



MONTHLY LABOR REVIEW

U.S. Department of Labor  
Bureau of Labor Statistics  
April 1980

*In this issue:*

Two articles about Frances Perkins  
A look at the distribution of earned income  
An evaluation of labor force statistics

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**April covers:**

Commemorative stamp honoring Frances Perkins, the first woman to serve as a member of a U.S. Presidential cabinet. The stamp, issued on the 100th anniversary of Frances Perkins' birth, was designed by F. R. Petrie of Rutherford, N.J.

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## MONTHLY LABOR REVIEW

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

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# Labor Month In Review



**FRANCES PERKINS.** The 100th anniversary of the birth of Frances Perkins is being marked this month by the issuance of a postage stamp bearing her likeness and by the naming in her honor of the building housing the U.S. Department of Labor. Several articles and other features in this issue of the *Monthly Labor Review* describe the life and work of Frances Perkins. Her important contributions also are recounted in a Labor Department booklet marking the dedication of the Frances Perkins Building. Excerpts:

**Questions for FDR.** Before Frances Perkins would accept the Cabinet appointment as Secretary of Labor, she told President-elect Franklin Delano Roosevelt, "I don't want to say yes to you unless you know what I'd like to do and are willing to have me go ahead and try."

She then read Roosevelt her list. It contained much of what would become the New Deal's most important social welfare and labor legislation: direct Federal aid to the States for unemployment relief, public works, maximum hours, minimum wages, child labor laws, unemployment insurance, social security, and a revitalized public employment service. "Are you sure you want these things done?" she asked. "Because you don't want me for Secretary of Labor if you don't."

Roosevelt never hesitated. He was convinced that the capable and strong-minded woman in his study was the most qualified person for the job. "Yes," he said. "I'll back you." With that, Perkins immediately accepted the post and served as Secretary of Labor the entire 12 years of the Roosevelt Administration. She was the first woman ever to serve as a Cabinet member and she served longer than any other Secretary of Labor.

**Social security.** The Social Security Act of 1935 was probably the most enduring contribution Perkins made as a Government official. As a member of the Committee on Economic Security, she worked tirelessly to create a practical social security program which could both pass the Congress and help the people. She made hundreds of speeches supporting social security. Its enactment, on August 14, 1935, helped change the economic and social structure of American life. Her belief that working people had a right to benefits during unemployment and in their old age was made the law of the land by this act. Perkins' determination helped workers secure a more equitable place on the social scale. Her leadership, and the dedicated work of many others, helped remove the threat of starvation, eviction, and destitution from every worker's doorstep.

**Fair labor standards.** If social security was Frances Perkins' pride, the Fair Labor Standards Act must have been her joy. She had long advocated minimum wage and maximum hour legislation. The collapse of labor standards during the Depression made some type of Government action imperative. Many among Roosevelt's advisers were uncertain of the constitutionality of Federal labor standards legislation. To lay the groundwork for Federal standards she believed inevitable, Perkins instructed the Labor Department to work with State governments to create a body of consistent laws and standards. She set up a Division of Labor Standards and was the first Labor Secretary to show real interest and concern for State labor agencies. She always tried to attend meetings with state representatives and considered these sessions very useful in developing workers' compensation and safety and health standards.

During his 1936 campaign for reelection, Roosevelt promised to support a Federal labor standards bill. The measure passed the Senate but died in the House Rules Committee. Perkins and Roosevelt would not let it rest in peace. Compromises were made and pressure was applied. The Fair Labor Standards Act finally became law on June 25, 1938.

**The role of States.** The social legislation of the 1930's forever changed the position of the American worker in society. While the Federal Government was often instrumental in creating these laws and indispensable for putting them into operation, Perkins often advocated more involvement for the individual States. She believed that programs such as unemployment insurance should be administered by a Federal-State system. At the National Conference for Labor Legislation in February 1934, she said: "The fundamental power to make regulations with regard to welfare . . . lies with the sovereign States." While many New Dealers have been seen as "big government" people, Perkins rarely favored the Federal Government dictating or making policy for the States. The closer decisionmaking was to the people, the better Perkins liked it.

**The Perkins legacy.** Perkins, indeed, had become an important historical figure. Yet with all her accomplishments, she never lost the basic qualities that made her an extraordinary person: her courage, her vibrant personality, her gift for friendship, her sense of propriety and privacy, and her deep religious spirit. These qualities formed the core of her character and they touched everyone she knew as well as the millions of people unknown to her for whom she worked throughout her life. □



# The distribution of earned income among men and women, 1958–77

*The trend toward greater earnings inequality for men continued, but appeared to slow in recent years; the more unequal distribution for women remained stable, probably reflecting limited occupational advances*

PETER HENLE AND PAUL RYSCAVAGE

The distribution of income continues to be a lively topic for public policy as well as academic debate. While few, if any, officials have embraced income redistribution as a goal of public policy, many legislative and administrative measures have, in fact, altered income distribution. The extent of such redistribution often becomes a major factor underlying the resolution of tax, welfare, and other economic policy questions. As one example, the 1977 congressional rejection of practically all President Carter's proposals for tax reform reflected a quite different attitude toward income distribution than the attitudes underlying the antipoverty programs of the 1960's.

A 1972 article explored the distribution of earned income (wages, salaries, and self-employment earnings) for men during 1958–70.<sup>1</sup> That study found "a slow but persistent trend toward greater inequality" both for all male earners and for those working full time year round. Various possible explanations for such a trend were discussed, including the changing age composition of the population, the changing structural characteristics of jobs, and differential changes in the rates of compensation.

The current effort extends the earlier work in several

ways. First, the data have been carried forward to 1977. This permits a broader perspective to test the trends identified from 1958–70 data. Second, data for women are included for the first time, allowing a comparison of earnings distribution trends by sex. And third, more recent contributions to the literature are reviewed to determine whether they have added to the earlier analysis.<sup>2</sup>

As in the earlier case, this study utilizes the Gini index as a shorthand method of describing the shape of earnings distribution.<sup>3</sup> Although it may have some statistical limitations, it still seems a useful way to identify the degree of equality at any one time and track changes in distribution over several years. The primary data used here are annual earnings reported to the Census Bureau by members of a nationwide sample of households (Current Population Survey). The current data incorporate various improvements in methodology, with the result that the 1958–70 Gini indexes utilized in the earlier article have been revised.<sup>4</sup> Values are for money income only, and no effort was made to include any estimate for fringe benefits not reflected in earnings, such as employer expenditures for health, welfare, and retirement plans. The article will focus first on the new and revised data for men; a discussion of the new data for women will follow.

## Earnings distribution of men

The basic structure of the earnings distribution noted in the 1972 article still holds. For example, the distribu-

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tion of wages and salaries is more equal than the distribution of all reported earnings. This follows from the fact that the self-employed include major concentrations at both the low and the high end of the distribution—low-earning proprietors of small retail and service establishments and high-earning professionals and businessmen. In a somewhat similar way, the distribution for year-round full-time workers is more equal than the distribution for all workers, because the inclusion of the part-time and part-year workers adds a large group of low-income earners to the distribution.

The “slow but persistent” trend toward inequality, previously noted for the years 1958–70, is still evident, although a 20-year perspective yields somewhat different insights. As shown in table 1, the trend towards inequality for the most inclusive series (all earners) continued steadily until 1977. A similar trend is evident for all male wage and salary workers. For both series, the 1968–73 period appears to show the greatest shift toward inequality, with the trend somewhat less marked before and after this period. For year-round full-time workers, the figures indicate either no trend at all (all earners) or a slightly more modest trend toward inequality (wage and salary workers).

These data, of course, pertain to broad aggregates

and all classes of earners. Perhaps more revealing are the data for occupational and industry groups, shown in table 2. The trend toward inequality among male workers in specific occupations and industries is even more evident. To assist in this analysis, a simple time series regression of the annual Gini indexes was utilized; the results are shown in tables 3 and 4.

Of the 10 major occupational groups, eight (managers and farm laborers are the exception) show a distinct trend toward inequality among all earners during 1958–77. Among year-round full-time workers, managers and farm laborers show a trend towards equality, professional workers and nonfarm laborers show an uncertain trend, but all the remaining occupational groups show a trend towards inequality. Increasing inequality is pronounced among blue-collar groups such as craftworkers and operatives. Clerical and sales (white-collar) occupations show an equally distinct trend toward inequality since 1958, but for clerical workers the annual data indicate less change during recent years.

When the data are grouped by industry, the results are similar; but industry data are available only for wage and salary workers. Moreover, for year-round full-time workers, data are available only from 1967, although these data were viewed along with the 1958–70 data available for the earlier article (based on an allocation method no longer utilized by the Census Bureau).

As shown in table 4, industry data for all wage and salary earners also display a definite trend toward inequality. The trend is especially marked for construction, manufacturing, transportation, trade, finance, most of the service industries, and public administration. As expected, data for all workers show a more definitive trend than the results for year-round full-time workers. Focusing on the latter group, both agriculture and mining show a trend toward equality. For the transportation, retail trade, and finance groups and for public administration, a statistically significant trend toward inequality is clear, but for the remaining industries little trend is indicated.

### Earlier factors less significant

The 1972 article reviewed various postwar developments that may have contributed to the trend towards inequality of earnings. Three types of factors were examined: changes in the personal characteristics of earners that might affect their earnings ability, chiefly age and schooling; changes in the characteristics of jobs that might affect the earnings ability of the jobholders; and changes in the rates of compensation in various occupations and industries that might affect differently jobs at various points in the earnings distribution.

The earlier analysis identified four specific developments that may have contributed to the trend towards inequality: the growing importance of voluntary part-

**Table 1. Gini indexes of all earnings and wages and salaries among men, 1958–77**

Item and year	All earners		Wage and salary earners	
	Total	Year-round full-time	Total	Year-round full-time
Workers, 1977 (in thousands) . . .	61,704	39,263	47,473	34,128
Median income, 1977 . . . . .	\$11,037	\$14,626	\$12,439	\$14,902
Gini index:				
1958 . . . . .	.399	.315	.327	<sup>1</sup> .254
1959 . . . . .	.398	.318	.324	<sup>1</sup> .262
1960 . . . . .	.411	.325	.337	<sup>1</sup> .275
1961 . . . . .	.419	.329	.343	<sup>1</sup> .274
1962 . . . . .	.410	.318	.336	<sup>1</sup> .270
1963 . . . . .	.406	.310	.336	<sup>1</sup> .270
1964 . . . . .	.406	.315	.336	<sup>1</sup> .275
1965 . . . . .	. . . . .	. . . . .	.334	<sup>1</sup> .276
1966 . . . . .	.406	.312	.342	<sup>1</sup> .281
1967 . . . . .	.409	.315	.335	.274
1968 . . . . .	.410	.313	.337	.273
1969 . . . . .	.417	.306	.344	.272
1970 . . . . .	.423	.310	.350	.278
1971 . . . . .	.428	.311	.357	.281
1972 . . . . .	.431	.321	.365	.287
1973 . . . . .	.427	.314	.360	.283
1974 . . . . .	.429	.319	.359	.286
1974 <sup>1</sup> . . . . .	.433	.315	.361	.281
1975 . . . . .	.434	.311	.367	.282
1976 . . . . .	.438	.317	.371	.284
1977 . . . . .	.439	.318	.374	.287

<sup>1</sup> Gini indexes for year-round full-time wage and salary workers, 1958–66, appeared in the earlier article (see text footnote 1), and were not recomputed when changes were made in the way the Gini indexes were calculated by the Census Bureau (see text footnote 4 for information on these changes).

<sup>1</sup>=revised: The 1974 income data were revised because of changes in the procedures used in collecting and processing the data. See text footnote 4 for more details.

NOTE: Data on earnings apply to all individuals with earnings in the specified year. Data on wages and salaries apply to all individuals employed in March of the following year who received wages or salaries in the specified year.



**Table 2. Gini indexes of earnings among men, by occupation (all earners) and industry (wage and salary earners), selected years**

Item	Workers, 1977 (In thousands)	Median income, 1977	Gini indexes						
			1958	1970	1974	1974 <sup>1</sup>	1975	1976	1977
<b>OCCUPATION</b>									
Total, all earners	61,704	11,037	0.399	0.423	0.429	0.433	0.434	0.438	0.439
Professional and technical	8,546	16,212	.353	.366	.372	.380	.381	.391	.378
Salaried	7,709	15,967	.303	.327	.345	.343	.348	.358	.347
Farmers and farm managers	1,376	4,317	.531	.558	.608	.598	.592	.615	.604
Managers	8,193	16,850	.386	.379	.393	.361	.369	.367	.368
Salaried	6,702	17,803	.318	.344	.372	.341	.344	.335	.338
Clerical workers	3,625	10,822	.274	.346	.360	.355	.359	.361	.363
Salesworkers	3,701	11,685	.433	.460	.464	.460	.474	.473	.486
Craftworkers	12,337	12,313	.260	.275	.298	.297	.309	.312	.321
Operatives	10,737	10,066	.297	.313	.340	.341	.346	.352	.364
Service workers	6,102	5,077	.375	.467	.487	.495	.499	.498	.511
Farm laborers	1,421	1,998	.560	.606	.602	.574	.580	.580	.564
Nonfarm laborers	5,585	4,566	.419	.496	.500	.499	.494	.517	.499
<b>INDUSTRY</b>									
Total, wage and salary earners	47,473	12,439	0.327	0.350	0.359	0.361	0.367	0.371	0.374
Agriculture	1,041	5,488	.485	.494	.449	.455	.476	.468	.466
Mining	643	15,096	.274	.284	.273	.270	.284	.284	.281
Construction	4,038	11,622	.319	.335	.331	.336	.363	.373	.361
Manufacturing	14,126	13,451	.294	.300	.298	.298	.304	.316	.313
Transportation, communication, and public utilities	4,344	15,082	.233	.273	.289	.287	.287	.287	.297
Wholesale trade	2,454	14,249	.325	.348	.368	.355	.362	.352	.367
Retail trade	6,696	7,735	.364	.434	.446	.454	.446	.452	.461
Finance	2,078	14,662	.347	.362	.406	.401	.396	.405	.397
Business services	1,808	10,046	.330	.404	.412	.390	.439	.434	.426
Personal services	742	5,564	.463	.463	.517	.503	.501	.495	.530
Entertainment and recreation	487	8,556	.474	.499	.503	.506	.478	.507	.504
Professional service	5,750	12,374	.381	.405	.392	.405	.422	.417	.415
Public administration	3,268	15,434	.220	.252	.291	.270	.281	.247	.263

<sup>1</sup> = revised: The 1974 income data were revised because of changes in the procedures used in collecting and processing the data. See text footnote 4 for more details.

time work; the increasing flow of young people into the labor force, many of them with low earnings; the changing occupational structure—more specifically the growing importance of highly paid professional and managerial personnel; and the pattern of increases in earnings which, in many instances, has meant higher increases in rates of pay for the higher earning occupations.

The result of these four developments in the 1958–70 period, it was concluded, was an increased proportion of earners at the lowest and highest end of the income scale.

These developments continued to operate during the 1970's, but in several respects it would appear that they were less significant, particularly in more recent years:

1. The rate at which young people have entered the labor market has slowed dramatically, reflecting the reduction in birth rates which took place beginning in the late 1950's. From 1958 to 1968, the number of young men age 16 to 19 in the civilian labor force increased at an annual rate of 4.2 percent. During 1968–73, the rate rose to 4.9 percent before dropping to 1.7 percent in the 1973–77 period.

2. The increase in voluntary part-time earners among men has also slowed considerably. From 1963 (the earliest year for which data are available) to 1973,

the annual rate of increase was 4.3 percent, slowing to 2.1 percent for 1973–77.

3. Changes in the occupational mix from blue collar to white collar also have not occurred with the same rapidity. For example, professional and technical occupations accounted for 10.4 percent of male employees in 1958, increasing substantially to 14.0 percent in 1970, but further increasing to only 14.6 percent in 1977.

**Table 3. Regression results of Gini indexes for the earnings of men, by occupation, 1958–77**

Occupation	All earners			Full-time year-round earners		
	Trend coefficient	t statistic	R <sup>2</sup>	Trend coefficient	t statistic	R <sup>2</sup>
Total	0.0020	18.50	0.810	-.0003	-1.359	0.098
Professional and technical workers	.0021	16.79	.730	.0006	2.111	.208
Farmers and farm managers	.0044	15.49	.640	.0040	14.495	.543
Managers	-.0016	-3.23	.381	-.0023	-4.851	.581
Clerical	.0046	13.35	.913	.0017	16.29	.700
Salesworkers	.0020	14.15	.503	.0024	14.33	.525
Craftworkers	.0030	18.54	.811	.0019	18.37	.805
Operatives	.0032	19.89	.852	.0011	13.38	.402
Service workers	.0068	120.69	.962	.0014	13.54	.424
Farm laborers	.0008	1.63	.135	-.0040	-5.41	.633
Nonfarm laborers	.0044	18.07	.792	.0008	22.48	.267

<sup>1</sup> Statistically significant at the 1-percent level.

<sup>2</sup> Statistically significant at the 5-percent level.

4. Increases in earnings have also been less dramatic among the higher paid occupations and industries. During 1958-70, the only occupational groups with higher than average earnings increases were both the professional and the managerial groups. During 1970-77, these groups showed below-average increases with higher increases recorded by laborers, semiskilled workers, and salesworkers.

For these reasons, it does not appear surprising that although the trend over the postwar period continues to point toward greater inequality, the movement in that direction has slowed in more recent years.

Special mention might be made of the two industries—agriculture and mining—in which the data for men show a trend toward greater equality. In both cases, special factors seem to be at work. In agriculture, the number of farmers and the farm work force continues to decline slowly, with the drop concentrated among the lower income farm group. Wages for farm laborers have increased quite substantially, with the minimum wage for agricultural workers rising more sharply than the basic minimum, as farm production becomes increasingly mechanized. Thus, it seems likely that the proportion of earners with low annual earnings has declined, helping to provide a more equal distribution.

In mining, which includes not only coal, metal, and nonmetallic mining, but also oil and gas extraction, the prosperity of both the coal mining and the oil and gas segments of the industry has certainly helped to raise earnings of workers in these industries. Because these two prosperous segments account for two-thirds of all mining employees, they may have been significant in producing greater equality of earnings.

**Table 5. Gini indexes of all earnings and wages and salaries among women, 1958-77**

Item	All earners		Wage and salary earners	
	Total	Year-round full-time	Total	Year-round full-time
Workers, 1977 (In thousands) . . . . .	46,194	19,238	34,503	17,736
Median income, 1977 . . . . .	\$4,674	\$8,618	\$5,986	\$8,733
Gini index:				
1958 . . . . .	.466	.264	.389	. . . . .
1959 . . . . .	.470	.264	.385	. . . . .
1960 . . . . .	.465	.257	.384	. . . . .
1961 . . . . .	.480	.284	.399	. . . . .
1962 . . . . .	.470	.277	.393	. . . . .
1963 . . . . .	.468	.273	.396	. . . . .
1964 . . . . .	.468	.270	.391	. . . . .
1965 . . . . .	. . . . .	. . . . .	.396	. . . . .
1966 . . . . .	.462	.276	.392	. . . . .
1967 . . . . .	.463	.287	.395	.264
1968 . . . . .	.460	.279	.390	.256
1969 . . . . .	.476	.266	.395	.246
1970 . . . . .	.483	.272	.402	.255
1971 . . . . .	.475	.266	.400	.251
1972 . . . . .	.475	.268	.403	.252
1973 . . . . .	.478	.268	.404	.254
1974 . . . . .	.471	.271	.395	.252
1974 <sup>1</sup> . . . . .	.470	.249	.395	.237
1975 . . . . .	.467	.258	.400	.245
1976 . . . . .	.469	.259	.401	.245
1977 . . . . .	.466	.260	.399	.245

<sup>1</sup> = revised: The 1974 income data were revised because of changes in the procedures used in collecting and processing the income data. See text footnote 4 for more details.

NOTE: Data on earnings apply to all individuals with earnings in the specified year. Data on wages and salaries apply to all individuals employed in March of the following year who received wages or salaries in the specified year.

**Table 4. Regression results of Gini indexes for wage and salary income of men, by industry, 1958-77**

Industry	Wage and salary earners			Full-time year-round earners		
	Trend coefficient	t statistic	R <sup>2</sup>	Trend coefficient	t statistic	R <sup>2</sup>
Total . . . . .	.0024	110.04	.849	0.0011	16.30	0.688
Agriculture, forestry, and fisheries . . . . .	-.0004	-.840	.038	-.0023	<sup>1</sup> -2.990	.3318
Mining . . . . .	-.0014	-1.768	.148	-.0013	<sup>2</sup> -2.141	.2030
Construction . . . . .	.0016	13.395	.390	.0009	1.903	.1674
Manufacturing . . . . .	.0010	4.182	.492	.0003	2.035	.1870
Transportation, communications, and public utilities . . . . .	.0026	19.262	.827	.0015	13.732	.4362
Wholesale trade . . . . .	.0017	3.974	.467	.0010	1.754	.146
Retail trade . . . . .	.0043	12.839	.902	.0016	13.971	.467
Finance, insurance, and real estate . . . . .	.0027	6.070	.672	.0016	13.310	.378
Business and repair service . . . . .	.0042	6.109	.675	.0016	1.825	.156
Personal services . . . . .	.0035	3.184	.360	.0018	1.364	.094
Entertainment and recreational services . . . . .	.0020	1.353	.092	.0010	.590	.019
Professional services . . . . .	.0025	6.262	.685	.0001	.231	.0029
Public administration . . . . .	.0026	5.604	.636	.0045	<sup>2</sup> 2.580	.2687

<sup>1</sup> Statistically significant at the 1-percent level.  
<sup>2</sup> Statistically significant at the 5-percent level.

**Earnings distribution of women**

The earnings distribution of women is significantly different from that of men. There are relatively more low earners and fewer high earners among women, and as a result the median earnings of women (table 5) is substantially lower than the median earnings of men (table 1). Large earnings differences also exist between men and women both as full-time year-round workers and as wage and salary workers.

These earnings differences have been the subject of much research in recent years, and a large literature has developed.<sup>5</sup> Researchers have pointed to a number of factors responsible for the earnings gap: women are more likely than men to work part time because of their childbearing and childrearing responsibilities and because of their greater chances of experiencing unemployment; many women, because of their shorter work histories, lack the necessary job skills, or human capital, to compete successfully with men in the job market; and women are more frequently discriminated against in their attempts to move up the career ladder.

The basic structure of women's earnings distribution is somewhat more unequal than the earnings distribution of men. This greater inequality can be traced to the tendency among women—whether voluntarily or involuntarily—to work only part time and part year. For example, in 1977, nearly 60 percent of all female earners



**Table 6. Distribution of all earnings among women, by occupation, 1977**

Occupational group	Workers (In thousands)	Median income	Gini index	Percent share of aggregate earnings					
				Lowest fifth	Second fifth	Middle fifth	Fourth fifth	Highest fifth	Top 5 percent
Total .....	46,194	\$4,674	.466	1.9	7.5	16.4	27.0	47.3	16.8
Professional and technical workers .....	6,826	9,161	.376	2.8	11.2	19.9	26.5	39.6	13.7
Salaried .....	6,487	9,453	.355	3.3	12.0	20.2	26.4	38.1	12.6
Farmers and farm managers .....	93	758	.666	1.4	3.9	6.5	15.4	72.7	30.0
Managers .....	2,620	7,817	.417	2.6	10.5	17.9	25.0	44.1	17.1
Salaried .....	2,214	8,391	.373	4.0	12.0	18.0	24.6	41.4	15.4
Clerical workers .....	15,095	6,053	.383	2.9	10.7	19.3	26.7	40.4	13.3
Salesworkers .....	3,281	2,425	.540	1.9	6.0	12.9	23.0	56.2	23.7
Craftworkers .....	761	5,600	.434	2.4	9.0	17.4	26.2	45.0	16.2
Operatives .....	5,421	5,109	.375	3.5	11.2	18.8	26.1	40.4	13.6
Service workers .....	8,996	2,463	.490	2.1	6.8	14.7	26.0	50.4	18.2
Farm laborers .....	501	849	.528	2.4	7.1	11.8	22.3	56.5	22.2
Nonfarm laborers .....	588	2,857	.504	1.6	5.1	14.4	29.6	49.3	16.5

worked less than year round, full time, compared to only 36 percent of all male earners. The greater prevalence of women who work full time and part time, off and on during the year, produces a greater variation in their earnings distribution relative to men.

The earnings of women who work year round in full-time jobs, however, are distributed more equally than the comparable distributions for men. This may occur because full-time year-round female earners tend to be clustered in a few occupations, where the range of earnings is not very great. (For example, in 1977, 39 percent of all female earners working full time, year round were in clerical occupations, and the Gini index for women in this occupation was only .204.)

The degree of earnings inequality varied considerably by the occupations and industries in which women worked. The most unequal earnings distributions for women in 1977 were found in the service, sales, and unskilled occupations (table 6). These occupations are major entry occupations for young women, and earnings are generally low. Occupations with the most equality

—more equal than the overall distribution—were the clerical, semiskilled, managerial, and professional occupations. Among the major industries in which female wage and salary workers were employed in 1977, the most unequal earnings distributions were in retail trade, business and personal services, agriculture, forestry, and fisheries, and entertainment and recreation services (table 7). The most equal distributions were observed in manufacturing, finance, insurance, and real estate, transportation, communication, and public utilities, and public administration.

### Evenly distributed gains

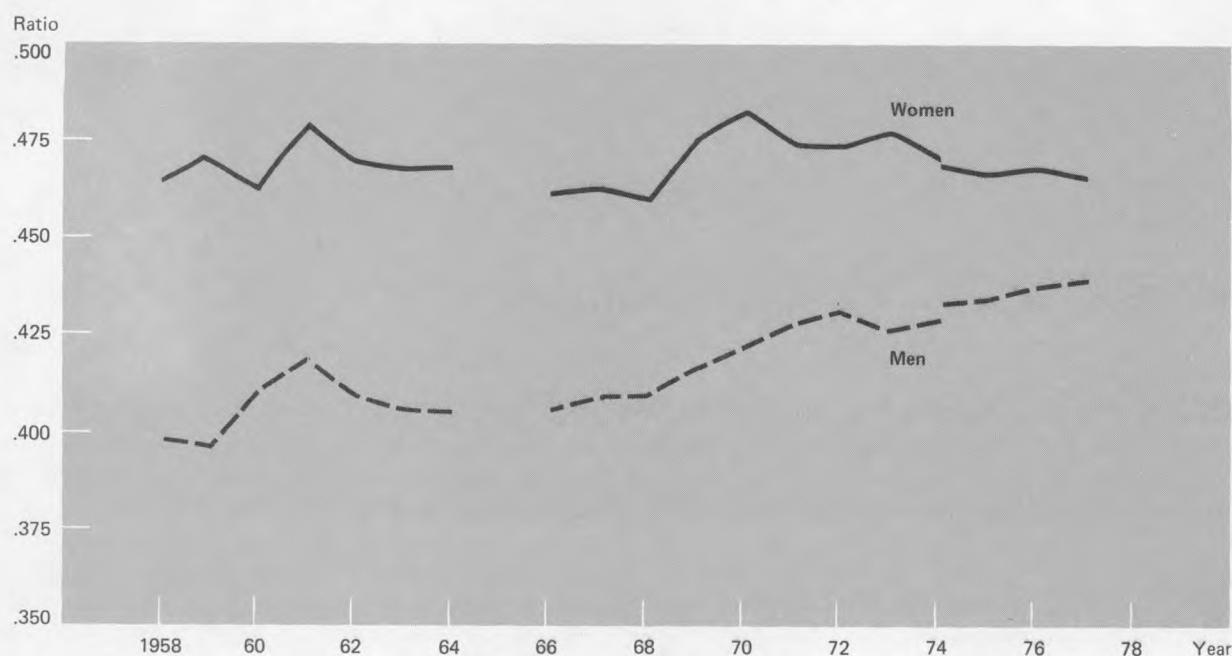
As shown earlier, there has been a trend toward greater earnings inequality among men during 1958–77, although it weakened to some extent during 1970–77. An obvious question is what was happening to the earnings distributions of women over these years.

In the aggregate, the distribution of women's earnings remained about as unequal in the 1970's as it was in the 1960's and in the late 1950's. (See chart 1.) In

**Table 7. Distribution of wage and salary earnings among women, by industry, 1977**

Industry	Workers (In thousands)	Median income	Gini index	Percent share of aggregate wage and salary earnings					
				Lowest fifth	Second fifth	Middle fifth	Fourth fifth	Highest fifth	Top 5 percent
Total .....	34,503	\$5,986	.399	3.1	10.3	18.0	26.1	42.4	14.6
Agriculture, forestry, and fisheries .....	258	2,781	.549	1.7	5.9	12.5	24.4	55.6	26.0
Mining .....	75	9,408	.329	7.0	13.6	17.6	21.6	40.1	24.1
Construction .....	298	6,748	.359	4.4	11.8	18.8	25.3	39.7	14.2
Manufacturing .....	6,117	6,947	.314	5.6	13.7	18.9	24.7	37.1	12.4
Transportation, communications, and public utilities .....	1,349	9,047	.319	5.0	13.3	19.8	25.3	36.6	12.4
Wholesale trade .....	815	7,337	.352	4.6	12.6	18.8	24.3	39.7	15.2
Retail trade .....	6,444	3,664	.434	3.0	9.3	16.4	25.4	45.9	16.7
Finance .....	2,676	7,319	.317	5.5	14.1	18.9	24.0	37.6	13.6
Business services .....	844	5,429	.426	2.4	9.3	17.9	26.2	44.2	16.2
Personal services .....	2,366	1,817	.532	1.9	5.6	12.6	25.5	54.5	20.6
Entertainment and recreational services .....	282	4,327	.484	2.7	7.4	14.5	25.2	50.2	20.8
Professional services .....	11,331	6,685	.383	3.6	10.9	18.2	26.2	41.2	13.9
Public administration .....	1,648	8,551	.328	4.9	13.5	19.0	24.9	37.8	12.8

Chart 1. Gini indexes of all male and female earners, 1958-64 and 1966-77



NOTE: Because the Census Bureau revised the income statistics in 1974, the data for 1974-77 are plotted separately (see text footnote 4).

other words, there was no positive or negative trend in the Gini indexes over these 2 decades. (See table 5.) Furthermore, the Gini indexes for those women with steady year-round employment indicate neither a positive nor a negative trend in earnings inequality since 1958.

Among women wage and salary earners, there was some slight evidence of a movement towards greater earnings inequality, especially between 1958 and 1970 (table 5). However, this trend was certainly not as strong as that exhibited by men over the same period. Somewhat more puzzling are the Gini indexes for the full-time year-round wage and salary workers—a series that only begins in 1967. According to these data, there has been a gradual trend towards greater earnings equality between 1967 and 1977, but here, too, the trend is not a very strong one. So, the Gini indexes for these aggregate earnings distributions of women indicate neither strong positive nor negative trends in earnings inequality.

