	106.2	102.2	96.5	100.0	98.7	98.5	103.1	103.3
Separates and sportswear (12/77 = 100)	106.0	103.5	99.8	102.0	106.3	106.8	107.6	105.9	106.1	101.3	102.9	106.8	107.4	108.3
Underwear, nightwear, hosiery, and accessories (12/77 = 100)	129.3	128.6	127.7	127.8	128.4	129.0	128.7	128.1	127.5	126.8	126.7	127.0	127.6	127.5
Infants' and toddlers'	274.2	283.0	282.4	281.9	287.4	289.0	288.7	285.5	293.4	293.1	292.3	297.9	299.9	298.1
Other apparel commodities	212.7	214.0	215.9	216.2	217.4	215.5	216.6	201.4	203.0	204.6	204.6	205.9	204.0	205.2
Sewing materials and notions (12/77 = 100)	120.0	122.4	123.0	121.6	121.9	120.4	118.6	118.2	120.5	121.0	119.8	120.2	118.5	116.8
Jewelry and luggage (12/77 = 100)	144.9	145.1	146.7	147.5	148.5	147.4	149.2	135.7	136.2	137.4	138.0	139.0	138.0	140.0
Footwear	206.9	206.8	203.8	205.7	208.0	208.6	209.1	206.7	206.6	203.7	205.5	207.6	208.1	209.1
Men's (12/77 = 100)	132.5	133.7	132.8	132.3	134.8	135.0	135.8	134.2	135.5	134.7	134.2	136.7	136.9	137.6
Boys' and girls' (12/77 = 100)	129.3	130.7	128.9	130.3	130.4	131.1	131.8	131.8	133.1	131.0	132.6	132.9	133.2	134.0
Women's (12/77 = 100)	127.6	125.6	122.9	125.3	126.8	127.1	126.7	123.6	121.3	118.9	121.1	122.3	122.6	122.9
Apparel services	282.0	290.9	291.8	292.3	293.4	294.6	296.2	280.3	289.2	290.0	290.4	291.5	292.6	294.3
Laundry and drycleaning other than coin operated (12/77 = 100)	167.9	173.5	174.1	174.5	174.4	176.0	177.0	166.4	171.9	172.5	172.9	173.3	174.3	175.4
Other apparel services (12/77 = 100)	148.1	152.4	152.7	152.7	153.7	153.8	154.5	149.2	153.7	153.9	153.9	154.8	154.9	155.6
TRANSPORTATION	295.8	298.3	300.4	302.4	303.7	305.7	306.3	297.3	299.6	301.9	304.1	305.5	306.9	308.2
Private	291.4	293.8	296.0	298.0	299.2	300.4	301.7	294.1	296.3	298.6	300.8	302.2	303.6	304.9
New cars	199.0	201.6	201.4	202.1	202.7	204.3	206.2	198.7	201.2	201.0	201.7	202.3	203.8	205.7
Used cars	310.5	322.7	329.6	336.8	343.9	350.4	356.1	310.5	322.7	329.6	336.8	343.9	350.4	356.1
Gasoline	388.1	386.1	389.3	389.5	387.1	382.4	378.1	389.5	387.4	390.6	391.0	388.8	384.3	380.1
Automobile maintenance and repair	322.3	329.5	329.8	331.0	332.3	333.5	335.2	323.1	330.2	330.4	331.7	333.0	334.1	335.6
Body work (12/77 = 100)	161.0	166.4	166.6	167.1	167.7	169.0	169.5	159.8	165.3	165.6	166.0	166.5	167.8	168.2
Automobile drive train, brake, and miscellaneous mechanical repair (12/77 = 100)	153.7	157.7	158.3	158.9	160.7	161.9	163.4	157.8	161.7	162.2	162.8	164.5	165.7	167.2
Maintenance and servicing (12/77 = 100)	149.3	152.2	152.0	152.8	152.6	152.5	152.7	148.6	151.5	151.3	152.2	151.9	151.7	151.9
Power plant repair (12/77 = 100)	154.4	157.0	157.3	157.5	158.4	159.1	160.2	153.9	156.4	156.6	156.9	157.8	158.5	159.5
Other private transportation	260.7	258.1	258.6	260.0	260.8	263.3	265.6	262.9	258.9	259.4	261.1	261.8	264.4	266.6
Other private transportation commodities	215.1	210.4	209.6	208.9	208.3	208.1	209.2	217.7	212.9	212.1	211.2	210.9	210.7	211.7
Motor oil, coolant, and other products (12/77 = 100)	153.3	156.0	155.3	153.5	154.2	152.7	152.9	152.3	154.8	154.1	152.6	153.2	152.2	151.7
Automobile parts and equipment (12/77 = 100)	137.0	133.2	132.7	132.4	131.9	131.9	132.7	139.0	135.0	134.5	134.1	133.8	133.8	134.6
Tires	190.4	184.3	183.5	183.4	181.7	181.7	183.1	194.0	187.9	187.2	186.9	185.4	185.4	187.0
Other parts and equipment (12/77 = 100)	135.1	132.7	132.3	131.6	132.9	133.0	133.0	135.4	132.5	132.1	131.3	132.8	132.8	132.9
Other private transportation services	275.3	273.3	274.1	276.0	277.3	280.5	283.1	277.5	273.6	274.5	276.8	277.8	281.1	283.7
Automobile insurance	286.9	301.1	302.4	302.9	303.8	309.4	312.8	286.1	300.5	302.0	302.5	303.4	308.8	312.1
Automobile finance charges (12/77 = 100)	178.9	152.2	151.7	155.4	156.4	157.2	159.1	178.1	151.4	151.1	155.0	155.8	156.8	158.7
Automobile rental, registration, and other fees (12/77 = 100)	139.2	144.7	145.6	146.0	146.9	147.1	147.3	140.0	146.0	146.9	147.2	147.9	148.2	148.3
State registration	183.8	192.3	194.8	194.6	195.3	195.4	195.4	183.4	192.1	194.7	194.5	195.2	195.2	195.2
Drivers' licenses (12/77 = 100)	132.8	150.3	152.9	153.0	153.0	154.0	154.5	133.1	150.6	153.4	153.4	153.4	154.4	154.8
Vehicle inspection (12/77 = 100)	128.5	131.2	139.0	139.0	139.8	139.8	139.8	129.8	132.5	139.8	139.8	140.5	140.5	140.5
Other vehicle-related fees (12/77 = 100)	155.5	159.0	157.9	158.8	160.5	160.2	160.5	162.9	167.0	165.5	166.3	167.8	167.6	167.7
Public	356.0	361.2	363.2	365.0	366.6	368.2	370.3	348.2	352.7	354.4	355.7	357.2	358.5	359.9
Airline fare	411.6	415.4	418.8	420.7	423.3	426.6	431.6	408.8	410.9	415.9	417.1	419.5	422.5	427.2
Intercity bus fare	373.8	403.9	404.2	412.8	415.1	417.7	416.0	375.7	405.2	404.1	412.7	415.3	417.6	416.9
Intracity mass transit	316.1	321.7	322.6	323.7	324.6	324.8	324.3	315.7	320.6	320.7	321.6	322.5	323.0	322.5
Taxi fare	300.5	301.0	301.0	302.4	303.5	303.1	304.7	310.1	311.0	311.0	311.8	312.7	312.2	313.5
Intercity train fare	348.3	353.2	361.3	364.5	364.8	365.4	364.8	349.3	353.6	362.3	365.2	365.4	366.1	365.6
MEDICAL CARE	342.2	355.4	357.7	360.0	361.2	362.9	364.9	339.8	353.3	355.6	357.9	359.2	360.9	362.9
Medical care commodities	212.9	223.2	224.2	225.4	226.3	227.5	228.9	213.4	223.6	224.5	225.8	226.7	227.8	229.1
Prescription drugs	201.0	213.7	214.5	215.7	216.7	218.6	220.8	202.1	214.8	215.6	216.9	218.0	219.9	222.1
Anti-infective drugs (12/77 = 100)	150.1	156.6	157.2	157.9	158.1	158.6	159.1	152.3	158.8	159.2	160.1	160.3	160.8	161.5
Tranquilizers and sedatives (12/77 = 100)	163.5	177.0	177.6	179.1	179.9	182.8	186.9	163.2	176.7	177.2	178.7	179.7	182.6	186.7
Circulatories and diuretics (12/77 = 100)	144.0	153.3	154.0	155.4	155.8	158.1	159.9	143.9	153.2	153.9	155.4	155.7	157.9	159.7
Hormones, diabetic drugs, biologicals, and prescription medical supplies (12/77 = 100)	183.9	198.1	198.1	199.2	200.0	201.9	204.0	185.2	199.9	199.8	201.1	201.9	204.0	206.1
Pain and symptom control drugs (12/77 = 100)	164.0	173.3	175.1	175.7	177.5	178.7	180.5	166.0	175.1	176.8	177.5	179.4	180.6	182.4
Supplements, cough and cold preparations, and respiratory agents (12/77 = 100)	153.4	161.8	162.3	162.6	163.8	164.2	164.7	153.6	162.0	162.5	162.9	164.1	164.5	165.1
Nonprescription drugs and medical supplies (12/77 = 100)	149.9	155.2	155.9	156.7	157.3	157.5	157.9	150.5	156.0	156.7	157.5	159.1	158.3	158.8
Eyeglasses (12/77 = 100)	132.9	135.0	135.8	136.2	137.7	137.3	137.8	131.6	133.9	134.6	135.1	136.7	136.2	136.6
Internal and respiratory over-the-counter drugs	241.9	251.9	253.5	255.0	255.6	256.1	256.4	243.0	253.3	254.9	256.3	256.9	257.4	257.7
Nonprescription medical equipment and supplies (12/77 = 100)	145.2	150.4	150.3	151.0	151.2	151.8	152.7	146.2	151.4	151.3	152.4	152.3	153.0	154.1

20. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers							
	1982	1983					1982	1983						
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.
Medical care services	371.0	384.6	387.2	389.8	391.0	392.9	395.0	367.7	381.7	384.4	387.0	388.3	390.2	392.3
Professional services	308.3	322.0	324.2	326.0	327.6	329.7	331.7	308.4	322.2	324.6	326.5	328.0	330.1	332.0
Physicians' services	335.3	351.7	353.9	354.9	356.5	358.5	360.5	338.6	355.3	357.6	358.8	360.5	362.3	364.3
Dental services	289.2	301.2	303.8	306.5	308.3	310.7	312.9	287.0	298.9	301.6	304.3	306.1	308.5	310.7
Other professional services (12/77 = 100)	147.2	152.3	153.0	154.0	154.3	155.4	155.9	143.9	148.7	149.6	150.5	150.8	151.8	152.5
Other medical care services	446.8	460.4	463.3	466.9	467.8	469.3	471.5	442.3	456.4	459.4	462.9	463.9	465.6	467.9
Hospital and other medical services (12/77 = 100)	182.6	191.5	193.8	196.7	197.8	199.4	201.0	180.7	189.6	191.9	194.6	195.7	197.3	199.0
Hospital room	586.6	609.6	619.1	627.6	633.8	638.0	641.9	578.7	602.2	611.2	619.5	626.1	630.2	633.9
Other hospital and medical care services (12/77 = 100)	178.1	188.3	189.9	193.0	193.3	195.1	197.1	176.7	186.8	188.4	191.2	191.4	193.3	195.4
ENTERTAINMENT	239.9	245.4	246.0	246.6	247.5	249.1	249.5	236.1	241.9	242.5	243.1	244.1	245.4	245.7
Entertainment commodities	241.4	246.3	246.7	248.0	248.0	249.3	249.0	235.4	240.7	241.4	242.5	242.6	243.7	243.4
Reading materials (12/77 = 100)	153.4	158.5	158.5	160.9	161.2	163.4	162.9	152.7	158.0	158.0	160.2	160.5	162.8	162.3
Newspapers	290.9	302.0	302.7	303.5	304.0	306.9	307.7	290.5	302.0	302.7	303.4	303.9	307.0	307.8
Magazines, periodicals, and books (12/77 = 100)	159.6	164.2	163.6	168.4	168.6	171.7	170.2	159.6	164.2	163.6	168.5	168.8	172.0	170.4
Sporting goods and equipment (12/77 = 100)	132.1	134.0	134.2	134.1	134.6	134.5	134.7	124.7	127.7	128.3	128.3	128.9	128.6	128.7
Sport vehicles (12/77 = 100)	133.8	136.7	137.1	136.4	137.4	137.3	137.8	122.2	126.8	127.8	127.8	128.5	128.2	128.5
Indoor and warm weather sport equipment (12/77 = 100)	119.9	119.9	118.6	118.5	118.6	118.6	118.1	117.6	117.6	116.4	116.6	116.3	116.4	116.0
Bicycles	198.3	199.2	199.8	199.9	200.1	199.9	198.6	199.5	200.2	200.7	200.7	200.9	200.7	199.3
Other sporting goods and equipment (12/77 = 100)	131.5	132.2	132.8	133.1	134.6	134.0	134.5	131.3	132.2	132.7	132.9	134.5	133.8	134.4
Toys, hobbies, and other entertainment (12/77 = 100)	136.4	138.6	139.0	139.3	138.8	139.3	139.1	135.2	137.3	137.7	138.0	137.7	138.1	137.8
Toys, hobbies, and music equipment (12/77 = 100)	135.5	137.4	137.7	137.7	136.7	137.3	136.7	131.8	133.6	134.0	133.0	133.0	133.5	132.8
Photographic supplies and equipment (12/77 = 100)	129.0	131.4	131.6	131.6	131.0	131.9	131.7	130.1	132.4	132.7	132.8	132.1	133.0	132.7
Pet supplies and expenses (12/77 = 100)	143.4	145.9	146.6	147.5	148.5	148.5	148.8	144.5	146.9	147.6	148.6	149.6	149.6	149.9
Entertainment services	238.2	244.7	245.4	245.0	247.2	249.2	250.5	238.4	245.1	245.8	245.4	247.8	249.7	251.0
Fees for participant sports (12/77 = 100)	149.0	151.3	151.8	152.2	154.4	155.6	156.4	150.1	152.5	152.8	153.2	155.5	156.9	157.7
Admissions (12/77 = 100)	136.9	144.7	146.4	145.4	145.2	145.8	146.6	135.9	143.7	145.4	144.5	144.2	144.8	145.6
Other entertainment services (12/77 = 100)	129.8	131.8	130.6	129.8	131.0	132.6	133.3	130.7	132.6	131.4	130.7	132.3	133.6	134.4
OTHER GOODS AND SERVICES	273.8	284.5	287.5	289.0	294.4	296.8	298.1	270.9	282.8	286.4	288.0	292.0	294.1	295.5
Tobacco products	264.0	285.9	294.6	297.7	298.0	299.0	299.9	263.4	285.4	294.3	297.5	297.8	298.8	299.7
Cigarettes	269.8	293.1	302.8	306.1	306.4	307.4	308.2	268.8	292.0	301.7	305.2	305.5	306.5	307.3
Other tobacco products and smoking accessories (12/77 = 100)	142.8	149.9	150.5	150.9	151.2	151.4	152.7	143.0	149.8	150.5	150.9	151.2	151.4	152.7
Personal care	254.2	260.9	261.3	262.1	263.0	263.3	265.6	252.1	259.0	259.4	260.1	260.9	261.5	263.7
Toilet goods and personal care appliances	253.5	261.4	262.3	261.9	262.4	263.0	265.7	254.1	262.1	263.0	262.6	263.0	263.9	266.6
Products for the hair, hairpieces, and wigs (12/77 = 100)	148.3	151.7	152.5	152.8	153.0	152.7	154.5	147.3	150.9	151.7	151.9	152.0	151.9	153.6
Dental and shaving products (12/77 = 100)	157.2	162.5	162.6	160.0	160.8	163.1	166.7	155.4	160.8	160.8	158.5	159.1	161.2	165.1
Cosmetics, bath and nail preparations, manicure and eye makeup implements (12/77 = 100)	141.7	148.5	148.8	148.6	148.3	147.7	148.9	142.3	149.2	149.5	149.2	148.9	148.9	150.1
Other toilet goods and small personal care appliances (12/77 = 100)	144.7	147.1	147.9	148.9	149.9	150.5	150.5	148.4	150.7	151.6	152.4	153.4	154.1	154.1
Personal care services	255.8	261.6	261.5	263.3	264.6	264.6	266.6	250.6	256.3	256.4	258.1	259.3	259.6	261.4
Beauty parlor services for women	258.9	265.0	264.3	266.5	268.1	267.5	269.8	252.1	258.0	257.5	259.7	261.1	260.7	262.9
Haircuts and other barber shop services for men (12/77 = 100)	141.4	144.4	145.1	145.6	146.0	146.8	147.5	140.3	143.2	143.9	144.4	144.8	145.6	146.3
Personal and educational expenses	320.0	326.0	327.2	328.1	344.6	350.9	351.3	321.3	328.1	329.4	330.5	345.6	352.4	352.9
Schoolbooks and supplies	283.1	293.6	294.2	294.6	306.6	308.5	308.8	286.8	297.6	298.3	298.8	310.8	312.9	313.0
Personal and educational services	328.6	333.8	335.1	336.2	353.5	360.6	361.0	329.8	335.8	337.3	338.6	354.3	362.0	352.9
Tuition and other school fees	167.2	167.6	168.0	168.2	178.6	182.9	182.9	167.7	168.2	168.5	168.8	178.4	183.3	183.3
College tuition (12/77 = 100)	166.8	167.3	167.8	168.0	180.7	182.7	182.7	166.9	167.4	167.9	168.0	180.5	182.6	182.6
Elementary and high school tuition (12/77 = 100)	168.7	168.9	168.9	169.2	170.9	183.9	183.9	169.7	169.9	169.9	170.3	172.7	184.9	184.9
Personal expenses (12/77 = 100)	174.1	186.1	187.9	189.8	192.6	193.4	194.6	174.0	186.2	188.3	190.4	193.0	193.9	195.2
Special indexes:														
Gasoline, motor oil, coolant, and other products	383.5	381.2	384.3	384.5	382.3	377.8	373.7	384.8	382.4	385.4	385.9	383.9	379.5	375.5
Insurance and finance									427.2	410.2	411.4	415.6	418.2	419.7
Utilities and public transportation	324.1	341.5	343.6	343.6	344.7	343.0	340.7	323.2	341.1	343.1	342.9	343.8	341.8	339.4
Housekeeping and home maintenance services	354.8	358.6	358.9	360.1	361.6	363.4	364.2	355.4	360.8	361.7	364.2	365.2	369.7	370.4