The picture is also mixed when the earnings distributions of women in the various occupations and industries are examined. In the clerical and sales occupations, for example, earnings distributions have tended towards greater inequality, and this applies even in the case of full-time year-round workers (table 8). On the other

hand, there is an indication of a movement towards greater equality in the earnings distributions of women working full time, year round in professional, managerial, and service occupations. Among the industries in which women are employed, a movement towards greater earnings inequality was seen in manufacturing, transportation, communication, and public utilities, retail trade, finance, insurance, and real estate, business and personal services, and public administration (table 9). However, the wage and salary earnings distributions for women who work full time, year round in these industries provide little evidence of any trend toward either equality or inequality, except in the professional service industry (toward equality) and in public administration (toward inequality).

How is the lack of any significant trend in earnings inequality for women reconciled with the general trend towards inequality for men? Certainly, the number of young, part-time female workers has grown rapidly in the last 20 years, and an increasing number of women have been employed in higher paying white-collar occupations. These factors should have created greater earnings variation, resulting in greater earnings inequality, just as in the case of men. Although the data indicate a trend toward earnings inequality for certain occupations and industries, other sectors show an opposite trend,



with no overall trend evident.

A careful review of the women's and men's earnings distributions in 1958 and 1977, although not providing an answer to the above question, did produce some interesting statistics. The following tabulation shows the earnings of men and women at various percentiles of the distributions in 1958 and 1977:

	Distribution percentiles			
	20th	40th	60th	80th
<b>Women:</b>				
1958 .....	\$ 379	\$ 1,062	\$ 2,152	\$ 3,324
1977 .....	1,109	3,241	6,070	9,417
Percent change ..	192.6	205.2	182.1	183.3
<b>Men:</b>				
1958 .....	\$ 1,422	\$ 3,342	\$ 4,148	\$ 6,141
1977 .....	3,279	8,699	13,279	18,832
Percent change ..	130.6	160.0	185.7	206.7

Earnings for women at the 20th, 40th, 60th, and 80th percentiles in 1977 were near or about 200 percent higher than they were in 1958. In other words, earnings growth was fairly uniform across the distribution. Among men, however, a different picture emerges: earnings growth was much faster at the 80th percentile than it was at the 20th. One possible explanation for these different growth patterns and trends in inequality between men and women may result from differences in occupational patterns.

Despite their entry into many new occupations in recent years, women still tend to be clustered in a relatively few occupations, primarily clerical and service occupations, where opportunities for advancement are typically limited and earnings increases have been traditionally moderate. Men, however, are found in a variety of occupations and tend to dominate professional and managerial occupations where employment opportuni-

**Table 8. Regression results of Gini indexes for the earnings of women by occupation, 1958-77**

Item	All earners			Full-time year-round earners		
	Trend coefficient	t statistic	R <sup>2</sup>	Trend coefficient	t statistic	R <sup>2</sup>
Total .....	.0001	.570	.019	-.0006	-1.669	.141
Professional and technical workers .....	-.0004	-1.043	.060	-.0014	<sup>1</sup> -3.233	.381
Farmers and farm managers .....	.0040	1.632	.136	-.0233	<sup>1</sup> -3.333	.395
Managers .....	-.0022	<sup>1</sup> -2.978	.343	-.0037	<sup>1</sup> -3.960	.480
Clerical workers .....	.0027	1.8.808	.820	.0013	1.4.561	.550
Salesworkers .....	.0029	<sup>1</sup> 5.326	.625	.0038	<sup>1</sup> 7.193	.753
Craftworkers .....	.0033	<sup>1</sup> 3.290	.389	.0003	.306	.006
Operatives .....	.0013	<sup>1</sup> 4.213	.511	.0001	.361	.008
Service workers .....	.0015	<sup>1</sup> 5.718	.658	-.0028	<sup>1</sup> -4.923	.588
Farm laborers .....	.0072	<sup>1</sup> 3.803	.460	-.0290	<sup>1</sup> -5.239	.618
Nonfarm laborers .....	-.0002	-.023	.000	-.0041	-1.869	.170

<sup>1</sup> Statistically significant at the 1-percent level.

**Table 9. Regression results of Gini indexes for wage and salary income of women by industry, 1958-77<sup>1</sup>**

Item	All wage and salary earners			Full-time year-round earners		
	Trend coefficient	t statistic	R <sup>2</sup>	Trend coefficient	t statistic	R <sup>2</sup>
Total .....	0.0007	<sup>2</sup> 4.458	.525	-.0016	<sup>3</sup> -3.107	.0518
Agriculture, forestry and fisheries .....	-.0039	<sup>2</sup> -3.376	.388	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Mining .....	-.0057	-1.501	.112	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Construction .....	.0018	1.540	.116	.0015	.762	.061
Manufacturing .....	.0017	<sup>2</sup> 4.554	.535	.0013	1.597	.221
Transportation, communications, and public utilities .....	.0025	<sup>2</sup> 4.889	.570	.0022	2.204	.351
Wholesale trade .....	.0001	.120	.001	.0010	.623	.041
Retail trade .....	.0027	<sup>2</sup> 10.172	.852	.0006	.738	.057
Finance .....	.0016	<sup>2</sup> 4.316	.509	-.0008	.713	.054
Business services .....	.0030	<sup>2</sup> 6.307	.689	-.0007	-.589	.037
Personal services .....	.0016	<sup>2</sup> 3.309	.378	-.0031	-2.019	.312
Entertainment and recreational services .....	.0023	1.899	.167	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Professional services .....	.0006	1.665	.134	-.0035	<sup>2</sup> -6.666	.840
Public administration .....	.0039	<sup>2</sup> 7.272	.746	.0030	<sup>2</sup> 5.723	.785

<sup>1</sup> The Gini indexes used in estimating the trends for full-time year-round workers were for the years 1967-1977.

<sup>2</sup> Statistically significant at the 1-percent level.

<sup>3</sup> Statistically significant at the 5-percent level.

<sup>4</sup> Trends were not estimated for these groups because of the lack of data.

ties have expanded rapidly and earnings growth has been above average.

THIS DISCUSSION may necessarily appear incomplete because changes in the distribution of earnings, no matter how thoroughly analyzed, cannot be labeled "good" or "bad." No consensus has been reached on what constitutes an optimum distribution. Some may argue for a more (or less) egalitarian society, but few, if any, have ventured to set forth the outlines of a pattern of distribution to be used as a goal in public policy. The current state of knowledge, though imperfect, does recognize the necessity of avoiding extremes: absolute inequality would stifle all freedom, absolute equality would produce a very dull society.

Because levels of earnings are affected by many factors, including effort, skill, knowledge, inheritance, family status, and luck, it becomes difficult, if not impossible, to single out the specific factors responsible for any given change in earnings distribution. Even if one wished to eliminate the element of "luck," he or she would be hard-pressed to know how to proceed. Yet the extent to which wealth and income are widely or narrowly distributed does reflect the nature of society and its economic system. Greater attention to earnings distribution data can yield more understanding of economic forces and the actions needed to effect change. □

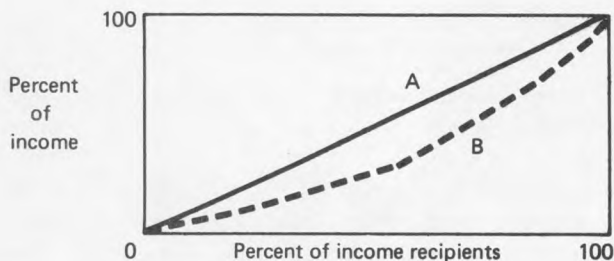
FOOTNOTES

ACKNOWLEDGMENT: The authors would like to acknowledge the contribution of Emmett Spiers, a statistician with the Census Bureau, who developed the data used in this article.

<sup>1</sup> See Peter Henle, "Exploring the distribution of earned income," *Monthly Labor Review*, December 1972, pp. 16-27.

<sup>2</sup> See Gian S. Sahota, "Theories of Personal Income Distribution: A Survey," *Journal of Economic Literature*, March 1978, pp. 1-55; John A. Brittain, *Inheritance and the Inequality of Material Wealth* (Washington, D.C., The Brookings Institution, 1978); Christopher Jencks, and others, *Who Gets Ahead: The Economic Determinants of Success in America* (New York Basic Books, 1979); Stanley Lebergott, *The American Economy: Income, Wealth, and Want* (Princeton, N.J., Princeton University Press, 1976); Sheldon Danziger and Eugene Smolensky, "Income Inequality: Problems of Measurement and Interpretation," in *American Society Ink* (Chicago, Rand-McNally, 1977). Alice M. Rivlin, "Income Distribution—Can Economists Help?" *Papers and Proceedings of the Eighty-Seventh Annual Meeting of the American Economic Association*, May 1975, pp. 1-15; Morton Paglin, "The Measurement and Trend of Inequality: A Basic Revision," *American Economic Review*, September 1975, pp. 598-609; Eric Nelson, William R. Johnson, Sheldon Danziger, Robert Haveman, Eugene Smolensky, Joseph J. Minarik, C. John Kurien, and Morton Paglin, "The Measurement and Trend of Inequality; Comments," *American Economic Review*, June 1977, pp. 497-531.

<sup>3</sup> The Gini index (developed by an Italian statistician, Corrado Gini, 1884-1965), can best be described by the use of the following diagram:



If recipients are ranked according to their income along the horizontal axis and their total income is placed on the vertical axis, Line A will represent complete equality (10 percent of income recipients received 10 percent of income, etc.) Line B (Lorenz curve) may represent an actual distribution which always falls below the diagonal. Gini index is the ratio of the area between the two lines to the triangle below Line A, and is always less than 1.0. The closer the Gini index is

to zero, the more equal the distribution.

<sup>4</sup> The method used by the Bureau of the Census to calculate the Gini indexes presented in this article differs slightly from the method used by the Bureau to derive the Gini indexes that were analyzed in an earlier article. Both methods used Pareto-linear interpolation and integration procedures to obtain the income quantiles and Lorenz Curves underlying the Gini indexes. The current scheme uses entirely consistent methods, whereas the earlier scheme sometimes combined Pareto and linear procedures in an inconsistent manner—moreover, the current scheme uses Simpson's rule for approximate integration in calculating the Gini indexes themselves, whereas the earlier scheme used the trapezoidal rule for approximate integration. For a more complete description of the improved methodology, see Emmett Spiers, "Estimation of Summary Measures of Income Size Distribution from Grouped Data," *American Statistical Association, 1977 Proceedings of the Social Statistics Section*, Part 1, pp. 252-57.

In addition, procedures for collecting and processing the income data were modified during the 1970-77 period, just as they were from time to time in the earlier years. These changes have been described in detail in the Census Bureau's *Current Population Reports*, Consumer Income, P-60 series, and have generally involved the procedures used in imputing income information for nonrespondents. Perhaps the most significant changes occurring in the 1970-77 period were those resulting in the revision of the 1974 income estimates. These revisions were necessitated not only by changes in the imputation procedures but also because of changes in the March CPS questions on income and work experience, changes in the number and detail of tabulated income intervals, and the correction of several small errors found in the previous processing system. Because of all these changes, the Census Bureau decided to revise the 1974 income statistics; consequently, this article contains 2 Gini indexes for the earnings distributions in 1974, one based on the old processing system and another based on the new system. For further information on the 1974 revision, see *Current Population Reports*, Series P-60, No. 105, "Money Income in 1975 of Families and Persons in The United States," Bureau of the Census, 1977.

<sup>5</sup> As an example of some of the research that has been done on the earnings differences between men and women, see Jacob Mincer and Solomon Polachek, "Family Investments in Human Capital: Earnings of Women," *Journal of Political Economy*, March/April 1974, Pt. II; Mary Corcoran, "The Structure of Female Wages," *The American Economic Review*, May 1978, pp. 165-78; Ronald Oaxaca, "Male-Female Wage Differentials in Urban Labor Markets," *International Economic Review*, October 1973, pp. 693-709; and Isabel V. Sawhill, "The Economics of Discrimination Against Women: Some New Findings," *Journal of Human Resources*, Summer 1973, pp. 383-95.



# National Commission recommends changes in labor force statistics

*The National Commission on Employment and Unemployment Statistics finds the U.S. system of employment and unemployment statistics fundamentally sound, but recommends many significant expansions and refinements of the data*

ROBERT L. STEIN

How well does our system of employment and unemployment statistics serve the needs of users? Congress raised that question in 1976, established a commission to address it, and instructed the Secretary of Labor to explore ways of implementing the commission's findings.

When it reported last September, the commission concluded that U.S. labor force statistics are generally sound, but called for improvements in a number of areas. Last month, Secretary of Labor Ray Marshall told Congress that he agrees with most of the commission's recommendations and already has implemented a few of them. This article reports both on the commission's recommendations and the Secretary's response.

## **Earlier review—Gordon Committee**

Since its inception in the 1940's, the labor force statistics program always has been the object of careful scrutiny by the agencies of the Federal government.<sup>1</sup> The statistical design and operation of the most comprehensive part of the system—the household data obtained through the monthly Current Population Survey (CPS)—has been the responsibility of the Bureau of the Census and the analytical responsibility since 1959 has been lodged in the Bureau of Labor Statistics. However, because of the central role of employment and un-

employment data in the formulation of Government policy, the statistical procedures and the concepts and definitions have been subject to periodic review by interagency committees and by the Joint Economic Committee of the Congress. Moreover, because the statistics are so widely used in government and the private sector, the statistical agencies have never introduced major conceptual or methodological changes without providing an opportunity for interested parties to review and comment upon them.

The first presidential review committee was appointed by President John F. Kennedy in response to widespread public criticism of and doubts about the accuracy of the labor force data because unemployment remained high during most of 1961, even though economic recovery was clearly under way. That 6-member review group, known as the Gordon Committee because its chairman was Professor Robert A. Gordon of the University of California, delivered its report in 1962. Many of its recommendations for improvements in concepts and methods were implemented in a series of actions by the BLS and the Census Bureau over the ensuing 5 years.<sup>2</sup> Among the major changes were the following: the sample for the survey was expanded by 50 percent; the questionnaire was sharpened to minimize reliance upon volunteered information; discouraged workers were classified as not in the labor force but, for the first time, were explicitly measured; other information on persons not in the labor force was collected for

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the first time; the age cutoff for labor force definitions was raised from 14 years to 16 years; the definition of unemployment included for the first time a specific indication of jobseeking methods used and of the jobseekers' current availability for work.

The Gordon Committee report resulted in many technical changes in the way the statistics were compiled, but did not basically alter their underlying conceptual or methodological structure,<sup>3</sup> and did not end the continuing controversy about the definition of unemployment. This controversy has many variations, but it really comes down to one basic issue: should the Government's figures on unemployment reflect only those persons with a strong attachment to the labor force who suffer significant economic hardship when unemployed (for example, family heads), or should the Government's figures reflect *all* those seeking work plus those who do not seek work because they believe none is available and those who are on involuntary part time. The Government's present definition is clearly in the middle of these extremes—it includes all those not working who are currently seeking work (during the last 4 weeks) and are available for work (regardless of the strength of their labor force attachment or the degree of hardship involved), but it does not include workers on involuntary part time or discouraged workers.

### The Levitan Commission

Whenever unemployment rises, as it did twice in the 1970's, the figures become subject to more intensive examination and heightened controversy. The late Commissioner of Labor Statistics Julius Shiskin tried to defuse this criticism by publicizing alternative unemployment measures<sup>4</sup> and by calling for the creation of another review commission inasmuch as 15 years had passed since the Gordon Committee was appointed. Another development that made conditions ripe for the appointment of a new commission was emergence in the 1970's of a new use for unemployment figures—that is, as a basis for the allocation of funds to specific localities for training and reemploying the unemployed. Because the Current Population Survey (CPS), which provides the data base for national estimates, was never designed for this purpose, indirect estimation methods have had to be used in conjunction with CPS benchmarks. Officials in cities and States who believed their unemployment problems were greater than indicated by the official statistics were increasingly critical of the State and local unemployment data, and this criticism spilled over onto the national monthly unemployment data.

As a result of these pressures, in October 1976, the Congress enacted legislation (Section 13 of PL 94-444) which mandated the appointment of a review commission to examine "the procedures, concepts, and method-

ology involved in employment and unemployment statistics and suggesting ways and means of improving them." The commission was appointed by President Jimmy Carter in April 1978.

The 9-member commission, chaired by Sar Levitan of George Washington University,<sup>5</sup> deliberated for nearly 18 months and delivered its final report to the Congress and Secretary of Labor Marshall, who is responsible for its implementation, on Labor Day 1979. The Secretary of Labor, as required by law, reported to Congress last month as to his response to each of the commission's recommendations—whether he considers them desirable and feasible and, if so, what steps he has taken or plans to take to implement the recommendations.

The commission's report, entitled, *Counting the Labor Force* comprises more than 300 pages and represents a distillation of extensive public hearings, the testimony of a broad spectrum of users, the findings contained in 33 background papers sponsored by the commission, and lengthy discussions among the commission members themselves.<sup>6</sup>

The commission concluded that the available data are useful in appraising current labor market trends, particularly at the national level. At the same time, the commission's judgment was that the data could be improved in several respects. In particular, the commission noted that more information was needed on "the qualitative dimensions of labor market experience" and on the dynamics of labor market behavior. The commission expressed a need for more comprehensive reporting on the link between employment status, workers' earnings, and family income. And it was critical of the adequacy of available data used as a basis for the allocation of funds to States and areas. In this case, it found that the statistical agencies of the Government were in a difficult situation because the monthly data needed to satisfy legislative requirements for thousands of small areas can only be generated by estimation procedures yielding data of doubtful quality.

The commission made nearly 90 recommendations for changes in the entire system of U.S. employment and unemployment statistics. (See exhibit 1.) Most of the recommendations apply to BLS, but a sizable number were also directed to the Census Bureau, and a smaller number involved the Department of Labor's Employment and Training Administration, the Department of Commerce's Office of Federal Statistical Policy and Standards, and the Department of Agriculture's Economics, Statistics, and Cooperatives Services. A few of the recommendations are directed to the Congress and its legislation affecting the allocation of money under the Comprehensive Employment and Training Act and other programs.

Despite the large number of recommendations, a fair assessment would be that this review commission, like



**Exhibit 1. Summary of recommendations of the National Commission on Employment and Unemployment Statistics**

Recommendation	Program affected	Agency affected	Status	Recommendation	Program affected	Agency affected	Status
<b>Defining the labor force</b>							
Define discouraged workers to reflect job search in last 6 months, current availability, and desire for work.	CPS	BLS Census	Accepted. New method being tested.	information on the new survey of Income and Program Participation (SIPP) sponsored by the Bureau of the Census and the Department of Health, Education and Welfare. <sup>(2)</sup> If SIPP does not prove to be a suitable vehicle, expand the CPS questionnaire for the outgoing rotation group to collect more detailed information on source of income.	CPS	HEW BLS	Accepted. Part 2 rejected.
Continue to exclude discouraged workers from the labor force count, but collect data on them monthly and tabulate separately.	CPS	BLS Census	Accepted on an interim basis. Final decision subject to evaluation of new data.	Obtain monthly information on whether employed respondents have begun new jobs within the past month, and if so, whether it was through job changing, new hires, or other method.	CPS	BLS Census	Accepted for an annual supplement, depending on CPS workload and budget.
Count Armed Forces members stationed in the United States as employed for national statistics, but do not include them in local area statistics.	CPS	BLS Census Defense	Accepted. Data to be provided by the Department of Defense.	Ascertain each month the school enrollment status of 16 to 24 year olds, including whether attendance is on a full- or part-time basis.	CPS	BLS Census	Accepted. New questions being tested.
Calculate employment/population ratio using the Armed Forces in both the numerator and denominator.	CPS	BLS	Accepted.	Expand the CPS sample to produce more reliable monthly data for blacks and Hispanics and annual estimates for Asian and Native Americans.	CPS	BLS Census	Accepted, depending on budget.
Define program participants in institutional training who are not actively seeking work as not in the labor force (rather than unemployed) and those in work experience programs as employed (rather than unemployed).	CPS	BLS Census	Accepted.	Identify race and ethnicity in the CPS in the same manner as in the decennial census.	CPS	BLS Census	Implemented.
<b>Linking employment status with earnings and income</b>							
Publish an annual report on measures of economic hardship resulting from low wages, unemployment, and involuntary part-time work.	CPS	BLS	Accepted.	Determine usual hours worked for all employed persons and the reasons for working fewer hours.	CPS	BLS Census	Accepted. New questions being tested.
<b>Adding labor market information</b>							
Collect information on volunteer work every 3 years through a special supplement to the CPS.	CPS	BLS Census ACTION	Accepted, depending on CPS workload and budget.	Use a specific hours cutoff (35 hours of more versus less than 35 hours) to determine whether the unemployed are seeking full- or part-time work.	CPS	BLS Census	Accepted. New questions being tested.
Test the feasibility of collecting information from unemployed persons in the outgoing CPS rotation groups on their reservation wage, earnings on prior job, and type of job sought.	CPS	BLS Census	Accepted for an annual supplement, depending on CPS workload and budget.	Improving data for consistently defined rural areas should be a consideration in the CPS redesign.	CPS	BLS Census	Accepted, subject to solution of technical problems.
				Measures of economic hardship should include specific measures for the rural population.	CPS	BLS Census	Accepted as part of BLS annual report, if rural area data can be developed.
				Extend the occupational employment statistics program to all States on a regular basis.	OES	BLS ETA NOICC	Accepted, depending on budget.
<sup>(1)</sup> Collect detailed labor market	SIPP	Census	Part 1 ac-				

Exhibit 1. Continued—Summary of the National Commission's recommendations

Recommendation	Program affected	Agency affected	Status	Recommendation	Program affected	Agency affected	Status
Have occupational projections for the Nation, States, and areas systematically reviewed by the responsible agencies to analyze forecast errors and improve future projections. Provide a range of forecasts based on alternate assumptions, as a guide to errors in projections. Research should be undertaken by the BLS on the response of occupational supply and demand to market factors such as wage changes.	OOS	BLS NOICC	Parts 1 and 2 being implemented. Part 3 accepted, subject to solution of technical problems.	Study occupational differential in agriculture to develop more detailed and meaningful agricultural occupational classifications for the Standard Occupational Classification system.	Quarterly Farm Employment Survey	ESCS	Accepted.
				Explore the possibility of including labor turnover questions in the quarterly agricultural establishment survey.	Quarterly Farm Employment Survey	ESCS	Prior research and testing required.
Conduct pilot studies by State employment security agencies to determine feasibility and costs of developing local occupational unemployment rates.	Unemployment Insurance OES	BLS ETA	Accepted in principle, but technical problems are severe.	<b>Current Population Survey</b>			
				In the post-1980 redesign of the CPS, design 50 State samples to improve the efficiency of the survey.	CPS	Census BLS	Accepted.
Collect occupational mobility data in a special supplement to the CPS to find out whether respondents changed occupations in previous year and, if so, what their occupations were.	CPS	BLS Census	Accepted, depending on budget.	Conduct intensified research and analysis on bias in the CPS data with an explicit timetable for publication of a set of total error estimates for prominent labor force series.	CPS	Census	Underway or planned.
Include question on occupation, industry and place of residence 1 year ago on mid-decade and 1990 census.	1985 and 1990 census	Census	Will consider in planning process.	Investigate the role of sample rotation bias in estimates by studying a group of addresses for 16 months to determine the number of new families moving into the residences. Collect information on the characteristics of those who move out, those who move in, and those who fail to cooperate initially, but subsequently participate in the survey.	CPS	Census	Underway or planned.
Insure that the new Standard Occupational Classification codes are broadly comparable with historical CPS occupational statistics.	CPS	BLS Census	Implemented.				
Use civilian codes for military personnel in occupations with a civilian counterpart and develop new codes for other military occupations.	CPS	BLS Defense	Accepted, in principle, if data can be provided by Department of Defense.	Assemble more information on the characteristics of noninterviews to improve estimation procedures.	CPS	Census	Underway or planned.
				Conduct a study to determine whether the differential effects of rotation group bias on the ratio and composite estimate make use of the composite estimate desirable. Explore alternate methods of estimation.	CPS	Census	Underway or planned.
Test the feasibility of expanding the BLS Labor Turnover Survey to trade, service, and other industries and linking a few basic demographic characteristics with the turnover data.	LTS	BLS	Accepted, depending on budget.	Include estimates of the "uncounted population" in the population controls used for the national and State labor force estimates; that is, adjust the population totals for the undercount.	CPS LAUS	Census BLS	Decision must await further developments.
A job vacancy statistics program is not recommended unless new evidence shows that useful data can be collected in a cost-effective manner.	Job vacancy statistics	BLS	Decision depends, in part, on outcome of BLS pilot tests.	Conduct a study of biases in the measurement of labor force status that arises from the use of proxy respondents. The investigation should be disaggregated for various groups in the labor force.	CPS	Census	Underway or planned.
Consider a farm operator as self-employed.	Quarterly Farm Employment Survey	ESCS	Accepted, depending on user reaction.				



Exhibit 1. Continued—Summary of the National Commission's recommendations

Recommendation	Program affected	Agency affected	Status	Recommendation	Program affected	Agency affected	Status
Establish a separate national CPS sample of approximately 10,000 households for a 2-year period to collect detailed supplementary labor market information that cannot be collected in the regular CPS.	CPS	BLS Census	Accepted, depending on budget.	Conduct research to determine if any bias exists in reporting hours and earnings. Publish an expanded and more thorough statement of imprecision and bias for all estimates.	CES	BLS	Accepted in principle. Technical problems being addressed.
<b>Nonagricultural Establishment Survey</b>				Test the feasibility and cost-effectiveness of collecting data on work hours of nonproduction workers through the BLS-790 program.	CES	BLS	Accepted within framework of program redesign.
Expand the BLS-790 sample to provide 508 published industry series and current aggregate employment estimates for all Standard Metropolitan Statistical Areas and remaining areas of States.	CES	BLS	Accepted within framework of program redesign.	<b>Agricultural Establishment Survey</b>			
Complete documentation of the BLS-790 program for use in studying possible redesign of the establishment survey.	CES	BLS	Accepted.	Continue efforts to identify the overlap of list and area samples of employees through direct inspection of the social security list. The feasibility of collecting employment identification numbers for this purpose should be tested.	Quarterly Farm Employment Survey	ESCS	Partly implemented.
Expand research on methods used to adjust for bias in the BLS-790 employment estimates.	CES	BLS	Accepted within framework of program redesign.	Restore the quarterly agricultural establishment survey sample to its pre-October 1979 level.	Quarterly Farm Employment Survey	ESCS	Accepted, depending on budget.
Study the quality and coverage of the benchmark employment data from unemployment insurance records.	CES	BLS	Accepted.	Institute a regular program of field quality control checks.	Quarterly Farm Employment Survey	ESCS	Accepted.
Benchmark the BLS-790 employment data annually.	CES	BLS	Accepted.	Include livestock series (SIC 0751) in the Department of Agriculture survey only.	Quarterly Farm Employment Survey	ESCS	Accepted, with reservations.
Where sampling is inadequate, delete certain industries from the monthly tables in <i>Employment and Earnings</i> , but publish them in the annual bulletin.	CES	BLS	Rejected. Preference is to improve samples.	Reinstate BLS coverage of Standard Industrial Classifications 08 (forestry, hunting, fishing) and 09 (trapping).	Quarterly Farm Employment Survey	ESCS	Accepted.
Revise the Standard Industrial Classification codes on a gradual and continuing basis.	CES	BLS	Accepted in principle. Technical problems being addressed.	Use payroll counts of all workers without regard to occupation.	Quarterly Farm Employment Survey	ESCS	Judgment reserved because of technical problems.
Institute a formal continuing quality control program for the BLS-790 and ES-202 program.	CES	BLS	Accepted within framework of program redesign.	Modify the Department of Agriculture's sample design to permit derivation of quarterly average employment estimates. Monthly estimates should be published where reliability standards permit.	Quarterly Farm Employment Survey	ESCS	Judgment reserved because of technical problems.
Evaluate the number of cells and degree of sample stratification annually at the time of benchmark revision to improve the accuracy of hours and earnings statistics, as well as employment statistics.	CES	BLS	Accepted in principle. Technical problems being addressed.	Publish thorough documentation of the Department of Agriculture's quarterly agricultural establishment statistics program.	Quarterly Farm Employment Survey	ESCS	Accepted.

Exhibit 1. Continued—Summary of the National Commission's recommendations

Recommendation	Program affected	Agency affected	Status	Recommendation	Program affected	Agency affected	Status
<b>Unemployment Insurance Statistics</b>				<b>Longitudinal data</b>			
Improve data comparability among States by analyzing differences in the qualifying requirements and duration provisions of State unemployment insurance laws that affect the insured unemployment rates.	Unemployment insurance	ETA	Accepted.	Resume publication of gross flow data, if current defects can be satisfactorily reduced. In the meantime, these data should be published occasionally, with an accompanying warning about their reliability. Prepare monthly gross flow data time series tapes for public use.	CPS	BLS Census	Accepted, subject to solution of technical problems.
Continue to collect the ES-203 data on characteristics of the insured unemployed through a Federal-State cooperative program.	ES-203	ETA	Accepted in principle. Other data sources being explored.	Prepare public use tapes containing longitudinal CPS microdata.	CPS	Census	Accepted.
Assign full responsibility for the ES-203 program to the Employment and Training Administration.	ES-203	ETA	Accepted in principle. Other data sources being explored.	<b>Seasonal adjustment</b>			
Fund a quality control program to enhance the accuracy and timeliness of the ES-203 through appropriations to the Unemployment Insurance Service.	ES-203	ETA	Accepted in principle. Other data sources being explored.	Pending further advances in regression or other methods of seasonal adjustment, continue the X-11 and BLS-SF methods for seasonally adjusting labor force data.	CPS CES	BLS	Accepted.
Analyze the characteristics of claimants over the last 15 or 20 years.	ES-203	ETA	Accepted in principle. Other data sources being explored.	Adjust unemployment rates and other important current labor statistics on a concurrent basis.	CPS	BLS	Rejected.
Reinstitute collection in the ES-203 reports of the basic characteristics of the insured unemployed who exhaust their benefits.	ES-203	ETA	Accepted in principle. Other data sources being explored.	Continue to revise adjusted historical data once a year.	CPS	BLS	Accepted.
				Use the X-11/ARIMA method for seasonally adjusting major labor force series that are characterized by rapidly changing seasonality.	CPS	Census BLS	Accepted.
				Develop standard errors for seasonally-adjusted data.	CPS	BLS	Accepted.
<b>Comparing data from different sources</b>				<b>State and local statistics</b>			
Develop a spendable earnings series based on the new CPS quarterly earnings data (if the data prove reliable) to replace the series based on establishment data.	CPS CES	BLS	Research being conducted on CPS-based series. Establishment-based series will be continued at this time.	Expand the CPS to provide a maximum expected 6.5-percent coefficient of variation in the annual average estimates of unemployment for States and SMSA's with a population of 1 million or more, 11 major central cities and the corresponding remainder of States and SMSA's.	CPS LAUS	Census BLS	Accepted in principle. Proposal modified to improve data for 125 SMSA's within same budgetary constraints. Implementation depends on budget.
				To meet requirements for monthly or quarterly State and sub-State statistics, update immediately the handbook procedures for estimating employment and unemployment. Update past CPS estimates to the current month in ways that	LAUS CES 1985 census	BLS Census	Accepted, subject to solution of technical problems, and budget.