¹Excludes motor oil, coolant, and other products as of January 1983.

c = corrected.

21. Consumer Price Index for All Urban Consumers: Cross classification of region and population size class by expenditure category and commodity and service group

[December 1977 = 100]

Category and group	Size class A (1.25 million or more)			Size class B (385,000-1,250 million)			Size class C (75,000-385,000)			Size class D (75,000 or less)		
	1983			1983			1983			1983		
	June	Aug.	Oct.	June	Aug.	Oct.	June	Aug.	Oct.	June	Aug.	Oct.
Northeast												
EXPENDITURE CATEGORY												
All items	153.9	155.0	156.5	160.8	161.5	163.1	164.2	165.5	167.1	158.5	160.0	161.6
Food and beverages	147.4	147.5	148.2	146.8	147.4	147.3	150.6	151.6	150.7	146.3	147.7	146.6
Housing	158.9	159.6	160.5	170.7	169.7	171.4	176.7	178.4	163.9	164.2	166.3	166.3
Apparel and upkeep	122.6	123.2	125.5	124.4	125.8	130.0	128.9	128.6	132.3	129.5	128.8	131.9
Transportation	161.7	164.2	165.8	169.2	171.4	173.4	166.6	169.5	172.0	166.7	169.7	171.9
Medical care	160.9	164.4	166.5	163.5	167.1	167.3	166.7	171.2	171.4	168.5	171.9	172.6
Entertainment	144.1	144.3	145.8	138.8	139.6	142.8	142.1	143.8	146.2	148.1	149.3	153.0
Other goods and services	156.7	160.3	166.9	159.8	162.8	167.1	163.1	165.9	170.5	162.2	166.7	171.3
COMMODITY AND SERVICE GROUP												
Commodities	149.1	150.1	151.2	154.8	156.0	157.4	154.3	155.4	156.4	152.3	153.9	154.7
Commodities less food and beverages	150.0	141.6	153.0	158.3	159.8	162.1	155.8	156.8	158.9	154.8	156.3	158.3
Services	160.0	161.3	163.2	169.8	169.8	171.8	180.1	181.7	184.2	167.9	169.2	171.9
North Central Region												
EXPENDITURE CATEGORY												
All items	165.2	166.6	167.3	162.0	162.2	162.6	158.3	159.6	161.1	159.3	160.7	162.1
Food and beverages	145.0	144.5	144.6	143.8	143.6	142.8	145.0	144.8	151.7	151.9	153.2	153.2
Housing	185.3	186.3	185.6	172.2	171.7	170.3	165.2	165.7	167.8	163.9	165.2	165.9
Apparel and upkeep	116.8	119.5	122.3	129.2	128.9	131.8	127.0	129.9	131.6	122.2	125.4	129.2
Transportation	164.2	167.4	168.8	167.1	168.6	170.1	167.1	169.8	171.8	165.7	167.8	169.4
Medical care	166.1	168.4	169.8	168.5	172.4	173.1	166.3	167.5	167.6	173.1	175.4	175.5
Entertainment	141.9	143.3	144.3	136.9	131.8	134.7	147.3	148.4	149.9	137.1	136.6	138.9
Other goods and services	156.7	158.1	162.9	168.5	170.4	175.8	153.8	158.3	161.1	166.3	169.3	172.4
COMMODITY AND SERVICE GROUP												
Commodities	153.5	154.7	155.6	152.8	153.1	153.7	150.0	151.5	152.7	149.9	151.3	153.0
Commodities less food and beverages	157.5	159.7	161.2	156.8	157.1	158.4	152.2	154.5	156.5	149.0	151.0	153.0
Services	182.4	184.3	184.6	176.8	176.8	176.9	171.7	172.8	174.7	174.1	175.6	176.5
South												
EXPENDITURE CATEGORY												
All items	161.2	162.4	163.3	161.7	162.9	164.9	161.2	162.3	163.5	162.0	162.8	165.1
Food and beverages	150.9	150.9	151.4	148.9	149.9	150.5	147.3	147.8	148.3	150.7	150.7	151.4
Housing	168.5	169.7	169.6	167.9	168.4	171.0	168.7	169.5	169.6	170.3	171.9	173.9
Apparel and upkeep	129.8	131.8	130.7	124.6	126.2	129.0	123.0	124.1	126.5	113.9	111.3	116.3
Transportation	166.8	168.7	171.1	170.3	172.2	174.2	168.5	170.3	172.4	166.0	167.3	170.4
Medical care	169.0	170.0	171.7	167.5	169.0	172.4	178.5	180.0	182.3	184.4	184.2	187.8
Entertainment	139.4	140.7	143.4	153.0	154.4	153.7	146.1	146.2	148.1	145.5	146.4	148.6
Other goods and services	159.3	162.1	166.2	162.9	164.9	168.5	160.0	161.6	166.2	161.0	162.9	164.0
COMMODITY AND SERVICE GROUP												
Commodities	153.7	155.0	155.5	154.5	155.6	157.2	152.0	153.7	154.8	153.0	153.2	155.4
Commodities less food and beverages	154.8	156.8	157.3	156.8	157.9	160.1	154.1	156.4	157.9	153.8	154.2	157.1
Services	171.5	172.7	174.1	172.6	173.9	176.6	175.3	175.6	177.1	175.7	177.1	179.6
West												
EXPENDITURE CATEGORY												
All items	161.4	162.7	163.5	161.8	162.5	163.8	153.5	155.2	155.9	160.0	162.2	163.9
Food and beverages	151.2	150.9	151.9	153.7	152.8	153.6	148.6	148.3	149.4	154.4	154.1	154.9
Housing	166.2	168.3	170.0	165.1	165.4	168.1	151.2	152.9	154.2	159.1	163.2	164.9
Apparel and upkeep	121.8	123.3	122.8	128.4	126.9	127.6	123.3	122.8	125.0	142.9	142.4	146.2
Transportation	171.3	173.0	172.0	171.6	174.4	174.3	167.7	170.6	169.9	165.6	167.8	169.8
Medical care	176.7	177.3	177.3	172.6	175.8	175.6	176.4	180.0	180.0	177.5	179.2	179.0
Entertainment	139.6	139.8	141.3	145.9	146.7	146.8	144.8	148.7	147.4	157.3	158.5	160.6
Other goods and services	155.5	165.0	168.0	163.4	165.5	168.4	158.0	161.2	164.6	169.2	173.4	175.3
COMMODITY AND SERVICE GROUP												
Commodities	152.4	152.6	152.4	154.6	155.2	155.7	152.1	153.3	153.4	151.2	152.4	153.8
Commodities less food and beverages	148.6	153.6	152.7	150.7	156.4	156.8	149.6	155.4	155.0	147.0	151.7	153.4
Services	171.6	175.9	177.8	170.2	172.6	174.9	155.3	157.6	159.1	168.8	176.6	178.6

22. Consumer Price Index—U.S. city average, and selected areas

[1967 = 100 unless otherwise specified]

Area ¹	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1982	1983					1982	1983						
	Nov.	June	July	Aug.	Sept.	Oct.	Nov.	Nov.	June	July	Aug.	Sept.	Oct.	Nov.
U.S. city average ²	...	298.1	299.3	300.3	301.8	...	...	...	297.2	298.2	299.5	300.8	...	...
Anchorage, Alaska (10/67 = 100)	257.2	...	265.8	...	276.9	...	270.4	254.4	...	257.5	...	260.8	...	264.0
Atlanta, Ga.	...	302.3	...	303.9	...	304.4	...	...	302.0	...	304.3	...	306.3	...
Baltimore, Md.	290.1	...	300.4	...	302.9	...	304.7	289.7	...	297.4	...	299.5	...	302.4
Boston, Mass.	285.0	...	289.1	...	290.6	...	294.0	284.4	...	288.0	...	288.6	...	292.5
Buffalo, N.Y.	...	284.3	...	285.9	...	288.5	...	...	283.3	...	285.1	...	296.8	...
Chicago, Ill.-Northwestern Ind.	294.3	298.6	299.6	301.6	303.0	343.4	303.9	293.1	295.8	296.4	297.4	299.1	294.5	295.7
Cincinnati, Ohio-Ky.-Ind.	304.2	...	312.4	...	314.6	...	316.8	307.1	...	308.0	...	311.2	...	316.0
Cleveland, Ohio	...	325.5	...	327.3	...	332.5	...	...	316.8	...	317.6	...	317.6	...
Dallas-Ft. Worth, Tex.	...	314.1	...	315.9	...	318.5	...	...	306.3	...	309.0	...	314.7	...
Denver-Boulder, Colo.	326.2	...	335.8	...	339.4	...	339.8	332.5	...	331.7	...	337.3	...	338.4
Detroit, Mich.	296.0	296.6	298.4	298.8	299.2	298.2	299.9	292.1	300.7	303.8	303.7	304.6	298.9	301.8
Honolulu, Hawaii	...	271.4	...	273.5	...	276.4	...	...	273.4	...	278.2	...	285.9	...
Houston, Tex.	...	321.3	...	324.0	...	324.3	...	...	319.7	...	321.6	...	322.4	...
Kansas City, Mo.-Kansas	...	297.5	...	301.3	...	303.3	...	...	298.3	...	299.3	...	303.9	...
Los Angeles-Long Beach, Anaheim, Calif.	288.5	293.6	294.5	295.2	296.4	297.0	296.5	291.6	292.1	293.2	293.7	296.7	299.0	297.8
Miami, Fla. (11/77 = 100)	156.8	...	160.8	...	162.9	...	164.0	158.1	...	162.8	...	164.3	...	164.9
Milwaukee, Wis.	303.1	...	310.1	...	313.9	...	312.5	306.9	...	325.0	...	329.1	...	328.9
Minneapolis-St. Paul, Minn.-Wis.	...	312.6	...	316.2	...	316.8	...	...	311.8	...	308.5	...	312.7	...
New York, N.Y.-Northeastern N.J.	283.6	288.1	289.1	289.5	292.1	292.9	293.9	281.9	285.9	286.1	288.4	288.1	288.7	287.3
Northeast, Pa. (Scranton)	279.4	...	283.4	...	297.2	...	288.5	280.6	...	286.5	...	290.0	...	290.9
Philadelphia, Pa.-N.J.	282.9	286.1	288.3	289.9	291.4	291.2	291.7	282.0	288.7	291.1	293.3	294.2	294.2	294.8
Pittsburgh, Pa.	...	305.4	...	310.2	...	313.7	...	...	299.5	...	304.2	...	304.7	...
Portland, Oreg.-Wash.	285.6	...	291.5	...	293.3	...	293.9	283.5	...	286.4	...	288.2	...	289.6
St. Louis, Mo.-Ill.	290.0	...	299.3	...	302.0	...	299.6	288.9	...	296.7	...	299.1	...	299.3
San Diego, Calif.	321.7	...	335.2	...	340.4	...	342.3	318.2	...	320.0	...	323.8	...	323.7
San Francisco-Oakland, Calif.	...	303.0	...	306.0	...	305.7	...	...	298.6	...	301.6	...	301.4	...
Seattle-Everett, Wash.	297.5	...	306.3	...	308.8	...	309.5	294.1	...	294.2	...	297.7	...	299.0
Washington, D.C.-Md.-Va.	286.3	...	296.8	...	297.0	...	298.6	291.6	...	300.0	...	300.9	...	302.7

¹The areas listed include not only the central city but the entire portion of the Standard Metropolitan Statistical Area, as defined for the 1970 Census of Population, except that the Standard Consolidated Area is

used for New York and Chicago.

²Average of 85 cities.

23. Producer Price Indexes, by stage of processing

[1967 = 100]

Commodity grouping	Annual average 1982	1983												
		Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept.	Oct.	Nov.	Dec.
FINISHED GOODS														
Finished goods	280.6	285.5	283.9	284.1	283.4	283.1	284.2	285.0	285.7	286.1	285.1	287.9	286.8	287.1
Finished consumer goods	281.0	285.6	283.5	283.7	282.7	282.3	283.6	284.6	285.2	285.7	285.1	287.1	285.8	286.1
Finished consumer foods	259.3	258.3	258.4	261.0	261.1	262.9	262.6	261.2	260.7	260.7	263.3	264.3	261.8	264.0
Crude	252.7	247.6	232.9	240.8	247.9	265.8	267.2	251.2	247.1	259.9	269.8	289.8	272.8	269.1
Processed	257.7	257.1	258.5	260.7	260.1	260.5	260.1	260.0	259.8	258.7	260.5	259.9	258.7	261.5
Nondurable goods less foods	333.6	342.2	336.6	333.7	332.0	328.7	332.0	335.7	337.7	338.6	338.6	337.9	336.6	335.3
Durable goods	226.7	232.0	231.7	232.9	231.9	232.2	232.9	233.1	233.4	233.8	228.9	235.4	235.3	235.7
Consumer nondurable goods less food and energy	223.8	229.2	228.3	228.9	229.4	230.1	230.3	230.7	232.0	232.7	232.8	233.3	233.7	233.7
Capital equipment	279.4	284.9	285.2	285.6	285.6	286.2	286.5	286.7	287.2	287.7	285.4	290.9	290.3	290.5
Intermediate materials	310.4	310.1	309.2	309.9	309.5	308.7	309.7	311.3	312.8	314.0	315.7	316.0	315.7	315.8
Materials and components for manufacturing	289.8	288.3	288.6	291.1	290.2	291.0	291.9	292.4	294.1	294.7	296.3	296.4	296.1	297.0
Materials for food manufacturing	255.1	249.8	250.9	254.1	252.8	255.1	257.0	257.0	257.4	260.5	269.3	264.0	260.4	262.5
Materials for nondurable manufacturing	284.4	278.0	277.0	277.0	276.6	277.3	277.7	277.7	279.7	281.1	281.9	283.5	284.1	284.7
Materials for durable manufacturing	310.1	309.4	312.0	319.2	315.7	316.6	318.4	319.0	320.9	320.9	322.8	322.2	321.1	322.6
Components for manufacturing	273.9	277.3	276.8	277.6	278.3	278.9	279.4	280.3	281.6	281.5	281.8	282.2	282.5	283.1
Materials and components for construction	293.7	294.7	296.5	298.8	299.6	300.9	301.2	302.4	302.9	303.7	302.8	303.5	304.0	304.6
Processed fuels and lubricants	591.7	595.0	577.9	565.4	564.2	543.3	547.8	562.0	567.9	572.0	579.2	579.9	574.0	568.5
Manufacturing industries	497.8	502.2	485.2	475.5	480.6	460.4	462.9	475.9	480.9	485.1	495.4	498.7	493.4	488.8
Nonmanufacturing industries	674.3	676.4	659.4	644.6	637.2	615.9	622.2	637.5	644.1	648.0	652.1	650.4	643.9	637.6
Containers	285.6	285.0	285.0	285.3	285.2	284.8	285.8	285.9	286.1	286.3	287.3	288.3	289.3	289.5
Supplies	272.1	273.0	273.1	273.5	273.9	275.5	275.6	275.6	276.2	277.9	280.1	280.4	281.0	281.0
Manufacturing industries	265.8	267.2	267.4	267.8	268.1	268.6	268.9	269.8	270.1	270.5	271.2	271.8	271.9	272.6
Nonmanufacturing industries	275.7	276.3	276.4	276.8	277.1	279.3	279.3	278.8	279.6	282.0	285.0	285.1	296.0	285.6
Feeds	207.0	204.7	206.5	207.4	207.7	219.8	218.1	213.4	216.2	230.7	247.1	245.6	249.6	244.0
Other supplies	289.8	291.1	290.9	291.2	291.6	291.9	292.2	292.5	291.9	293.0	293.5	293.9	294.2	294.8
Crude materials	319.5	312.7	313.9	320.2	321.6	325.8	325.8	323.3	320.6	327.1	328.3	324.5	324.1	327.8
Foodstuffs and feedstuffs	247.8	237.1	239.6	249.3	249.1	256.8	256.5	252.1	248.4	256.4	257.4	253.9	252.0	256.2
Nonfood materials	473.9	475.3	473.6	473.0	477.7	474.6	475.4	476.8	476.2	479.6	481.1	476.7	479.5	482.1
Nonfood materials except fuel	376.8	365.8	368.0	366.0	366.8	367.0	369.0	370.5	371.6	375.6	376.6	375.3	377.7	379.6
Manufacturing industries	387.2	375.0	377.6	375.1	375.9	376.1	378.3	379.9	381.6	385.7	386.5	385.1	387.8	389.7
Construction	270.3	268.1	267.5	269.1	269.3	270.0	270.3	271.3	270.9	271.0	273.1	272.6	272.9	274.6
Crude fuel	886.1	952.2	930.7	937.7	961.8	941.6	935.9	936.7	927.8	926.9	931.2	911.2	915.2	921.4
Manufacturing industries	1,034.8	1,121.4	1,093.8	1,103.9	1,134.3	1,107.6	1,100.9	1,102.3	1,090.4	1,088.9	1,094.7	1,067.9	1,072.4	1,079.9
Nonmanufacturing industries	782.2	832.2	815.5	820.0	839.2	824.0	819.1	819.4	813.0	812.5	815.7	800.9	804.6	810.0
SPECIAL GROUPINGS														
Finished goods excluding foods	285.8	292.5	290.3	289.6	288.7	287.7	289.3	290.8	291.8	292.5	290.3	293.7	293.0	292.6
Finished consumer goods excluding foods	287.8	295.0	291.4	290.3	288.9	287.3	289.4	291.6	292.6	293.5	291.3	293.8	293.0	292.5
Finished consumer goods less energy	244.1	247.6	247.1	248.7	248.6	249.5	249.7	249.4	249.9	250.2	249.6	252.2	251.4	252.4
Intermediate materials less foods and feeds	315.7	315.7	314.6	315.2	314.8	313.6	314.6	316.4	318.0	318.7	319.8	320.4	320.1	320.3
Intermediate materials less energy	290.4	290.0	290.5	292.4	292.1	293.2	293.9	294.4	295.6	296.5	297.8	298.1	298.2	298.8
Intermediate foods and feeds	239.4	235.1	236.4	238.8	238.0	243.6	244.4	242.8	244.0	250.9	262.2	258.2	257.1	256.6
Crude materials less agricultural products	536.3	537.4	536.0	535.1	539.7	536.1	536.2	537.5	536.8	540.0	541.7	537.4	540.4	543.8
Crude materials less energy	240.4	229.9	232.5	241.4	242.7	248.6	249.0	246.2	243.9	251.2	252.2	249.1	248.5	252.3

¹Data for August 1983 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

r = revised.

24. Producer Price Indexes, by commodity groupings

[1967 = 100 unless otherwise specified]

Code	Commodity group and subgroup	Annual average 1982	1982		1983											
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept.	Oct.	Nov.	Dec.	
	All commodities	299.3	300.7	299.9	300.9	300.6	300.6	301.5	302.4	303.2	304.7	305.3	306.3	305.6	306.0	
	All commodities (1957-59 = 100)	317.6	319.0	318.2	319.3	318.9	318.9	319.9	320.8	321.7	323.3	323.9	325.0	324.2	324.7	
	Farm products and processed foods and feeds	248.9	244.8	245.8	250.4	250.6	254.7	254.7	252.5	251.5	255.5	259.2	257.9	256.0	257.8	
	Industrial commodities	312.3	315.2	313.9	313.9	313.5	312.4	313.6	315.3	316.5	317.3	317.2	318.7	318.3	318.4	
	FARM PRODUCTS AND PROCESSED FOODS AND FEEDS															
01	Farm products	242.4	232.6	233.2	240.7	241.5	250.5	250.4	247.4	244.3	253.5	256.3	255.2	251.0	254.0	
01-1	Fresh and dried fruits and vegetables	253.7	248.8	227.6	227.8	234.9	266.6	260.1	264.4	258.2	270.4	275.5	307.6	274.7	273.0	
01-2	Grains	210.9	262.3	206.3	222.4	227.4	243.8	242.2	241.5	236.7	251.8	258.0	253.7	257.5	243.6	
01-3	Livestock	257.8	237.2	242.3	251.1	251.4	260.6	258.0	251.7	240.7	242.2	231.5	229.4	220.5	238.2	
01-4	Live poultry	191.9	177.8	177.1	200.1	177.8	170.8	186.9	199.3	214.5	221.4	242.2	208.5	238.5	241.2	
01-5	Plant and animal fibers	202.9	200.6	201.7	206.4	217.0	213.6	223.8	229.7	230.4	240.7	238.7	234.5	243.6	244.1	
01-6	Fluid milk	282.5	285.5	284.5	284.3	282.9	280.8	279.8	278.6	278.7	281.7	284.4	284.1	283.2	281.4	
01-7	Eggs	178.7	170.0	170.0	170.0	170.0	170.0	185.1	169.3	177.2	189.5	200.1	(2)	(2)	(2)	
01-8	Hay, haysseeds, and oilseeds	212.8	209.0	212.4	217.9	217.8	226.3	227.3	213.3	227.3	262.8	297.8	288.8	287.6	282.2	
01-9	Other farm products	274.5	280.1	279.9	281.2	280.3	279.2	281.0	284.4	282.5	285.7	287.3	283.7	283.5	276.9	
02	Processed foods and feeds	251.5	250.5	251.7	254.7	254.5	256.0	256.1	254.3	254.4	255.5	259.7	258.3	257.6	258.8	
02-1	Cereal and bakery products	253.8	256.2	257.3	256.8	256.9	258.8	259.1	260.3	261.4	262.8	263.2	264.6	264.7	264.9	
02-2	Meats, poultry, and fish	257.6	249.9	252.3	261.0	260.7	259.1	257.8	250.2	247.3	243.2	244.3	239.6	242.1	242.1	
02-3	Dairy products	248.9	250.8	250.7	250.9	250.7	251.0	250.9	250.4	250.5	250.4	250.1	251.0	251.2	249.2	
02-4	Processed fruits and vegetables	274.5	275.7	274.8	274.3	274.9	273.7	275.3	277.1	277.1	278.3	278.1	280.0	279.8	281.5	
02-5	Sugar and confectionery	269.7	280.1	282.1	286.4	283.7	287.4	289.9	296.0	296.4	298.9	300.1	297.7	297.6	297.4	
02-6	Beverages and beverage materials	256.9	258.8	260.1	261.3	262.0	263.0	263.6	263.0	263.7	263.9	264.5	265.1	266.1	266.5	
02-7	Fats and oils	215.1	203.0	201.7	205.3	206.0	214.6	220.0	219.3	222.2	245.6	303.7	287.4	277.6	271.7	
02-8	Miscellaneous processed foods	248.6	248.6	248.8	249.3	248.5	249.9	249.9	251.5	255.0	252.7	257.5	259.7	264.0	265.8	
02-9	Prepared animal feeds	211.3	210.1	211.6	212.3	212.4	222.8	221.3	217.1	220.0	233.0	247.2	247.7	250.9	245.7	
	INDUSTRIAL COMMODITIES															
03	Textile products and apparel	204.6	202.6	202.7	202.6	203.4	203.5	204.3	204.7	205.3	206.0	205.8	206.4	207.0	207.2	
03-1	Synthetic fibers (12/75 = 100)	162.1	159.7	156.7	153.1	153.9	153.8	155.6	155.9	158.3	157.5	158.6	160.4	159.5	158.2	
03-2	Processed yarns and threads (12/75 = 100)	138.3	136.7	134.7	135.0	135.8	136.0	137.4	137.6	138.5	140.2	140.5	140.7	141.3	142.4	
03-3	Gray fabrics (12/75 = 100)	145.3	143.3	144.4	144.3	145.1	145.8	146.2	145.8	146.1	146.7	147.1	148.9	150.2	151.7	
03-4	Finished fabrics (12/75 = 100)	124.6	122.8	122.2	122.3	122.4	123.1	122.8	122.5	122.4	123.6	123.3	123.8	123.9	124.3	
03-81	Apparel	194.4	193.0	194.4	195.0	196.1	195.8	196.5	197.9	198.4	198.7	197.4	197.3	198.7	198.4	
03-82	Textile housefurnishings	238.5	236.2	236.5	234.3	234.2	234.2	237.6	235.2	234.8	234.5	238.6	238.5	233.9	234.7	
04	Hides, skins, leather, and related products	262.6	264.1	266.7	264.3	264.9	267.4	269.4	271.2	272.3	274.7	275.3	274.7	277.3	278.3	
04-2	Leather	311.4	314.4	314.4	312.8	316.2	320.5	326.6	335.9	337.9	343.4	341.8	337.1	340.2	342.6	
04-3	Footwear	245.0	247.7	251.5	247.7	248.1	250.0	248.7	249.9	249.9	250.9	250.9	251.2	251.4	251.3	
04-4	Other leather and related products	247.4	249.1	250.8	251.0	250.9	251.0	251.7	251.7	253.5	253.7	257.0	256.9	257.6	258.1	
05	Fuels and related products and power	693.2	703.4	683.6	668.6	658.0	644.8	651.9	665.5	668.7	671.7	675.7	672.7	667.1	662.1	
05-1	Coal	534.7	538.7	535.6	533.4	538.6	538.0	535.2	534.1	534.8	536.6	536.1	536.7	539.8	542.4	
05-2	Coke	461.7	452.3	450.9	450.9	447.3	447.3	438.4	438.4	431.6	453.9	453.9	456.5	453.5	453.5	
05-3	Gas fuels ³	1,060.8	1,181.2	1,147.3	1,154.7	1,180.0	1,156.1	1,156.7	1,155.1	1,148.9	1,145.9	1,149.3	1,130.7	1,124.2	1,125.6	
05-4	Electric power	406.5	409.9	410.8	410.8	411.4	409.2	412.2	419.4	426.4	427.2	428.2	423.9	419.0	417.6	
05-61	Crude petroleum ⁴	733.4	720.0	719.7	692.9	678.0	678.0	678.0	677.9	675.7	675.1	676.1	676.1	676.0	674.8	
05-7	Petroleum products, refined ⁵	761.2	754.2	720.6	692.8	666.6	645.9	659.3	684.2	688.7	694.9	701.8	702.4	694.7	684.8	
06	Chemicals and allied products	292.3	289.6	289.3	290.5	289.8	291.3	291.1	290.8	293.7	294.4	294.8	296.4	296.4	296.6	
06-1	Industrial chemicals ⁶	352.6	342.4	339.3	340.1	338.8	338.7	338.8	338.5	347.0	347.6	346.3	348.6	346.3	345.1	
06-21	Prepared paint	262.8	264.7	264.7	264.7	264.7	264.7	264.7	264.7	265.2	265.4	264.5	264.1	264.4	264.9	
06-22	Paint materials	304.6	301.7	301.5	299.5	298.4	299.8	300.2	299.5	300.5	305.7	316.0	316.6	314.5	315.5	
06-3	Drugs and pharmaceuticals	210.1	216.0	218.6	222.2	222.9	225.1	225.2	225.2	227.6	227.3	228.0	229.7	230.6	231.4	
06-4	Fats and oils, inedible	267.1	240.8	242.0	253.4	262.2	278.3	287.1	276.9	260.9	278.1	305.5	319.5	320.9	319.0	
06-5	Agricultural chemicals and chemical products	292.4	285.2	283.2	283.3	284.2	282.8	282.4	280.6	278.1	277.1	276.0	276.8	281.1	282.5	
06-6	Plastic resins and materials	283.4	282.5	283.8	283.1	282.1	285.4	288.0	289.1	291.3	293.7	293.1	297.5	296.6	298.3	
06-7	Other chemicals and allied products	270.1	272.0	272.8	274.4	272.0	274.7	272.0	272.4	274.2	274.2	274.5	273.9	274.4	274.5	
07	Rubber plastic products	241.4	242.2	242.9	242.3	241.8	243.0	243.2	243.1	243.4	243.7	244.5	245.1	243.8	244.1	
07-1	Rubber and rubber products	267.8	268.2	269.6	268.3	267.1	267.0	267.0	265.6	265.2	265.1	266.8	267.1	264.8	265.1	
07-11	Crude rubber	278.9	271.1	271.1	274.3	281.2	281.3	280.6	280.2	283.2	284.6	284.3	284.3	282.8	282.4	
07-12	Tires and tubes	255.2	256.0	259.1	250.5	246.6	246.5	243.7	243.7	242.4	242.8	242.5	242.7	242.7	243.0	
07-13	Miscellaneous rubber products	276.9	279.7	284.5	289.6	285.8	285.7	286.0	285.9	285.7	284.5	289.3	289.9	284.2	284.8	
07-2	Plastic products (6/78 = 100)	132.3	133.0	133.0	133.1	133.2	134.6	134.8	135.5	136.0	136.4	136.3	137.0	136.8	136.9	
08	Lumber and wood products	284.7	285.6	293.3	303.1	305.8	307.2	308.0	314.8	314.6	313.9	306.0	306.1	306.0	308.8	
08-1	Lumber	310.8	312.6	326.8	344.7	349.3	354.2	358.6	372.8	373.1	366.6	348.2	345.8	346.0	351.5	
08-2	Millwork	279.4	286.5	293.7	300.5	304.0	302.8	299.0	294.9	296.3	306.6	305.7	307.1	308.2	308.5	
08-3	Plywood	232.1	231.2	235.3	239.5	238.9	239.4	241.1	255.5	252.5	246.2	244.2	240.1	244.7	247.1	
08-4	Other wood products	236.2	231.2	232.0	233.2	231.6	230.8	231.1	229.6	229.7	229.3	229.6	229.6	229.7	230.4	