**Exhibit 1. Continued—Summary of the National Commission's recommendations**

Recommendation	Program affected	Agency affected	Status	Recommendation	Program affected	Agency affected	Status
will minimize both the size of annual revisions to the estimates and the distortion of monthly movements. Along with expanding the nonagricultural establishment survey to provide current employment data for all SMSA's and the corresponding remainder of States, collect labor force information on small areas in the mid-decade census, if the expense is not excessive.				1219, ES-202, Occupational Employment Statistics, and Local Area Unemployment Statistics programs.	programs		ments being negotiated by the affected agencies.
Review present statistical requirements pertaining to the allocation of funds to States and localities, including the frequency with which statistics are mandated and the use of allocation formulas that place a premium on the accuracy of estimates.	Grant allocation	Congress Labor Commerce	Accepted in principle. Implementation depends on the Congress.	Provide funds so that the BLS can establish a training program for workers in Federal-State statistics programs.	Federal-State programs	BLS	Accepted with reservations.
Avoid using monthly data for allocation of funds to States and localities. Use graduated allocation formulas, when feasible.	Grant allocation	Congress	Accepted in principle. Implementation depends on the Congress.	Expand the BLS regional staff to assist State and local agencies in their statistical work.	Federal-State programs	BLS	Judgment reserved.
<b>Administration and presentation</b>				Continue to insulate the BLS statistical program from partisan influence.	Various	BLS	Accepted.
				The BLS advisory councils should adopt a more active role.	Various	BLS	Accepted.
				Establish a new advisory council broadly representative of the data user community.	Various	BLS	Rejected.
				Prior to instituting major changes affecting current statistical programs, the BLS should conduct broad public information programs to describe the contemplated changes and solicit comments. Where appropriate, advance notice of planned changes should be published in the Federal Register.	Various	BLS	Accepted.
				Review the Nation's labor market information system at least once each decade.	Various	BLS ETA Agriculture Census	Accepted.
The Office of Federal Statistical Policy and Standards should be consulted during the initial stages of legislative formulation by any department regarding potential factors to be used in formula grant allocations.	Grant allocation	Commerce	Accepted.	Review the present array of alternative unemployment measures in light of the conceptual issues addressed in the recommendations of the National Commission of Employment and Unemployment Statistics.	Various	BLS	Accepted.
A statistical reliability note should accompany all legislative proposals, submitted, including cost estimates for any new or expanded data collection requirements.	Legislation	Commerce ETA BLS Other	Accepted with reservations.				
Allow the BLS sole funding authority for the BLS-790, BLS-	Federal-State	ETA BLS	Funding arrange-				

NOTE: HEW = U.S. Department of Health, Education and Welfare.  
 OES = Occupational employment statistics.  
 ETA = Employment and Training Administration, U.S. Department of Labor.  
 NOICC = National Occupational Information Coordinating Committee.

OOS = Occupational outlook statistics.  
 LTS = Labor Turnover Survey.  
 ESCS = Economics, Statistics, and Cooperatives Services, U.S. Department of Agriculture.  
 LAUS = Local Area Unemployment Statistics.  
 CES = Current Employment Statistics.

its predecessor the Gordon Committee, did not call for a basic overhaul in any of the major statistical programs or of the specific concepts, methods, or procedures in use. Its recommendations for changes in defi-

nitions are minor. The commission considered but rejected recommending the development of an annual index of economic hardship, and instead called for the publication of an annual report on this subject. It also

considered and rejected the possibility of counting "discouraged workers" as unemployed. The major thrusts of the recommendations were to call for: (1) the collection, processing, analysis, and reporting of more data about the employed, the unemployed, and persons not in the labor force; (2) the expansion and strengthening of samples now in use to provide more reliable area, demographic, industry, and occupational data; and (3) the intensification of research into a number of long-term methodological problems. Many of the commission's recommendations were, in effect, encouragement for the statistical agencies to pursue efforts already under consideration or under way for data development and data improvement. Nevertheless, taken as a whole, the recommendations of the commission should have considerable impact on employment and unemployment statistics programs over the next several years simply because of the added weight and support provided by a prestigious body to specific decisions and courses of action. Some of the major specific recommendations are summarized in the following discussion. Except as noted, the Secretary of Labor endorsed these recommendations.

### Labor force definitions

The commission spent a great deal of time considering possible changes in labor force definitions. For example, it considered the desirability of introducing cutoffs based on hours of work or hours of seeking work as criteria for inclusion in the labor force; of raising the age cutoff from 16 to 18; and tightening the definition of jobseeking by ruling out some informal methods. In the final analysis, it rejected all these courses of action and left the basic definitions almost completely intact.

*Discouraged workers.* The most controversial definitional issue considered by the commission was that of discouraged workers. The present statistical practice, recommended by the Gordon Committee, defines discouraged workers as persons who want to work but are not seeking work because they believe none is available, and classifies them as not in the labor force. Information is compiled and published on the number and characteristics of discouraged workers on a quarterly basis. The commission recommended monthly publication and a change in the criteria for defining discouraged workers. But, it urged continuing the practice of classifying them as not in the labor force, rather than as unemployed. The new criteria would involve determining whether a person had sought work in the past 6 months, and whether he or she was currently available for and wanted work. Persons who meet these criteria would be defined as discouraged workers.

The Secretary of Labor accepted the change in the

definition of discouraged workers, but indicated that the *final* decision on their classification as "unemployed" or "not in the labor force" should await the accumulation and study of data under the new definition. In the meantime, discouraged workers will continue to be classified as "not in the labor force."

At present, two versions of a specific set of questions which would implement this commission proposal are being tested in the Census Bureau's 3,200-household "Methods Development Survey." If this recommendation is proven feasible, a change in the method of defining discouraged workers, and monthly compilation and reporting of the data, could go into effect in January 1983.

*Armed Forces.* One significant definitional change recommended by the commission was to include members of the Armed Forces among the employed for purposes of national statistics (but not to include them in local area statistics), and to include them in the numerator and denominator in calculating the employment-population ratio.

This recommendation was accepted by the Secretary, with the understanding that the decision might be reconsidered if there should be a change in military personnel policy (a shift from an all-volunteer armed services to a military draft). In implementing this definitional change, data will continue to be obtained from the Department of Defense, rather than through the CPS.

### Economic hardship

The commission deliberated extensively about the merits of recommending the development of specific measures of "labor market-related economic hardship." An early draft of the commission's report, circulated in January 1979 for public comment, contained a formulation of such measures synthesizing information on weeks and hours worked and weeks looking for work in the previous calendar year; workers' annual earnings; and the incomes of their families in relation to the poverty line, which in turn is adjusted for family size. The draft report also contained an extensive discussion of the conceptual and technical problems in developing such measures. The commission's final recommendation was for BLS to develop an annual report in which data would be provided and analyzed on three aspects of individual labor market hardship—low wages, unemployment, and insufficient participation in the labor force. The commission recommended that these data, which would pertain to individuals, should also be analyzed in the context of family income and composition.

Secretary Marshall commented that this was potentially one of the commission's most important recommendations because the annual report could enhance



public understanding of the relationship between employment status and family income.

### **Additional information**

The commission devoted a significant part of its report to a discussion of recommendations for the collection of new information on the labor market, and the extension of coverage of existing programs. Of the 23 recommendations in chapters 6 and 7, 13 relate mainly to the CPS. The more significant recommendations pertaining to the CPS are the following:

1. The sample should be expanded to strengthen the reliability of data for racial and ethnic minorities. This is one of the objectives of the Census Bureau and BLS in planning for redesign of the CPS after completion of the 1980 decennial census.

2. There should be some testing of the feasibility of collecting monthly or quarterly information on the unemployed with respect to the lowest wage they will accept (their reservation wage), earnings on prior jobs, and the occupation being sought. This type of information has been collected in the CPS on an ad hoc basis in the past, although nonresponse rates have been comparatively high. Both the BLS and the Census Bureau have a strong preference for an annual supplement to the CPS as the best way to collect this type of information.

3. Monthly data should be collected on new jobs obtained by the employed, and whether they were obtained through a job change, a recall from layoff, entry into the labor force, or some other method. (Again, the statistical agencies prefer an annual supplement to collect this data.)

4. Monthly data should be obtained on the school attendance of youth, and whether enrollment is full or part time. Such information presently is available only in October; in other months, proxy information is available from a question on major activity during the survey week, but this is a less satisfactory approach. Questions on school enrollment are included in the Methods Development Survey test panels.

5. Questions on usual hours of work, and reasons for working fewer hours, should be asked of all workers rather than only those working 1–34 hours as is done presently. These are also being tested in the Methods Development Survey.

6. Special supplementary inquiries should be conducted on occupational mobility and volunteer work.

Other programs which would be expanded by the commission are the Occupational Employment Statistics program which would cover all States, and the Labor Turnover Survey which would cover all industries.

The commission recommended against the further development of a job vacancy statistics program "unless new evidence is presented that useful data can be col-

lected in a cost-effective manner."

Recommendations which involve (1) extension of sample coverage to additional population groups, States, or industries, or (2) the addition of questions to the CPS questionnaire, depend for their implementation on the availability of resources—both staff and financial—and on the resolution of some technical problems. The only controversial recommendation is that on job vacancy statistics. The commission recommended against collection of such data; however, the Secretary of Labor noted that a decision in this area must await the results of BLS testing activities.

### **CPS methodology**

There are two major recommendations relating to sampling and estimation. The post-1980 redesign on the CPS should be based on 50 State samples to improve the efficiency of the survey. This has all along been one of the basic planning assumptions of the Census Bureau and BLS in the work on the redesign. The commission also recommended that estimates of the "unaccounted population" be included in the population controls for the national and State labor force estimates. This is a very controversial recommendation because it affects the data used for many different government programs, and because estimation of the undercount below the national level is fraught with problems. The Census Bureau sponsored a special conference of academicians and policymakers in February 1980 to discuss the issues raised by the population undercount and the kinds of data and methods that might be used to adjust the census counts. A recommendation on this sensitive issue will be made by the Census Bureau to the Department of Commerce sometime during the next 12 months.

Other recommendations on methodology call upon the Census Bureau to intensify its research efforts into the various biases which have been long known to exist in the CPS.

### **BLS nonagricultural establishment survey**

The commission presented several technical recommendations designed to improve the accuracy of the BLS industry employment statistics obtained through the monthly establishment survey. The commission also called for an expansion of survey coverage to additional industries and to all Standard Metropolitan Statistical Areas (SMSA's) and remaining areas of States. The latter was considered useful in its own right as well as for the purpose of improving the monthly employment estimates used in the calculation of the labor force and unemployment rates for local areas in the Local Area Unemployment Statistics (LAUS) program. The recommendations on improving the accuracy of these data are being considered by BLS within the framework of a

multi-year redesign of the program of industry employment statistics.

*Gross flow data.* The commission considered gross flow data to be extremely important in providing insight into the dynamics of labor force behavior. The gross flow data provide the user with estimates of the total number entering the labor force (gross inflow), those leaving the labor force (gross outflow) each month, as well as gross shifts between employment and unemployment. These data have received increasing use, though still limited because they are known to be subject to several kinds of biases which cannot be readily measured. The commission does not offer a solution to this problem but urges the statistical agencies to reduce the defects in the data to an acceptable level, and to begin publishing them at least annually, with appropriate caveats.

*Seasonal adjustment.* The commission recommended that the seasonal adjustment of major labor force series be converted to the X-11 ARIMA method and that the seasonal adjustment be on a concurrent basis.<sup>7</sup> The X-11 ARIMA method (which includes a provision for forecasting the original series 1 year ahead) has been found to be particularly effective for series whose seasonal patterns are changing, and for identifying turning points in the business cycle. The concurrent method would involve developing seasonal adjustment factors for each month by using all the available data, including the current month, and then revising the entire series at the end of each year. However, the concurrent method would preclude the prior announcement of seasonal factors for future months. In January 1980, the BLS shifted to the X-11 ARIMA method but not to the concurrent method. There will be a recomputation and prior announcement of factors every 6 months, but revision of the entire series only once a year.

### Local Area Unemployment Statistics (LAUS)

This program is discussed extensively in the commission's report. There are four basic recommendations:

- Expand the CPS sample substantially so that annual benchmarks for States and 35 large SMSA's will be significantly improved.
- Update and improve the so-called "handbook procedure"—a building-block approach to estimating unemployment by month by area, using unemployment insurance administrative data as its primary input.
- Collect labor force information in the mid-decade census in order to improve local area unemployment estimates.
- Have the Congress review and possibly modify the statistical requirements imposed by various legislative enactments.

The BLS and the Department of Labor endorsed the

commission's proposal to interview a larger number of households each month to obtain more reliable data for States and metropolitan areas. However, the Department believes that it would be more desirable, within the same budgetary framework, to improve the data for the 125 largest SMSA's (containing about 62 percent of the Nation's population), sacrificing some of the proposed improvement for the 35 largest SMSA's. This alternative would provide for a much larger number of metropolitan areas benchmarked to the CPS and should lead to greater equity in the distribution of Federal money. In addition, this proposal would provide annual average data on the demographic characteristics of the employed and unemployed in these areas, which should be of substantial value in program planning and policy analysis.

The sample expansion is being incorporated into the planning for the CPS redesign. Implementation depends, of course, on the availability of financial resources.

The BLS is exploring the feasibility of various means of improving the handbook procedure and has let a contract with Mathematica Policy Research Corp. to develop an improved handbook-type methodology, including an investigation of regression techniques as recommended by the commission. However, it is too early to tell what the results of this research will yield. The fate of the other recommendations is also uncertain at this time.

### Other recommendations

*Presentation of data.* The commission's recommendations in this area were not very extensive, calling for an improvement in the explanatory note to the press release (already implemented by BLS), and a review of the  $U_1-U_7$  alternative measures of unemployment. These measures are being reviewed by BLS.

*Administration.* The commission made a variety of recommendations, involving such issues as the statistical requirements imposed by legislation, the funding of Federal-State programs, the training of State personnel, the utilization of advisory committees by the BLS, and a comprehensive review of the labor force data system at least once a decade. The commission offered a number of constructive suggestions which could impact the environment in which statistics are developed, but will have little short-term effect on the data themselves.

REACTIONS TO THE OVERALL thrust of the commission's recommendations have been largely favorable, although several agencies including BLS and the Census Bureau have expressed disagreement with one or more of the specific proposals. Implementation of many of the recommendations will involve a lengthy process and, in



many cases, will depend on the availability of resources and the ability to solve some very difficult technical problems that have thus far defied solution. In any event, there will be another progress report to the Congress on implementation of the commission's proposals.

The law requires the Secretary of Labor to submit a final report within 2 years after the commission's final report (that is, on or before September 3, 1981) detailing the actions taken with respect to the commission's recommendations. □

— FOOTNOTES —

<sup>1</sup> See John E. Bregger, "A new Employment Statistics Review Commission," *Monthly Labor Review*, March 1977, pp. 14-20.

<sup>2</sup> President's Committee to Appraise Employment and Unemployment Statistics, *Measuring Employment and Unemployment* (Washington, 1962) and Robert L. Stein, "New Definitions for Employment and Unemployment," *Employment and Earnings*, February 1967, pp. 3-27.

<sup>3</sup> John E. Bregger, "Unemployment statistics and what they mean," *Monthly Labor Review*, November 1971, pp. 22-29.

<sup>4</sup> Julius Shiskin, "Employment and unemployment: the doughnut or the hole?" *Monthly Labor Review*, February 1976, pp. 3-10.

<sup>5</sup> National Commission on Employment and Unemployment Statistics, *Counting the Labor Force* (Washington, Government Printing Office, 1979), 312 pp. See also National Commission on Employment and Unemployment Statistics, *Concepts and Data Needs, Appendix Volume I; Data Collection, Processing and Presentation: National and Local, Appendix Volume II* (forthcoming); and *Counting the Labor Force: Readings in Labor Force Statistics, Appendix Volume III*. For

transcripts of hearings conducted by the commission, see *Public Hearings Before the National Commission on Employment and Unemployment Statistics, Volumes 1, 2, and 3* (U.S. Congress, Joint Economic Committee, 95th Cong. 2d sess. 1979, Committee Print). See also, *Interim Report of the Secretary of Labor on the Recommendations of the National Commission on Employment and Unemployment Statistics* (Department of Labor, 1980).

<sup>6</sup> In addition to Chairman Levitan, the commission's members were Bernard E. Anderson, University of Pennsylvania; Glen G. Cain, University of Wisconsin; Jack Carlson, U.S. Chamber of Commerce; Michael H. Moskow, ESMARK, Inc.; Rudolph A. Oswald, AFL-CIO; Samuel L. Popkin, University of California at San Diego; Mitchell Sviridoff, Ford Foundation; and Joan L. Wills, National Governors' Association.

<sup>7</sup> This approach was recommended by Estela Dagum of Statistics Canada based upon research and applications performed on labor force series at that organization. Dagum served as a consultant to the National Commission on Employment and Unemployment Statistics.

# Frances Perkins, Isador Lubin, and the Bureau of Labor Statistics

*As Commissioner of Labor Statistics,  
Isador Lubin worked closely with  
Secretary of Labor Frances Perkins  
to meet the urgent need for data  
stemming from the Great Depression*

JOSEPH P. GOLDBERG

The memory of the first woman to be appointed to the Presidential Cabinet is being signally honored this month, with the designation of the Department of Labor Building in Washington, D.C., as the "Frances Perkins Building."<sup>1</sup> Frances Perkins' influence as Secretary of Labor was prominent in the New Deal program seeking to create employment to cope with the Great Depression, and with broad social legislation of lasting influence—the Fair Labor Standards Act, the Social Security Act, and the Wagner Act. Upon assuming office in the new administration of President Franklin D. Roosevelt, Perkins made clear her concern with the role of the Bureau of Labor Statistics by immediately initiating a review of the Bureau's statistics, and a search for a Commissioner of Labor Statistics. Her choice of Isador Lubin was an inspired one—resulting in a relationship which extended to concerns beyond the Bureau, and even the Department, for Lubin also became a trusted confidant of President Roosevelt.

In the process, the Bureau of Labor Statistics made its transition to a forward-looking agency, geared to the requirements of a wartime, and later, to a growth economy. This article deals with the Perkins-Lubin relation-

ship as it determined the role of the Commissioner of Labor Statistics, and the development of the Bureau's programs.

Isador Lubin's death in July 1978, at the age of 82, terminated a long career, in which he had been Commissioner of Labor Statistics for a period of 13 years, from 1933 to 1946. He was the Bureau's fifth Commissioner. When he assumed the post, it was with a clear view, shared by Perkins, that he would seek to bring the Bureau into a position compatible with its established reputation, and the economic and social needs of the time. The New Deal concern with the status of workers, encouragement of labor organization, and development of collective bargaining accentuated the need for improved and modernized statistics and analyses of socioeconomic conditions. Lubin, with the active support of Perkins, and by his personality, experience, and expertise in labor economics, and his facility for dealing with and inspiring confidence in the varied groups with which he dealt, provided the impetus for the Bureau's growth. This forward-looking adaptation has persisted over the second-half century of the Bureau's existence.

## **BLS in the 1920's**

Perkins and Lubin had dealt with Commissioner of Labor Statistics Ethelbert Stewart during the 1920's. When Perkins was New York State Industrial Commissioner, her agency had cooperated with the Bureau in the development and expansion of the Bureau's employ-

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ment series. Lubin, at the newly established Brookings Institution, was a leading participant in the economic advice and research provided by Brookings. He conducted studies of the effects of technological unemployment, and of British experience in dealing with unemployment. He was actively involved in the growing Congressional awareness of the need to identify the scope, characteristics, and ameliorative approaches to growing unemployment. He was loaned by Brookings in 1928 and again in 1930 to serve as economic counsel to Senate committees considering legislation to deal with unemployment, and with the establishment of a national economic council to aid in governmental economic planning. He worked closely with Senators Robert M. LaFollette, Jr. of Wisconsin, James Couzens of Michigan, and Robert Wagner of New York.<sup>2</sup>

Although BLS was recognized as a valuable and technically capable institution by technical experts and professional societies, the Bureau's opportunities to modernize and improve its work were restricted during the 1920's by appropriations which, though doubling in the 25 years to 1930, had only kept pace with increases in salaries and the cost of field work. Even when the Congress called for improvements in the scope and coverage of employment statistics, the appropriations followed late and were either threatened or eliminated.

Support for expansion in Federal statistical programs in the 1920's was determined by the influence associated with farmers and businessmen in the prevailing economic climate. During the administrations of Presidents Warren Harding, Calvin Coolidge, and Herbert Hoover, the economic plight of farmers resulted in support for expanded agricultural statistics, if more direct aid was not received. As Secretary of Commerce for 8 years, Hoover encouraged the provision for adequate statistics to business, "because businessmen were making the most important economic decisions."<sup>3</sup>

Stewart's proposals for increased appropriations were met with frequent Congressional reactions suggesting reductions instead, in the interest of economy. Asking for increases to base the semiannual cost-of-living index on expanded and modernized expenditure patterns of wage earners, he was pressed instead to justify the greater costs involved in field visits, rather than mail schedules, in the conduct of industry wage studies and the pricing for the cost of living index.<sup>4</sup>

The analytical reports of the Bureau adapted to the changing economic and social scene, continued during the 1920's, despite budgetary limitations. Wage and hour studies of individual industries were scheduled at 5-year intervals, with such new industries as motor vehicles and airplanes, along with the previously initiated studies of coal mining, meatpacking, and textiles. Productivity studies in individual industries were developed during the 1920's, reflecting interest in the impact of

new technologies. Bureau work in industrial accidents and hygiene continued to be prominent.

The continuing concern in the 1920's over the state of employment, and the absence of adequate unemployment information, provided the Bureau with resources, albeit limited and lagging, to expand its work in the employment field. The study of employment and payrolls had begun in 1915, gaining momentum when the downturn of 1921-22 resulted in awareness of the uncertainty of unemployment information. President Harding's Conference on Unemployment in 1921, chaired by Hoover, included a variety of unemployment estimates. The Department of Labor's U.S. Employment Service estimated unemployment at 3.5 million, while BLS reported an employment shrinkage of 5.5 million. With so many wide-ranging guesses, the conference "merely voted to announce to the country that the number unemployed was between 3.5 million and 5.5 million, numbers startling enough to challenge attention."<sup>5</sup>

The conference resulted in increased appropriations to the Bureau to expand its coverage of manufacturing industries, and continued study by the American Statistical Association's Committee on Governmental Labor Statistics. The committee's recommendations called for the BLS to be the coordinating center for the States and any other Federal agencies gathering employment data. BLS was called upon to expand its industrial coverage from manufacturing and first class railroads, to include mining, communications, building construction, wholesale and retail trade, and agriculture.<sup>6</sup>

### Unemployment increases

In 1928, concern with growing unemployment was again prominent in Congress. Increased appropriations permitted the Bureau to expand coverage to nonmanufacturing industries. Both Stewart and Lubin were involved in the landmark Senate hearings in 1928-29, chaired by Couzens on the bills introduced by Wagner, covering comprehensive unemployment measures.

Ethelbert Stewart testified on the "shrinkage of employment," and, as he did over the years, stressed that the Bureau's employment index was not an unemployment measure. Lubin, who had been involved in a Brookings Institution study of the absorption of "dispossessed" or discharged workers by industry, was loaned to the Senate Committee as economic adviser.

Lubin's analysis of the witnesses' testimony and of the Brookings study were important contributions to the committee. The Brookings study, he pointed out, had shown that most displaced workers have great difficulties in finding new lines of employment. Lubin supported Stewart's expression of the need for a census of unemployment for benchmarking purposes, approved of the efforts underway to expand the reporting sample,

and agreed that coverage of part-time employment be added. In a period of Federal *laissez-faire* in regard to unemployment, Lubin's assessment that "unemployment is the result of industrial organization, and not of individual character," would receive catastrophic confirmation in the forthcoming Great Depression.<sup>7</sup>

With the onset of the crash of 1929, and the attendant depression and unemployment, statistics became a focus for approaches to the problems in the labor market. The continuing controversy over the extent of unemployment was reflected in the debate surrounding Hoover's press conference release in early 1930 announcing an increase in employment. Perkins, New York State Industrial Commissioner, responded that these statistics were questionable. She noted that these had not been attributed to the Bureau of Labor Statistics, whose estimates were viewed as honest and reliable on the basis of long association. Further, the New York State experience showed a decline in employment. Perkins' estimate was confirmed with the release of the official BLS report on employment.<sup>8</sup>

In the remaining period of Stewart's stewardship, the employment statistics remained a sore point. Secretary of Labor Doak and Stewart differed in early 1932 on the interpretation of the statistics. When newspapermen checked with Stewart, Doak publicly rebuked the Commissioner. Subsequently, at age 74, with 45 years of government service, with more than a year remaining for completion of his term, Stewart was not included by President Hoover on the list of those for whom extensions were requested beyond mandatory retirement age.<sup>9</sup> Charles E. Baldwin was named acting commissioner for the balance of Stewart's term.

### The statistical ambience

The longtime experience of Perkins as New York State Industrial Commissioner provided an awareness of the role of the Bureau of Labor Statistics in economic policy. She was equally aware of the need for obtaining support to modernize that role to meet the requirements of the social and economic policies required to cope with the depression conditions of 1933. It was crucial to her concerns that the new Commissioner meet the challenge of changed requirements. The breadth of Lubin's interests and experience was known to her, and she expected that he would provide broad economic and social perspectives in dealing with the statistical programs of the Bureau. As her biographer states: "When Perkins offered him the post, she told him he had been chosen because she thought he would remember that statistics were not numbers but people coping or failing to cope with the buffetings of life. She evidently stressed this point to Roosevelt, for he later repeated it to Lubin."<sup>10</sup>

The conjoint interests of Perkins and Lubin went to both the improvement of the Departmental statistical

program and to ensuring the effective coordination of the statistical programs of the Federal Government. Upon her appointment, Perkins immediately invited the president of the American Statistical Association to confer and advise "regarding the methods, adequacy, usefulness, and general program of the Bureau of Labor Statistics." Immediately following his appointment as Commissioner, Lubin became involved directly in both the work of the Advisory Committee to Perkins, and in the broader efforts toward establishing a central statistical board. Lubin welcomed the advice and counsel of this committee of technical experts. Its members included Ewan Clague and Aryness Joy, who later served together as Commissioner and Deputy Commissioner of BLS. The review of the Bureau's programs continued for more than a year.

Lubin and Perkins agreed on the role of the Central Statistical Board, in that it would ensure consistency in approaches on the part of Government agencies, avoidance of duplication, and attainment of economies. But a centralized statistical agency was opposed, for as Lubin stated: "In terms of the usefulness of statistics, it probably is cheaper in the long run, despite the additional cost of duplicated overhead, to have smaller decentralized units collecting data which are of maximum usefulness in formulating policies and solving problems, than it would be to have a centralized and consolidated statistical agency collecting data on a series of unrelated subjects, which data do not have the realism necessary to give them effective usefulness."<sup>11</sup>

Lubin's role in the formation and functioning of the Central Statistical Board was persistent, and he urged Perkins to actively participate. He was among an unofficial committee which proposed its establishment to members of the Roosevelt Cabinet, and then served on it as the Department of Labor representative.<sup>12</sup> He obtained Perkins' endorsement for a permanent Board. The legislation subsequently made the Board the joint responsibility of a Cabinet-level Central Statistical Committee, consisting of the Secretaries of Labor, Commerce, Treasury, and Agriculture. Lubin urged Perkins to press with President Roosevelt her claim to be chairperson. Perkins was designated chairperson of the Cabinet-level Central Statistical Committee, with Lubin serving as vice-chairperson of the Central Statistical Board.

Lubin and Perkins were active in using the Board to meet the threat of duplication by the statistical activities of the National Recovery Administration (NRA) to the longstanding activities of BLS and other established agencies. Perkins wrote to Roosevelt and to Hugh Johnson, Director of the NRA, citing the duplication as resulting in refusals by some employers to continue to submit reports to Government agencies. Attention was called to investigations conducted by the Central Statis-



tical Board, and to a Board resolution calling for an Executive Order rectifying the situation.<sup>13</sup>

### Controversial order issued

The Administrator for Industrial Recovery responded by issuing an order requiring industries under codes to furnish data directly to the Bureau of Labor Statistics, and Federal and State agencies working in cooperation with the Bureau. Some representatives of industry associations questioned the order, so Lubin met with trade association executives to explain why the direct Government collection was necessary for uniform and timely reporting.<sup>14</sup> In meeting with representatives of State labor departments and interested Federal agencies on the broad authority under the NRA order, Lubin cautioned on the need for care in maintaining and improving existing reporting relationships based on established voluntarism and confidentiality. While "under this order we have for the first time legal authority to secure these data," Lubin cautioned, "We don't want to use that power though, we would rather it would be a cooperative venture . . . . These data are confidential and not to be used for enforcement purposes."<sup>15</sup>

Perkins encouraged Lubin's broader role including his participation in economic meetings at the White House. He prepared economic analyses for Perkins directly, and for the Cabinet-level Central Statistical Committee, of which she was chairperson. Lubin was elected by the committee to serve as secretary, and to prepare for the committee a periodic economic analysis and report, which would also be abstracted for presentation to the National Emergency Council. Perkins wrote Roosevelt, that the "value of this arrangement would obviously be enhanced by Dr. Lubin's membership in the National Emergency Council. May I recommend and request that you designate him?"<sup>16</sup>

Lubin was soon called upon by the White House in a variety of situations. He participated in the discussions held by Roosevelt with business, labor, and government policy officials in meeting the recession of 1937 and soon after, Lubin was the first witness called at congressional hearings on unemployment.<sup>17</sup> In June 1938, when the Temporary National Economic Commission was approved by Joint Congressional Resolution, following a Presidential message, a letter from the President called on Lubin to cancel a commitment to lecture at the Summer School of the University of California. Roosevelt requested, "In view of the passage of the Wage and Hour Bill and of the Congressional resolution providing for an investigation into monopoly conditions in American industry, I think it would be helpful if you could arrange to remain in Washington until such time as the Monopoly Commission can formulate its agenda and the preliminary organization necessary for the administration of the Wage and Hour Bill can be set in motion."<sup>18</sup>

The culmination of Lubin's partial association with the White House occurred in May 1941, when he was appointed as special statistical assistant to President Roosevelt.

### Lubin as Commissioner

Lubin's primary goal for the Bureau, with Perkins' encouragement, was the development of a professionally-staffed organization prepared to meet the requirements of the rapidly evolving New Deal policies affecting the status of workers. Not only were the ongoing statistical activities of the Bureau, particularly in employment and prices, to be improved and modernized; appropriate analytical treatment would be given to these statistical reports. The Bureau's programs in the field of labor-management relations were to be expanded to meet the requirements of new policies. These goals were intensified by the many special activities in which Lubin himself and the Bureau were involved, as social and economic concerns of the Department of Labor under Perkins were broadened to meet the burst of New Deal legislative development.

The Bureau expanded substantially under Lubin's direction, but the process was slow and uneven. When he took over in 1933, the Bureau's budget had just been cut from \$580,400 to \$450,000, with the staff reduced from 240 to 211, as part of overall economy measures. Emergency funds compensated for part of a further reduction the following year, with the staff increasing to 318. In succeeding years, the regular budget had more increases than decreases, and was supplemented by funds transferred from other agencies for special studies. By 1940-41 the regular budget had increased to about \$1.1 million, and the staff to more than 800 (690 in Washington and 120 in the field).

The annual report for the Bureau initially bearing Lubin's imprimatur stressed that professionalization of staff and interpretation and analysis were to go hand in hand. The program needs in the price area were expressed in terms of consumer information needed to cope with the unwarranted increases allegedly due to the National Industrial Recovery and Agricultural Adjustment Acts. Employment data required expansion to permit assessment of the effects of industrial revival. Studies of industrial wages and hours required expansion and greater currency to meet the code-formulating activities of the National Recovery Administration (NRA). In summary, the report stated, "Not only must raw data be improved but the Bureau must be enabled more fully to analyze the material it now has, so that evidence may be available as to where the recovery program is having the greatest effect and where it is falling down. The Bureau is not at present in a financial position to employ the economic analysts necessary for such interpretations."<sup>19</sup>



The need for improvising to meet the gargantuan demands of the emergency situation, and particularly of the NRA, was stated by both Perkins and Lubin at appropriation hearings in December 1933. With BLS assuming responsibility to provide information for the codes, personnel were detailed from inside and outside the Department. As Perkins stated, "The Bureau of Labor Statistics has turned itself out in order to get this information and to make it available in a form that was easily understood and readily used by people who had the responsibility of taking some action." Lubin added that every labor group involved in any NRA code had had to go to the Labor Department for information.

Lubin indicated the lengths to which ingenuity had had to be applied to meet pressing needs, absent adequate resources: "I do not want to appear to boast, but I think I am one of the few officials who have actually gone out and borrowed people from other departments of the Government and put them to work during their spare time getting materials for which we would otherwise have to pay."<sup>20</sup>

### Efforts take effect

By mid-1935, it could be reported that improvements in organization and working methods had proceeded efficaciously. An industrial relations division had been established, and a survey of employer-employee relationships was underway. Statistical reporting had been improved with more commodities and communities covered in retail food reporting. The cost-of-living index, as it was then called, had been placed on a quarterly basis, from its former semiannual appearance, and reflected improvements in weighting and food price coverage. The monthly employment report continued to receive improvements. Benchmark adjustments to the Census of Manufactures were introduced for the first time—with coverage now extended for 50 percent of the wage earners of the country, including nearly complete coverage for employment resulting from Federal appropriations. Efforts were being made to include in the regular industry wage surveys such matters as age of workers, length of service, annual earnings, occupational descriptions, and personnel policies. An investigation of the expenditures of employed wage earners in 1934 was expanded during 1935–36 to a broad investigation in which the Works Progress Administration, the Department of Agriculture, and the National Resources Commission collaborated with the BLS in the study of consumer purchases, which presented consumption estimates for all segments of the population, both rural and urban. These provided the basis for the introduction of a comprehensively revised consumers' price index in 1940.

By the recommendation of an advisory committee to the President, an occupational outlook section was

established in the Bureau in 1939, but its initial intent to provide career guidance was not to be effectuated until after the war. Instead, it was absorbed in projections of manpower supply and needs for defense industries. In this, Lubin's specifications for the office and the duties of its chief were anticipatory of the defense and wartime role of this service.

Lubin was ever on the alert for capable staff. A. Ford Hinrichs was brought in as chief economist, Sidney Wilcox had already been employed as chief statistician, and Aryness Joy joined the BLS staff as a senior economist. Young economists seeking employment in government received ready encouragement from Lubin. He was readily accessible to staff, and stimulated interest in the expanding role of the Bureau. Before the American Economic Association, he proselytized for the role of government economists. He contrasted the limited and circumscribed environment of the academic researcher with the opportunities offered by "Federal economic research, with its ramifications into the political and sociological aspects of virtually every problem that comes within the public eye, and has a great opportunity to break down these barriers," between economics, sociology, and political science.<sup>21</sup>

The burdens confronting the Bureau during the NRA period slowed up the process of reorganization. Added to this were the special tasks assigned to the Bureau, and to Lubin himself by Perkins. For almost 3 years, as chairman of a Labor Advisory Board to the Public Works Administration (PWA), he dealt with questions relating to the referral of union and nonunion workers to construction projects, job opportunities for black skilled workers in view of their exclusion from building trade unions, observance of arbitration awards, and predetermination of wages. A trying situation in which Secretary Ickes of the Interior Department was concerned that black workers should be issued work permits on certain PWA projects in Chicago, was personally mediated by Lubin. He obtained agreement for black employment of at least 13 percent of unskilled workers and 3 percent of skilled workers, the proportions shown in various crafts in the 1930 census.<sup>22</sup> Criticized for making a wage determination of 40 cents an hour for unskilled labor in the South as excessive, Lubin responded that Congress had mandated a standard of living of decency, not an "economic wage," as contended by the contractors.<sup>23</sup>

Lubin served as chairperson of a board to settle a strike of citrus workers in Florida. The report of the board called on Secretary Henry Wallace to have the Department of Agriculture insist on inclusion of a code for labor-management relations in the market agreement approved for the citrus industry by the Agricultural Adjustment Administration. The subsequent failure to set such minimum labor conditions despite the urgency

of the situation, was noted by Lubin.<sup>24</sup>

Lubin was designated by Perkins as chairperson of a departmental committee to look into the promotion of U.S. membership in the International Labor Organization (ILO). Following U.S. entry into the ILO in August 1934, the United States was represented for the first time at an ILO Governing Body meeting in January 1935, with Lubin as the Government delegate. The Bureau was given responsibility for the administrative arrangements for the permanent Geneva representation, including requests for appropriations in its budget.<sup>25</sup> Lubin continued to attend these meetings, particularly those involving planning for international instruments on statistical standards and hours of work.<sup>26</sup>

The mutually supportive relations between Lubin and Perkins were often explicitly recognized in stressful situations. When a resolution of Congress called on the Secretary of Labor to make a study of the economic needs of migratory labor, which Lubin indicated the Bureau would undertake, Perkins' reaction was "I have the feeling that everything that is difficult gets to you." Shortly thereafter, preparing suddenly to go on vacation, Perkins not having had time to say goodbye to Lubin, wrote: "I want to thank you sincerely for all that you have done to make the work of the Department a success and to tell you how much it means to me personally to realize the loyalty, interest, and integrity with which you are carrying on the work of your Bureau."<sup>27</sup> In his turn, when the U.S. Employment Service was transferred from the Department of Labor to the Federal Security Administration, with a like possibility for the Children's Bureau, Lubin urged that "all of us should use every means to keep constantly before the President the fact that transfer is inimical to the interests of American labor . . . ." <sup>28</sup>

### External relationships

Lubin's ability for effective relationships was crucial to the workings of the Bureau in a period of substantial changes in the role of government. His straightforward, direct approach with representatives of labor organizations, of major companies and trade associations, and the press, made him influential in all these areas. This was evident even as he analyzed the Bureau's data, and as he indicated his views on major economic issues.

Early in his administration, Lubin called a meeting of labor union research staff members, to meet with the BLS and the Advisory Committee to the Secretary of Labor. Reporting on the committee's statistical review, and the rapid introduction of accommodating changes by the Bureau, Lubin stated: "The ultimate purpose is to provide statistics which will do for the wage earner of this country what the Department of Agriculture is doing for the farmer, that is, supply laboring people with information as to what is happening in such detail

that they can make their own plans and develop their own programs." The institution of the Labor Information Service, in the form of a monthly bulletin was also announced, for "the attention of local officers and the intelligent members of locals, so that these people will know what is happening. . . . in the country as a whole as well as in his own particular industry."<sup>29</sup> Relations with the trade union research staff members continued on an informal basis until June 1940, when a formal and continuing advisory relationship was established.

Salutary relationships with management, as extensively as possible, had been an inherent requirement for the Bureau's conduct of its activities, particularly in wage studies and employment data collection. Lubin contributed greatly by maintaining personal relationships with many corporate executives, in which he candidly exchanged views on major issues. He was intimately involved in resolving issues which might threaten the Bureau's activities, and generally, his directness and persuasiveness kept such occurrences minimal.

Sensitivities developed, but were overcome, over a Bureau study on the delicate subject of company unions, of interest to Perkins, Lubin, and Francis Biddle, chairperson of the National Labor Relations Board. This study, in 1934, was intended to obtain a proper picture of these organizations to meet the needs of the two labor agencies. At an estimated cost of \$15,000, Perkins' proposal for a joint study was accepted in short order.<sup>30</sup> David Saposs, who had just completed a study on the subject for the Twentieth Century Fund, was hired as director of the study. At an informal meeting of BLS with American Federation of Labor representatives, the latter expressed some uncertainties over such a study, suggesting emphasis on the study of collective bargaining agreements, rather than what was viewed as merely "an arm of management."<sup>31</sup>

In September 1935, Lubin reported to Perkins on the interest stimulated among union officials in the study, and their requests to have the report issued as soon as possible. "Somehow or other a rumor has been spread that this bulletin may be suppressed."<sup>32</sup> The preliminary report in the *Monthly Labor Review* stirred up a temporary tempest.<sup>33</sup> A communication from the National Association of Manufacturers advised Lubin that some member firms of the association, some of which had participated in the survey, now felt that the conclusions might be misleading as to the employee representation plans. The opportunity to discuss the matter was offered, and immediately accepted by Lubin, who responded: "If members of the NAM feel that our study on company unions attempts to establish standards of employee representation plans which may result in misleading conclusions as to their functions and operations, I want very much to secure their full and unbiased opinions."<sup>34</sup> Immediately thereafter, the Journal of Com-



merce was to report: "Although resentment in industrial circles against the recent study on company unions prepared by the BLS continues high, it now seems doubtful an organized boycott will result."<sup>35</sup>

The relations between the automobile industry and BLS also underwent a period of difficulty. In January 1936, the Automobile Manufacturers Association advised the Bureau that information for individual companies in the industry would no longer be furnished directly to the Bureau, and that individual plants would not be identified, except by a code to make monthly comparisons for individual plants. Lubin wrote the association that he viewed this "as a one-way proposition, with the Bureau being placed in the position where it can have only what the association says it should have and not what it feels it needs for its own use. . . . I frankly cannot continue in the uncomfortable position I find myself in of warding off questions concerning our automobile figures." Lubin continued to press the matter, and it was finally resolved in late 1937, when the Manufacturers Committee of the Automobile Manufacturers Association authorized the forwarding of individual reports to the Bureau.<sup>36</sup>

Lubin was constantly concerned with the press' understanding of the Bureau's work, and with stressing clarity and style in the presentation of Bureau data. A critical editorial on the style of a Bureau press release resulted in the formulation of principles to ensure effective use of Bureau reports. These guidelines included: "Ideally, (a) technically competent persons should always be able to detect from the record any possible shortcomings in our work, and (b) others who follow us should be able to determine from the printed record exactly what we have done."<sup>37</sup>

### Economic analysis stressed

Lubin's interests in labor economics in an institutional setting, and in related areas such as industrial prices, unemployment, and social security, were actively pursued throughout his direction of BLS. His emphasis on analysis along with the improvement and extension of the Bureau's statistical programs was apparent in his activities and public statements. He was called upon to represent the Bureau, the Department of Labor, or both, in a number of landmark Congressional hearings. Lubin would make statistical presentations that went to the heart of the matter and would draw on his extensive experience and perception to comment on the policy questions involved. His ready, direct, and stimulating responses raised no doubt about his objectivity and impartiality. Nor was there ever any question regarding his political independence as Commissioner.

Several basic themes were apparent in Lubin's public expressions during his commissionership. Shortly after his appointment, while he was not in sympathy with the

price-fixing and production-restricting aspects of the National Industrial Recovery Act, he found important justification in it based on the single maxim, that the welfare and profits of no private business shall interfere with the welfare of the nation as a whole. . . . With NRA setting the rules for industry, competition was not eliminated, and "employers with a social conscience are assured that they will no longer be compelled to conform to the standards of competitors with blunted social sensibilities," Lubin said. Further, he saw the greatest contribution of NIRA to social progress as lying "in the guarantee it gives workers to organize and bargain collectively through representatives of their own choosing."<sup>38</sup>

Complementary was his view that underconsumption resulting from inequitable distribution of income in the 1920's had been a major contributory factor in the Great Depression. These views were expressed in his testimony at the hearings on the Fair Labor Standards Bill in 1937 and in his extensive presentation in opening the Temporary National Economic Committee hearings in 1938.

Calling attention to the evidence of the consumer expenditure survey of 1936-37, that 54 percent of the 29 million families in the United States, had incomes below \$1,250 per year, Lubin said, "A more equitable distribution of income is more than an ethical problem. . . . To me it is a problem of keeping the gears of the economic machine constantly in mesh."<sup>39</sup>

Lubin and the Bureau staff were prominent in the work of the Temporary National Economic Committee (TNEC) from 1938 to 1941. Lubin was designated as the Department of Labor representative, with A. Ford Hinrichs as alternate. Lubin played a major role in planning the work of the committee, and as analyst of trends utilizing data and analyses prepared by the Bureau staff and occasional outside consultants. He made recommendations to the committee as an expert labor economist representing the Department of Labor. Aryness Joy directed the Bureau's staff work for the TNEC, which included the preparation of monographs reflecting analytical and case study approaches Lubin had viewed as essential to the role of the Bureau.

The economic climate changed with the defense preparations underway after the start of World War II. The TNEC hearings and Lubin's periodic testimony in 1939 and 1940 reflected the new circumstances. But again, the basic concerns in Lubin's ideas were reformulated in order to set long-term goals which drew on past experience and continuing socioeconomic trends. In an incisive analysis of the factors affecting the productivity of labor, he pointed out that the effects of technological change would be moderated as the economy absorbed more employees. Calling attention to the costs directly borne by displaced workers, in contrast to the tax treat-



ment of obsolescence of machinery, he urged the committee "to give consideration to the feasibility of a compulsory dismissal wage to be tied up in some way or other with the unemployment insurance system."<sup>40</sup>

Lubin, who had been the leadoff witness at the TNEC hearings in 1938, was also one of the final witnesses appearing in March 1941. He was now an official of the Office of Production Management, as well as a member of the TNEC and a representative of the Department of Labor/Bureau of Labor Statistics. He pointed to the major changes which had occurred between 1932, and even between 1938, and 1941: "In 1941 we are strong. In 1932 our morale was pitifully low. The assumption of responsibility for the welfare of individual citizens by the Government in the intervening years has been partly responsible for this change." He urged the TNEC to sift out the practical aspects of the problems presented, to formulate a program to ensure "that never again does a catastrophe occur like that which overwhelmed us in the 1930's. . . ."—a program fitting, "into our traditions of private enterprise and private ownership."<sup>41</sup>

### The war years

Lubin's full-time direction of the Bureau came to an end in June 1940, although he remained as Commissioner on leave until January 1946. On June 15, 1940, Perkins announced that at the request of Sidney Hillman of the National Defense Committee, Lubin had been assigned to serve as an assistant to Hillman, but was to retain his position as Commissioner. In a memorandum to A. Ford Hinrichs, designated as Acting Commissioner, Lubin stated, "In general you are authorized on your own responsibility and without reference to me to represent the Bureau of Labor Statistics in any matters which may arise and to make any decisions that may be necessary either with reference to policy or internal administration." However, he would continue to be available to Hinrichs "on all matters of fundamental policy."<sup>42</sup>

The next year, President Roosevelt called for Lubin's assignment to the White House. On May 12, 1941, Perkins wrote to Roosevelt that: "I am very glad to comply with your request to assign to your office and for your assistance Mr. Isador Lubin . . . while Mr. Lubin will, I know, give you great assistance, his entire staff in the Department of Labor will be at his disposal to assist him in the inquiries he will make for you."<sup>43</sup>

There were continuing calls for advice from Lubin by Perkins during the war years. She called upon him for his views on coordinating the activities of the BLS with those of the Bureau of Employment Security in the War Manpower Administration. His response was to oppose any intimation of the possibility of the transfer of any work from BLS.<sup>44</sup> He was also called upon for planning

in connection with the ILO Conference in Philadelphia in 1944.

Lubin's White House assignments as economic and statistical adviser were varied. Immediately, he was involved in analyzing the economic effects of shifts in production to lend-lease requirements, and in discussions relating to economic stabilization. He went to London temporarily to assist W. Averill Harriman, coordinator of U.S. supplies to Britain. In March 1945, he was designated associate U.S. representative on the Allied Commission on Reparations, and spent much time examining conditions abroad at the end of the war.<sup>45</sup>

### Lubin resigns as Commissioner

Giving personal obligations as his reasons for leaving public service, Lubin resigned in January 1946. (Perkins had resigned as Secretary of Labor in 1945.) President Harry S. Truman accepted his resignation as Commissioner of Labor Statistics, but stated that he would continue to regard him "as a public servant whom I shall feel free to call upon whenever the occasion warrants. . . . For 13 years you have without hesitation given of your time and energy to the service of your government. You built up the Bureau of Labor Statistics into an institution that has commanded the respect of all recognized leaders in the field of economics and statistical science, as well as of labor and management throughout the country."<sup>46</sup>

Lubin expressed his own assessment of the role of the Bureau on the occasion of the Bureau's 70th anniversary in 1954. He observed that the "Bureau's data have always played an important part in the formulation of Federal policy," reinforcing the constant recognition by the Bureau of the need for continuing "improvements in collection procedures and technical standards and in willingness to have its work periodically reviewed." But he expressed concern for the need for continued emphasis "of the considered analytical studies which have marked its work in the past."<sup>47</sup>

In 1966, Lubin wrote a eulogy for David Sapos, in honor of his 80th birthday. The eulogy is equally applicable to Lubin: "Everything that he has undertaken to do he has done with real distinction. His interest in the various fields in which he has been engaged has not been that of an intellectual. It has been the outgrowth of a deep feeling for needs of mankind and the conviction that things could be improved in this world of ours."<sup>48</sup> □

### FOOTNOTES

<sup>1</sup> The centennial of the birth of Frances Perkins, appointed as Secretary of Labor by President Franklin D. Roosevelt in 1933, was observed on Apr. 10, 1980. She died in 1965.

<sup>2</sup> Lewis Lansky, *Isador Lubin: The Ideas and Career of a New Deal*

Economist, 1976, Case Western Reserve (microfilm), pp. 97–102. U.S. Congress, Senate Committee on Manufacturing, Hearings on S6215, *Establishment of a National Economic Council*, 72nd Congress, 1st Session, 1931, p. 736.

<sup>3</sup> Joseph W. Duncan and William C. Shelton, *Revolution in United States Government Statistics, 1926–1976*, U.S. Department of Commerce, 1978, p. 137.

<sup>4</sup> Stewart testimony, Department of Labor Appropriation hearings, 1928, January 1927, p. 27.

<sup>5</sup> Ralph Hurlin and W. Berridge, *Employment Statistics for the United States*, 1926, p. 30.

<sup>6</sup> *Employment Statistics*, pp. 3–19. Charles E. Baldwin, BLS Chief Statistician, and Royal Meeker were among the members of the committee with Mary Van Kleec of the Russell Sage Foundation as chairperson.

<sup>7</sup> Senate Committee on Education and Labor, Hearings on S. Res. 219, *Unemployment and Systems for Prevention and Relief*, 1928–29; together with Senate Report 2072, 70th Congress, 1st Session, 1929, pp. 179–187, 491–510.

<sup>8</sup> Public Papers of President Herbert Hoover, News Conference of Jan. 21, 1930, p. 28; *The New York Times*, Jan. 23, 1930, p. 11; Feb. 20, 1930, p. 24.

<sup>9</sup> *The New York Times*, July 3, 1932, p. 15.

<sup>10</sup> George Martin, *Madam Secretary: Frances Perkins* (Houghton Mifflin Co. Boston, 1976.) p. 303.

<sup>11</sup> Lubin to LaDame, Nov. 16, 1938 (Perkins' Files, National Archives).

<sup>12</sup> DOL Appropriation Hearings, 1935, December 1933, p. 57; Duncan and Shelton, *Revolution in U.S. Government Statistics*.

<sup>13</sup> Perkins to the President, Aug. 23, 1933; Perkins to Hugh Johnson, Aug. 7, 1933; Resolution of the Central Statistical Board, Aug. 14, 1933 (Perkins' Files, National Archives).

<sup>14</sup> Roscoe Edlund, Association of American Soap and Glycerine Producers, Inc. to Isador Lubin, Mar. 22, 1934; Lubin to Edlund, Apr. 4, 1934 (BLS Files, National Archives).

<sup>15</sup> Transcript of meeting May 19, 1934 (BLS Files, National Archives).

<sup>16</sup> Perkins to Roosevelt, Mar. 30, 1936 (Perkins' Files, National Archives).

<sup>17</sup> *The New York Times*, Nov. 9, 11, 14, 1937; Jan. 4, 5, 1938.

<sup>18</sup> Roosevelt to Lubin, June 16, 1938 (BLS Files, National Archives).

<sup>19</sup> *Department of Labor Annual Report for Year Ending June 30, 1933*, p. 41.

<sup>20</sup> Appropriation Hearings, 1935 Bill, held Dec. 13, 1933, pp. 11, 50.

<sup>21</sup> Isador Lubin, "Government Employment as a Professional Career in Economics," *American Economic Review*, Vol. XXVII, No. 1, Supplement, March 1937.

<sup>22</sup> Lubin to Frances Jay, Oct. 25, 1935 (BLS Files, National Archives).

<sup>23</sup> Lubin to Turner W. Battle, Oct. 31, 1933 (BLS Files, National Archives).

<sup>24</sup> Lubin letters to Wallace, Mar. 26, Apr. 13 and 16, 1934 (BLS Files, National Archives).

<sup>25</sup> Lubin to Perkins, Nov. 22, 1933 (BLS Files, National Archives); *The New York Times*, Aug. 21, 1934; Jan. 30 and 31, 1935. This continued for 12 years, until a separate Bureau of International Affairs

was established in the Department in 1946.

<sup>26</sup> *The New York Times*, Oct. 10, 1937, *The New York Times*, Aug. 5, 1939.

<sup>27</sup> Perkins to Lubin, July 11, 1936; July 21, 1936 (BLS Files, National Archives).

<sup>28</sup> Lubin to Perkins, May 5, 1939 (BLS Files, National Archives).

<sup>29</sup> Minutes of meeting of labor union statisticians, Department of Labor (mimeo), May 18, 1934.

<sup>30</sup> Perkins to Biddle, Jan. 10, 1935; Biddle to Perkins, Feb. 7, 1935 (Perkins' Files, National Archives). Perkins commenting on a report by the National Industrial Conference Board, which found greater numbers of workers in company or independent unions than in the AFL, said: "The significance of the report lies in the fact that no attempt has been made to define company unions. As you know, there are thousands of little associations of workers in individual plants throughout the country, any of which, since they are sponsored by employers might be considered as company unions. If, however, one is to define a company union as a collective bargaining unit, it is doubtful whether we would find anywhere near the large number of such organizations as is implied in the report of the NICB."

<sup>31</sup> Hinrichs to Lubin, Apr. 2, 1935 (BLS Files, National Archives).

<sup>32</sup> Lubin to Perkins, Sept. 3, 1935 (BLS Files, National Archives).

<sup>33</sup> "Extent and Characteristics of Company Unions: Preliminary Report," *Monthly Labor Review*, October 1935, pp. 865–876.

<sup>34</sup> Noel Sargent, Secretary, NAM to Lubin, Oct. 11, 1935; Lubin to Sargent, Oct. 14, 1935 (BLS Files, National Archives).

<sup>35</sup> *Journal of Commerce*, Oct. 15, 1935.

<sup>36</sup> Lubin to Andrew Court, Apr. 13, 1936; Lubin to Stephen DuBrul, General Motors, Apr. 13, 1936. DuBrul, General Motors to Lubin, July 28, 1937; Lubin to DuBrul, July 30, 1937. Court to Lubin, Aug. 17, 1937; Lubin to Court, Aug. 21 and Sept. 11, 1937. Lubin to W. J. Cronin, Dec. 2, 1937 (BLS Files, National Archives).

<sup>37</sup> Lubin memo to Division Chiefs, Mar. 1, 1940 (BLS Files, National Archives).

<sup>38</sup> Isador Lubin, Social Implications of NRA, *Progressive Education Journal*, Oct. 1933.

<sup>39</sup> Temporary National Economic Committee, Investigation of Concentration of Economic Power, Dec. 1, 1938, p. 79; *The New York Times*, Dec. 21, 1938.

<sup>40</sup> *Ibid.*, Part 30, Technology and Concentration of Economic Power, 1940, pp. 17258–17263.

<sup>41</sup> *Ibid.*, *Final Report and Recommendation of the T.N.E.C.*, Document No. 35, 77th Congress, 1st Session, Mar. 1941, pp. 517–538, 542, 551–554.

<sup>42</sup> Lubin to Hinrichs, July 1, 1940 (BLS Files, National Archives).

<sup>43</sup> Perkins to Roosevelt, May 12, 1941 (Perkins' Files, National Archives).

<sup>44</sup> Lubin to Perkins, May 6, 1942 (Perkins' Files, National Archives).

<sup>45</sup> *The New York Times*, May 22, 1942; Sept. 4, 1942; Dec. 9, 1942; Mar. 16, 1945.

<sup>46</sup> *The New York Times*, Jan. 26, 1946.

<sup>47</sup> Isador Lubin, "The BLS Program—A Review and Some Suggestions," *Monthly Labor Review*, January 1955, pp. 31–33.

<sup>48</sup> Jack Barbash, "The Labor Movement: A Re-Examination: A Conference in Honor of David J. Saposs," The University of Wisconsin, 1966, p. iii.

# Frances Perkins' interest in a new deal for blacks

*The black-oriented programs of the Nation's first female Cabinet member may seem modest by today's standards; however, in her time she was a pioneer, who made the welfare of blacks a priority of the Department of Labor*

HENRY P. GUZDA

As Secretary of Labor from 1933 to 1945, Frances Perkins adhered to the principles of equality for all. A former social worker, Perkins conceived the Department of Labor to be the listening post for the Government, "the place where the poor people of the Nation could come with their complaints and obtain assistance."<sup>1</sup>

She made it quite clear that no one would be denied assistance because of race, creed, or religion. Blacks, in particular, needed help during the Depression, and Perkins offered assistance, although critics claimed her programs were simple tokenism. Yet, as one author stated, "It was all tokenism, perhaps, but blacks hadn't been able to get even tokens in the past."

By making social welfare the No. 1 priority of the Department of Labor, Perkins ran afoul of traditional values. Her appointment, by the nature of her sex, was opposed by many labor leaders who viewed the Labor Department as their own.

Of President Franklin D. Roosevelt's circle of advisers, Perkins was not the only member considered a champion of black causes. Black leaders also turned to Works Project Administrator Harry Hopkins and Secretary of Interior Harold Ickes. Together, this troika would often pool its efforts to advance the social progress of blacks, calling on Eleanor Roosevelt for additional help.<sup>2</sup>

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## First experience—a lasting one

The social awakening of Frances Perkins began when, as a student at Mount Holyoke College, she visited the grimy factories that dotted the landscape of the Connecticut River Valley. Another strong impact was Jacob Riis's exposé of urban slum life in *How the Other Half Lives*.<sup>3</sup> Riis's descriptions and photographs seared Perkins' imagination, and throughout her life the impact of that book remained.

As a young social worker, she dealt directly with poor blacks for the first time when she secured a job with the Philadelphia Research and Protective Association. Both immigrant and black girls traveled to Philadelphia searching for employment in the booming city. They were met at the boat piers or railroad terminals by unsavory agents who offered them lodging and employment as prostitutes. The Philadelphia Protective Association assigned Perkins and two black assistants to meet the new arrivals and direct them to reputable boardinghouses and employment agencies. Perkins was instrumental in the closing down of several of the disruptable agencies. City officials, drawing upon recommendations from the Protective Association, eventually required licensing for lodging houses.<sup>4</sup>

## 'New deal' or raw deal?

"Will the New Deal be a Square Deal for the Negro?" asked Jesse Thomas, a field representative for



the National Urban League. Would President Roosevelt simply pay lip service to blacks and ignore them after the elections? Black leaders had every right to be skeptical about the "New Deal." Roosevelt had served under President Woodrow Wilson and Navy Secretary Joseph Daniels in the early 1900's "with no visible discomfort," and both men were segregationists. And, as governor of New York, Roosevelt demonstrated little interest in civil rights.

Civil rights leaders, however, had no doubts about Perkins, his choice for Secretary of Labor. Oswald Garrison Villard, former executive secretary of the National Association for the Advancement of Colored People, said, "When I think of Frances Perkins' point of view, it seems to me that she will be an angel at the Cabinet table. . . ."<sup>5</sup> Will Alexander, a respected white civil rights leader from the South, commented that Perkins was committed to the principle that black Americans had the right to all the opportunities enjoyed by other Americans.<sup>6</sup>

If there were any doubts concerning Perkins' position on equal rights, they quickly dissipated. Soon after taking office, the Secretary received complaints from some Southern white employees that black clerical workers were eating lunch in the "whites only" cafeteria. The previous policy kept facilities segregated under the guise that one was for blue-collar workers and manual laborers and one was for white-collar workers. Perkins replied that the black clerks were white-collar workers, and therefore, violated no rules by eating where they did. Shortly afterwards, she abolished dual facilities altogether.

One of the reasons behind this incident was the increase in employment of blacks at the department. Previously, blacks, with few exceptions, worked as messengers, custodians, and in similar positions. Between 1933 and 1936, however, the department added 129 black employees, many in clerical positions.

Perkins revived the U.S. Employment Service and added 78 blacks there. She insisted that the U.S. Employment Service treat all citizens with impartiality regardless of race, color, or creed. In States with a high percentage of blacks in the population, she saw to it that blacks were represented on the U.S. Employment Service staff. The special Negro Placement Service in the employment offices surveyed the conditions of blacks and the prevailing racial attitudes of the local community. U.S. Employment Service officials used the data to determine the size and movement of the local black population, and the available job opportunities.<sup>7</sup> Progress came slowly, and while the number of appointments and placements left much to be desired, it was a beginning.

During the Depression, many employers fired black workers, replacing them with whites. At the Labor De-

partment, several black elevator operators told Secretary Perkins of their impending dismissal to create jobs for unemployed whites. (Perkins knew some of the operators personally, because she used the public elevators, rather than her private one.) She ordered the building contractor to keep the black operators, arguing that blacks had held those jobs since the 1920's when no one else wanted them.<sup>8</sup>

Integrating cafeterias and protecting the job security of elevator operators were noble gestures, but they did little to help the majority of black Americans. Blacks suffered particularly hard during the Depression. The National Urban League said that black unemployment was 30 to 60 percent greater than white unemployment. The Government did not systematically collect statistics on joblessness for any group until about 1940, but the Bureau of Labor Statistics estimated that in 1933, the worst year of the Depression, about 25 to 35 percent of the civilian labor force was out of work.

Black leaders petitioned their friends in Washington, including Eleanor Roosevelt, Secretary of the Interior Ickes, and Labor Secretary Perkins, to initiate special programs for destitute black Americans. Ickes appointed Clark Foreman, a white civil rights leader, as Adviser for Negro Relations to the Interior Department; however, Foreman acted as adviser to the entire executive branch.