See footnotes at end of table.

24. Continued—Producer Price Indexes, by commodity groupings

[1967 = 100 unless otherwise specified]

Code	Commodity group and subgroup	Annual average 1982	1982		1983											
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept.	Oct.	Nov.	Dec.	
INDUSTRIAL COMMODITIES—Continued																
09	Pulp, paper, and allied products	288.7	290.5	293.6	294.2	294.8	295.4	296.0	297.0	297.8	298.8	299.1	300.4	302.0	302.7	
09-1	Pulp, paper, and products, excluding building paper and board	273.2	268.8	269.8	268.7	268.7	268.5	268.7	269.2	270.2	271.1	271.7	273.0	276.3	276.8	
09-11	Woodpulp	379.0	347.2	346.6	345.7	343.0	342.5	343.2	344.9	345.8	346.4	348.4	348.6	352.6	351.3	
09-12	Wastepaper	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	183.3	(²)	(²)	(²)	210.2	211.5	
09-13	Paper	286.3	279.2	279.3	278.8	278.4	278.5	279.0	279.5	279.2	280.9	285.3	286.6	287.9	288.9	
09-14	Paperboard	254.9	244.1	243.3	244.1	246.3	248.1	248.7	249.4	249.7	250.1	252.8	255.5	257.9	259.5	
09-15	Converted paper and paperboard products	264.4	264.8	265.0	265.1	265.1	264.2	264.1	264.5	264.1	264.7	265.3	266.5	267.8	268.0	
09-2	Building paper and board	239.5	242.0	241.1	241.4	244.2	247.0	249.3	255.7	256.2	252.1	252.8	254.7	254.7	250.5	
10	Metals and metal products	301.6	299.9	300.3	304.7	304.4	304.6	306.1	306.3	307.3	308.2	310.9	310.7	310.3	311.4	
10-1	Iron and steel	339.0	332.8	333.3	339.9	341.6	341.5	340.9	341.3	342.1	343.2	347.6	348.2	349.2	350.6	
10-17	Steel mill products	349.5	344.7	343.7	351.1	349.8	349.7	349.8	350.1	350.8	351.7	357.7	358.1	359.1	359.5	
10-2	Nonferrous metals	263.6	263.2	267.0	275.8	270.6	271.8	277.7	275.7	278.4	279.8	282.1	279.8	275.6	278.0	
10-3	Metal containers	328.5	328.3	327.9	331.1	331.4	331.9	337.1	337.4	336.5	336.6	338.3	338.3	338.2	338.2	
10-4	Hardware	280.3	285.8	287.2	287.9	288.2	288.6	288.5	291.5	292.1	292.2	289.8	290.0	291.5	291.9	
10-5	Plumbing fixtures and brass fittings	278.7	279.2	280.6	283.5	285.6	287.7	289.1	290.8	290.4	292.0	291.5	292.7	293.7	293.6	
10-6	Heating equipment	237.2	239.3	240.7	240.7	241.1	242.3	242.7	243.0	244.9	245.1	244.7	245.0	245.2	245.6	
10-7	Fabricated structural metal products	304.8	304.7	303.6	302.8	303.7	302.5	302.1	302.0	302.2	303.0	303.8	304.4	305.0	304.9	
10-8	Miscellaneous metal products	282.3	283.2	279.1	279.0	280.4	280.7	280.8	283.4	283.7	284.0	287.7	288.2	289.1	289.3	
11	Machinery and equipment	278.8	282.4	283.3	284.3	284.7	285.4	286.0	286.2	287.4	287.4	287.5	287.8	288.1	288.8	
11-1	Agricultural machinery and equipment	311.1	320.7	322.4	323.3	323.5	323.9	326.4	326.4	327.1	327.3	328.0	327.9	329.7	329.8	
11-2	Construction machinery and equipment	343.9	348.1	348.3	349.3	349.6	350.9	352.3	352.5	352.8	352.9	353.4	353.5	353.7	353.7	
11-3	Metalworking machinery and equipment	320.9	323.6	324.1	325.2	325.5	326.2	326.7	327.0	326.6	326.5	326.3	326.5	326.6	327.7	
11-4	General purpose machinery and equipment	304.0	307.0	307.4	307.9	307.5	308.2	308.4	308.4	308.5	307.9	308.1	308.3	308.4	309.3	
11-6	Special industry machinery and equipment	325.1	329.9	331.8	332.6	333.6	334.5	335.8	336.7	338.0	339.0	339.7	340.5	340.9	341.7	
11-7	Electrical machinery and equipment	231.6	234.2	235.2	237.2	237.5	238.4	238.5	238.8	241.7	241.7	242.1	242.5	242.7	243.7	
11-9	Miscellaneous machinery	268.4	272.3	272.9	272.7	273.7	274.2	275.3	275.0	275.2	275.3	274.5	274.9	275.0	275.2	
12	Furniture and household durables	206.9	209.2	210.7	212.5	212.3	212.8	213.6	214.0	214.8	214.9	214.9	215.1	215.4	215.3	
12-1	Household furniture	229.8	232.0	231.9	232.6	231.1	231.8	234.4	235.0	235.4	236.3	236.3	237.1	237.1	237.3	
12-2	Commercial furniture	275.5	278.5	281.1	282.2	285.1	286.2	285.9	286.9	287.5	286.5	287.7	287.9	290.3	290.5	
12-3	Floor coverings	181.2	181.5	182.2	182.1	182.0	182.2	181.4	186.6	181.4	186.6	188.2	188.1	187.9	187.8	
12-4	Household appliances	199.1	201.8	203.9	204.9	205.0	206.3	207.5	207.5	207.8	207.7	207.6	207.6	207.7	208.1	
12-5	Home electronic equipment	88.1	87.1	87.3	87.0	87.0	86.6	86.4	86.5	85.9	85.5	85.8	85.8	85.8	84.6	
12-6	Other household durable goods	289.3	298.1	302.8	314.8	312.9	312.0	312.7	314.3	314.8	313.9	313.0	313.1	312.9	313.1	
13	Nonmetallic mineral products	320.2	320.5	321.5	322.3	322.0	324.1	324.1	324.5	325.1	326.3	327.2	327.9	328.9	329.2	
13-11	Flat glass	221.5	225.3	229.7	229.7	229.7	229.7	229.7	229.7	229.8	229.7	229.6	229.5	230.1	230.0	
13-2	Concrete ingredients	310.0	306.7	307.2	310.0	308.5	312.8	313.7	314.2	314.0	316.4	318.9	318.8	316.7	317.0	
13-3	Concrete products	297.8	298.5	299.4	300.1	300.4	301.0	301.1	301.6	302.3	302.7	302.8	303.3	303.6	303.7	
13-4	Structural clay products, excluding refractories	260.8	264.8	264.9	264.3	270.7	275.7	277.6	281.5	282.4	282.4	281.7	282.8	283.4	283.5	
13-5	Refractories	337.1	337.2	337.7	337.7	337.7	338.2	338.2	336.8	338.2	339.4	340.7	345.6	354.3	354.3	
13-6	Asphalt roofing	298.4	397.0	393.7	380.4	374.7	384.0	380.0	379.6	385.3	383.4	385.7	385.0	384.2	380.6	
13-7	Gypsum products	256.1	253.9	263.1	267.4	265.9	271.9	275.7	273.8	276.0	289.3	295.7	304.3	313.9	321.4	
13-8	Glass containers	355.5	357.6	356.6	355.8	354.1	353.5	351.8	351.8	351.6	351.3	351.2	351.1	351.1	351.0	
13-9	Other nonmetallic minerals	471.8	471.0	471.5	476.1	476.4	478.7	478.5	479.5	479.7	481.9	482.4	482.7	486.9	487.4	
14	Transportation equipment (12/68 = 100)	249.7	257.5	256.3	255.8	255.2	255.6	255.8	256.1	256.2	256.8	250.3	261.2	260.6	260.7	
14-1	Motor vehicles and equipment	251.3	258.1	257.0	256.3	255.4	255.9	256.2	256.7	256.6	256.8	248.9	261.1	260.3	260.4	
14-4	Railroad equipment	346.5	350.8	350.8	350.5	350.3	350.0	350.4	350.1	351.3	351.0	357.5	355.4	355.4	357.3	
15	Miscellaneous products	276.4	290.4	285.7	288.8	287.4	287.4	287.1	288.0	291.5	292.0	291.3	291.2	291.4	292.5	
15-1	Toys, sporting goods, small arms, ammunition	221.5	223.7	222.7	225.3	225.7	226.3	226.0	225.9	224.3	224.5	225.3	225.3	225.7	225.8	
15-2	Tobacco products	323.1	382.9	356.2	356.4	353.8	354.1	353.8	352.1	373.4	376.7	376.5	376.7	376.7	377.0	
15-3	Notions	277.0	279.8	280.5	280.6	280.6	280.3	280.3	280.3	280.3	279.7	279.7	279.7	279.6	280.1	
15-4	Photographic equipment and supplies	210.4	210.0	210.0	211.8	216.6	216.6	216.6	216.5	216.5	216.6	216.9	217.1	217.1	217.1	
15-5	Mobile homes (12/74 = 100)	161.9	161.7	161.8	161.7	162.9	162.3	162.4	163.1	163.5	163.7	164.0	164.2	164.3	164.7	
15-9	Other miscellaneous products	338.3	351.6	350.8	359.8	350.5	350.3	349.2	353.4	353.7	352.9	349.0	347.9	348.4	352.3	

¹Data for August 1983 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

²Not available.

³Prices for natural gas are lagged 1 month.

⁴Includes only domestic production.

⁵Most prices for refined petroleum products are lagged 1 month.

⁶Some prices for industrial chemicals are lagged 1 month.

r = revised.

c = corrected.