At Foreman's suggestion, Frances Perkins regarded the welfare of the black worker as special to the Labor Department: she appointed her own adviser for Negro affairs, took steps to study the problems of black workers, and arranged for employment bureaus for blacks. The Women's Bureau gave special attention to black women workers and, similarly, the Children's Bureau became concerned with black child labor.

Perkins once stated that one of the best ways to protect the interest of the workers needing the most protection was to "look, see, and report."<sup>9</sup> By publicizing the facts of discrimination against blacks, she hoped to stimulate reform. The Bureau of Labor Statistics reported the proceedings of an immense conference of civil rights leaders and their recommendations on solving black unemployment problems and also published the findings of Robert Weaver, the highest ranking black in the Government, which refuted the theories that the overrepresentation of blacks on the relief roles was from a lack of initiative or innate inferiority.

Other studies conducted by the Department of Labor corroborated Weaver's findings. With unemployment so high, white workers accepted jobs which paid marginal wages, often replacing black workers. The department also found that very few blacks worked in the skilled trades because union locals barred them and controlled apprenticeship for entry into the trades. When the government passed legislation beneficial to organized labor,

it often penalized those few blacks in the skilled trades because the majority of a craft or class determined representation. In addition, Labor Department researchers found that 25 percent of all employed blacks worked as domestics and, as the Depression worsened and strained everyone's budget, were among the first to lose their jobs.<sup>10</sup>

*Division of Negro Labor.* Black leaders had been urging the Secretary of Labor to appoint an adviser to coordinate activities in the department that dealt with the special problems of Negro labor. Assistant Secretary Edward McGrady represented Perkins at several conferences on Negro labor. She appointed another white, George Arthur of the Rosenwald Foundation (a civil rights organization), to the National Advisory Committee of the U.S. Employment Service. Perkins also established a committee, composed of the chiefs of the Women's Bureau, Children's Bureau, and the Bureau of Labor Statistics, to study how the Government could improve the health and welfare of blacks. These actions did not appease civil rights groups; they wanted a member of their own race to represent them in the Department.

Early in 1934, Perkins appointed Lawrence Oxley, a commissioner of conciliation for the department, as director of the newly formed Division of Negro Labor. The Division of Negro Labor functioned as Perkins' personal advisory agency on the problems of black workers. Oxley was responsible for coordinating the activities of the various bureaus which were concerned with blacks, and representing the Secretary in all labor affairs concerning blacks. The Division of Negro Labor was a remnant of the Division of Negro Economics, set up by Secretary of Labor William B. Wilson to handle interracial manpower problems during World War I. (Wilson had tried to make the Division of Negro Economics permanent, but Southern congressmen refused to appropriate funds.) A major difference between the two was that the Division of Negro Labor commissioner had some influence in alleviating unemployment of blacks through use of the U.S. Employment Service. (Oxley was made an adviser to the director of the U.S. Employment Service.)

*Public construction projects.* A landmark program co-sponsored by the Departments of the Interior and Labor provided employment for black workers in Public Works Administration (PWA) projects. Local PWA administrators and U.S. Employment Service agents set aside a percentage of funds to hire black workers on public construction projects in areas predominantly populated by blacks. (In the early 1970's, such programs—the Philadelphia Plan, for one—would be hailed as a major innovation in the promotion of equal

employment opportunity.)

Organized labor approached the arrangement with less than enthusiasm. The Washington Building Trades Council argued against using nonunion labor on public construction projects. Lawrence Oxley countered that few blacks belonged to unions and that despite the affirmation of the American Federation of Labor to erase the color line, many local trade organizations still debarred blacks. The Department of Labor ordered U.S. Employment Service agents to secure work permits for unaffiliated black workers to ensure them representation on construction projects. Several projects failed to meet the obligation of such arrangements, but most sites complied.

### The blue eagle strikes

The National Recovery Administration (NRA) brought hopes of a new era for most Americans. The NRA suspended antitrust laws so that industries could agree on "fair trade" codes intended to lessen competition and raise wages; recognized labor's right to bargain for workers; and got employers to agree to a 35- to 40-hour workweek and to pay minimum wages of \$12 to \$15 a week. Establishments adhering to these codes displayed a blue eagle, the NRA symbol.

Black Americans, at first, rallied around the blue eagle, little realizing that for some of them it was about to become a bird of prey. The black press called the program "a lifesaver to the colored American." New Dealers thought stimulation of the economy by consumer purchasing power was a key to ending the Depression and that the NRA would provide that stimulus.

In a short time, black leaders began to see the NRA in less glowing tones. Southern employers were using the codes to replace blacks with whites or were writing new codes which allowed a regional differential by which workers in the South would receive considerably less than workers in the North. (Most of the time these were racial, rather than geographical, differentials.) Southern employers defended their discriminatory differentials, saying that blacks in the South traditionally received lower wages because they were inefficient and innately lazy, and that if there were no differentials, they would have to replace their black workers with white ones.

When Perkins testified before Congress on the National Recovery Administration, it was clear her sympathies were with the blacks. The purpose of the NRA, she stated while testifying before a hearing on "fair trade" codes in the iron and steel industry, was to revive the purchasing power of the wage earners. Supplied with information gathered by Oxley, she argued that regional wage differentials should be dictated by the cost of living. "The low rates for the Southern districts are presumably based on the predominance of Negro labor



in those districts," she said, "but Negroes are also consumers. Their cost of living is not lower than the living costs of the whites; it is rather that they live differently on a lower standard."<sup>11</sup> The codes for the steel industry on a racial basis were denied, and instead a geographical differential was adopted for all workers.

Southern employers appealed for special exemptions, arguing that obsolete and inefficient plants would be closed if they had to pay blacks at the same level as whites. Perkins ordered an investigation into one of the most publicized cases, that of the Southland Manufacturing Co. The 300 blacks employed at the plant were paid \$9 a week. Company executives told the appeals board that they could not operate if they had to pay the extra \$3 a week as prescribed in the codes. However, investigators found no legitimate reason for an exemption, and the board ordered Southland to pay \$6,100 in back wages. Three months later, Southland's parent company, Reliance Manufacturing, closed the plant.

The NRA investigated the case. The president of Reliance Manufacturing claimed that the plant had operated in the red, "on account of the characteristics of the people who have not had the experience and background, and their racial characteristics."<sup>12</sup>

Perkins assigned Esther Peterson of the Women's Bureau to work with Oxley on obtaining the facts on Southland. They found that other Reliance Manufacturing plants had records no better than Southland, that the Southland plant had a notoriously long record of using convict labor, operating under sweatshop conditions, and employing blacks to keep out organized labor, and that the assertions of Negro inefficiency were false. They also provided figures showing that the Southland plant did not operate in the red and that it made a profit.<sup>13</sup> The NRA denied the exemptions for a second time. Black leaders and Perkins breathed easier, but 300 blacks had lost their jobs. And, in many areas throughout the South, blacks lost their jobs because employers refused to pay them the same wages as whites.

### Stepping stone for young men

One of the most disturbing problems of the Depression was unemployed youth. After Roosevelt took office, he sought to harness some of that young manpower and at the same time refurbish the Nation's eroded and scarred landscapes. Frances Perkins testified in favor of his plan before Congress. It passed, and the Civilian Conservation Corps was born.

The administration of the corps was interdepartmental. The Department of Labor selected the young men for the program through the U.S. Employment Service; the War Department fed, clothed, housed, and conditioned them; and the Agriculture and Interior Depart-

ments chose the work projects. The young men lived in camps and planted trees in virtually every section of the country. They received \$1 a day, a good portion of which went home to their parents.

Oscar De Priest, the only black congressman, had attached a rider to the bill which stated "that no discrimination shall be made on account of race, color, or creed." However, selection of young men for the corps had barely started, when Perkins received complaints from civil rights leaders that in many sections of the South, U.S. Employment Service agents were excluding blacks from the Civilian Conservation Corps.

Among the most flagrant discriminators were agencies in the State of Georgia. And, it was only after Perkins threatened to suspend the program for the entire State, that Georgia Governor Eugene Talmadge unenthusiastically agreed to enroll blacks.

But Georgia violated the agreement frequently, and U.S. Employment Service Director Edward Persons wanted to suspend Civilian Conservation Corps activities in the State. He drafted a letter to that effect, but Perkins discouraged him from sending it to Talmadge. She knew that the President needed the support of Southern politicians for many of his programs and would not embarrass Roosevelt if she could help it.<sup>14</sup>

The Department of Labor experienced similar difficulties in other Southern States, though never so major as in Georgia. Persons succeeded in persuading many areas to enroll blacks, although not as many as he felt was justified. Alabama, for example, placed 776 Negroes, the highest number, while Mississippi, with the largest population of blacks in the South, placed only 46.

A critical point for the Civilian Conservation Corps came in the summer of 1935 when unrest among white communities over black camps reached a tender stage. California, Arkansas, and, especially, Texas wanted a halt in black placements. Civilian Conservation Corps Director Robert Fechner told Persons that the situation in Texas posed a special problem and that suspension of black enrollment might be a good idea. Persons adamantly opposed suspension, and wrote to Perkins,

The CCC has never adequately fulfilled its opportunities for the selection of colored enrollees. For us now to expressly deny the right would be an indefensible procedure.

Perkins agreed that the black camps should not be suspended. However, President Roosevelt perused the reports submitted by both sides and termed the situation "political dynamite,"<sup>15</sup> and the Department of Labor bowed to political pressure.

Even the harshest critics of the New Deal admitted that blacks benefited from the Civilian Conservation Corps. Of the 2.5 million men enrolled during its 9 years of existence, 200,000 were black. Almost 87 per-



cent of the black enrollees participated in an education program. And, while the education they received did not open all the doors of opportunity, it was a forward step.

### Colorblind assistance

Perkins had lobbied long and hard for passage of the Social Security Act of 1935 and was disappointed that the Department of Labor did not administer all its provisions. The act grew out of the many changes in the American experience. It set up bulwarks against new kinds of economic insecurity which threatened Americans during the Depression. The act protected people who were too young or too old or were physically

handicapped. It authorized Federal grants to enable States to broaden and extend regular allowances for needy mothers, the blind, and the aged. It also provided grants for child welfare, crippled children, and physically handicapped people with potential for useful work. The provisions for child welfare were especially beneficial in rural areas of the South, where a good number of the children were black.

THE BLACK-ORIENTED PROGRAMS and policies initiated under Perkins' direction seem modest by today's standards. The fact that she would forgo her social beliefs to protect the President from political embarrassment might seem hypocritical. But, the programs she started left a legacy for programs of the 1960's and 1970's. □

### — FOOTNOTES —

<sup>1</sup> David Mac Eachron, "The Role of the U.S. Department of Labor," Ph. D. dissertation, 1953, p. 60.

<sup>2</sup> Nancy Weiss, *The National Urban League* (New York, Oxford University Press, 1974), p. 272.

<sup>3</sup> Jacob Riis, *How the Other Half Lives* (New York, Charles Scribner's Sons, 1890), p. 52.

<sup>4</sup> George Martin, *Madam Secretary* (Boston, Mass., Houghton Mifflin Co., 1976), pp. 65–68.

<sup>5</sup> Oswald Garrison Villard, "Issues and Men: And a Woman," *Nation*, Mar. 8, 1933, pp. 253–54.

<sup>6</sup> Will W. Alexander, "A Strategy For Negro Labor," *Opportunity*, April 1934, p. 103.

<sup>7</sup> Correspondence from Lawrence Oxley to Albert Hinrichs, Bureau of Labor Statistics, Jan. 30, 1935, Hinrichs file; *Report of the USES on Division of Negro Labor*, Dec. 23, 1936, Oxley file; correspondence from Edward Young, U.S. Employment Service, to Oxley, June 6, 1936; and correspondence from Oxley to Samuel Gompers, Jr., U.S. Department of Labor, Apr. 28, 1936, National Archives and Records Service, General Services Administration.

<sup>8</sup> Correspondence from Frances Perkins to Lawrence Oxley, Division of Negro Labor, Jan. 2, 1934, Oxley file, National Archives and

Records Service, General Services Administration.

<sup>9</sup> Mac Eachron, "The Role of the U.S. Department of Labor," p. 60.

<sup>10</sup> "Washington Conference on the Economic Status of the Negro," *Monthly Labor Review*, July 1933, pp. 42–43; See also, "Relative Efficiency of Negro and White Workers," *Monthly Labor Review*, February 1935, pp. 335–38.

<sup>11</sup> *Testimony of Frances Perkins before the NRA on the codes for the iron and steel industry*, U.S. Department of Labor, 1933.

<sup>12</sup> Raymond Wolters, *Negroes and the Great Depression* (Westport, Conn., Greenwood Publishing Corp., 1970), pp. 125–27. Correspondence from Isador Lubin, Bureau of Labor Statistics to Oxley, Apr. 11, 1935, and from Oxley to Lubin, Dec. 5, 1934, Lubin file, National Archives and Records Service, General Services Administration.

<sup>13</sup> Correspondence from Mary Anderson and Esther Peterson to Oxley, Oct. 9, 1934, Oxley file, and from Labor Advisory Board to Perkins, Oct. 23, 1934, Lubin file, National Archives and Records Service, General Services Administration.

<sup>14</sup> John Salmond, *The Civilian Conservation Corps* (Durham, N.C., Duke University Press, 1964), pp. 90–100 and George Martin, *Madam Secretary*, p. 297.

<sup>15</sup> Salmond, *The Civilian Conservation Corps*, p. 98.

### Establishing a reputation

When Al Smith became Governor of New York in 1918, he appointed Frances Perkins to the State Industrial Commission despite strong opposition from manufacturers' associations. Smith's confidence was quickly rewarded when, in 1919, he sent her to mediate a violent strike of copper mill workers in Rome, N.Y. On arriving, she found troops patrolling the city's streets. After talking with representatives of labor, business, and the community, Perkins advised that a public hearing be held before the State Industrial Commission. She firmly believed in the persuasive power of public opinion, and the subsequent hearings

quickly led to direct negotiations and a settlement of the strike. The workers gained higher wages and union recognition; Frances Perkins gained a reputation. Manufacturers who had complained when Smith sent a woman to deal with a labor problem sent word after the strike: "Do us a favor and ask the Governor where he got that woman."

—GORDON BERG

"Champion of Labor Law in a Tricorn Hat," *Worklife*, October 1976, p. 169.

# Changes in unemployment insurance legislation during 1979

*Concern for financing of unemployment insurance payments was evident in 1979; changes generally involved extending disqualification periods, restricting eligibility, and increasing tax rates*

VIRGINIA A. CHUPP

No major Federal unemployment insurance legislation was enacted in 1979. However, Congress did extend the National Commission on Unemployment Compensation for an additional 6 months. The Commission, created under the Unemployment Compensation Amendments of 1976, is to examine the unemployment insurance program and make recommendations for changes. A report is due by July 1.

Most of the amendments in unemployment compensation undertaken by State legislatures during the year were designed to provide financial backing for programs. Several notable trends emerge from a State-by-State analysis of changes: increasing eligibility requirements, tightening disqualifications, and revision of tax schedules to produce additional income for unemployment insurance funds.

## Benefits and requirements

Fewer claimants may be eligible for benefits in 1980 because of the increased amount of high-quarter or base-period wages needed to qualify. For example, Arizona, New Hampshire and South Dakota increased the amount of high-quarter wages a claimant needs to qualify for benefits. In Arizona, \$625 is needed (\$725 in August), up from \$375 last year; New Hampshire requires \$600 in two high quarters (formerly \$300) and South Dakota, \$600 (formerly \$400). To qualify for benefits in

Iowa, a claimant's base-year wages must be 1-1/4 times his or her high-quarter wage; in Maine, base-period wages must double the State's annual average weekly wage; and in Montana, a claimant must have worked 20 weeks or more, averaging \$50 weekly.

Maximum weekly benefits increased in only eight States:

	<i>Old maximum</i>	<i>New maximum</i>
Arizona . . . . .	\$85	\$90
Mississippi . . . . .	80	90
Florida . . . . .	82	95
Missouri . . . . .	85	105
Nebraska . . . . .	60	106
New Hampshire . . . . .	102	114
Tennessee . . . . .	95	100
Virginia . . . . .	115	122

Changes in eligibility and disqualifications provisions tended to be toward more restrictive requirements for claimants to meet in order to collect benefits. North Dakota, South Dakota, Montana, and Nevada amended their laws to require strictly duration disqualifications for the three major causes: voluntarily leaving work without good cause, refusal of suitable work, and discharge for misconduct. Under such a disqualification, a claimant is denied benefits for the duration of the unemployment, and until he or she earns a specified amount of wages in subsequent work. In addition, two States, Maryland and North Dakota, now restrict good cause for leaving work to that attributable to the work or the employer, and no longer recognize good personal cause.

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In Iowa, Maine, and Montana, and definition of "suitable work" now changes, by law, with the length of a claimant's unemployment. Previously, "suitable work" was redefined by a procedure or regulation.

Generally, States are changing fraud from a penalty specified in the State's unemployment insurance law to a criminal act, punishable under the State's penal code. Six States made such changes in 1979.

Following is a summary of some significant changes in State unemployment insurance laws in 1979:

*Arizona* amended its benefit charging provisions so that benefits paid subsequent to a labor dispute will not be charged to a base-period employer, if the payment is a result of the labor dispute.

*Arkansas* lifted the disqualification for quitting work to attend school or become self-employed, although the individual must continue to meet the able-to-work and available-for-work requirements. The voluntary quit disqualification no longer applies if the claimant had a leave of absence because of pregnancy and was not rehired after the termination of the pregnancy. However, pregnancy is among the nondisqualifying causes for leaving work if the claimant made reasonable efforts to preserve her job rights.

*California* changed the time for which temporary disability insurance benefits can be paid on account of pregnancy from a period of 3 weeks before and 3 weeks after childbirth to any 6-week period during the pregnancy.

*Colorado* will use average earnings in all industries covered by the law, rather than selected ones, in computing the State maximum weekly benefit amount. Full benefits will be allowed if the worker quits because of harassment by the employer, not related to job performance. Pension payments will not be deducted from the claimant's weekly benefit if the pension payment is made in a lump sum comprising only contributions made by the claimant.

The following were added to the list of reasons for disqualification or reduced award: excessive tardiness or absenteeism; sleeping or loafing on the job; failure to meet established job standards for reasons other than inability to do the work; and voluntarily quitting work for unknown reasons or for personal reasons.

A seasonal industry was redefined to include an industry customarily operating for 25 (formerly 24) weeks or less in a year.

*Connecticut's* claimants who received benefits to which they were not entitled, even though not because of fraud, are liable to repay those benefits or have them deducted from future benefits. However, deductions

may not exceed half of an individual's weekly benefit.

Because of experiences in the winter of 1979, the law was amended so that employers are not charged for benefits resulting from damage to a place of employment caused by severe weather conditions. The maximum disqualification for fraud was increased from 20 to 39 weeks following the offense.

*Delaware's* maximum tax rate increased from 3.0 to 5.0 percent of employer's payroll. The period in which an employer's account must be chargeable before he or she can qualify for other than the standard 2.7-percent rate was reduced from 4 to 3 years.

*Florida* limited the maximum tax rate to 0.1 percent a year. To be charged for benefits, an employer must pay at least \$100 (formerly \$40) in base-period wages.

The disqualification period for the three major causes was changed from the duration of the unemployment and until the worker earns 10 times the weekly benefit amount to duration plus earnings of 17 times the weekly benefit. A disqualification was added for discharges for gross misconduct if the worker was terminated for violation of a criminal law punishable by imprisonment, or for any dishonest act. The disqualification period continues for up to 52 weeks or until the individual is reemployed and earns 10 times the weekly benefit amount. Also, disqualifying income now includes retirement payments made for service in the U.S. Armed Forces.

*Hawaii* changed the penalty for fraud from a fine of up to \$200 or 30 days' imprisonment, or both, to either a misdemeanor or a felony under the State criminal code.

*Idaho's* provision denying benefits to school personnel between school years or terms now applies only to those wages earned for work performed for educational institutions.

*Indiana* will deny benefits to temporary employees of the General Assembly or of a legislative committee who work between legislative sessions only.

*Iowa* has dramatically changed its benefit system. An individual's weekly benefit amount will be computed, in steps, at 1/19 to 1/23 of the high-quarter wages up to 58 to 70 percent of the State average weekly wage, depending on the number of dependents claimed by the worker. In addition, the proportion of base-period wages used to compute the duration of benefits was reduced from one-half to one-third and maximum duration was reduced from 39 to 26 weeks. Base-year wages of 1-1/4 times the high-quarter wages are needed to qualify for benefits, in addition to the previous requirement of \$400 in the highest quarter and \$200 in a quar-



ter outside the high quarter.

The amount of benefit charges to a succeeding employer's account is limited to those based on wages earned with that employer and, if the claimant remains unemployed 10 weeks after those wage credits have been charged, any benefits paid after the 10 weeks.

All three of the major causes of disqualifications were amended. Disqualification for any of the three causes now continues for the duration of the claimant's unemployment and until he or she has earned wages in covered work equal to 10 times the weekly benefit amount. In addition, discharge for gross misconduct will result in a cancellation of all wage credits earned prior to discharge.

Work is considered suitable if the weekly wage offered bears the following relationship to the claimant's high-quarter weekly wage: (1) during the first 5 weeks of unemployment, 100 percent; (2) from the 6th through the 12th week, 75 percent; (3) from the 13th through the 18th week, 70 percent; (4) after the 18th week, 65 percent. However, no individual is required to accept a job paying less than the Federal minimum wage.

*Kansas* increased the percentage of highest quarter earnings used to determine weekly benefits from 4 to 4.25 percent. The maximum contribution rate remains at 6.6 percent for 1980, but will increase to 3.8 percent for 1981 and 1982, and to 4.0 percent in 1983 and subsequent years. In addition, a new maximum rate of up to 4.3 percent can be implemented under certain conditions.

*Maine's* claimants must meet these requirements to be eligible for benefits: (1) wages must equal twice the State's annual average weekly wage in each of two quarters in the base year, and (2) total base-year wages must equal 7 times the State annual average weekly wage.

The suitable work definition was amended to disregard prior earnings if an individual has been unemployed for 12 consecutive weeks and the work offered pays wages at least equal to the State's average weekly wage. Services of certain musicians are excluded, if they are performed under terms of a contract between the musicians and the employer.

*Maryland* changed its voluntary leaving provision so that only a cause directly attributable to or connected with the work will be considered good cause for leaving work. The period in which prosecution may be brought for fraud in connection with the collection of benefits was extended from 2 to 3 years. A claimant's current employer will not be charged for benefits paid for unemployment caused by a shutdown for retooling; instead, the employer causing the shutdown will be charged.

*Michigan* preserved an individual's right to receive benefits during continuous involuntary disability if the claimant submits a timely request for such preservation. Benefits are not payable after 156 weeks after the beginning of the claimant's benefit year.

*Minnesota* changed its disqualifications for voluntary leaving and discharge for misconduct to exclude separations because of completion of an apprenticeship program or terminations occurring after the employee gave notice of intent to quit work. The latter continues only through the week of the intended termination. Benefits cannot be paid for any week in which the individual received a salary equal to his weekly benefit.

An individual will not be disqualified for any acts occurring after separation from employment. The penalty for disqualification because of fraud will expire 104 weeks after the week in which the fraud determination was made.

Benefits paid after an individual fails, without good cause, to accept an offer of reemployment will not be charged to the employer if the refusal was due to the distance of the work from the claimant's residence, serious illness, or the claimant's other employment at the time of the offer.

*Mississippi* law was amended to increase the standard and the maximum contribution rate from 2.7 to 4.0 percent and the minimum rate from 0 to 0.1 percent. Also benefits will not be charged to an employer's account if paid after an employee is fired before a 90-day trial work period because he or she is unable to perform the work.

Service performed as a "sitter" at a hospital is excluded from coverage if the "sitter" is employed by the individual.

*Missouri* decreased slightly the percentage of highest quarter earnings used to determine the weekly benefit amount. The taxable wage base will increase from \$6,000 to \$6,600 if, during the preceding year, the balance in the unemployment compensation fund dropped below \$125 million. The maximum tax rate was increased from 4.1 to 6.0 percent, and the fund balance triggers that determine the rate schedule were changed from a percentage of payrolls to a cash balance requirement.

The maximum period of disqualification for a misconduct discharge was increased from 8 to 16 weeks. An individual will not be disqualified for voluntary leaving if he or she retired pursuant to a contract between the employer and a duly-elected union.

*Montana* claimants must have at least 20 weeks of work at an average weekly wage of \$50 to qualify for benefits, effective July 1, 1980. At the same time, minimum

weekly benefits will change from \$12 to an amount equal to 15 percent of the State's average weekly wage and weekly benefits will be computed at 50 percent of an individual's average weekly wage, up to the maximum which is currently computed at 60 percent of the State's average weekly wage. The period for which benefits are payable was reduced from 12 to 8 weeks.

The taxable wage base increased from \$6,000 to \$7,400 for 1979 and, beginning in 1980, will be recomputed annually at 75 percent of the State's average annual wage. The minimum contribution rate was decreased from 0.5 to 0.2 percent, and the maximum rate was increased from 3.1 to 4.4 percent.

The experience rating system, used to determine an employer's rate, was changed from a system which measures the decline in an employer's annual payroll to a system which uses all factors—benefits, contributions, and the employer's payroll.

Excluded from coverage is casual labor not in the course of the employer's trade or business, unless the quarterly wages paid are \$50 or more and the service is not done by a regular employee hired specifically for those services.

The voluntary leaving disqualification will continue for the duration of an individual's unemployment and until he or she earns 6 (formerly 4) times the weekly benefit amount. The requirement which permitted requalification for benefits after 7 weeks of otherwise compensable unemployment was repealed. However, the law now permits purging the disqualification if the individual regularly attends an accredited school for at least 3 consecutive months.

Claimants discharged for misconduct will now be disqualified for the duration of their unemployment and until they earn 8 (formerly 6) times the weekly benefit amount. Here, too, the alternative requirement permitting benefits to be paid after the claimant has served 8 otherwise compensable weeks of unemployment was repealed.

Suitable work was redefined: for the first 13 weeks of unemployment, suitable work is that which meets the criteria established by law and that which offers the areawide prevailing wage for the claimant's customary occupation; after 13 weeks, suitable work will include work that offers 75 percent of the prevailing wage.

The benefit charging provisions were amended to specify that no employer's account will be charged for Federal-State extended benefits, or for benefits paid to an individual who voluntarily left work without good cause or was discharged for misconduct.

*Nevada* tightened disqualification for misconduct discharges from a variable period with no earnings required to the duration of claimant's unemployment and until the claimant earns the weekly benefit amount in each of 1 to 15 weeks.

*New Hampshire* extended coverage to certain local government employees and enacted legislation denying benefits to school personnel between terms, professional athletes between seasons, and certain aliens. In addition, a new disqualification applies to an individual who leaves self-employment and will continue until the claimant earns wages in each of 3 weeks equal to 120 percent of the weekly benefit amount.

The provision was repealed which prohibited application of the labor dispute disqualification if the stoppage of work is due to a lockout or the employer's failure to live up to an employment contract. However, the labor dispute disqualification will not apply if the claimant became unemployed and entitled to benefits prior to the dispute and his or her connection with the employer has been totally severed.

Disqualification for disciplinary layoff now applies for the life of the layoff. A lump sum payment (other than accrued vacation pay) from an employer going out of business now affects a claimant's eligibility for benefits.

*New Mexico* decreased the maximum number of weeks in a year that benefits can be paid from 30 to 26. The circumstances under which a labor dispute disqualification will be imposed were changed from a work stoppage existing because of the dispute to a labor dispute in progress at the claimant's place of employment.

*North Carolina* amended its fraud penalty so that instead of a fine or jail or both, the individual is guilty of a misdemeanor. Also, the time needed to qualify for experience rating is no longer limited to 12 months.

*North Dakota* changed from a minimum weekly benefit amount of \$15 to a flexible minimum computed annually in July at 18 percent of the State average weekly wage. This change results in a flexible qualifying requirement because the State requires wages in two quarters and 40 times the weekly benefit amount to qualify for benefits. Minimum duration of benefits was reduced from 18 to 12 weeks and the computation of duration is no longer based on the relationship of base-period wages and weekly benefits but is based on the ratio of base-year wages to high quarter wages.

The wage base is now computed at 70 percent of the State's average annual wage for the 12 months ending June 30. Formerly, this computation occurred only if the fund balance failed to meet a specified level and the amount of the increase in the wage base was limited to \$100 in any year. The maximum contribution rate increased from 4.2 percent of the employer's total payroll to 6.0 percent and the minimum rate from 0.2 to 0.3 percent. The method of determining fund requirements for triggering rate schedules was changed from a percentage of payrolls to a multiple of the highest benefit cost in 1 of the preceding 5 years.

An individual's weekly benefit will be reduced by half the amount of the pension he or she receives if at least half the cost of the pension was provided by a base-period or chargeable employer, and by the entire cost of the pension if the pension was wholly financed by such an employer.

Only a cause directly attributable to the employer is considered a good reason for voluntarily leaving work. In addition, the period of disqualification for voluntary leaving was reduced from the duration of the claimant's unemployment and until he or she earned 10 times the weekly benefit amount to duration plus 5 times the weekly benefit amount.

The alternative requalifying requirement was deleted for those claimants denied benefits because of one or more of the three major causes of disqualifications.

*Oregon* law now specifies that individuals claiming benefits must submit information regarding qualifications, training, and experience if requested to do so by the State employment service.

*Rhode Island's* taxable wage base will be determined as 70 percent of the State's average annual wage in covered employment during the preceding year. In addition, the minimum contribution rate was increased from a range of 1.0-3.0 percent to 3.0 percent and the maximum rate was increased from 4.0 percent to 6.0 percent. Employers are required to pay a balancing tax, ranging from 0.7 percent to 1.5 percent, depending on the tax schedule in effect in a year. In addition, the maximum rate at which a new employer can be taxed was increased from 2.7 percent to 4.2 percent.

*South Dakota* increased the maximum contribution rate from 4.1 percent to 7.0 percent.

The amount needed to qualify for benefits was increased to 20 times (formerly 10) the weekly benefit amount outside the highest quarter, and the minimum amount of high-quarter wages required was increased to \$600 (formerly \$400). The State further restricted conditions under which partial benefits will be paid by changing the definition of partial unemployment to a week in which the claimants earned less than half (formerly 1-1/2 times) the weekly benefit amount and by deducting three-quarters (formerly one-half) of a claimant's part-time earnings from his or her weekly benefits.

The penalty for fraud was changed from a variable period of 1 to 52 weeks to either a misdemeanor or a felony under the State's criminal code.

School employees will be denied benefits during established, customary vacation or holiday periods.

Disqualification for the three major causes was changed from a variable period to the duration of the

claimant's unemployment and until he or she has been reemployed in covered work for 6 weeks and has earned wages in each of those weeks equal to the weekly benefit.

The criteria for determining whether a voluntary quit was with good cause now include considerations of the claimant's health and the employer's conduct. Disability payments are no longer deductible.

*Tennessee* repealed the exclusion from the automatic denial of benefits to hourly paid nonprofessional school personnel between school terms.