25. Producer Price Indexes, for special commodity groupings

[1967 = 100 unless otherwise specified]

Commodity grouping	Annual average 1982	1983												
		Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept.	Oct.	Nov.	Dec.
All commodities—less farm products	303.0	305.4	304.4	304.9	304.5	303.8	304.8	306.0	307.1	308.0	308.4	309.5	309.1	309.4
All foods	254.4	252.7	252.4	255.7	255.8	258.2	258.2	256.6	256.2	257.1	261.0	261.1	258.0	260.0
Processed foods	256.0	254.7	255.8	259.3	258.9	259.5	259.6	257.9	257.7	257.6	261.3	259.3	258.1	260.1
Industrial commodities less fuels	272.8	274.9	275.4	277.0	276.9	277.6	278.2	278.7	279.8	280.4	279.8	281.8	281.9	282.5
Selected textile mill products (Dec. 1975 = 100)	138.2	136.8	136.7	136.8	137.2	137.4	137.7	137.4	143.0	139.0	138.7	139.2	139.2	139.5
Hosiery	138.3	139.7	141.7	144.5	144.5	144.5	144.5	144.5	144.5	145.6	145.6	145.6	145.6	145.6
Underwear and nightwear	217.6	219.7	223.3	222.6	223.8	223.4	223.5	222.7	223.3	223.5	224.4	224.2	224.5	224.8
Chemicals and allied products, including synthetic rubber and fibers and yarns	283.8	281.4	280.8	281.4	280.7	281.8	281.6	281.5	284.6	285.0	286.4	286.3	286.4	
Pharmaceutical preparations	206.0	212.8	215.8	219.4	220.3	223.3	223.5	223.6	226.3	226.0	227.2	229.5	230.5	231.8
Lumber and wood products, excluding millwork	288.8	289.6	300.7	314.3	317.2	320.8	324.3	338.8	338.1	331.5	317.6	317.4	316.9	321.5
Steel mill products, including fabricated wire products	349.4	344.8	343.1	349.9	348.4	348.4	348.5	348.7	349.3	350.1	355.4	355.8	356.9	357.4
Finished steel mill products, excluding fabricated wire products	348.4	344.0	342.1	349.8	348.3	348.4	348.5	348.8	349.4	350.3	356.7	357.2	358.2	358.7
Finished steel mill products, including fabricated wire products	348.1	343.3	341.6	348.5	347.0	347.0	347.1	347.4	347.9	348.7	354.4	354.8	355.9	356.4
Special metals and metal products	286.6	288.7	288.6	290.9	290.3	290.7	291.7	292.0	292.6	293.5	291.5	296.5	296.0	296.6
Fabricated metal products	291.6	292.5	291.1	291.3	292.3	292.2	292.6	294.0	294.2	294.7	296.2	296.7	297.5	297.6
Copper and copper products	185.5	181.8	190.7	201.5	198.9	200.9	206.7	201.3	201.6	201.2	198.0	190.5	183.0	184.9
Machinery and motive products	272.1	277.9	277.8	278.2	278.1	278.7	279.2	279.4	280.1	280.4	277.5	282.6	282.5	283.0
Machinery and equipment, except electrical	306.4	310.6	311.3	311.9	312.2	312.9	313.8	313.9	314.2	314.2	314.5	314.8	315.3	
Agricultural machinery, including tractors	323.1	335.1	337.0	337.7	337.8	338.2	341.7	341.8	342.7	342.8	343.5	343.2	346.0	346.0
Metalworking machinery	350.4	354.1	354.6	355.7	355.6	356.3	358.0	357.8	357.8	357.5	357.3	357.2	357.3	360.0
Total tractors	355.0	364.2	365.6	365.6	365.7	366.1	370.5	370.6	370.7	370.0	372.5	372.6	375.2	373.8
Agricultural machinery and equipment less parts	313.8	324.3	325.9	326.6	326.8	327.1	330.1	330.2	331.0	331.2	332.0	331.9	333.9	333.8
Farm and garden tractors less parts	327.8	340.3	342.2	342.2	342.2	342.2	348.8	348.8	348.8	347.5	350.6	350.7	354.7	351.9
Agricultural machinery, excluding tractors less parts	319.6	331.1	333.1	334.4	334.5	335.2	336.2	336.4	338.0	339.2	337.9	337.3	339.2	341.4
Construction materials	288.0	287.9	290.3	294.6	295.0	296.1	296.8	298.6	310.6	299.8	299.8	300.4	300.6	301.4

¹Data for August 1983 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

r = revised.

26. Producer Price Indexes, by durability of product

[1967 = 100]

Commodity grouping	Annual average 1982	1983												
		Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept.	Oct.	Nov.	Dec.
Total durable goods	279.0	282.0	282.6	284.8	284.6	285.3	286.0	286.7	287.4	287.8	286.7	289.2	289.2	289.9
Total nondurable goods	315.3	315.3	313.3	313.4	313.0	312.4	313.5	314.5	315.4	317.8	319.9	319.5	318.3	318.5
Total manufactures	292.7	294.3	293.5	293.9	293.2	292.7	293.7	295.0	296.1	296.9	297.3	298.8	298.4	298.7
Durable	279.8	283.2	283.7	285.7	285.3	286.0	286.7	287.3	288.0	288.3	287.1	289.7	289.6	290.3
Nondurable	306.4	305.9	303.8	302.5	301.4	299.7	301.0	303.1	304.5	305.9	308.1	308.3	307.5	307.5
Total raw or slightly processed goods	331.2	331.6	330.4	335.2	337.3	340.4	340.9	339.0	338.3	343.8	346.0	343.6	341.0	342.5
Durable	233.8	217.4	224.2	235.4	243.3	244.1	246.1	249.4	249.9	256.8	261.5	260.6	259.4	264.1
Nondurable	337.3	339.0	337.2	341.5	343.2	346.5	346.8	344.6	343.7	349.1	351.1	348.6	346.0	347.1

¹Data for August 1983 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

r = revised.

27. Producer Price Indexes for the output of selected SIC industries

[1967 = 100 unless otherwise specified]

1972 SIC code	Industry description	Annual average 1982	1983													
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept.	Oct.	Nov.	Dec.	
MINING																
1011	Iron ores (12/75 = 100)	175.2	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1	177.1
1092	Mercury ores (12/75 = 100)	312.2	312.5	306.2	289.5	285.4	272.9	268.7	254.1	237.5	231.2	243.3	283.3	287.5	277.0	
1311	Crude petroleum and natural gas	925.8	958.4	945.2	931.2	934.4	922.1	921.8	924.2	916.6	915.8	920.8	908.0	910.2	910.2	
1455	Kaolin and ball clay (6/76 = 100)	151.2	151.7	153.6	156.3	158.4	164.3	164.3	164.3	164.3	164.3	164.3	171.7	172.9	172.9	
MANUFACTURING																
2021	Creamery butter	276.0	277.8	275.5	275.6	275.6	275.6	275.6	275.6	275.6	275.6	276.1	278.4	278.1	278.2	269.5
2044	Rice milling	185.1	196.1	191.3	183.0	183.0	188.9	191.3	194.5	193.7	198.1	201.1	196.7	199.6	199.6	
2067	Chewing gum	304.1	306.1	326.0	326.0	326.1	326.1	326.1	327.2	327.2	327.2	327.3	327.3	327.3	327.4	327.5
2074	Cottonseed oil mills	168.3	169.4	157.5	173.4	167.1	186.8	186.2	179.2	192.4	220.6	265.6	256.5	233.2	223.3	
2083	Malt	256.9	240.6	232.6	232.6	232.6	232.6	232.6	232.6	232.6	232.6	232.6	232.6	241.6	241.6	
2091	Canned and cured seafoods (12/73 = 100)	187.0	186.6	182.8	179.2	177.9	177.7	175.7	173.4	173.7	169.4	169.8	170.2	169.2	169.6	
2098	Macaroni and spaghetti	258.5	255.5	255.5	255.5	255.5	255.5	255.5	255.5	255.5	255.5	255.5	255.5	256.8	261.9	261.9
2251	Women's hosiery, except socks (12/75 = 100)	116.8	118.3	118.5	122.6	122.7	122.7	122.7	122.7	122.7	122.7	122.9	123.0	123.0	123.0	123.0
2261	Finishing plants, cotton (6/76 = 100)	139.5	136.1	135.3	136.0	136.1	139.8	138.0	132.9	132.8	133.8	133.5	134.2	134.0	137.1	
2262	Finishing plants, synthetics, silk (6/76 = 100)	128.2	127.3	125.7	126.7	126.2	127.2	126.9	125.9	125.1	127.2	125.8	127.2	127.3	127.4	
2284	Thread mills (6/76 = 100)	157.2	157.8	157.9	161.9	165.6	165.7	165.7	165.7	165.7	165.7	166.1	166.1	166.1	166.1	
2298	Cordage and twine (12/77 = 100)	141.5	142.6	142.6	142.7	142.8	137.6	137.6	137.6	137.6	137.6	139.0	139.0	139.0	139.0	
2323	Men's and boys' neckwear (12/75 = 100)	119.5	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	123.5	123.5	123.5	123.5
2361	Children's dresses and blouses (12/77 = 100)	120.6	117.0	117.0	117.0	115.5	115.5	115.5	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0
2381	Fabric dress and work gloves	292.1	287.4	288.8	288.8	288.8	291.0	291.7	291.7	291.7	296.3	296.3	296.3	296.3	297.6	
2394	Canvas and related products (12/77 = 100)	145.4	147.3	148.7	148.7	146.2	146.2	146.2	146.2	146.2	146.2	146.2	146.8	148.5	148.5	148.5
2396	Automotive and apparel trimmings (12/77 = 100)	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0	131.0
2448	Wood pallets and skids (12/75 = 100)	145.6	144.6	144.6	145.2	145.7	146.9	148.5	149.5	150.9	151.3	150.9	151.4	151.9	153.6	
2521	Wood office furniture	270.3	271.4	271.4	273.4	279.6	282.5	282.5	282.5	283.5	283.6	284.7	284.7	284.7	284.7	
2654	Sanitary food containers	259.7	261.7	261.7	261.7	265.1	265.2	265.2	265.2	267.1	267.1	269.3	270.6	270.6	270.6	
2655	Fiber cans, drums, and similar products (12/75 = 100)	177.8	183.8	183.8	183.8	183.8	185.6	185.6	185.9	187.7	187.7	187.7	187.8	189.5	189.5	
2911	Petroleum refining (6/76 = 100)	278.3	278.3	267.2	257.4	250.4	240.6	246.0	254.0	255.4	257.2	257.8	258.0	254.5	251.0	
2952	Asphalt felts and coating (12/75 = 100)	173.5	172.9	171.4	165.8	163.2	166.9	165.1	164.9	167.4	166.4	167.4	167.1	167.0	165.5	
3251	Brick and structural clay tile	307.4	315.5	315.7	315.6	328.3	332.2	333.8	334.6	336.4	336.4	337.5	339.5	340.8	341.0	
3253	Ceramic wall and floor tile (12/75 = 100)	140.6	140.7	140.7	140.7	140.7	140.7	142.4	149.6	149.6	149.6	146.8	146.8	146.8	146.8	
3255	Clay refractories	352.8	350.3	351.1	351.1	351.2	352.2	352.2	349.4	352.1	354.4	356.8	366.0	368.6	368.6	
3259	Structural clay products, n.e.c.	219.7	219.0	219.0	215.7	215.7	232.7	234.7	234.7	234.8	234.9	235.5	235.7	235.7	235.7	
3261	Vitreous plumbing fixtures	265.0	269.7	272.1	273.3	275.1	275.3	276.1	276.9	277.0	277.0	281.3	283.7	284.5	285.4	
3262	Vitreous china food utensils	357.8	377.7	380.1	380.1	380.1	380.1	380.1	369.2	380.1	380.1	369.2	369.2	382.3	382.3	
3263	Fine earthenware food utensils	318.2	326.0	365.7	365.7	365.7	365.7	365.9	366.5	366.5	366.5	364.3	364.3	366.2	366.2	
3269	Pottery products, n.e.c. (12/75 = 100)	167.3	173.7	186.5	186.6	186.6	186.6	186.6	186.6	186.6	186.6	183.8	183.8	187.0	187.0	
3274	Lime (12/75 = 100)	186.3	185.7	187.3	185.5	185.1	187.8	185.2	186.2	187.1	187.6	186.6	186.2	182.6	182.6	
3297	Nonclay refractories (12/74 = 100)	201.8	203.6	203.7	203.6	203.6	203.8	203.6	203.6	203.7	203.8	203.8	204.0	212.9	212.9	
3482	Small arms ammunition (12/75 = 100)	164.2	174.1	175.1	175.1	181.6	181.6	181.6	181.6	181.6	181.6	187.6	187.6	187.6	187.6	
3623	Welding apparatus, electric (12/72 = 100)	239.6	243.3	243.6	244.0	243.4	243.3	243.1	242.3	243.5	243.5	238.5	238.7	239.0	239.7	
3636	Sewing machines (12/75 = 100)	154.6	154.2	154.2	154.2	154.4	155.0	156.8	156.8	156.8	156.8	156.1	156.1	156.1	156.1	
3641	Electric lamps	294.0	303.4	306.0	311.5	311.4	313.8	313.8	316.7	319.4	319.8	332.4	332.7	333.0	336.9	
3648	Lighting equipment, n.e.c. (12/75 = 100)	170.0	171.4	171.4	171.5	171.6	172.6	172.6	173.1	173.4	173.4	173.6	173.7	173.9	172.6	
3671	Electron tubes, receiving type	382.1	414.1	431.6	432.0	431.9	432.1	432.1	432.2	432.2	432.5	432.6	432.9	432.8	469.8	
3942	Dolls (12/75 = 100)	136.7	136.5	137.1	136.8	136.8	137.7	137.7	137.7	137.7	137.7	137.3	137.3	137.3	137.3	
3944	Games, toys, and children's vehicles	234.0	235.5	235.3	243.4	241.8	242.2	242.2	242.2	236.1	236.2	232.1	232.1	231.9	232.0	
3955	Carbon paper and inked ribbons (12/75 = 100)	140.0	139.4	139.2	139.2	139.2	139.2	139.2	139.2	139.2	139.2	139.2	139.3	139.3	139.3	
3995	Burial caskets (6/76 = 100)	148.4	150.8	147.0	152.1	152.1	152.1	152.1	152.1	155.4	155.4	155.4	156.0	156.0	156.0	
3996	Hard surface floor coverings (12/75 = 100)	155.9	156.8	159.2	159.2	159.2	159.7	159.6	159.6	162.2	163.4	163.5	163.5	163.5	163.5	

¹Data for August 1983 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

r = revised.

PRODUCTIVITY DATA

PRODUCTIVITY DATA are compiled by the Bureau of Labor Statistics from establishment data and from estimates of compensation and output supplied by the U.S. Department of Commerce and the Federal Reserve Board.