*Utah* will reduce a claimant's weekly benefit by 100 percent (formerly 50 percent) of his or her weekly retirement benefits. The formula used to compute benefits for a week of partial unemployment was changed so that now the weekly benefit is reduced by the amount of earnings in excess of 30 percent of the benefits. Formerly, the amount disregarded was that in excess of 50 percent of the weekly benefit amount, or \$12, whichever was less.

A claimant is required to make an active effort to secure work. Disqualifications for the three major causes were changed, so that now the claimant is ineligible for the duration of his or her unemployment and until he or she earns 6 times the weekly benefit amount in covered work.

Disqualification because of fraud continues for 13 weeks for the first week in which fraud is committed plus 6 weeks for each week of commitment thereafter, but not more than a total of 49 weeks of disqualification. In addition the claimant must pay back twice the amount fraudulently received. Formerly, disqualification continued for 52 weeks and until the fraudulently received benefits were repaid.

*Virginia* now denies benefits to part-time and substitute school employees. In addition, the State extended the between-terms denial during customary and established vacation periods. Quitting work to accompany or join a spouse in a new locality is no longer considered a good cause for leaving work. Also, an individual is disqualified while incarcerated.

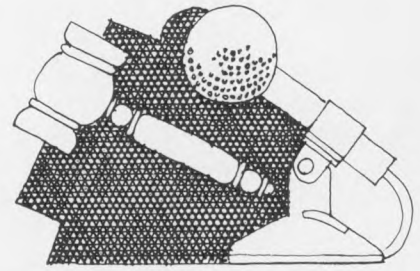
*West Virginia* increased the percentage of the State's average weekly wage used to compute the maximum weekly benefit amount from two-thirds to 70 percent. A claimant is required to have earned wages in two calendar quarters to be eligible for benefits.

To be considered available for work, an individual must do what a reasonably prudent person in similar circumstances would do to seek work. Employees on vacation at the employer's request now are not considered unemployed and, thus, are ineligible for benefits. □



# Conventions

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## Arbitration and the rights of mentally handicapped workers

BENJAMIN W. WOLKINSON AND DAVID BARTON

In the last few years, there has been a growing awareness of the vast extent and cost of mental illness at the work site. It has been estimated, for example, that emotional problems are responsible for approximately 20 to 30 percent of employee absenteeism, that one-fourth of any large work force is in serious need of help for psychological or social problems, and that at least 65 percent of all discharges result from personal factors rather than technical incompetence.<sup>1</sup>

The widespread and frequent occurrence of mental disability suggests that managers are often faced with sensitive decisions about how to accommodate both the needs of afflicted employees and the economic interests of the firm. The Rehabilitation Act of 1973 places new constraints on organizations that receive Federal funds, requiring them to accommodate physically or mentally handicapped employees.<sup>2</sup> Equally important but less well appreciated are the rights and protections afforded mentally disabled employees by the just-cause disciplinary provisions of collective bargaining agreements. As this report will demonstrate, the industrial common law that has evolved from grievance proceedings has established definite restraints on management's ability to penalize workers afflicted by mental illness. Furthermore, this industrial common law appears to impose on employers some duty to accommodate the specific needs of affected workers.

### Protection of job rights

Between 1947 and 1978, there were 38 reported arbitration decisions involving the discharge or denial of reinstatement to employees with mental disabilities.<sup>3</sup> In only 10 of these cases was management's decision upheld. Apparently, arbitrators impose a stiff evidentiary

burden on employers seeking to terminate a mentally handicapped worker. Only when a mental disability exposes the employee or others to serious risks of injury or harm or, alternatively, prevents the employee from performing his duties was the discharge upheld. In 7 of the 10 cases where termination was upheld, the arbitrator found that the employer had demonstrated through competent medical testimony that the grievant could not safely or successfully perform his or her job.<sup>4</sup>

In five of the approved terminations, there were additional findings that the worker's disability precluded the performance of any job in the bargaining unit.<sup>5</sup> One case involved an employee with 16 years of service; following brain surgery, he was no longer able to function efficiently, and the company reluctantly terminated him. The arbitrator concluded that the employer had acted properly: it had consulted the union, had given the employee additional time to recuperate, and had demonstrated that all other positions in the bargaining unit entailed the same level of skill and difficulty.<sup>6</sup> Several other cases concerned employees diagnosed as psychotic with histories of violent outbursts on the work floor, and who posed a danger to customers, fellow employees, and the employer's property.<sup>7</sup>

Although employers may terminate a worker on the basis of compelling evidence of disability, they cannot discipline an employee solely because of previous confinement or treatment for a diagnosed mental disability. In one case,<sup>8</sup> a firm was ordered to reinstate with back pay a worker hospitalized and successfully treated for mental illness. Similarly, a worker suspended pending a psychiatric examination was awarded full back pay. As a result, an employer's authority to suspend a worker pending the results of a mental examination may be limited to cases where there is some basis to conclude that the individual is suffering from a disability.<sup>9</sup>

Furthermore, an employee who has undergone mental treatment may not be denied reinstatement because of management's unverified or unsubstantiated fears of coworker or community disapproval. Thus, a successfully treated sexual psychopath was ordered reinstated in a case where management fears of community disapproval had not been verified.<sup>10</sup> Such fears were considered especially misplaced because the grievant's job did not require contact with anyone other than coworkers.

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In some cases, the onset of mental illness may be acute and noticeable. In other cases, it may be evidenced only by subtle changes in behavior. Considerable time may elapse before a recognizable pattern of mental illness develops. Despite this inherent difficulty in discerning either the nature or commencement of an employee's illness, arbitrators have generally maintained that the firm is responsible to thoroughly investigate and consider a worker's emotional problem before imposing discipline. This requirement is particularly relevant when dealing with a long-term employee who has an otherwise satisfactory work record and whose behavior as a result of mental stress or breakdown is radically or suddenly altered.

One firm discharged an employee who assaulted a supervisor during an argument over an open plant window. The discharge was voided, however, because management had failed to discover that the worker was under medical treatment for hypersensitivity and that prior to the incident had spent the previous night searching for his missing son.<sup>11</sup>

At the same time, employees confronted by management for explanation of rule infractions may be obliged to communicate the nature of their emotional problems or mental disability where it has influenced the questioned conduct. The dismissal of a mentally depressed employee for excessive absenteeism was upheld in one case, because of the employee's repeated refusal to reveal to management the reasons for his absence, which included treatment and hospitalization for his illness.<sup>12</sup> Without knowledge of mitigating factors, the arbitrator ruled, the employer had no alternative but to exercise its normal disciplinary policy.

Under mental stress, some employees have suddenly departed from the job, informing management that they were quitting. When they subsequently sought reinstatement, their requests have often been denied on the grounds that, by voluntarily quitting, they had terminated their seniority rights and employee status. Although recognizing that ordinarily employees lose seniority and job rights by quitting, arbitrators have made exceptions if, when "quitting," the employee lacked the necessary mental capacity to make a meaningful decision. For example, one arbitrator ruled that management had acted "precipitously and prematurely" in terminating as a voluntary quit an employee who during a screaming rage assaulted a supervisor and abruptly quit after being denied a leave of absence.<sup>13</sup> Because the employee's action was not the result of a considered judgment but rather an emotional outburst of a sick man, the arbitrator found that management should have placed the grievant on sick leave.

Seniority rights are also typically broken when an employee has been absent without prior notice. Although dismissal for such conduct may be sanctioned

by past practice or authorized by agreement, arbitrators have been reluctant to apply such standards to the mentally disabled. Dismissals of mentally handicapped workers for violating such reporting provisions have usually been overturned on the grounds that their application is unfair and unreasonable.<sup>14</sup>

### **A duty to accommodate**

The Rehabilitation Act of 1973 requires organizations that receive Federal funds to accommodate handicapped persons; has a parallel responsibility been generated by just-cause provisions of collective agreements? The nature of management's required accommodation has generally focused on two important questions: (1) when a mentally disabled worker can no longer perform his job, is management required to seek out and transfer the employee to other jobs for which he or she can qualify? and (2) where the evidence indicates that the mentally ill employee cannot perform any job in the bargaining unit, is management obliged to place the worker on leave until he or she undergoes successful treatment permitting reinstatement?

In many cases, the mentally disabled employee is unable to perform any job, so that transfer is not an alternative. This may occur with a psychotic employee predisposed to violent outbursts. At other times, however, the stress of a particular job may precipitate a breakdown, and transfer to a different job may enable the employee to return to employment. Whether employers are obliged to accommodate a mentally ill employee through job transfers is the subject of conflict among arbitrators.

The strongest statement of management's duty to accommodate appears in the following excerpt from a 1972 case:<sup>15</sup>

Arbitrators are reluctant to uphold a discharge for such [emotional] disability unless the employer can show that not only can the disabled employee no longer perform his own job adequately, but that there is no other job available that he can do. There is a degree of callousness involved in turning out a senior employee because of disabilities (physical or emotional) if he is capable of doing a less demanding job satisfactorily.

The worker was ordered reinstated to a less demanding job that he had previously performed without difficulty.

Other arbitrators have also indicated that employers must do everything possible to enable the mentally handicapped employee to adjust to normal work life, including transfer to other jobs.<sup>16</sup> Supportive of this approach is a case in which a discharge of an emotionally unstable employee who handled explosives was voided. Instead, the grievant was placed on suspension pending a joint management-union review to determine whether there were other jobs that the grievant could safely handle.<sup>17</sup> Similarly, in a 1964 case, a worker was ordered re-



instated to an available job which was least likely to produce stress or irritation.<sup>18</sup> Although these cases involved workers' reinstatement because of management's failure to accommodate, it is also significant that in 5 of the 10 cases where a worker's dismissal was upheld, the arbitrator determined that the grievant was unable to perform any job in the facility.<sup>19</sup>

A small minority of arbitrators have been reluctant to impose upon management the duty to consider a mentally disabled employee for other less stressful jobs once evidence indicates an inability to perform the most recent job. For example, in a 1948 case, an arbitration board ruled that in the absence of any express or implied provision in the agreement entitling employees to transfer, management had full discretion to fill vacancies and maintain its policy of no interdepartmental transfers.<sup>20</sup> As a result, an employee suffering from a serious disorder was barred from obtaining a position his psychiatrist felt he could satisfactorily perform; he was terminated for unsatisfactory performance in his current position.

More recently, an arbitrator upheld the contention that management is not obliged nor is an arbitrator empowered to move a mentally handicapped employee to other jobs. It was suggested in that case that such an approach would be tantamount to the creation of a disability retrogression clause in agreements.<sup>21</sup> Significantly, however, this strict constructionist approach has been taken by only a small number of arbitrators.

Just as arbitrators have been divided over the transfer rights of a mentally disabled employee to a less strenuous job, they have also split over a firm's obligation to place a mentally ill worker on leave until recovery. In some cases, dismissals have been upheld on evidence that the worker is presently incapacitated and there is reason to believe that additional treatment would not be very helpful.<sup>22</sup> For example, in one case, the grievant had a history of mental illness and treatment, including hospitalization and drug therapy. Nevertheless his condition deteriorated, and based on the likelihood of worsening symptoms, the discharge was upheld.<sup>23</sup>

Some arbitrators, however, have ignored the issue of future employability, upholding a dismissal solely on the basis of the worker's present mental condition.<sup>24</sup> Thus, no concern may be given to the possibility that the individual might be rehabilitated through professional treatment. Although hoping that a grievant would obtain medical treatment, one arbitrator refused to require management to give the employee the opportunity to become rehabilitated before finalizing a dismissal.<sup>25</sup>

Other arbitrators, however, have been inclined to order reinstatement if prior to the hearing the grievant had successfully undergone treatment and was re-employable. In cases where the grievant's illness was found to be in a state of remission,<sup>26</sup> reinstatement has

been conditioned on continued receipt of medical treatment<sup>27</sup> or satisfactory completion of a trial period.<sup>28</sup>

Significantly, an increasing number of arbitrators have ruled that a mentally ill employee's inability to perform his or her job or other jobs in the facility does not constitute just cause for dismissal. The imposition of the discharge penalty has been viewed as signifying egregious fault on the part of the worker, and the element of fault has been considered inopposite when dealing with individuals who have no control over their actions.<sup>29</sup> Furthermore, there has been a growing sentiment to treat mental illness like any other physical illness or disability. This approach would give the mentally ill employee the opportunity to seek treatment and to be reemployed upon recovery. An arbitrator in a 1977 case strongly affirmed this view by placing on sick leave a psychotic employee dismissed for an unprovoked assault upon a coworker.<sup>30</sup>

. . . [A] person's mind is no less a part of his body than any other portion of his anatomy. Simply stated, a person who cannot be kept on the active payroll because his mind is abnormal is, in fact, disabled from work and sick just as a person who is unable to work due to a broken arm, unduly high blood pressure, or any other physical ailment, is sick and disabled from work. Thus, there is no reasonable basis for distinguishing between a disability due to a physical illness and one due to a mental disorder.

Following this approach, many arbitrators have voided the discharge of employees proved to be mentally incompetent to perform any job. Instead, they have allowed management only to temporarily remove the employee from the work site, with reinstatement rights upon reasonable assurance from medical authorities that the employee no longer constitutes a risk to himself or others.<sup>31</sup> Typically, the employee has been placed on sick leave<sup>32</sup> or, alternatively, on a medical leave of absence without pay.<sup>33</sup> Additionally, a dismissal may be overturned if the amount of leave extended is viewed as unreasonably deficient. Following a 3-month leave to undergo psychiatric treatment, a worker was discharged for dangerous horseplay conduct. The discharge was overturned, however, because the amount of leave was less than afforded other employees.<sup>34</sup>

In requiring employers to accommodate the mentally ill employee, arbitrators have been keenly aware of the tragic impact that dismissal may have on a worker's future employment opportunity.<sup>35</sup> Once stigmatized as mentally incompetent, such employees may face permanent exclusion in the job market even after successful treatment. Consequently, although recognizing management's right to protect plant safety and efficiency, many arbitrators have found that the proper balance between such interests and employee job rights is better struck through the mechanism of temporary removal rather than outright dismissal.



### Appropriate medical evidence

A central issue in grievances involving the mentally ill is the employee's capacity to perform. Here arbitrators have typically relied on the expert opinion of qualified medical authorities. Thus, when medical experts testified that the grievant was seriously ill and the prognosis for future rehabilitation was minimal, the dismissal was almost always upheld.<sup>36</sup> Conversely, when medical evidence indicated that the grievant's condition had improved and permitted satisfactory job performance, the dismissal was normally overturned.<sup>37</sup> With insufficient medical evidence upon which to evaluate the grievant's employability, arbitrators have directed the parties to jointly select a competent psychiatrist to examine the grievant and provide an opinion. For example, one arbitrator required an employer to allow a worker to be reexamined before deciding the reinstatement issue, because it had been a year since the grievant's last psychiatric examination.<sup>38</sup>

At times, arbitrators have been confronted with conflicting medical opinions. As illustrated in the following excerpt from a 1961 case,<sup>39</sup> such conflict occurs more frequently in mental disability cases as opposed to physical handicap cases.

The resolution of such cases where actual physical disability is involved is a clear-cut fact situation which is easily subject to expert medical testimony and experiences resultant from long years of medical knowledge of the various disabilities. In the field of mental disability, a more nebulous and complex area of medical knowledge and experience is involved. Two equally expert medical men can easily arrive at opposite conclusions on any given case because of lack of concrete medical knowledge concerning mental illness and the subjective nature of such illness.

Presented with conflicting medical reports, arbitrators have used common sense notions in determining the weight given particular testimony. For example, when faced with conflicting medical evidence based on examination of the grievant undertaken at two different times, one arbitrator gave more consideration to the more recent opinion.<sup>40</sup> Similarly, another arbitrator relied more on a medical opinion based on a series of interviews with, and psychological testing of, the worker as opposed to a different judgment formed by one doctor after a single meeting with the grievant.<sup>41</sup> Alternatively, an arbitrator has given more weight to a medical opinion corroborated by a second doctor rather than the opinion of a single physician.<sup>42</sup> At times, a conflict in medical testimony has been settled in favor of the grievant because an adverse decision would result in dismissal.<sup>43</sup>

Arbitrators usually have not attempted to determine whether one doctor is more qualified than another. In a 1972 case, the employer argued that its physician's

opinion should be given more weight because he was a diplomat of the American Board of Psychiatrists and the union's doctor was not. However, the arbitrator reasoned that because the union's physician practiced psychiatry he had all the legal and professional credentials necessary.<sup>44</sup> In another case, a medical opinion based on the individual's full file (work history, medical records) combined with other physicians' examinations was given more consideration than the opinion of the doctor who did not have this additional information.<sup>45</sup> Similarly, the company doctor's opinion was held to outweigh that of an outside psychiatrist who had based much of his opinion on a falsified work history supplied by the grievant.<sup>46</sup> Finally, when the medical evidence appears evenly divided, the arbitrator may resolve the dilemma by reinstating the grievant for a trial period. This solution was used where the company doctor had recommended dismissal because of his concern that remission of the grievant's medical disorder was not likely to last, but the employee's psychiatrist had favored reinstatement because of the worker's present satisfactory condition and the possibility that the remission would continue.<sup>47</sup>

### Available remedies

In 11 cases where employees were suspended, dismissed, or denied reinstatement, back pay and reinstatement were ordered. Outright unconditional reinstatement with back pay was usually ordered when management failed to demonstrate that the grievant posed a danger to safety or operating efficiency.<sup>48</sup>

When the grievant had been guilty of some impropriety, an employer's back pay liability was often reduced. For example, in a 1964 case, a worker was discharged for carrying weapons onto his employer's property. Finding the employee's conduct to be caused by mental illness for which he was successfully treated, the arbitrator ordered the worker reinstated. However, because of the misconduct, back pay was ordered only from the date of the hearing.<sup>49</sup> When no credible evidence supported a suspension, the employer's back pay liability has run from the date of discharge to date of reinstatement.<sup>50</sup> Employees who have been successfully treated and subsequently denied reinstatement have received back pay from the date of the employee's request for reinstatement,<sup>51</sup> or the company's receipt of a psychiatric report indicating the worker's reemployability.<sup>52</sup>

Conditional reinstatement with back pay was ordered in four cases. This remedy was implemented when the individual still required treatment and there was some doubt concerning his employability. With a conditional reinstatement, special restrictions or requirements have been imposed on the worker. In a pair of cases more than 20 years apart, a worker was placed on a 6-month trial period, during which management was permitted

to discharge the individual if unable to perform.<sup>53</sup> In another pair of cases, reinstatement was conditioned on the worker receiving medication and seeing a psychiatrist periodically.<sup>54</sup>

Conditional reinstatement reflects the efforts of arbitrators to accommodate both the job rights of the employees and the legitimate business interests of the firms. It suggests that although companies would prefer to receive absolute assurances that the grievant can be reemployed without problems, such assurances are difficult to communicate and rarely provided. Moreover, the absence of such iron-clad assurances is not an appropriate basis for the denial of reinstatement if competent medical authorities are reasonably assured that with continued treatment the grievant is employable. Employer doubts are not dismissed, but are considered and acted upon by conditioning reinstatement on the completion of a probationary period or the grievant's continued treatment, or both. At times, back pay has been denied because the discharge was considered reasonable at the time the decision was made or because the employer had acted in good faith and upon the advice and recommendation of company doctors.<sup>55</sup>

A final remedial approach has been used in cases where the grievant was presently unemployable. As discussed earlier, a significant number of arbitrators have viewed discharge as inappropriate, reasoning instead that the grievant be placed on some type of leave (sick leave if the worker is entitled or, alternatively, leave without pay) until recovery. For example, in one case, an employee with a 22-year record of satisfactory performance developed a serious manic depressive condition with no clear prognosis for recovery. The grievant was ordered placed on sick leave until recovery or until he reached retirement age.<sup>56</sup> Similarly, a psychotic individual was ordered placed on leave with a right to reinstatement upon evidence that he could be reemployed without risk to himself or others.<sup>57</sup> These cases appear to reflect the view that mentally disabled employees may be rehabilitated with proper care; and even though it may not be the firm's responsibility to provide for or fund treatment, the individual should have the opportunity to obtain it without suffering permanent job loss. When an arbitrator has voided the discharge of an individual judged unemployable, however, back pay has not been awarded.<sup>58</sup> Back pay has been an issue only when an employable person has been denied the opportunity to work.

### Mitigating factors

In 10 of 27 dismissal cases where the grievance was upheld, the employee's previous satisfactory performance operated as a mitigating factor.<sup>59</sup> For many arbitrators, evidence of meritorious past performance may suggest the individual's capacity to function effective-

ly following successful treatment. Consequently, upon recovery, such an individual has been reinstated. The following excerpt from a 1964 case illustrates this perspective.<sup>60</sup>

... [T]his service record (9 years without discipline) clearly entitles the grievant to an opportunity to show that he can continue to serve the company in the same acceptable fashion as in the past . . . this long favorable past record obligates the company to afford such an opportunity to the grievant.

The discharge of an employee with a long record of satisfactory service has been nullified when management failed to investigate the circumstances surrounding the individual's sudden incapacity to function.<sup>61</sup> Moreover, accommodation to the needs of mentally ill employees has often been required when the employee has had many years of meritorious service. In a pair of cases,<sup>62</sup> the employers were ordered to find alternative jobs for mentally handicapped employees with many years of seniority.

At the same time, past performance alone has not necessarily immunized the mentally ill employee from dismissal. The dismissals of long-term employees have been upheld where the individual was unable to perform any job and the prognosis for recovery was poor.<sup>63</sup> A few arbitrators have upheld the dismissal of a long-term employee solely on the basis of present unemployability, without considering whether future treatment may be beneficial. Thus, one arbitrator upheld a worker's dismissal, although noting that it was entirely probable that the grievant's mental disability was temporary.<sup>64</sup>

Another consideration that has influenced arbitrators' decisions is an employer's past practice. Where past practice suggested that mentally ill individuals have been afforded time off to obtain medical treatment, the sudden dismissal of a mentally ill worker regardless of his present unemployability has usually been overturned.<sup>65</sup> The case against dismissal under such circumstances has also been strengthened by evidence that others hospitalized for mental illness were reinstated successfully.<sup>66</sup>

Past practice, however, has also been used to justify an employer's refusal to accommodate. In a 1948 case, an employee being treated for mental illness had sought transfer to a job his doctor had felt he could better handle. Management's rejection of the transfer request was upheld because the contract implied that the company could determine how vacancies would be filled, and past practice showed no deviation from the employer's established policy of barring inter-departmental transfers.<sup>67</sup>

Yet a rigid policy of no accommodation has been overturned, notwithstanding past practice. Despite an alleged policy of never reemploying individuals who have been confined for mental illness, a firm was or-



dered to reinstate an employee who had been successfully treated and was able to resume work.<sup>68</sup> Thus, the policy of no reinstatement under any circumstances was considered unreasonable and modified.

### Emerging equity through arbitration

Mentally disabled employees pose unique and difficult problems for those in the employment relationship. Employers must consider plant efficiency and safety, unions must protect the job security of their membership, and all parties face the difficulty of the uncertain and unpredictable nature of mental illness, which makes diagnosis and prognosis problematic.

There is an apparent trend among arbitrators to view discipline as an inappropriate mechanism by which to compel the mentally ill employee to adhere to work rules and production norms. Discipline is normally meted out to those who should have been aware and nevertheless ignored, or who knowingly violated, reasonable plant rules and policies. Given this framework, the discipline of an employee whose mental illness deprived him of the capacity to satisfy appropriate standards of conduct is improper. As a result, the dismissal of mentally ill employees for infractions such as excessive or unreported absences, insubordination, or assault has been increasingly viewed as a breach of contractual just-cause provisions.

Although arbitrators have split over management's duty to accommodate, a growing number have required firms to examine whether the employee could perform other jobs in the bargaining unit. Even when there has been no other job available, there was a reluctance to uphold dismissal when there was some hope that through treatment the mentally ill employee could become reemployable.

The expanded reach that many arbitrators have given to the just-cause provisions of contracts parallels the protections of the Rehabilitation Act of 1973, requiring employers to make a "reasonable accommodation" to handicapped applicants and employees. This congruency

between Federal law and industrial jurisprudence should facilitate the informal settlement of grievances of the handicapped, an outcome favored by U.S. Department of Labor regulations enforcing the statute.<sup>69</sup> Under regulations implementing Section 503 of the law, a complainant who works for a Federal contractor must first attempt to resolve the issue through the employer's grievance procedure when one is available. Only when no agreement satisfactory to the grievant has been reached after 60 days may the Office of Federal Contract Compliance Programs begin an investigation.

The settlement of employment disputes involving mental disability through grievance adjustments and arbitration provides the employee with a more expeditious avenue of relief than would otherwise be available through resort to the Government's compliance process under the 1973 statute. The remedies available under Sections 503 and 504 include the withholding of progress payments, termination of Federal contracts, and debarment from the receipt of future contracts. Although these are powerful remedies, experience with similar enforcement measures for anti-bias requirements suggests that the likelihood of their implementation to enforce rights of the handicapped is minimal.<sup>70</sup> Furthermore, although injunctive relief is available under Section 503,<sup>71</sup> to date it has not been sought in any case. Consequently, arbitration remains an important tool to protect the employment opportunities of mentally disabled employees.

Recently, there have been significant questions raised concerning the relevance of arbitration in areas which are becoming increasingly subject to Federal regulation.<sup>72</sup> A review of arbitration decisions involving the mentally handicapped shows that, although overlap may exist between external law and contractual adjudication, arbitration serves as an important mechanism for preserving workers' rights. In an era of ever-increasing administrative backlogs and clogged court dockets, reliance on informal methods of dispute resolution is a healthy phenomenon that should be encouraged. □

### FOOTNOTES

<sup>1</sup> Lawrence N. Loban, "Mental Health and Company Progress," *Management Review*, December 1966, p. 29.

<sup>2</sup> The duty to make "reasonable accommodation" is the result of Office of Federal Contract Compliance Programs regulations enforcing Sec. 503 (a) of the Rehabilitation Act of 1973. The nature and duty of a Federal contractor's accommodation are defined in C.F.R. 60-741.6(d) (1977).

<sup>3</sup> These decisions represent all 34 dismissal cases published by the Bureau of National Affairs in its *Labor Arbitration* series between 1947 and 1978 and 4 cases that were published by Commerce Clearing House in its *Labor Arbitration Award (ARB)* during that time.

<sup>4</sup> Whitin Machine Works, 10 LA 707 (1948); Gulf Oil Corp., 34 LA 80 (1960); Maremont Automotive Products, Inc., 37 LA 175 (1961); Hiller Chevrolet Cadillac, Inc., 37 LA 629 (1961); Fischer Scientific, 45 LA 559 (1965); U.S. Steel Corp., 46 LA 545 (1966); Cheyenne

Pipeline Co., 59 LA 726 (1972). Three cases did not fall in the above category: dismissal was upheld in Husky Oil Co., 65 LA 47 (1975), because of the employee's excessive absenteeism; in Wolpin Co., 69 LA 589 (1977), because of the employee's violation of a probationary period following an earlier dismissal; and Kellogg Co., 71 LA 494 (1978), because the employee was found to have voluntarily quit.

<sup>5</sup> Whitin Machine Works, 10 LA 707 (1948); Maremont Automotive Products, 37 LA 175 (1961); Hiller Chevrolet, 37 LA 629 (1961); Fischer Scientific, 45 LA 559 (1965); and Cheyenne Pipeline Co., 59 LA 726 (1972).

<sup>6</sup> Cheyenne Pipeline Co., 59 LA 726 (1972).

<sup>7</sup> Hiller Chevrolet-Cadillac, 37 LA 629 (1961); Maremont Automotive Products, 37 LA 175 (1961); and Fischer Scientific, 45 LA 559 (1965).

<sup>8</sup> Alcas Cutlery Co., 38 LA 297, at 299 (1962).



<sup>9</sup> Caterpillar Tractor Co., 36 LA 104 (1961). See also Jamestown Telephone Co., 73-1 ARB ¶ 8229 (1973).

<sup>10</sup> International Harvester Co., 24 LA 229, 231 (1955).

<sup>11</sup> Brown and Williamson Tobacco Corp., 60 LA 17 (1972).

<sup>12</sup> Husky Oil Co., 65 LA 47, at 58-59 (1975).

<sup>13</sup> General Tire and Rubber Co., 51 LA 206, at 208 (1968). See also Hervoss Corp., 70 LA 497 (1978), and Kellogg Corp., 71 LA 494 (1978).

<sup>14</sup> See, for example, Spavingont Fibre Co., 21 LA 58 (1953); U.S. Steel Corp., 41 LA 461 (1963); American Can Filler, 63 LA 1277 (1974); and Springday Co., 76-1 ARB ¶ 8295 (1976).

<sup>15</sup> American Smelting and Refining Corp., 59 LA 722, 725 (1972).

<sup>16</sup> Whitin Machine Works, 10 LA 707, 712 (1948).

<sup>17</sup> Silas Mason Co., 59 LA 197 (1972).

<sup>18</sup> Dayton Malleable Iron Co., 43 LA 959, 963 (1964).

<sup>19</sup> See footnote 5.

<sup>20</sup> Package Machinery Corp., 10 LA 154, 156 (1948).

<sup>21</sup> Commonwealth Gas Co., 76-2 ARB ¶ 8494 (1976).

<sup>22</sup> See, for example, Maremont Automotive Products, Inc., 37 LA 175 (1961), and Cheyenne Publishing Corp., 59 LA 726 (1972).

<sup>23</sup> Hiller Chevrolet-Cadillac, 37 LA 629 (1961).

<sup>24</sup> See, for example, Whitin Machine Co., 10 LA 707 (1948).

<sup>25</sup> Fisher Scientific, 45 LA 559, 560 (1965).

<sup>26</sup> Dayton Malleable, 43 LA 959 (1964), National Steel Corp., 66 LA 533 (1976), Springday Corp., 76-1 ARB ¶ 8295 (1946).

<sup>27</sup> Commonwealth Gas Co., 76-2 ARB ¶ 8494 (1976).

<sup>28</sup> National Steel Co., 66 LA 533, 539 (1976).

<sup>29</sup> See, for example, Consolidated Foods Corp., 58 LA 1285 (1972).

<sup>30</sup> B. F. Goodrich, 69 LA 922 (1977). See also General Telephone Co. of Indiana, 61 LA 867 (1973), where arbitrator Julius Getman ruled that an employer must provide disability pay to a worker absent because of mental illness, under a contractual provision mandating such pay for illness. Getman found no basis for distinguishing between mental and physical illness, even though company practice may have been to extend benefits only in cases of physical disability.

<sup>31</sup> See, for example, Chrysler Corp., 26 LA 295 (1956); Foster Wheeler Corp., 57 LA 1171 (1971); Consolidated Foods Corp., 58 LA 1285 (1972); Brown and Williamson Tobacco Co., 60 LA 17 (1972); John Mansville Perlite Corp., 67 LA 1255 (1977); B. F. Goodrich, 69 LA 922 (1977); and Ocean Spray Cranberries Inc., 71 LA 161 (1978).

<sup>32</sup> General Tire and Rubber Corp., 51 LA 206 (1968); Consolidated Food Corp., 58 LA 1285 (1972); B. F. Goodrich, 69 LA 922 (1977); and Ocean Spray Cranberries Inc., 71 LA 161 (1978).