Definitions

Output is the constant dollar gross domestic product produced in a given period. Indexes of **output per hour of labor input**, or labor productivity, measure the value of goods and services produced per hour of labor. **Compensation per hour** includes wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. The data also include an estimate of wages, salaries, and supplementary payments for the self-employed, except for nonfinancial corporations, in which there are no self-employed. **Real compensation per hour** is compensation per hour adjusted by the Consumer Price Index for All Urban Consumers.

Unit labor cost measures the labor compensation cost required to produce one unit of output and is 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 the current dollar gross domestic product and dividing by output. In these tables, **unit nonlabor costs** contain all

the components of unit nonlabor payments except unit profits. **Unit profits** include corporate profits and inventory valuation adjustments per unit of output.

The **implicit price deflator** is derived by dividing the current dollar estimate of gross product by the constant dollar estimate, making the deflator, in effect, a price index for gross product of the sector reported.

Hours of all persons describes the labor input of payroll workers, self-employed persons, and unpaid family workers. **Output per all employee hour** describes labor productivity in nonfinancial corporations where there are no self-employed.

Notes on the data

In the business sector and the nonfarm business sector, the basis for the output measure employed in the computation of output per hour is Gross Domestic Product rather than Gross National Product. Computation of hours includes estimates of nonfarm and farm proprietor hours.

Output data are 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 from the Bureau of Economic Analysis and the Bureau of Labor Statistics.

28. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years, 1950-82

[1977 = 100]

Item	1950	1955	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981	1982
Business sector:													
Output per hour of all persons	50.4	58.3	65.2	78.3	86.2	94.5	97.6	100.0	100.6	99.4	98.9	101.3	101.2
Compensation per hour	20.0	26.4	33.9	41.7	58.2	85.5	92.9	100.0	108.6	118.7	131.2	143.9	155.1
Real compensation per hour	50.5	59.6	69.5	80.1	90.8	96.3	98.9	100.0	100.9	99.1	96.5	95.9	97.4
Unit labor costs	39.8	45.2	52.1	53.3	67.5	90.5	95.1	100.0	108.0	119.5	132.7	142.1	153.3
Unit nonlabor payments	43.4	47.6	50.6	57.6	63.2	90.4	94.0	100.0	106.7	112.8	119.0	136.2	136.9
Implicit price deflator	41.0	46.0	51.6	54.7	66.0	90.4	94.7	100.0	107.5	117.2	128.1	140.1	147.7
Nonfarm business sector:													
Output per hour of all persons	56.3	62.7	68.3	80.5	86.8	94.7	97.8	100.0	100.6	99.1	98.4	100.3	100.2
Compensation per hour	21.8	28.3	35.7	42.8	58.7	86.0	93.0	100.0	108.6	118.4	130.7	143.5	154.7
Real compensation per hour	55.0	64.0	73.0	82.2	91.5	96.8	99.0	100.0	100.9	98.9	96.1	95.6	97.1
Unit labor costs	38.8	45.1	52.3	53.2	67.6	90.8	95.1	100.0	108.0	119.5	132.8	143.0	154.4
Unit nonlabor payments	42.7	47.8	50.4	58.0	63.8	88.5	93.5	100.0	105.3	110.4	118.5	135.0	137.0
Implicit price deflator	40.1	46.0	51.6	54.8	66.3	90.0	94.6	100.0	107.1	116.5	128.1	140.4	148.6
Nonfinance corporations:													
Output per hour of all persons	(¹)	(¹)	68.0	81.9	87.4	95.5	98.2	100.0	100.9	100.7	99.8	102.3	102.8
Compensation per hour	(¹)	(¹)	37.0	43.9	59.4	86.1	92.9	100.0	108.5	118.7	130.9	143.6	154.8
Real compensation per hour	(¹)	(¹)	75.8	84.3	92.7	96.9	98.9	100.0	100.7	99.1	96.3	95.7	97.2
Unit labor costs	(¹)	(¹)	54.4	53.5	68.0	90.2	94.6	100.0	107.5	117.8	131.2	140.3	150.6
Unit nonlabor payments	(¹)	(¹)	54.6	60.8	63.1	90.8	95.0	100.0	104.2	106.9	117.4	134.4	137.6
Implicit price deflator	(¹)	(¹)	54.5	56.1	66.3	90.4	94.7	100.0	106.4	114.1	126.4	138.3	146.1
Manufacturing:													
Output per hour of all persons	49.4	56.4	60.0	74.5	79.1	93.4	97.5	100.0	100.8	101.5	101.7	105.3	106.5
Compensation per hour	21.5	28.8	36.7	42.8	57.6	85.4	92.3	100.0	108.3	118.8	132.7	145.8	158.2
Real compensation per hour	54.0	65.1	75.1	82.3	89.8	96.2	98.3	100.0	100.6	99.2	97.6	97.2	99.3
Unit labor costs	43.4	50.0	61.1	57.5	72.7	91.5	94.6	100.0	107.4	117.0	130.5	138.5	148.5
Unit nonlabor payments	54.3	58.5	61.1	69.3	65.0	87.3	93.7	100.0	102.5	99.9	97.7	110.2	109.2
Implicit price deflator	46.6	53.2	61.1	61.0	70.5	90.3	94.4	100.0	106.0	112.0	120.9	130.2	137.0

¹ Not available.

29. Annual changes in productivity, hourly compensation, unit costs, and prices, 1972-82

Item	Year											Annual rate of change	
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1950-82	1972-82
Business sector:													
Output per hour of all persons	3.5	2.6	-2.4	2.2	3.3	2.4	0.6	-1.2	-0.5	2.4	-0.1	2.2	0.9
Compensation per hour	6.5	8.0	9.4	9.6	8.6	7.7	8.6	9.4	10.5	9.7	7.7	6.6	8.9
Real compensation per hour	3.1	1.6	-1.4	0.5	2.6	1.2	0.9	-1.7	-2.6	-0.6	1.5	2.1	0.2
Unit labor costs	2.9	5.3	12.1	7.3	5.1	5.1	8.0	10.7	11.1	7.1	7.9	4.3	7.9
Unit nonlabor payments	4.5	5.9	4.4	15.1	4.0	6.4	6.7	5.8	5.5	14.4	0.5	3.7	6.8
Implicit price deflator	3.4	5.5	9.5	9.8	4.7	5.6	7.5	9.0	9.2	9.4	5.4	4.1	7.6
Nonfarm business sector:													
Output per hour of all persons	3.7	2.4	-2.5	2.0	3.2	2.2	0.6	-1.5	-0.7	1.9	-0.1	1.8	0.8
Compensation per hour	6.7	7.6	9.4	9.6	8.1	7.5	8.6	9.0	10.4	9.8	7.8	6.3	8.8
Real compensation per hour	3.3	1.3	-1.4	0.4	2.2	1.0	0.9	-2.0	-2.8	-0.6	1.6	1.8	0.1
Unit labor costs	2.8	5.0	12.2	7.5	4.8	5.2	8.0	10.7	11.1	7.7	7.9	4.4	8.0
Unit nonlabor payments	3.2	1.3	5.9	16.7	5.7	6.9	5.3	4.8	7.4	13.9	1.4	3.7	6.8
Implicit price deflator	3.0	3.8	10.2	10.3	5.1	5.7	7.1	8.8	10.0	9.6	5.8	4.2	7.6
Nonfinancial corporations:													
Output per hour of all employees	2.9	2.4	-3.7	2.9	2.9	1.8	0.9	-0.2	-0.9	2.5	0.5	(¹)	0.9
Compensation per hour	5.7	7.5	9.4	9.6	7.9	7.6	8.5	9.4	10.3	9.7	7.8	(¹)	8.8
Real compensation per hour	2.4	1.2	-1.5	0.4	2.0	1.1	0.7	-1.7	-2.8	-0.6	1.6	(¹)	0.0
Unit labor costs	2.8	4.9	13.6	6.5	4.9	5.7	7.5	9.6	11.3	7.0	7.3	(¹)	7.8
Unit nonlabor payments	2.7	1.5	7.1	20.1	4.6	5.3	4.2	2.6	9.8	14.5	2.4	(¹)	7.1
Implicit price deflator	2.8	3.8	11.4	10.9	4.8	5.6	6.4	7.2	10.8	9.4	5.7	(¹)	7.6
Manufacturing:													
Output per hour of all persons	5.0	5.4	-2.4	2.0	4.4	2.5	0.8	0.7	0.2	3.5	1.2	2.4	1.9
Compensation per hour	5.4	7.2	10.6	11.9	8.0	8.3	8.3	9.7	11.7	9.9	8.5	6.4	9.4
Real compensation per hour	2.0	0.9	-0.3	2.5	2.1	1.8	0.6	-1.4	-1.6	-0.4	2.2	1.9	0.6
Unit labor costs	0.3	1.7	13.3	8.8	3.4	5.7	7.4	9.0	11.5	6.1	7.2	3.9	7.4
Unit nonlabor payments	0.8	-3.3	-1.8	25.9	7.4	6.7	2.5	-2.6	-2.2	12.8	-0.9	2.2	4.1
Implicit price deflator	0.5	0.3	9.0	13.1	4.6	6.0	6.0	5.7	7.9	7.7	5.2	3.4	6.5

¹ Not available.

30. Quarterly indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted

[1977 = 100]

Item	Annual average		Quarterly indexes										
	1981	1982	1981				1982				1983		
			I	II	III	IV	I	II	III	IV	I	II	III
Business sector:													
Output per hour of all persons	101.3	101.2	100.5	101.1	102.3	101.2	101.1	100.7	101.1	101.9	102.5	103.8	104.7
Compensation per hour	143.9	155.1	139.7	142.2	145.5	148.2	151.6	153.9	156.5	158.7	160.7	162.1	164.2
Real compensation per hour	95.9	97.4	96.3	96.1	95.6	95.6	97.1	97.4	97.1	98.0	99.4	99.2	99.4
Unit labor costs	142.1	153.3	139.0	140.7	142.3	146.4	149.9	152.9	154.7	155.6	156.9	156.2	156.9
Unit nonlabor payments	136.2	136.9	131.2	133.4	139.9	140.2	137.0	137.0	136.3	137.4	140.8	145.8	147.3
Implicit price deflator	140.1	147.7	136.3	138.2	141.5	144.3	145.5	147.5	148.5	149.4	151.5	152.7	153.6
Nonfarm business sector:													
Output per hour of all persons	100.3	100.2	100.1	100.1	101.1	99.9	100.0	99.9	100.4	100.8	101.7	103.3	104.1
Compensation per hour	143.5	154.7	139.3	141.8	145.1	147.7	151.3	153.5	156.1	158.3	161.0	162.7	164.4
Real compensation per hour	95.6	97.1	96.0	95.8	95.3	95.4	96.9	97.1	96.9	97.8	99.5	99.6	99.4
Unit labor costs	143.0	154.4	139.2	141.6	143.5	147.8	151.3	153.6	155.4	157.1	158.3	157.4	157.9
Unit nonlabor payments	135.0	137.0	130.3	132.2	138.3	139.5	136.4	137.7	136.5	137.2	140.7	145.9	147.9
Implicit price deflator	140.4	148.6	136.2	138.4	141.8	145.0	146.4	148.3	149.1	150.5	152.4	153.6	154.6
Nonfinancial corporations:													
Output per hour of all employees	102.3	102.8	101.8	102.1	103.0	102.2	102.4	102.3	103.2	103.4	104.3	105.9	107.3
Compensation per hour	143.6	154.8	139.5	142.0	145.0	147.8	151.7	153.7	156.1	158.1	160.4	161.6	163.1
Real compensation per hour	95.7	97.2	96.2	95.9	95.2	95.4	97.2	97.2	96.9	97.7	99.2	98.9	98.7
Total unit costs	142.7	153.5	138.4	141.1	143.6	147.7	150.9	153.1	153.8	156.3	156.7	155.3	154.4
Unit labor costs	140.3	150.6	137.0	139.0	140.7	144.6	148.1	150.2	151.1	152.9	153.9	152.5	152.1
Unit nonlabor costs	149.4	161.8	142.3	147.0	151.9	156.6	158.9	161.2	161.3	165.9	164.7	163.1	161.0
Unit profits	104.1	88.9	103.0	100.3	108.6	104.2	90.8	90.3	91.2	83.0	96.1	115.0	131.4
Implicit price deflator	138.3	146.1	134.3	136.4	139.6	142.7	144.0	145.9	146.6	147.9	149.7	150.7	151.7
Manufacturing:													
Output per hour of all persons	105.3	106.5	105.1	105.4	106.1	104.4	105.1	105.3	107.8	108.1	110.2	112.6	115.7
Compensation per hour	145.8	158.2	141.6	144.3	147.0	150.5	155.1	157.1	159.6	161.4	165.5	166.4	167.4
Real compensation per hour	97.2	99.3	97.6	97.5	96.5	97.1	99.4	99.4	99.1	99.7	102.3	101.8	101.3
Unit labor costs	138.5	148.5	134.8	136.9	138.5	144.1	147.6	149.1	148.1	149.3	150.2	147.8	144.7

31. Percent change from preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted at annual rate

Item	Quarterly percent change at annual rate						Percent change from same quarter a year ago					
	I 1982 to II 1982	II 1982 to III 1982	III 1982 to IV 1982	IV 1982 to I 1983	I 1983 to II 1983	II 1983 to III 1983	II 1981 to II 1982	III 1981 to III 1982	IV 1981 to IV 1982	I 1982 to I 1983	II 1982 to II 1983	III 1982 to III 1983
Business sector:												
Output per hour of all persons	-1.6	1.7	3.3	2.0	5.4	3.5	-0.4	-1.1	0.7	1.3	3.1	3.5
Compensation per hour	6.4	6.7	5.7	5.4	3.5	5.3	8.2	7.5	7.1	6.1	5.3	5.0
Real compensation per hour	1.1	-1.0	3.7	5.8	-0.7	0.5	1.3	1.6	2.5	2.4	1.9	2.3
Unit labor costs	8.1	5.0	2.3	3.3	-1.8	1.8	8.7	8.7	6.3	4.7	2.2	1.4
Unit nonlabor payments	-0.1	-2.0	3.2	10.5	15.0	3.9	2.7	-2.6	-2.0	2.8	6.5	8.1
Implicit price deflator	5.5	2.7	2.6	5.5	3.3	2.5	6.7	4.9	3.5	4.1	3.5	3.5
Nonfarm business sector:												
Output per hour of all persons	-0.4	2.3	1.3	3.7	6.6	3.1	-0.3	-0.6	0.8	1.7	3.4	3.6
Compensation per hour	5.8	7.2	5.8	6.8	4.3	4.2	8.2	7.6	7.2	6.4	6.0	5.3
Real compensation per hour	0.5	-0.6	3.7	7.2	0.1	-0.5	1.3	1.7	2.6	2.7	2.6	2.6
Unit labor costs	6.2	4.7	4.4	3.0	-2.1	1.1	8.5	8.3	6.3	4.6	2.5	1.6
Unit nonlabor payments	3.7	-3.4	2.0	10.6	15.7	5.6	4.2	-1.3	-1.6	3.1	6.0	8.4
Implicit price deflator	5.4	2.2	3.7	5.3	3.2	2.5	7.1	5.2	3.7	4.1	3.6	3.7
Nonfinancial corporations:												
Output per hour of all employees	-0.5	3.8	0.6	3.4	6.5	5.2	0.1	0.2	1.2	1.8	3.6	3.9
Compensation per hour	5.4	6.4	5.4	6.0	2.9	3.9	8.2	7.6	7.0	5.8	5.2	4.5
Real compensation per hour	0.1	-1.3	3.4	6.4	-1.2	-0.8	1.3	1.7	2.4	2.1	1.7	1.9
Total units costs	6.0	1.8	6.7	1.0	-3.5	-2.4	8.5	7.1	5.8	3.8	1.4	0.4
Unit labor costs	6.0	2.4	4.8	2.5	-3.4	-1.3	8.1	7.4	5.7	3.9	1.5	0.6
Unit nonlabor costs	6.0	0.1	11.9	-2.8	-3.8	-5.2	9.7	6.2	6.0	3.7	1.2	-0.2
Unit profits	-2.1	3.8	-31.4	79.9	104.7	70.7	-9.9	-16.1	-20.3	5.8	27.3	44.1
Implicit price deflator	5.4	1.9	3.6	5.1	2.5	2.9	7.0	5.0	3.6	4.0	3.3	3.5
Manufacturing:												
Output per hour of all persons	0.8	9.6	1.2	8.0	9.0	11.6	-0.1	1.6	3.5	4.8	6.9	7.4
Compensation per hour	5.1	6.5	4.5	10.7	2.1	^r -2.1	8.8	^r 8.6	7.3	6.7	5.9	4.9
Real compensation per hour	-0.2	-1.2	2.5	11.1	^c -2.1	2.1	1.9	2.6	2.7	3.0	2.5	2.2
Unit labor costs	4.3	-2.8	3.3	2.5	-6.4	-8.1	8.9	6.9	-3.6	1.8	-0.9	-2.3

¹Not available.
r = revised.

c = corrected.

WAGE AND COMPENSATION DATA

DATA FOR THE EMPLOYMENT COST INDEX are reported to the Bureau of Labor Statistics by a sample of 2,000 private nonfarm establishments and 750 State and local government units selected to represent total employment in those sectors. On average, each reporting unit provides wage and compensation information on five well-specified occupations.

Data on negotiated wage and benefit changes are obtained from contracts on file at the Bureau, direct contact with the parties, and secondary sources.

Definitions

The **Employment Cost Index (ECI)** is a quarterly measure of the average change in the cost of employing labor. The rate of total compensation, which comprises wages, salaries, and employer costs for employee benefits, is collected for workers performing specified tasks. Employment in each occupation is held constant over time for all series produced in the ECI, except those by region, bargaining status, and area. As a consequence, only changes in compensation are measured. Industry and occupational employment data from the 1970 Census of Population are used in deriving constant weights for the ECI. While holding total industry and occupational employment fixed, in the estimation of indexes by region, bargaining status, and area, the employment in those measures is allowed to vary over time in accord with changes in the sample. The rate of change (in percent) is available for wages and salaries, as well as for total compensation. Data are collected for the pay period including the 12th day of the survey months of March, June, September, and December. The statistics are neither annualized nor adjusted for seasonal influence.

Wages and salaries consist of earnings before payroll deductions, excluding premium pay for overtime, work on weekends and holidays, and shift differentials. Production bonuses, incentive earnings, commissions, and cost-of-living adjustments are included; nonproduction bonuses are included with other supplemental pay items in the benefits category; and payments-in-kind, free room and board, and tips are excluded. **Benefits** include supplemental pay, insurance, retirement and savings plans, and hours-related and legally required benefits.

Data on negotiated wage changes apply to private nonfarm industry collective bargaining agreements covering 1,000 workers or more. Data on compensation changes apply only to those agreements covering 5,000 workers or more. *First-year* wage or compensation changes refer to average negotiated changes for workers covered by settlements reached in the period

and implemented within the first 12 months after the effective date of the agreement. *Changes over the life of the agreement* refer to all adjustments specified in the contract, expressed as an average annual rate. These measures exclude wage changes that may occur under cost-of-living adjustment clauses, that are triggered by movements in the Consumer Price Index. *Wage-rate changes* are expressed as a percent of straight-time hourly earnings; *compensation changes* are expressed as a percent of total wages and benefits.

Effective wage adjustments reflect all negotiated changes implemented in the reference period, regardless of the settlement date. They include changes from settlements reached during the period, changes deferred from contracts negotiated in an earlier period, and cost-of-living adjustments. The data also reflect contracts providing for no wage adjustment in the period. Effective adjustments and each of their components are prorated over all workers in bargaining units with at least 1,000 workers.

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 a measure of the percent change in employers' cost for employees' 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.

Data for the broad white-collar, blue-collar, and service worker groups, and the manufacturing, nonmanufacturing, and service industry groups are presented in the ECI. Additional occupation and industry detail are provided for the wages and salaries component of total compensation in the private nonfarm sector. For State and local government units, additional industry detail is shown for both total compensation and its wages and salaries component.

Historical indexes (June 1981 = 100) of the quarterly rates of changes presented in the ECI are also available.

For a more detailed discussion of the ECI, see chapter 11, "The Employment Cost Index," of the BLS *Handbook of Methods* (Bulletin 2134-1), and the *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; and "The Employment Cost Index: recent trends and expansion," May 1982.

Additional data for the ECI and other measures of wage and compensation changes appear in *Current Wage Developments*, a monthly publication of the Bureau.

32. Employment Cost Index, by occupation and industry group

[June 1981 = 100]

Series	1981		1982				1983			Percent change		
	Sept.	Dec.	March	June	Sept.	Dec.	March	June	Sept.	3 months	12 months	
										ended	ended	
											September 1983	
Civilian workers¹	102.6	104.5	106.3	107.5	110.1	111.4	113.2	114.5	116.5	1.7	5.8	
Workers, by occupational group												
White-collar workers	102.7	104.9	106.5	107.7	110.7	111.9	113.7	114.9	117.6	2.3	6.2	
Blue-collar workers	102.3	104.1	105.7	107.1	109.2	110.5	112.3	113.6	114.8	1.1	5.1	
Service workers	102.8	104.2	107.2	108.3	110.8	112.4	114.3	115.1	116.7	1.4	5.3	
Workers, by industry division												
Manufacturing	102.1	104.0	106.0	107.2	109.3	110.4	112.5	113.5	115.0	1.3	5.2	
Nonmanufacturing	102.8	104.8	106.4	107.7	110.5	111.8	113.5	114.9	117.2	2.0	6.1	
Services	104.4	107.1	108.2	109.2	113.5	115.0	116.6	117.1	121.1	3.4	6.7	
Public administration ²	104.3	106.0	108.1	109.1	112.8	113.6	116.2	117.0	119.8	2.4	6.2	
Private industry workers	102.0	104.0	105.8	107.2	109.3	110.7	112.6	113.9	115.6	1.5	5.8	
Workers, by occupational group												
White-collar workers	101.8	104.0	105.8	107.2	109.5	110.8	112.8	114.2	116.5	2.0	6.4	
Blue-collar workers	102.2	104.0	105.6	107.0	109.0	110.3	112.1	113.5	114.6	1.0	5.1	
Service workers	101.9	103.1	106.7	107.9	109.6	111.8	113.8	114.6	115.1	1.4	5.0	
Workers, by industry division												
Manufacturing	102.1	104.0	106.0	107.2	109.3	110.4	112.5	113.5	115.0	1.3	5.2	
Nonmanufacturing	102.0	103.9	105.7	107.1	109.3	110.8	112.6	114.2	116.0	1.6	6.1	
State and local government workers	105.3	107.4	108.8	109.3	114.3	115.1	116.5	117.1	120.8	3.2	5.7	
Workers, by occupational group												
White-collar workers	105.7	107.8	109.1	109.5	114.9	115.8	117.0	117.5	121.5	3.4	5.7	
Blue-collar workers	104.2	105.9	108.2	108.9	112.7	113.0	114.9	115.8	118.0	1.9	4.7	
Workers, by industry division												
Services	105.8	107.9	109.0	109.4	114.9	115.9	116.8	117.4	121.7	3.7	5.9	
Schools	106.0	107.9	108.9	109.1	114.8	115.8	116.6	116.9	121.9	4.3	6.2	
Elementary and secondary	106.3	108.3	109.3	109.5	115.6	116.6	117.2	117.4	123.3	5.0	6.7	
Hospitals and other services ³	105.0	107.8	109.5	110.3	115.3	116.0	117.5	118.8	121.1	1.9	5.0	
Public administration ²	104.3	106.0	108.1	109.1	112.8	113.6	116.2	117.0	119.8	2.4	6.2	

¹ Excludes farm, household, and Federal workers.

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

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

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

[June 1981 = 100]

Series	1981		1982				1983			Percent change	
	Sept.	Dec.	March	June	Sept.	Dec.	March	June	Sept.	3 months ended	12 months ended
										September 1983	
Civilian workers¹	102.5	104.4	106.3	107.3	109.7	110.9	112.2	113.4	115.3	1.7	5.1
Workers, by occupational group											
White-collar workers	102.6	104.7	106.7	107.6	110.4	111.4	113.0	114.2	116.7	2.2	5.7
Blue-collar workers	102.4	104.0	105.5	106.7	108.6	109.8	110.8	112.0	113.1	1.0	4.1
Service workers	102.5	103.6	106.8	107.9	110.1	111.8	113.2	113.9	115.1	1.1	4.5
Workers, by industry division											
Manufacturing	102.1	104.0	105.9	107.0	108.8	109.8	111.0	112.0	113.3	1.2	4.1
Nonmanufacturing	102.7	104.5	106.5	107.5	110.1	111.3	112.7	114.0	116.1	1.8	5.4
Services	104.4	106.6	108.6	109.5	113.2	114.4	115.8	116.3	120.1	3.3	6.1
Public administration ²	103.8	105.5	107.5	108.4	111.9	112.6	114.6	115.4	118.2	2.4	5.6
Private industry workers	102.0	103.8	105.9	107.1	109.0	110.3	111.6	112.9	114.5	1.4	5.0
Workers, by occupational group											
White-collar workers	101.8	103.9	106.2	107.3	109.4	110.6	112.2	113.6	115.9	2.0	5.9
Professional and technical workers	103.3	105.5	108.0	109.4	111.8	112.9	114.8	115.9	119.9	3.5	7.2
Managers and administrators	101.6	102.8	105.8	107.2	108.5	109.3	112.0	114.0	114.8	.7	5.8
Salesworkers	98.0	101.9	102.2	101.8	104.5	106.2	105.7	107.1	108.4	1.2	3.7
Clerical workers	102.7	104.2	107.0	108.3	110.3	111.6	113.4	114.6	116.7	1.8	5.8
Blue-collar workers	102.3	103.9	105.4	106.6	108.5	109.7	110.7	111.9	112.9	.9	4.1
Craft and kindred workers	102.9	104.3	106.2	107.6	109.6	111.2	112.2	113.4	114.3	.8	4.3
Operatives, except transport	102.1	104.1	105.4	106.6	108.3	109.3	110.0	111.1	112.3	1.1	3.7
Transport equipment operatives	101.0	102.7	103.2	104.1	106.0	106.9	108.0	110.3	110.7	.4	4.4
Nonfarm laborers	101.5	103.3	104.1	105.1	106.5	107.8	109.0	109.8	110.8	.9	4.0
Service workers	101.8	102.7	106.7	107.9	109.3	111.4	112.9	113.5	113.7	.2	4.0
Workers, by industry division											
Manufacturing	102.1	104.0	105.9	107.0	108.8	109.8	111.0	112.0	113.3	1.2	4.1
Durables	102.1	104.5	106.3	107.4	109.0	110.3	111.1	111.8	112.9	1.0	3.6
Nondurables	102.0	103.1	105.3	106.3	108.5	109.1	110.9	112.3	113.9	1.4	5.0
Nonmanufacturing	102.0	103.8	105.9	107.1	109.1	110.5	112.0	113.4	115.2	1.6	5.6
Construction	103.0	104.3	105.9	107.3	109.1	109.7	110.4	112.1	112.2	.1	2.8
Transportation and public utilities	102.0	103.6	105.7	106.9	109.5	111.1	112.9	114.7	115.7	.9	5.7
Wholesale and retail trade	101.3	102.3	103.9	105.8	106.5	107.2	108.5	110.8	111.5	.6	4.7
Wholesale trade	102.0	103.4	106.3	108.9	109.0	109.8	111.8	114.1	115.7	1.4	6.1
Retail trade	101.0	101.9	103.0	104.5	105.5	106.1	107.2	109.4	109.9	.5	4.2
Finance, insurance, and real estate	98.3	102.3	103.7	102.4	106.1	109.0	110.6	111.1	113.5	2.2	7.0
Services	103.6	105.8	108.8	110.0	112.5	114.3	116.0	116.6	120.4	3.3	7.0
State and local government workers	105.0	107.0	108.2	108.7	113.5	114.0	115.1	115.7	119.2	3.0	5.0
Workers, by occupational group											
White-collar workers	105.4	107.5	108.5	108.9	114.2	114.6	115.6	116.1	119.8	3.2	4.9
Blue-collar workers	103.9	105.5	107.5	107.9	111.5	112.0	113.3	114.3	116.4	1.8	4.4
Workers, by industry division											
Services	105.5	107.6	108.4	108.8	114.2	114.6	115.5	115.9	119.8	3.4	4.9
Schools	105.7	107.7	108.3	108.5	114.2	114.5	115.2	115.4	119.9	3.9	5.0
Elementary and secondary	106.0	107.9	108.7	108.8	114.9	115.1	115.6	115.8	121.1	4.6	5.4
Hospitals and other services ³	104.6	107.3	108.8	109.5	114.3	114.9	116.5	117.7	119.7	1.7	4.7
Public administration ²	103.8	105.5	107.5	108.4	111.9	112.6	114.6	115.4	118.2	2.4	5.6

¹Excludes farm, household, and Federal workers.