<sup>33</sup> John Mansville Perlite Corp., 67 LA 1255 (1977).

<sup>34</sup> Foster Wheeler Corp., 57 LA 1171 (1971).

<sup>35</sup> John Mansville Perlite Corp., 67 LA 1255, at 1260 (1977). This concern is very real. One study has shown that two-thirds of all disabled employees who were not reemployed by their company could not achieve gainful employment in the succeeding 5 years. Conversely, if rehired by the original firm, the employee was found to be "assured of relative success in the future labor market": A. J. Jaffee and others, *Disabled Workers in the Labor Market*, (New Jersey, Bedminster Press, 1964), pp. 73, 75-76.

<sup>36</sup> See, for example, Hiller Chevrolet-Cadillac, Inc., 37 LA 629 (1961), Fischer Scientific Corp., 45 LA 559 (1965), Cheyenne Pipeline Co., 59 LA 726 (1972).

<sup>37</sup> See, for example, Alcas Cutlery, 38 LA 297 (1962), U.S. Steel Corp., 41 LA 461 (1963), Philco Corp., 43 LA 569 (1964).

<sup>38</sup> U.S. Steel Corp., 46 LA 545, 549 (1966). See also General Electric Co., 71 LA 161, 164 (1978), Hervoss Corp., 70 LA 497, 500 (1978).

<sup>39</sup> Hiller Chevrolet-Cadillac, Inc., 37 LA 629, at 632-633 (1961).

<sup>40</sup> Union Camp Corp., 59 LA 127, at 133 (1972).

<sup>41</sup> Maremont Automotive Products, Inc., 37 LA 175, at 176 (1961).

<sup>42</sup> Union Camp Corp., 59 LA 127 (1972).

<sup>43</sup> City of Hartford, 69 LA 303, 306 (1977).

<sup>44</sup> Union Camp Corp., 59 LA 127 (1972). See, however, General Electric Co., 71 LA 161, 164 (1978), where arbitrator James Stern did not credit the grievant's medical release as sufficient evidence of his employability because the grievant's doctor was not a psychiatrist.

<sup>45</sup> Maremont Automotive Products, Inc., 37 LA 175, at 176 (1961).

<sup>46</sup> U.S. Steel Corp. 46 LA 545, at 549 (1966).

<sup>47</sup> National Steel Co. 66 LA 533, at 534-536 (1976).

<sup>48</sup> See, for example, Caterpillar Tractor Co., 36 LA 104 (1961); Alcas Cutlery, 38 LA 297 (1962); U.S. Steel Corp., 41 LA 460 (1963); American Smelting and Refining Corp., 59 LA 722 (1972); Union Camp Corp., 59 LA 127 (1972); Midwest Telephone Co., 76-1 ARB ¶ 8203 (1976); and Jamestown Telephone Co., 73-1 ARB ¶ 8229 (1973).

<sup>49</sup> Philco Corp., 43 LA 568 (1964). See also Marion Power Shovel Co., 69 LA 339 (1973).

<sup>50</sup> Union Camp Corp., 59 LA 127 (1972); and Caterpillar Tractor Co., 36 LA 104 (1961).

<sup>51</sup> See American Smelting and Refining Corp., 59 LA 722 (1972).

<sup>52</sup> See Alcas Cutlery Corp., 38 LA 297 (1962).

<sup>53</sup> International Harvester Co., 24 LA 229 (1955), and National Steel Co., 66 LA 533 (1976).

<sup>54</sup> Dayton Malleable Iron Co., 43 LA 959 (1964), and Commonwealth Gas Co., 76-2 ARB ¶ 8494 (1976).

<sup>55</sup> Commonwealth Gas Co., 76-2 ARB ¶ 8494 (1976); International Harvester Co., 24 LA 229 (1955); Dayton Malleable Iron Co., 43 LA 959 (1964); and National Steel Co., 66 LA 533 (1976).

<sup>56</sup> Consolidated Food Corp., 58 LA 1285, at 1289 (1972).

<sup>57</sup> Chrysler Corp., 26 LA 295 (1956). See also cases listed in footnote 31.

<sup>58</sup> See footnote 31.

<sup>59</sup> Foundry Equipment Co., 28 LA 333 (1957); U.S. Steel Corp., 41 LA 461 (1963); Dayton Malleable Iron Co., 43 LA 959 (1964); General Tire and Rubber Co., 51 LA 206 (1968); Consolidated Food Corp., 58 LA 1285 (1972); Silas Mason Co., 59 LA 197 (1972); American Smelting and Refining Corp., 59 LA 722 (1972); Brown and Williamson Tobacco Corp., 60 LA 17 (1972); John Mansville Perlite Corp., 67 LA 1255 (1977); Marion Power Shovel Co., 69 LA 339 (1973).

<sup>60</sup> Philco Corp., 43 LA 568 (1964).

<sup>61</sup> Brown and Williamson Tobacco Co., 60 LA 17 (1972); General Tire and Rubber Co., 51 LA 206 (1968).

<sup>62</sup> Silas Mason Co., 59 LA 197, at 200 (1972), and American Smelting and Refining Corp., 59 LA 722, at 726 (1972).

<sup>63</sup> Whitin Machine Works, 10 LA 707 (1948); Maremont Automotive Products, 37 LA 175 (1961); and Cheyenne Pipeline Co., 59 LA 726 (1972).

<sup>64</sup> See footnote 41.

<sup>65</sup> Foster Wheeler Corp., 57 LA 1171, at 1174 (1971).

<sup>66</sup> Philco Corp., 43 LA 568 (1964).

<sup>67</sup> Package Machinery Corp., 10 LA 154 (1948).

<sup>68</sup> Alcas Cutlery 38 LA 297 (1962).

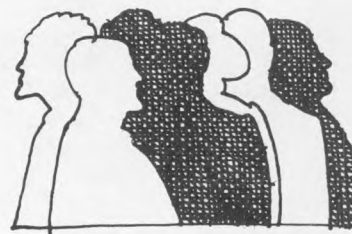
<sup>69</sup> 41 C.F.R. Sec. 60-741.28(c), (d), and (e), (1977).

<sup>70</sup> As of June 15, 1977, the U.S. Department of Labor had debarred only 13 companies since 1965 when the Executive Order mandating affirmative action by Federal contractors was first issued. Statement, Donald Elisburg, Assistant Secretary for Labor, in *U.S. Commission on Civil Rights, The Federal Civil Rights Enforcement Effort-1977* (Washington, D.C., 1977), p. 142.

<sup>71</sup> 41 C.F.R. Sec. 60-741.28(b) (1977).

<sup>72</sup> See, for example, David E. Feller, "The Impact of External Law Upon Labor Arbitration," in *The Future of Labor Arbitration in America*, Benjamin Ana and others, eds. (New York, American Arbitration Association, 1976), pp. 83-113.

# Special Labor Force Reports—Summaries



## Marital and family characteristics of the labor force, March 1979

BEVERLY L. JOHNSON

The rising number of multi-earner families has been one of the most important socioeconomic developments of the 1970's. In March 1979, a record 3 out of every 5 married-couple families reported having had at least two members who were earners during the previous year. Since 1970, the number of such families has increased by more than 3 million, reaching 28.4 million.<sup>1</sup> (See table 1.)

Almost exclusively responsible for the rising number of multi-earner families have been the steep annual increases in the number and proportion of working wives. (See table 2.) Year after year, married women have continued to record spectacular gains in labor force participation. Since March 1970, the number of wives in the work force has increased by one-third, rising from 18.4 million to nearly 24 million. More than half of this gain (54 percent) was among wives 25 to 34 years old.

The labor force participation rate of married women had risen to 49.4 percent by March 1979, an increase of nearly 9 percentage points since 1970. (See table 3.) In contrast, the participation rate of husbands has been in a long-term decline. At 81.4 percent in March 1979, the rate for husbands had dropped by more than 5 percentage points since 1970—a reduction greater than that recorded during the preceding 2 decades.

Continuing its upward trend, the rate for white wives rose significantly over the year ending in March 1979, reaching 48.5 percent. The participation rates for black (59.7 percent) and Hispanic wives (46.3 percent) registered no significant change from a year earlier but have also risen considerably since the mid-1970's. Reflecting the higher labor force participation rate of black wives, the proportion of black families with 2 earners or more during 1978 was higher than that for white or Hispanic; 64.5 percent of black married-couple families, compared with 59 percent of white and Hispanic families, had more than one earner.

There was little year-to-year change in the labor force participation of husbands whether white, black, or Hispanic. However, both the rates for white and black husbands have drifted down over the decade, to 81.5 and 80.0 percent. The rate for Hispanic husbands (87.4 percent) was at the same level in early 1979 as at mid-decade (when separate data for this ethnic group first became available).

### Family income

Working wives made substantial contributions to their families' economic welfare. In 1978, they contributed about 26 percent to family income, a proportion that varied considerably by the extent of their work experience. When wives worked 50 to 52 weeks full time they contributed an average of 40 percent to family income; when they worked full time 27 to 49 weeks, they contributed about 30 percent; and when they worked up to a half year full time or 1 to 52 weeks part time, their share was approximately 11 percent. These proportions have remained relatively unchanged throughout the 1970's. One factor accounting for this is that there has been very little change in the occupational distribution of wives; that is, they have not yet gained full access to many of the high skill, high paying jobs. It is largely because of this that the basic ratio of women's to men's earnings has not changed much for years.<sup>2</sup>

The impact of wives' earnings on family income is clearly shown by the income differences between one-earner and multiple-earner families. In 1978, median family income for white multi-earner families was \$23,300, 37 percent higher than families with one earner. For black families with two earners or more, median family income was \$19,500, 66 percent higher than that of families with only one earner. Hispanic multi-earner families had an average annual income of \$17,900, 59 percent higher than that of families with only one earner. Because of this, married-couple families with multiple earners have an exceedingly low incidence of poverty.<sup>3</sup> For white families with more than one earner, fewer than 2 percent were living below the poverty level, compared with 6 percent of the families with only one earner and 16 percent of those families with no earners. For black and Hispanic multi-earner families, only about 5.5 percent were living below the poverty level. However, as among the white population, the

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**Table 1. Number of earners in previous year, by type of family in March 1970 and March 1979 and by race, March 1979**

Item	All families				White		Black	
	March 1970		March 1979		March 1979		March 1979	
	Number (in thousands)	Percent distribution	Number (in thousands)	Percent distribution	Number (in thousands)	Percent distribution	Number (in thousands)	Percent distribution
Families, total	51,237	.....	57,804	.....	50,910	.....	5,906	.....
Married-couple families, total	44,436	100.0	47,692	100.0	43,636	100.0	3,244	100.0
No earners	3,022	6.8	5,101	10.7	4,777	10.9	276	8.5
1 earner	16,268	36.6	14,173	29.7	13,054	29.9	875	27.0
Husband only	15,133	34.1	12,194	25.6	11,320	25.9	664	20.5
Wife only	797	1.8	1,477	3.1	1,294	3.0	161	5.0
Other relative only	339	.8	502	1.1	441	1.0	50	1.5
2 earners or more	25,145	56.6	28,418	59.6	25,805	59.1	2,092	64.5
Husband and wife <sup>1</sup>	20,327	45.7	24,253	50.9	21,948	50.3	1,858	57.3
Husband and other, not wife	4,517	10.2	3,583	7.5	3,379	7.7	154	4.7
Husband non-earner	302	.7	582	1.2	478	1.1	79	2.4
Other families, total	6,801	.....	10,113	.....	7,273	.....	2,662	.....
Maintained by women <sup>2</sup>	5,573	100.0	8,458	100.0	5,918	100.0	2,390	100.0
No earners	1,194	21.4	1,964	23.2	1,213	20.5	712	29.8
1 earner	2,468	44.2	4,114	48.6	2,909	49.2	1,147	48.0
2 earners or more	1,911	34.3	2,380	28.1	1,796	30.3	531	22.2
Maintained by men <sup>2</sup>	1,239	100.0	1,655	100.0	1,355	100.0	272	100.0
No earners	121	9.7	189	11.4	151	11.1	35	12.9
1 earner	520	41.9	746	45.1	602	44.4	131	48.2
2 earners or more	598	48.2	719	43.4	602	44.4	105	38.6

<sup>1</sup> May also include sons, daughters, or other family members.

<sup>2</sup> Maintained by divorced, separated, widowed, or never-married persons.

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

poverty rate among these minority groups was 4 times higher for families with only one earner and 8 to 9 times higher for those married-couple families with no earners in the home.

Married-couple families with children under 18 were far more likely to have two earners or more than were those families with no children—63 percent, compared with 51 percent in March 1978.<sup>4</sup> This reflects both greater economic pressures of families raising school- and preschool-age children, as well as the comparatively higher concentration of older, often retired, husbands and wives among families with no children. About 51 percent of wives with no children under 18 were age 55 and older, compared with only 2 percent of the married mothers with children under 18.

*Working mothers.* The labor force commitment of all mothers showed unusual strength in the 1970's and by March 1979, 16.6 million, or 54 percent, of the women with children under 18 were working or looking for work. (This compares with 12 million or 42 percent in 1970, and 8 million or 30 percent in 1960.) Most working mothers were married but nearly 1 of 4 (23 percent) was divorced, separated, widowed, or had never been married. Partly reflecting the sharp decline in birth rates<sup>5</sup> during the 1970's, and consequently fewer children for families to care for, the labor force participation rate of married mothers zoomed upward—from 39.7 percent in March 1970 to 51.8 percent. (See table 4.) Divorced mothers remained far more likely than other mothers to be working or looking for work—79 percent did so in March 1979.<sup>6</sup>

The tremendous influx of mothers into the 1970's work force occurred both among those with school-age as well as those with preschool-age children; in March 1979, 62 percent of mothers with children 6 to 17 years old and 45 percent of those with children under age 6 were working or looking for work. Comparable rates for 1970 were 52 and 32 percent.

Black mothers are still more likely than white or Hispanic mothers to be in the labor force. However, the sharpest increase in participation during the late 1970's has been registered by white mothers. As a result, the difference in labor force participation between black and white mothers has narrowed considerably. From March 1975 to 1979, the rate for white mothers rose from 46.0

**Table 2. The civilian labor force, by sex and marital status, March 1970 and 1979**

[Numbers in thousands]

Sex and marital status	Civilian labor force			
	March 1970		March 1979	
	Number	Percent	Number	Percent
Both sexes, total	81,693	100.0	101,579	100.0
Men, total	50,460	61.8	58,608	57.7
Never married	9,421	11.5	14,895	14.7
Married, wife present	38,123	46.7	38,756	38.2
Married, wife absent	1,053	1.3	1,599	1.6
Widowed	672	0.8	570	0.6
Divorced	1,191	1.5	2,789	2.7
Women, total	31,233	38.2	42,971	42.3
Never married	6,965	8.5	11,006	10.8
Married, husband present	18,377	22.5	23,832	23.5
Married, husband absent	1,422	1.7	1,808	1.8
Widowed	2,545	3.1	2,358	2.3
Divorced	1,927	2.4	3,967	3.9



**Table 3. Civilian labor force participation rates of persons 16 years and over, by race, Hispanic origin, marital status, and sex, March 1979**

[Numbers in thousands]

Marital status and sex	All persons		White		Black		Hispanic	
	Number	Labor force participation rate	Number	Labor force participation rate	Number	Labor force participation rate	Number	Labor force participation rate
Both sexes, total	101,579	63.2	89,507	63.5	10,144	60.4	4,795	63.6
Men	58,608	77.0	52,297	77.8	5,246	70.2	2,936	81.1
Never married	14,895	70.9	12,874	72.7	1,760	51.8*	786	70.1
Married, wife present	38,756	81.4	35,474	81.5	2,585	80.0	1,852	87.4
Other marital status	4,957	66.2	3,948	66.6	900	64.5	298	78.9
Married, wife absent	1,599	76.5	1,134	79.1	405	69.0	162	86.7
Widowed	570	29.3	439	27.5	116	37.6	22	( <sup>1</sup> )
Divorced	2,789	80.9	2,375	81.9	379	75.8	114	84.9
Women	42,971	50.7	37,210	50.4	4,899	52.6	1,859	47.4
Never married	11,006	62.7	9,296	65.2	1,502	50.7	502	56.0
Married, husband present	23,832	49.4	21,391	48.5	1,920	59.7	1,028	46.3
Other marital status	8,133	43.1	6,523	42.2	1,477	47.0	330	40.8
Married, husband absent	1,808	58.8	1,136	58.9	632	58.9	117	40.4
Widowed	2,358	22.6	1,968	22.0	322	25.0	58	22.2
Divorced	3,967	74.0	3,400	75.3	523	66.8	154	60.2

<sup>1</sup> Percent not shown where base is less than 75,000.

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

to 53.5 percent; for black mothers, it went from 56.0 to 61.3 percent; and for Hispanic mothers, the rate increased from 39.5 to 44.8 percent.

*Children of working women.* In March 1979, the number of children under 18 whose mother was in the labor force was 30.1 million, a gain of 4.6 million from 1970.

(See table 5.) A smaller proportion of white (49 percent) than of black children (61 percent) in two-parent families had working mothers. However, when there were no fathers in the home, white children were more likely than black to have mothers in the labor force—67 and 53 percent, respectively. Among Hispanic children, 43 percent of those in two-parent families had

**Table 4. Labor force status of women 16 years and over, by marital status, and presence and age of youngest child, March 1979**

[Numbers in thousands]

Marital and labor force status	Total	No children under 18 years	With children under 18 years						
			Total	6 to 17 years only		Under 6 years			
				Total	14 to 17 years, none younger	6 to 13 years	Total	3 to 5 years, none younger	Under 3 years
Women, 16 years and over, total	84,686	54,204	30,482	17,164	5,392	11,772	13,317	5,312	8,006
In labor force	42,971	26,355	16,616	10,570	3,288	7,281	6,046	2,775	3,272
Labor force participation rate	50.7	48.6	54.5	61.6	61.0	61.9	45.4	52.2	40.9
Unemployment rate	6.6	6.1	7.3	5.7	4.7	6.1	10.0	8.2	11.6
Never married	17,564	16,651	913	300	21	279	613	228	385
In labor force	11,006	10,513	493	190	10	180	303	121	182
Labor force participation rate	62.7	63.1	54.0	63.4	( <sup>1</sup> )	64.5	49.4	53.0	47.2
Unemployment rate	9.7	9.2	20.7	19.0	...	20.0	21.8	17.2	25.0
Married, husband present	48,239	23,474	24,765	13,655	4,333	9,323	11,110	4,227	6,883
In labor force	23,832	10,974	12,858	8,064	2,534	5,529	4,795	2,089	2,706
Labor force participation rate	49.4	46.7	51.9	59.1	58.5	59.3	43.2	49.4	39.3
Unemployment rate	5.1	3.7	6.2	4.9	3.9	5.3	8.5	7.2	9.5
Married, husband absent	3,075	1,396	1,679	909	235	674	770	355	414
In labor force	1,808	807	1,001	592	145	447	409	212	197
Labor force participation rate	58.8	57.8	59.6	65.2	61.7	66.3	53.1	59.5	47.5
Unemployment rate	9.8	6.3	12.6	8.8	5.7	9.8	18.2	12.1	24.7
Widowed	10,450	9,756	694	605	305	300	89	66	23
In labor force	2,358	2,015	344	311	164	148	33	27	6
Labor force participation rate	22.6	20.7	49.5	51.4	53.6	49.3	36.5	( <sup>1</sup> )	( <sup>1</sup> )
Unemployment rate	5.2	4.6	9.0	8.2	10.9	5.2	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Divorced	5,359	2,928	2,431	1,694	498	1,196	736	436	300
In labor force	3,967	2,047	1,920	1,412	435	977	508	327	181
Labor force participation rate	74.0	69.9	79.0	83.4	87.4	81.7	68.9	74.9	60.3
Unemployment rate	6.1	4.8	7.6	6.5	6.4	6.6	10.4	8.4	14.0

<sup>1</sup> Rate not shown where base is less than 75,000.

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

working mothers, compared with 39 percent of those in families maintained by the mother.

### One-parent families

Among the most striking changes that occurred during the 1970's was the sharp rise in the number of working women who had the principal responsibility for the maintenance and welfare of their own families. About 1 of every 9 women in the March 1979 labor force (5 million) maintained her own family and was divorced, separated, widowed, or had never been married. Mainly because of the rising incidence of marital break-up,<sup>7</sup> the number of families maintained by women increased substantially over the decade, so that in March 1979 these families totaled 8.5 million, or 1 of every 7 families.

Children under 18 were present in about 5.3 million families maintained by women. (See table 6.) In fact, most of the over-the-decade gain in the number of families maintained by women occurred among families with children. From March 1970 to 1979, the number of single-parent families maintained by women rose by 80 percent, while those maintained by men increased by more than 70 percent.<sup>8</sup>

One-parent families are largely those of female householders and face economic difficulties rarely encountered by families with male householders. In 1978, 42 of every 100 single-parent families maintained by the mother had incomes below the poverty level, compared with 15 of every 100 maintained by the father and 6 of every 100 two-parent families.<sup>9</sup>

Accompanying the large increases in the numbers of mothers maintaining their own families have been un-

**Table 6. Labor force status of divorced, separated, widowed, or never-married women and men maintaining families, by presence and age of own children under 18, March 1970 and March 1979**

[Numbers in thousands]

Presence and age of children <sup>1</sup>	March 1970			March 1979		
	Population	Labor force	Labor force participation rate	Population	Labor force	Labor force participation rate
Women maintaining families	5,573	2,950	52.9	8,456	5,033	59.5
With children under 18						
years	2,924	1,736	59.4	5,288	3,486	65.9
With children 6-17						
years	1,813	1,215	67.0	3,362	2,406	71.6
With children under 6						
years	1,111	521	46.9	1,926	1,080	56.1
With no children under 18	2,649	1,214	45.8	3,168	1,547	48.8
Men <sup>2</sup> maintaining families	1,239	893	72.1	1,654	1,218	74.2
With children under 18						
years	333	304	91.3	569	496	87.1
With children 6-17						
years	262	237	90.5	435	375	86.2
With children under 6						
years	71	67	( <sup>3</sup> )	134	121	90.3
With no children under 18	906	589	65.0	1,085	722	66.5

<sup>1</sup> Children are defined as "own" children of husband-wife families or of women or men maintaining families. Included are never-married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

<sup>2</sup> Includes a few male members of the Armed Forces living off post or with their families on post.

<sup>3</sup> Percent not shown where base is less than 75,000.

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

**Table 5. Children under 18 years old, by age, type of family, and labor force status of mother, March 1970 and March 1979**

[Numbers in thousands]

Item	Total children under 18		Children 6 to 17		Children under 6	
	March 1970	March 1979	March 1970	March 1979	March 1970	March 1979
Children total <sup>1</sup>	65,755	58,537	46,149	41,556	19,606	16,981
Mother in labor force	25,544	30,105	19,954	22,940	5,590	7,166
Mother not in labor force	39,550	27,503	25,627	17,849	13,923	9,654
Married-couple families	58,399	47,786	40,479	33,347	17,920	14,439
Mother in labor force	21,982	24,063	17,035	18,161	4,947	5,902
Mother not in labor force	36,417	23,724	23,444	15,186	12,973	8,538
Families maintained by women <sup>2</sup>	6,695	9,822	5,102	7,442	1,593	2,380
Mother in labor force	3,562	6,043	2,919	4,779	643	1,264
Mother not in labor force	3,133	3,779	2,183	2,663	950	1,116
Families maintained by men <sup>2</sup>	661	929	568	768	93	161

<sup>1</sup> Children are defined as "own" children of husband-wife families or of women or men maintaining families. Included are never-married sons, daughters, stepchildren, and adopted children. Excluded are other related children such as grandchildren, nieces, nephews, cousins, and unrelated children.

<sup>2</sup> Includes only divorced, separated, widowed, or never-married persons.

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

precedented gains in the number who are working. In March 1979, 65.9 percent of mothers maintaining their own families were in the labor force, compared with 59.4 percent in 1970. As might be expected, the labor force participation rates of mothers in one-parent families varied by the age of the youngest child, with those having school-age children being far more likely than those with their youngest child under 6 years to be in the labor force—72 percent, compared with 56 percent. Women who are divorced, separated, or widowed often experience substantial declines in their family income. In 1978, the median income of families maintained by the mother was only 34 percent that of two-parent families. However, when the single parent was a father, the rate jumped to 71 percent.

Several factors contributed to these income differences. First, families maintained by the mother are far more likely to have no earners in the home than are other families. Approximately 28 percent of families maintained by mothers, compared with 9 percent of those maintained by fathers and only 1.6 percent of two-parent families, had no earners in the home. Second, single-parent families maintained by the mother were less apt to have 2 earners or more—only 19 percent had 2 earners or more, compared with 28 percent of one-parent families maintained by the father and 64 percent of two-parent families. Furthermore, a very high

proportion of mothers in single-parent families had not completed high school—4 out of 10 in March 1979—and low educational levels are usually associated with low labor force participation, high unemployment, and low pay.

Even when the mother was in the labor force, family income was likely to be considerably lower than that of

either two-parent families with working mothers or single-parent families maintained by working fathers. Average income in 1978 of single-parent families with working mothers (\$8,900) was only 40 percent that of two-parent families with working mothers (\$22,200) and 54 percent that of one-parent families maintained by working fathers. □

—FOOTNOTES—

<sup>1</sup> This report is the latest from an annual series based primarily on information from supplementary questions in the March Current Population Survey. The most recent report on this subject, containing data for March 1978, was published in the *Monthly Labor Review*, April 1979, and reprinted as Special Labor Force Report No. 219.

The data in this report relate to the noninstitutional population 16 years and over, including those male members of the Armed Forces living off post or with their families on post (824,000 in March 1979). Sampling variability may be relatively large in cases where numbers are small, and small differences between estimates or percentages should be interpreted with caution.

<sup>2</sup> Janet L. Norwood and Elizabeth Waldman, *Women in the Labor Force: Some New Data Series*, Bureau of Labor Statistics Report 575. Also see, *The Earnings Gap Between Women and Men*, U.S. Department of Labor, Office of the Secretary, Women's Bureau, 1979.

<sup>3</sup> Families are classified as being above or below the low income level according to the poverty index adopted by a Federal interagency committee in 1969. The poverty thresholds are updated every year to reflect changes in the Consumer Price Index. Thus, the poverty threshold for a nonfarm family of four was \$6,662 in 1978, 7.6 per-

cent higher than the comparable 1977 cutoff of \$6,191. For further details, see *Characteristics of the Population below the Poverty Level: 1977*, Current Population Reports, Consumer Income, Series P-60, No. 119 (Bureau of the Census) 1979, p. 206.

<sup>4</sup> Latest data available from special computer run for March 1978.

<sup>5</sup> The birth rate declined from 18.4 per thousand population in 1970 to 15.3 per thousand in 1978. See *Monthly Vital Statistics Reports*, Vol. 27, No. 13, August 13, 1979 and Vol. 23, No. 13, May 30, 1975, U.S. Department of Health, Education, and Welfare, Public Health Service.

<sup>6</sup> For a detailed discussion on working mothers during the 1970's, see Elizabeth Waldman and others, "Working mothers in the 1970's: a look at the statistics," *Monthly Labor Review*, October 1979, pp. 39-49.

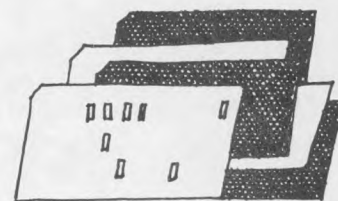
<sup>7</sup> *Monthly Vital Statistics*, Vol. 27, No. 13, p. 10.

<sup>8</sup> Beverly L. Johnson, *Single-Parent Families*, a speech presented to the U.S. Department of Agriculture Conference on Outlook of the 80's, Released 10:45, November 7, 1979.

<sup>9</sup> *Consumer Income Report*, Series P-60, No. 120, November 1979.



# Research Summaries



## Workers' expectations about losing and replacing their jobs

CHARLES N. WEAVER

How secure do workers feel about keeping their jobs? How confident are they that they could find another job?

Two recent nationwide surveys indicate a high degree of confidence on both counts, despite relatively high unemployment. In 1977 and in 1978, only a few of the workers surveyed feared the loss of their jobs, and a majority thought they could find comparable work without much difficulty. (In 1977, the national unemployment rate was 7 percent and in 1978, 6 percent.)

The results indicate considerable variations, however, among various categories of full-time workers. Certain workers, including blacks, those with less education, lower earnings, and lower skilled jobs, tended to experience greater insecurity of employment. They were more likely to fear the loss of their jobs or of being laid off within the next 12 months and were more likely to anticipate difficulty in finding a comparable job. Similarly, workers with more education, higher earnings, and higher skilled jobs typically experienced a greater sense of security in their present jobs and were more likely to believe that finding a comparable job would be easy.

The data were taken from the 1977 and 1978 General Social Surveys conducted by the National Opinion Research Center at the University of Chicago, with funds from the National Science Foundation.<sup>1</sup> Expectations about losing one's job and about finding another job were measured by responses to the following questions:

Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off—very likely, fairly likely, not too likely, or not at all likely?

About how easy would it be for you to find a job with another employer with approximately the same income and fringe benefits you have now? Would you say very easy, somewhat easy, or not easy at all?

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When both sets of expectations are considered, several important dimensions of worker attitudes toward job security become apparent (table 1). For instance, blacks were not only almost twice as likely as whites to expect to lose their jobs or be laid off within the next 12 months, but were also significantly less likely than whites to believe that finding another job would be easy. Additionally, older workers were less likely to expect that they would lose their jobs or be laid off within the next 12 months (probably due to seniority), but they were more likely to believe that it would be difficult to find a job with similar earnings and fringe benefits.

**Table 1. Workers who expect to lose their jobs and those who think they could find another job without much trouble**

[In percent]

Characteristics	Expect to lose job	Could find another job
Overall .....	7.7	59.2
Sex:		
Male .....	7.7	60.5
Female .....	7.7	57.6
Race:		
White .....	7.0	60.2
Black .....	13.2	50.3
Age:		
18-29 .....	11.1	67.9
30-39 .....	8.5	62.3
40-49 .....	5.2	59.5
50-59 .....	4.5	46.7
60 and over .....	3.4	24.4
Education:		
Grade school .....	9.0	48.8
High school .....	8.8	56.9
Some college .....	9.0	68.4
College degree .....	2.7	62.2
Graduate work .....	1.3	72.3
White-collar workers:		
Professional-technical .....	3.2	67.4
Administrative-managerial .....	5.4	65.4
Salesworkers .....	3.8	58.9
Clerical workers .....	8.0	61.4
Blue-collar workers:		
Craftworkers .....	9.3	63.1
Operatives .....	13.7	45.8
Laborers .....	15.1	41.1
Service workers .....	8.2	54.0
Personal income:		
Less than \$5,000 .....	12.7	65.1
\$5,000-\$6,999 .....	8.1	59.9
\$7,000-\$9,999 .....	9.5	57.2
\$10,000-\$14,999 .....	7.4	55.2
\$15,000-\$19,999 .....	6.8	55.8
\$20,000 and over .....	1.0	63.8

Workers with elementary school, high school, or some college education were much more likely than those with a college or graduate school education to believe they would lose their jobs or be laid off within the next 12 months, and workers with an elementary school or high school education were less likely than those with higher education to believe that it would be easy to find a similar job.