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

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

34. Employment Cost Index, private industry workers, by bargaining status, region, and area size

[June 1981 = 100]

Series	1981		1982				1983			Percent change	
	Sept.	Dec.	March	June	Sept.	Dec.	March	June	Sept.	3 months ended	12 months ended
										September 1983	
COMPENSATION											
Workers, by bargaining status ¹											
Union	102.5	104.8	106.5	108.4	110.6	112.3	114.5	116.0	117.8	1.6	6.5
Manufacturing	102.3	104.6	106.3	108.0	110.3	111.8	114.0	114.8	116.3	1.3	5.4
Nonmanufacturing	102.7	105.0	106.8	108.7	111.0	112.8	114.9	117.1	119.2	1.8	7.4
Nonunion	101.7	103.5	105.3	106.5	108.5	109.7	111.5	112.8	114.4	1.4	5.4
Manufacturing	101.8	103.5	105.7	106.6	108.4	109.2	111.2	112.3	113.8	1.3	5.0
Nonmanufacturing	101.7	103.5	105.2	106.4	108.6	109.9	111.6	113.0	114.7	1.5	5.6
Workers, by area size ¹											
Metropolitan areas	102.1	104.1	105.7	107.2	109.4	110.9	112.9	114.2	116.0	1.6	6.0
Other areas	101.8	103.2	106.2	107.0	108.6	109.1	110.8	112.3	113.4	1.0	4.4
WAGES AND SALARIES											
Workers, by bargaining status ¹											
Union	102.7	105.0	106.5	108.1	110.3	111.8	112.9	114.2	116.0	1.6	5.2
Manufacturing	102.6	104.7	105.9	107.3	109.5	110.8	111.4	112.3	113.7	1.2	3.8
Nonmanufacturing	102.8	105.2	107.0	108.8	111.1	112.7	114.3	116.0	118.3	2.0	6.5
Nonunion	101.6	103.2	105.6	106.5	108.3	109.5	110.9	112.2	113.7	1.3	5.0
Manufacturing	101.7	103.3	105.9	106.7	108.2	109.1	110.7	111.8	113.0	1.1	4.4
Nonmanufacturing	101.6	103.2	105.5	106.4	108.3	109.6	111.0	112.4	114.0	1.4	5.3
Workers, by region ¹											
Northeast	101.7	104.4	106.1	106.7	109.7	111.5	112.0	113.6	115.3	1.5	5.1
South	101.9	102.8	105.7	107.4	108.8	109.8	111.4	112.5	114.3	1.6	5.1
North Central	101.6	103.3	104.7	106.1	107.6	108.6	110.1	111.5	112.8	1.2	4.8
West	103.2	105.1	107.9	108.6	110.7	112.0	114.1	114.9	116.5	1.4	5.2
Workers by area size ¹											
Metropolitan areas	102.1	104.0	105.9	107.1	109.1	110.5	111.9	113.2	114.9	1.5	5.3
Other areas	101.8	103.1	106.0	106.8	108.3	108.8	110.1	111.4	112.3	8	3.7

¹The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see BLS *Handbook of Methods*, Bulletin 1910.

35. Wage and compensation change, major collective bargaining settlements, 1978 to date

[In percent]

Measure	Annual average					Quarterly average								
	1978	1979	1980	1981	1982	1981	1982				1983 ^P			
						IV	I	II	III	IV	I	II	III	
Total compensation changes, covering 5,000 workers or more, all industries:														
First year of contract	8.3	9.0	10.4	10.2	3.2	11.0	1.9	2.6	6.2	3.3	-1.6	4.6	4.5	
Annual rate over life of contract	6.3	6.6	7.1	8.3	2.8	5.8	1.2	2.1	4.7	4.8	1.4	3.8	4.1	
Wage rate changes covering at least 1,000 workers, all industries:														
First year of contract	7.6	7.4	9.5	9.8	3.8	9.0	3.0	3.4	5.4	3.8	-1.2	2.7	3.6	
Annual rate over life of contract	6.4	6.0	7.1	7.9	3.6	5.7	2.8	3.2	4.5	4.8	2.2	2.8	3.6	
Manufacturing:														
First year of contract	8.3	6.9	7.4	7.2	2.8	6.6	2.5	1.8	5.1	4.1	-3.4	1.3	3.8	
Annual rate over life of contract	6.6	5.4	5.4	6.1	2.6	5.4	2.7	1.7	3.9	4.5	.9	1.6	4.1	
Nonmanufacturing (excluding construction):														
First year of contract	8.0	7.6	9.5	9.8	4.3	9.6	2.7	6.6	5.5	3.6	3.5	6.4	5.6	
Annual rate over life of contract	6.5	6.2	6.6	7.3	4.1	5.6	2.1	6.1	4.8	5.2	5.4	5.7	3.9	
Construction:														
First year of contract	6.5	8.8	13.6	13.5	6.5	11.4	8.6	6.2	6.3	3.4	.7	1.7	.4	
Annual rate over life of contract	6.2	8.3	11.5	11.3	6.3	11.7	8.2	6.3	5.9	2.9	2.4	2.1	2.4	

p = preliminary.

36. Effective wage adjustments in collective bargaining units covering 1,000 workers or more, 1978 to date

Measure	Year					Year and quarter								
	1978	1979	1980	1981	1982	1981	1982				1983 ^P			
						IV	I	II	III	IV	I	II	III	
Average percent adjustment (including no change):														
All industries	8.2	9.1	9.9	9.5	6.8	1.5	1.0	2.0	2.4	1.3	0.3	1.3	1.1	
Manufacturing	8.6	9.6	10.2	9.4	5.2	1.9	.9	1.0	1.7	1.5	-.4	1.0	1.1	
Nonmanufacturing	7.9	8.8	9.7	9.5	7.9	1.1	1.1	2.7	2.9	1.2	.9	1.4	1.1	
From settlements reached in period	2.0	3.0	3.6	2.5	1.7	.4	.2	.4	.5	.6	-.2	.2	.2	
Deferred from settlements reached in earlier period	3.7	3.0	3.5	3.8	3.6	.4	.6	1.4	1.3	.4	.4	1.0	.8	
From cost-of-living clauses	2.4	3.1	2.8	3.2	1.4	.6	.3	.2	.6	.3	.1	.1	.2	
Total number of workers receiving wage change (in thousands) ¹	—	—	—	8,648	7,852	3,225	2,878	3,423	3,760	3,441	2,998	3,139	2,883	
From settlements reached in period	—	—	—	2,270	1,907	604	204	511	620	825	444	542	444	
Deferred from settlements reached in earlier period	—	—	—	6,267	4,846	882	1,001	1,594	2,400	860	828	1,413	1,328	
From cost-of-living clauses	—	—	—	4,593	3,830	2,179	1,920	1,568	2,251	1,970	2,050	1,376	1,216	
Number of workers receiving no adjustments (in thousands)	—	—	—	145	483	5,568	5,457	4,912	4,575	4,895	5,047	4,906	5,163	

¹ The total number of workers who received adjustments does not equal the sum of workers that received each type of adjustment, because some workers received more than one type of adjustment during the

period.
p = preliminary.

WORK STOPPAGE DATA

WORK STOPPAGES include all known strikes or lockouts involving 1,000 workers or more and lasting a full shift or longer. Data are based largely on newspaper accounts and cover all workers idle one shift or more in establishments directly involved in a stoppage. They do not measure the indirect or secondary effect on other establishments whose employees are idle owing to material or service shortages.

Estimates of days idle as a percent of estimated working time measure only the impact of larger strikes (1,000 workers or more). Formerly, these estimates measured the impact of strikes involving 6 workers or more; that is, the impact of virtually *all* strikes. Due to budget stringencies, collection of data on strikes involving fewer than 1,000 workers was discontinued with the December 1981 data.

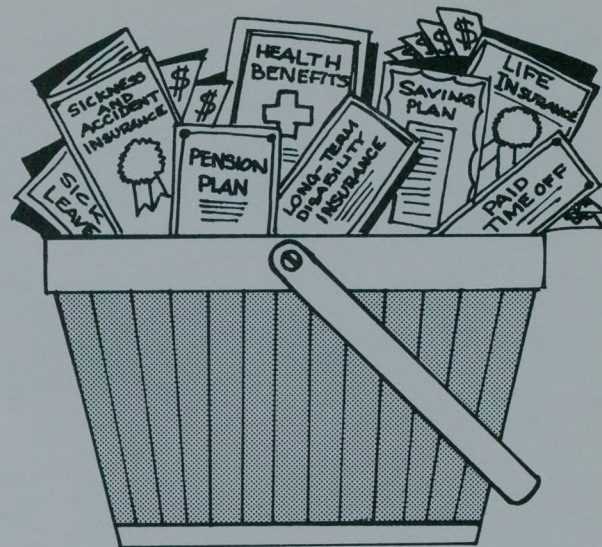
37. Work stoppages involving 1,000 workers or more, 1947 to date							
Month and year	Number of stoppages		Workers involved		Days idle		
	Beginning in month or year	In effect during month	Beginning in month or year (in thousands)	In effect during month (in thousands)	Number (in thousands)	Percent of estimated working time	
1947	270		1,629		25,720		
1948	245		1,435		26,127	22	
1949	262		2,537		43,420	38	
1950	424		1,698		30,390	26	
1951	415		1,462		15,070	12	
1952	470		2,746		48,820	38	
1953	437		1,623		18,130	14	
1954	265		1,075		16,630	13	
1955	363		2,055		21,180	16	
1956	287		1,370		26,840	20	
1957	279		887		10,340	07	
1958	332		1,587		17,900	13	
1959	245		1,381		60,850	43	
1960	222		896		13,260	09	
1961	195		1,031		10,140	07	
1962	211		793		11,760	08	
1963	181		512		10,020	07	
1964	246		1,183		16,220	11	
1965	268		999		15,140	10	
1966	321		1,300		16,000	10	
1967	381		2,192		31,320	18	
1968	392		1,855		35,567	20	
1969	412		1,576		29,397	16	
1970	381		2,468		52,761	29	
1971	298		2,516		35,538	19	
1972	250		975		16,764	09	
1973	317		1,400		16,260	08	
1974	424		1,796		31,809	16	
1975	235		965		17,563	09	
1976	231		1,519		23,962	12	
1977	298		1,212		21,258	10	
1978	219		1,006		23,774	11	
1979	235		1,021		20,409	09	
1980	187		795		20,844	09	
1981	145		729		16,908	07	
1982	96		656		9,061	04	
1982	January	2	4	6.1	11.4	202.8	.01
	February	3	7	3.9	15.3	241.1	.01
	March	4	9	13.3	26.1	357.0	.02
	April	14	21	59.5	79.1	533.1	.03
	May	15	23	42.7	66.1	657.6	.04
	June	18	27	42.8	66.9	907.2	.05
	July	13	25	38.4	65.9	844.7	.04
	August	9	23	18.8	58.0	754.3	.04
	September	14	27	390.0	427.0	2,088.8	.11
	October	3	13	38.1	67.6	904.8	.05
	November	1	6	2.2	43.7	805.4	.04
	December	—	2	—	36.4	764.4	.04
1983 ^p	January	1	3	1.6	38.0	794.8	.04
	February	5	7	14.0	50.4	844.4	.05
	March	5	10	10.5	54.9	1,131.5	.05
	April	2	9	2.8	52.4	789.5	.04
	May	11	16	23.6	32.9	493.9	.03
	June	15	24	59.8	79.7	689.0	.03
	July	10	23	49.9	85.1	1,198.1	.07
	August	7	19	675.8	730.4	10,655.7	.51
	September	7	19	21.7	50.8	574.6	.03
	October	10	17	62.9	79.6	1,152.2	.06
	November	14	12	24.8	44.4	655.4	.04
	December	—	8	—	32.0	512.1	.03

p = preliminary.

r = revised.

Employee Benefits in Medium and Large Firms

U.S. Department of Labor
Bureau of Labor Statistics
Bulletin 2176



The Bureau of Labor Statistics issues its 1982 bulletin on employee benefits in medium and large firms. This survey is the fourth in an annual series.

Data available

- Incidence and detailed characteristics of 11 private sector employee benefits paid for at least in part by the employer: Lunch and rest periods, holidays, vacations, and personal and sick leave; sickness and accident, long-term disability, health, and life insurance; and private retirement pension plans.
- Incidence data on 18 other employee benefits, including stock, savings and thrift, and profit sharing plans; employee discounts; and educational assistance.
- Data presented separately for three occupational groups—professional-administrative, technical-clerical, and production workers.

Coverage

- Major benefits in medium and large firms, nationwide.

- Minimum employment in establishments covered is generally 100 to 250 employees, depending on the industry.

Source of data

- Sample of about 1,500 establishments in a cross-section of the Nation's private industries; primarily by personal interview.

Uses

- Benefit administration in public and private employment.
- Union contract negotiations.
- Conciliation and arbitration in public and private sectors.
- Development of legislation affecting the welfare of workers.

Please send your order to the Bureau of Labor Statistics Regional Office nearest you:

1603 JFK Federal Building
Government Center
Boston, Mass. 02203

1515 Broadway, Suite 3400
New York, N.Y. 10036

3535 Market Street
P. O. Box 13309
Philadelphia, Pa. 19101

1371 Peachtree, NE
Atlanta, Ga. 30367

9th Floor
Federal Office Building
230 S. Dearborn Street
Chicago, Ill. 60604

2nd Floor
555 Griffin Square Building
Dallas, Tex. 75202

911 Walnut Street
Kansas City, Mo. 64106

450 Golden Gate Avenue,
Box 36017
San Francisco, Calif. 94102

You may also send your order directly to:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Order form

Please send _____ copies of *Employee Benefits in Medium and Large Firms, 1982*, Bulletin 2176, Stock No. 029-001-02761-3 at \$4.50 each for a total of _____.

- Enclosed is a check or money order payable to Superintendent of Documents.
- Charge to GPO Deposit Account No. _____ Order No. _____
- Credit Card Orders—MasterCard or Visa, on orders to Superintendent of Documents only. Credit Card No. _____

Total charges \$ _____

Expiration Date _____
Month/Year _____

Name _____

Address _____

City, State, Zip Code _____

U.S. Department of Labor
Bureau of Labor Statistics
Washington D.C. 20212

Official Business

Penalty for private use, \$300
RETURN POSTAGE GUARANTEED

Postage and Fees Paid
U.S. Department of Labor
Lab-441



SECOND CLASS MAIL

MLR LIBRA442L ISSUED
LIBRARY
FED RESERVE BANK OF ST LO
PO BOX 442
SAINT LOUIS MO 63166