In contrast to blue-collar workers, white-collar workers were only half as likely to believe they would lose their jobs or be laid off within the next 12 months, and were significantly more likely to believe that finding another job would be easy. However, expectations of losing and finding employment varied considerably within the white- and blue-collar occupational categories. Professional-technical and administrative-managerial workers had the lowest expectations about losing their jobs or being laid off, and had the most confidence about finding another job. On the other hand, salesworkers also had low expectations about losing their jobs or being laid off but were least confident (among white-collar workers) about finding another job. And, compared with other white-collar workers, clerical workers had the highest expectations about losing their jobs or being laid off but had moderately high expectations about the ease of finding another job. Among blue-collar workers, operatives and laborers felt most insecure about their jobs, and were most skeptical about finding a similar job. Service workers were the least concerned about blue-collar workers losing their jobs but did not believe that finding a similar job would be easy. Craftworkers had moderately high expectations about losing their jobs, but had the highest expectations (among blue-collar workers) that finding another job would be easy.

Workers whose annual salaries were less than \$5,000 had the highest expectations that they would lose their jobs or be laid off within the next 12 months, but they also had the highest expectations that it would be easy to find a similar job with another employer. Workers in the highest salary category, over \$20,000, had the lowest expectations that they would lose their jobs or be laid off and had highest expectations that it would be easy to find a similar job. Workers whose salaries ranged in categories between \$5,000 and \$20,000 had approximately the same expectations about both losing their jobs and about finding similar jobs with other employers.

Knowing the characteristics of workers who expect to lose their jobs and of those who believe that they could easily find other jobs should be important for the following reasons. Because job security and job satisfaction are correlated,<sup>2</sup> those interested in improving morale should benefit from having knowledge of the conditions under which worker expectations about losing their jobs are most intense. And, because unemploy-

ment is correlated with jobseeker discouragement,<sup>3</sup> those interested in increasing employment should benefit from having knowledge of the conditions associated with fluctuations in worker expectations about finding another job. Furthermore, having knowledge of the conditions associated with *both* of these sets of expectations for the *same* workers should increase understanding of the attitudes of workers toward their overall employment security. □

—FOOTNOTES—

<sup>1</sup> Only persons age 18 and older who reported in the face-to-face interviews that they were employed full-time (35 hours or more per week) were included in this study, and the two groups were pooled into a single sample of 1,463 for analysis.

<sup>2</sup> F. Herzberg, B. Mausner, R. O. Peterson, and D. F. Capwell, *Job Attitudes: Review of Research and Opinion* (Pittsburgh Psychological Service of Pittsburgh, 1957).

<sup>3</sup> Carol M. Ondeck, "Discouraged workers' link to jobless rate reaffirmed," *Monthly Labor Review*, October 1978, pp. 40-42.

## Hours and earnings of production or nonsupervisory workers, 1968-78

HOWARD DAVIS

Average hourly earnings of production or nonsupervisory employees on private, nonagricultural payrolls increased between 1968 and 1978 at an annual rate of 7.2 percent.<sup>1</sup> Average weekly hours dropped by 2 hours, from 37.8 to 35.8.

All industry divisions exhibited hourly declines except mining, as shown in table 1. Rising from a low of 41.9 hours in 1974 and 1975, mining reached a decade-high of 43.4 hours in 1977 and remained the same in 1978 under the stimulus of strong gains in coal mining and oil and gas extraction. The largest 11-year drops occurred in retail trade (-3.7 hours), services (-1.9 hours), and wholesale trade (-1.3 hours). Average weekly hours did not increase in any of these three industries after 1969. This was also true for hours in the finance, insurance, and real estate industry, although the total decline was only 0.6 of an hour.

A general cyclical pattern appears in mining, manufacturing, construction, and transportation and public utilities. Decreases in the number of hours in these industries occurred after the peak of economic expansion and either stopped descending or increased within the year following the recession low.<sup>2</sup>

The persisting decline of hours in trade and services

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is related to the marked increase in part-time employment in these sectors. The average workweek for the private sector would have been 37.4 in 1978, rather than 35.8 hours, if the number of hours in each industry division in 1968 had been the same in 1978. The general decline within the various divisions would have reduced the average workweek by only 0.4 of an hour as a result of changes in compositional employment. The drop in hours paid for in the retail trade and service divisions amounted to 83 percent of the remaining decrease of 1.6 hours. Thus, much of the apparent long-term decline in weekly hours in the private sector is due to the pronounced shift of employment toward these rapidly expanding divisions.

As in the case of hours, divergences exist in the tempo of average hourly earning increases among industry divisions over the 11-year period. And for any given year, there is considerable variance among the year-to-year changes. While the overall pace of increase in average hourly earnings was 7.2 percent per year, the annual rate of change for individual industry divisions ranged from a high of 8.6 percent for mining to a low of 6.0 percent for the finance, insurance, and real estate industry. As shown in table 2, average hourly earnings in mining rose from 118 percent of the overall average for 1968 to nearly 135 percent in 1978, while earnings in retail trade dipped from 76 to 74 percent of the overall average. Nevertheless, the rankings among the industry divisions evidenced considerable stability over the 11-year period.

Earnings in mining exhibited the largest relative improvement, while those in finance, insurance, and real estate posted the largest slippage. In retail trade, earnings eased off slightly, remaining the lowest among the industry divisions. Average hourly earnings in the transportation and public utility industry also increased significantly, rising from 120 percent to almost 133 per-

**Table 2. Average hourly earnings, by industry division, as percent of total private nonagricultural payrolls, 1968 and 1978**

Industry division	1968	Rank	1978	Rank
Mining .....	117.5	7	134.8	8
Construction .....	154.7	9	152.0	9
Durable goods, manufacturing .....	111.9	6	115.6	6
Nondurable goods, manufacturing .....	96.1	3	97.2	4
Transportation and public utilities .....	120.0	8	132.7	7
Wholesale trade .....	107.0	5	103.3	5
Retail trade .....	75.8	1	73.6	1
Finance, insurance, and real estate .....	96.5	4	86.1	2
Services .....	84.9	2	87.7	3

cent of the overall average.

The slow pace of earnings growth in retail trade doubtlessly reflects the increase in the number of part-time workers, who are generally paid about the minimum wage. Voluntary part-time employment amounted to 26.1 percent in retail trade in 1968; by 1978, the proportion was 29.4 percent. The trend of yearly increase in average hourly earnings picked up slightly in manufacturing and trade after the cyclical peak in 1973, reflecting the discontinuation of wage and price controls on May 1, 1974. The annual rate of growth in durable manufacturing jumped from 6.4 in 1968-73 to 8.6 percent in 1974-78 and in nondurable manufacturing from 6.2 to 8.4 percent. In wholesale trade, earnings rose 5.9 percent and 7.6 percent. Similarly, in retail trade, the annual pace jumped from 6.2 to 7.6 percent.

Construction, in contrast, was the only industry division displaying a slowing in the annual rate of increase of earnings. After 1971 and the imposition of wage controls, the pace slowed to 6.1 percent compared with the 8.9 percent prevailing from 1968 through 1971. However, the tempo of increases in these 3 years was sharply above those in any of the other divisions.

Pronounced jumps in earnings occurred in the transportation and public utility industry in 1971, and in mining in 1972. In both cases, the increases were the aftereffect of strikes by railroad workers and coal miners. Earnings in mining rose again, and with vigor, in 1974, 1975, and 1978. These wage increases followed strike activity in 1974 (after economic controls were lifted), and again in 1978. Coal mining and construction accounted for a significant proportion (41 percent) of the workers involved in walkouts, and of all days lost to strikes in 1974 (35 percent). There was a 25.5-percent increase in mining earnings over the years 1974 and 1975. This is the largest consecutive 2-year increase recorded in any industry between 1968-78. □

FOOTNOTES

<sup>1</sup> Hours referred to are paid but not necessarily worked, for example, paid holidays.

**Table 1. Average weekly hours and average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls, 1968 and 1978**

Industry division	Average hourly earnings		Annual rate of growth 1968-78	Hours		Change in hours 1968-78
	1968	1978		1968	1978	
Total .....	\$2.85	\$5.69	7.2	37.8	35.8	-2.0
Mining .....	3.35	7.67	8.6	42.6	43.4	+ 8
Construction .....	4.41	8.65	7.0	37.3	36.9	- 4
Durable goods, manufacturing .....	3.19	6.58	7.5	41.4	41.1	- 3
Nondurable goods, manufacturing .....	2.74	5.53	7.3	39.8	39.4	- 4
Transportation and public utilities .....	3.42	7.55	8.2	40.6	40.0	- 6
Wholesale trade .....	3.05	5.88	6.8	40.1	38.8	-1.3
Retail trade .....	21.6	4.19	6.9	34.7	31.0	-3.7
Finance, insurance, and real estate .....	2.75	4.90	6.0	37.0	36.4	- 6
Services .....	2.42	4.99	7.5	34.7	32.8	-1.9



<sup>2</sup>The cyclical peaks and troughs are as defined by the National Bureau of Economic Research.

Portland, Washington . . . . .	95-99
Birmingham, Indianapolis, Milwaukee . . . . .	90-94
Boston, Memphis, Philadelphia, Pittsburgh . . . . .	85-89

## Occupational earnings in auto dealer repair shops

Average straight-time earnings of journeymen mechanics in auto dealer repair shops ranged from \$7.42 in Memphis to over \$10 an hour in Houston, San Francisco-Oakland, and Detroit, among 23 areas surveyed by the Bureau of Labor Statistics in June 1978. Earnings for lubricators, usually the lowest-paid group of workers among eight occupations studied in repair and parts departments, ranged from \$3.38 in Philadelphia to \$7.52 in Los Angeles-Long Beach. Painters (\$6.24-\$14.34) and body repairers (\$7.72-\$11.53) generally had the highest average hourly earnings among the surveyed jobs. Other groups surveyed and their salary ranges were: service mechanics (\$4.80-\$9.44), new-car get-ready workers (\$4.01-\$7.54), parts clerks (\$4.76-\$8.82), and service salesworkers (\$5.61-\$10.01).

Earnings in San Francisco-Oakland, Houston, and Detroit were typically among the highest reported; those in Boston, Memphis, Philadelphia, and Pittsburgh were generally among the lowest. The following tabulation illustrates the pay level relationships for the 23 areas studied (New York average equals 100), based on the combined averages for six of the repair shop occupations which were common to all areas:

<i>Area</i>	<i>Relative pay level</i>
San Francisco-Oakland . . . . .	125-129
Houston . . . . .	120-124
Detroit . . . . .	115-119
Chicago, Los Angeles-Long Beach . . . . .	110-114
Dallas-Ft. Worth, Denver-Boulder, St. Louis . . . . .	105-109
Miami, Minneapolis-St. Paul, New York . . . . .	100-104
Atlanta, Kansas City, Nassau-Suffolk, . . . . .	

Also, hourly earnings relationships between occupations varied widely by area. For instance, in Kansas City, body repairers averaged 28 percent more than lubricators; in Detroit and Houston, they averaged about 75 percent more; and in Chicago, Philadelphia, Pittsburgh, Portland, and Washington, D.C., they earned more than twice as much.

Workers paid on an incentive basis accounted for about one-half of the production workers in the survey and nearly always averaged higher earnings than their time-rated counterparts. The prevalence of incentive pay also contributed to the wide dispersion of individual earnings within the same job and area. Auto body repairers and painters were most frequently paid on the basis of a flat rate percentage, receiving a stipulated proportion (usually 40 to 50 percent) of the labor cost charged to the customer; parts clerks and service salesworkers were virtually always on commission; and incentive workers in the four remaining occupations usually were under flat-rate-hours systems, in which pay is computed by multiplying the number of hours predetermined for each task by an established rate.

Both holidays and vacations with pay were provided for most workers in nearly all areas. Life, hospitalization, surgical, basic medical, and major medical insurance plans were provided to nine-tenths or more of the production workers in most areas. Retirement pension plans covered at least one-half the workers in only 10 of the 23 areas studied.

Individual reports for each of the areas in the survey were issued earlier and are available upon request from the Bureau of Labor Statistics or any of its regional offices. A comprehensive bulletin, *Industry Wage Survey: Auto Dealer Repair Shops, June 1978*, is available. □

# Significant Decisions In Labor Cases



## Safety first

Overruling two of the three appeals courts which have considered the issue, the Supreme Court recently approved a Labor Department regulation supplementing the explicit procedures of the Occupational Safety and Health Act of 1970 in order to fulfill the purposes of that act. Because OSHA was designed to protect workers and to require employers to eliminate workplace hazards, the Court upheld a regulation giving workers the right to refuse to perform hazardous jobs if they reasonably believe there is no other way to avoid risk of serious injury or death. However, the Court also made clear that employers had no obligation to pay workers for the time that they have refused to work. (*Whirlpool Corp. v. Marshall*.<sup>1</sup>)

Following the death caused by a worker's stepping onto a wire mesh guard 20 feet above a factory floor, the Whirlpool Corp. issued a directive forbidding workers from standing on the mesh. Twelve days later, two workers were ordered onto the mesh (which they had already reported to OSHA, after their employer refused to repair it at their request) but refused to step on it. They were reprimanded and sent home without pay.

In the Supreme Court, both sides agreed that these workers' actions were covered by a Labor Department regulation providing:

[A]s a general matter, there is no right afforded by the act which would entitle employees to walk off the job because of potential unsafe conditions at the workplace. . . . However, . . . if the employee, with no reasonable alternative, refuses in good faith to expose himself to the dangerous condition, he would be protected against subsequent discrimination. The condition causing the employee's apprehension of death or injury must be . . . reasonable . . .

In this case, the district court ruled that the regulation was invalid because it was not authorized by the OSHA statute. Although the Fifth and Tenth Circuits had ruled the same way in two similar cases,<sup>2</sup> the Sixth Circuit reversed.<sup>3</sup>

In upholding the Sixth Circuit's decision, the Supreme Court held that the Labor Department regulation "clearly conforms to the fundamental objective of

the Act—to prevent occupational deaths and serious illnesses." Although OSHA does not mention a right to refuse to work under unsafe conditions, Justice Potter Stewart's opinion for a unanimous Court reasoned that the Secretary of Labor had the power to find such an implied right in the law because Congress had intended to prevent injuries and to require employers to eliminate dangers in the workplace:

The regulation thus on its face appears to further the overriding purpose of the Act, and rationally to complement its remedial scheme. In the absence of some contrary indication in the legislative history, the Secretary's regulation must, therefore, be upheld, particularly when it is remembered that safety legislation is to be liberally construed to effectuate the congressional purpose.

Following a review of the legislative history, Stewart concluded that in rejecting earlier versions of the OSHA legislation granting workers and the Labor Department other specified rights, the Congress had not meant to prevent workers from refusing to perform hazardous jobs when they had no reasonable alternative. Similar rights have been found under the Federal Mine Safety and Health Act Amendments of 1977 and under the NLRA and the Labor Management Relations Act.<sup>4</sup>

## The collegial bargain

The Supreme Court recently ruled that the faculty at Yeshiva University is not entitled to the collective bargaining rights provided "employees" under the National Labor Relations Act. In a close 5-to-4 decision, the Court rejected the assertion of the National Labor Relations Board that, within the authority structure of such academic institutions, faculty members are professional workers whose interests are separate from those of the institution. Instead, the Court found that Yeshiva's faculty acts in a managerial capacity "by taking or recommending discretionary actions that effectively control or implement employer policy." Thus, the Court concluded that the establishment of collective bargaining for most of the Yeshiva faculty would lead to a division of loyalty that Congress had sought to prevent. (*NLRB v. Yeshiva Univ.*<sup>5</sup>)

In reaching its verdict, the Court established two crucial elements to support its interpretation of the managerial exclusion. First, Justice Lewis Powell's majority

<sup>1</sup>"Significant Decisions in Labor Cases" is written by Gregory J. Mounts of the *Monthly Labor Review* staff.

opinion concluded that the Yeshiva faculty exercise authority which "in any other context" unquestionably would be managerial:

... Their authority in academic matters is absolute. They decide what courses will be offered, when they will be scheduled, and to whom they will be taught. They debate and determine teaching methods, grading policies, and matriculation standards. They effectively decide which students will be admitted, retained, and graduated. On occasion their views have determined the size of the student body, the tuition to be charged, and the location of a school. When one considers the functions of a university, it is difficult to imagine decisions more managerial than these. To the extent the industrial analogy applies, the faculty determines within each school the product to be produced, the terms upon which it will be offered, and the customers who will be served.

In addition, the Court noted that the faculty members also play a predominant role in faculty hiring, tenure, sabbaticals, termination, and promotion. Thus, the Yeshiva faculty's functions represent the range of characteristics that make faculty jobs managerial in scope, rather than purely professional. At the other end of the scale, Powell noted that professors who merely "determine the content of their own courses, evaluate their own students, and supervise their own research" would not be subject to the managerial exclusion. Moreover, he suggested that the structure and operation of a school's faculty could provide a rational line—such as tenure—for distinguishing those who properly could be included in a bargaining unit. Powell even speculated that the Board might be able to make such distinctions among the Yeshiva faculty.

The second important element in Powell's majority opinion explicitly rejected the Board's argument that the Yeshiva faculty's role in decisionmaking is not managerial because it involves only the exercise of "independent professional judgment" in academic governance. Powell noted that the Board had implicitly rejected this criterion when it applied the managerial exclusion to certain professionals in other cases,<sup>6</sup> and he explained why it would be particularly inappropriate in a collegial setting:

... [T]he Board's approach would undermine the goal it purports to serve: To ensure that employees who exercise discretionary authority on behalf of the employer will not divide their loyalty between employer and union. In arguing that a faculty member exercising independent judgment acts primarily in his own interest and therefore does not represent the interest of his employer, the Board assumes that the professional interests of the faculty and the interests of the institution are distinct, separable entities with which a faculty member could not simultaneously be aligned. The Court of Appeals found no justification for this distinction,

and we perceive none. In fact, the faculty's professional interests—as applied to governance at a university like Yeshiva—cannot be separated from those of the institution. . . . Faculty members enhance their own standing and fulfill their professional mission by ensuring that the university's objectives are met. But there can be no doubt that the quest for academic excellence and institutional distinction is a "policy" to which the administration expects the faculty to adhere, whether it be defined as a professional or an institutional goal. It is fruitless to ask whether an employee is 'expected to conform' to one goal or another when the two are essentially the same.

Justice William Brennan, joined by Justices White, Blackmun, and Marshall, dissented from the Court's opinion. Not only did the majority exceed the Court's limited role in reviewing Board decisions, he wrote, but it reversed a reasonable policy conclusion resulting from an exhaustive analysis by the Board.

Brennan specifically objected to the majority's reasoning that the interests of the university and those of the faculty are inseparable. The congruence of their interests in certain academic and professional areas does abrogate the faculty's right to collective bargaining on issues where some conflict exists, he observed:

... The very fact that Yeshiva's faculty has voted for the union . . . indicates that the faculty does not perceive its interests to be aligned with those of management. Indeed, on the precise topics which are specified as mandatory subjects of collective bargaining—wages, hours, and other terms and conditions of employment—the interests of teacher and administrator are often diametrically opposed. □

— FOOTNOTES —

<sup>1</sup> *Whirlpool Corp. v. Marshall*, 48 U.S.L.W. 4189 (U.S., Feb. 26, 1980).

<sup>2</sup> *Marshall v. Daniel Construction Co.*, 563 F.2d 707 (5th Cir., 1977), see *Monthly Labor Review*, March 1979, p. 61; and *Marshall v. Certified Welding Corp.*, CCH OSHD 23,257 (10th Cir., 1978).

<sup>3</sup> *Marshall v. Whirlpool Corp.*, 593 F.2d 715 (6th Cir., 1979), see *Monthly Labor Review*, June 1979, pp. 44–45.

<sup>4</sup> According to the Court, the Secretary of Labor's interpretation of OSHA in this area "conforms to the interpretation that Congress clearly wished the courts to give the parallel antidiscrimination provision of the Federal Mine Safety and Health Amendments Act of 1977, 30 U.S.C. Sec. 801 *et seq.*" In addition, Sec. 7 of the National Labor Relations Act, 29 U.S.C. Sec. 157, provides employees a protected right to strike over safety issues. Similarly, Sec. 502 of the Labor Management Relations Act, 29 U.S.C. Sec. 143, provides that "the quitting of labor by an employee or employees in good faith because of abnormally dangerous conditions for work . . . [shall not] be deemed a strike." The effect of this section is to create an exception to a no-strike obligation in a collective bargaining contract.

<sup>5</sup> *NLRB v. Yeshiva Univ.*, 48 U.S.L.W. 4175 (U.S., Feb. 20, 1980).

<sup>6</sup> *University of Chicago Library*, 205 N.L.R.B. 220 (1973), enforced 506 F.2d 1402 (7th Cir., 1974); and *Sutter Community Hospitals of Sacramento*, 227 N.L.R.B. 181 (1976).



# Major Agreements Expiring Next Month



This list of collective bargaining agreements expiring in May 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	Union <sup>1</sup>	Number of workers
Associated General Contractors of America, Inc.:			
Detroit Chapter, 3 agreements (Michigan)	Construction	Operating Engineers; Carpenters; and Teamsters (Ind.)	14,000
Detroit Chapter and 2 others (Michigan)	Construction	Bricklayers	3,300
Detroit Chapter and 1 other (Michigan)	Construction	Bricklayers; Plasterers; and Cement Masons	3,000
Detroit Chapter and 2 others (Michigan)	Construction	Iron Workers	2,200
Florida East Coast and Southern Florida Chapters	Construction	Operating Engineers	1,300
Idaho Branch (Interstate)	Construction	Laborers; Cement Masons; Carpenters; Operating Engineers; and Teamsters (Ind.)	4,750
Inland Empire Chapter, 3 agreements (Washington and Idaho)	Construction	Carpenters; Laborers; and Operating Engineers	10,500
Ohio State Building Chapter, 2 agreements (Ohio and Kentucky)	Construction	Laborers; and Carpenters	4,400
Oregon-Columbia Chapter (Oregon and Washington)	Construction	Laborers	25,000
Seattle and Tacoma Chapters	Construction	Teamsters (Ind.)	1,200
Allied Employers, Inc. (Washington)	Retail trade	Food and Commercial Workers	1,700
American Enka Corp. (Enka, N.C.)	Chemicals	Textile Workers	1,500
Builders Association of Chicago (Illinois)	Construction	Bricklayers	3,300
Boston Edison Co. (Massachusetts)	Utilities	Utility Workers	1,900
Calumet Builders Association, 2 agreements (Indiana and Michigan)	Construction	Carpenters; and Iron Workers	3,850
Champion International Corp., Champion Paper Division (Pasadena, Tex.)	Paper	Paperworkers	1,250
Detroit Mason Contractors Association	Construction	Bricklayers	1,600
Eastbay Motor Car Dealers, Inc. (California)	Retail trade	Painters; Machinists; Automobile Salesmen; and Teamsters (Ind.)	1,200
Erwin Mills (Durham, N.C.)	Textiles	Textile Workers	1,200
Gardner-Denver Co. (Quincy, Ill.)	Rubber	Machinists	1,100
Gimbel Brothers, Inc. (Interstate)	Retail trade	Retail, Wholesale, and Department Store	4,750
Great Lakes Fabricators and Erectors, 2 agreements (Interstate)	Construction	Operating Engineers; and Iron Workers	4,800
Houston Lighting and Power Co. (Texas)	Utilities	Electrical Workers (IBEW)	3,300
Hudson Pulp and Paper Corp. (Plataka, Fla.)	Paper	Paperworkers	1,350
Kaiser Aluminum and Chemical Corp. (Interstate)	Primary metals	Steelworkers	10,000
Kerr-McGee Nuclear Corp. (Grants, N.M.)	Chemicals	Oil, Chemical and Atomic Workers	1,100
Kroehler Manufacturing Co. (Interstate)	Furniture	Upholsterers	1,900
Mechanical Contractors Association, 3 agreements (Interstate)	Construction	Plumbers	4,850
Metropolitan Detroit Plumbing and Mechanical Contractors Association, Inc. (Michigan)	Construction	Plumbers	1,900
Michigan Road Builders Association (Michigan)	Construction	Operating Engineers	4,500
Motor Wheel Corp. (Lansing, Mich.)	Transportation equipment	Allied Industrial Workers	2,600
National Electrical Contractors Association:			
Detroit Southern Michigan Chapter	Construction	Electrical Workers (IBEW)	3,500
Milwaukee Chapter (Wisconsin)	Construction	Electrical Workers (IBEW)	2,300
Puget Sound Chapter (Washington)	Construction	Electrical Workers (IBEW)	1,250
St. Louis Chapter (Missouri)	Construction	Electrical Workers (IBEW)	7,300
Westchester-Fairfield Chapter (New York)	Construction	Electrical Workers (IBEW)	1,300
Niagara Mohawk Corp. (New York)	Utilities	Electrical Workers (IBEW)	7,300
Nothern Indiana Public Service Co. (Hammond, Ind.)	Utilities	Steelworkers	3,500

See footnotes at end of table.

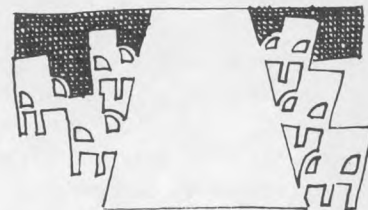
Continued—Major Agreements Expiring Next Month

Employer and location	Industry	Union <sup>1</sup>	Number of workers
Ohio Contractors Association (Ohio) . . . . .	Construction . . . . .	Carpenters . . . . .	1,250
Omaha Building Contractors Employers Association (Nebraska) . . . . .	Construction . . . . .	Laborers . . . . .	5,000
Ormet Corp. (Hannibal, Ohio) . . . . .	Primary metals . . . . .	Steelworkers . . . . .	1,800
Outboard Marine Corp., Gale Products and 1 other (Galesburg, Ill.) . . . . .	Machinery . . . . .	Machinists . . . . .	1,800
Painting and Decorating Contractors of America, and 1 other (Washington)	Machinery . . . . .	Painters . . . . .	1,500
Panhandle Eastern Pipe Line Co. (Interstate) . . . . .	Utilities . . . . .	Oil, Chemical and Atomic Workers . . . . .	1,150
Paris Manufacturing Co., Holley Carburetor Division (Paris, Tenn.) . . . . .	Machinery . . . . .	Auto Workers (Ind.) . . . . .	1,200
Potlatch Corp., Master Agreement (Idaho) . . . . .	Lumber . . . . .	Woodworkers . . . . .	2,400
Public Service Electric and Gas Co. (New Jersey) . . . . .	Utilities . . . . .	Electrical Workers (IBEW) . . . . .	4,100
Retail Working Agreement (Washington) <sup>2</sup> . . . . .	Retail trade . . . . .	Food and Commercial Workers . . . . .	1,700
Reynolds Metals Co., 2 agreements (Interstate) . . . . .	Primary metal . . . . .	Aluminum Workers; and Steelworkers . . . . .	10,600
Robertshaw Controls Co., Controls Division (Long Beach, Calif.) . . . . .	Instruments . . . . .	Auto Workers (Ind.) . . . . .	1,500
Sacramento and Vicinity Hotel, Restaurant and Tavern Owners Independent Agreement (California)	Hotels . . . . .	Hotel and Restaurant . . . . .	1,200
San Francisco Electrical Contractors Association, Inc. (California) . . . . .	Construction . . . . .	Electrical Workers (IBEW) . . . . .	1,000
Sheet Metal and Air Conditioning Contractors Association of Milwaukee, Inc. (Wisconsin)	Construction . . . . .	Sheet Metal Workers . . . . .	1,250
Simpson Timber Co. (Washington) . . . . .	Lumber . . . . .	Woodworkers . . . . .	1,200
St. Joe Minerals Corp., Zinc Smelting Division (Pennsylvania) . . . . .	Primary metals . . . . .	Steelworkers . . . . .	1,300
Steel Fabricators Association of Southern California, Inc. . . . .	Fabricated metal products . . . . .	Iron Workers . . . . .	1,000
Sundstrand Corp. (Rockford and Belvidere, Ill.) . . . . .	Transportation equipment . . . . .	Auto Workers (Ind.) . . . . .	1,200
Tecumseh Products Co., Factory Agreement (Marion, Ohio) . . . . .	Machinery . . . . .	Auto Workers (Ind.) . . . . .	1,750
Texas International Airlines (Interstate) <sup>3</sup> . . . . .	Air transportation . . . . .	Air Line Pilots . . . . .	1,000
Union Camp Corp. (Savannah, Ga.) . . . . .	Paper . . . . .	Paperworkers . . . . .	1,600
Ventilating and Air Conditioning Contractors' Association and 1 other (Illinois)	Construction . . . . .	Sheet Metal Workers . . . . .	4,500
Weyerhaeuser Co., 4 agreements (Washington and Oregon) . . . . .	Lumber . . . . .	Woodworkers . . . . .	7,850
Wheaton Industries, Production and Maintenance Department (Millville, N.J.)	Stone, clay and glass products . . . . .	Glass Bottle Blowers . . . . .	2,000
Wisconsin Power and Light Co. (Madison, Wis.) . . . . .	Utilities . . . . .	Electrical Workers (IBEW) . . . . .	1,500
Yellow Cab Co., and Checker Taxi Co., Inc. (Chicago, Ill.) . . . . .	Transit . . . . .	Seafarers . . . . .	2,000

<sup>1</sup> Affiliated with AFL-CIO except where noted as independent (Ind.).  
<sup>2</sup> Industry area (group of companies signing same contract).

<sup>3</sup> Information is from newspaper reports.

# Developments in Industrial Relations



## AFL-CIO invites Teamsters to reaffiliate

At its winter meeting, the Executive Council of the AFL-CIO affirmed its support of the revised anti-inflation program, extended an invitation to independent unions to join its ranks, and cleared the way for women to sit on its presently all-male council by lifting an eligibility restriction.

The anti-inflation program resulted from the 1979 national accord between the Carter Administration and organized labor. (See *Monthly Labor Review*, March 1980, p. 55.) The council stressed that if this voluntary program failed, it would press for mandatory controls on wages and prices. Prior to the national accord, which gave labor a greater voice in anti-inflation efforts, the AFL-CIO had opposed a voluntary plan, contending that it was more stringent for labor than business.

The council established a committee to negotiate a possible reaffiliation of the Teamsters union, which was expelled from the AFL-CIO in 1957 on charges of corruption. Federation President Lane Kirkland, who heads the 5-member committee, said that he has already had some discussions with Teamsters President Frank Fitzsimmons on the matter and is satisfied that the Teamsters are "a bona fide trade union that has been working in the best interest of its members."

Committees were not created to negotiate with the Auto Workers and Mine Workers unions on affiliation, but Kirkland noted that both unions (and the Teamsters) were now participating in weekly meetings on legislative goals at the AFL-CIO. Auto Workers President Douglas Fraser said he favored reaffiliation and that negotiations might start after the union's convention in June. The Auto Workers left the AFL-CIO in 1968, and the Mine Workers were never an affiliate.

The council moved to open its ranks to women and minority group members by waiving the requirement that only presidents and secretary-treasurers of unions are eligible for membership. The all-male 35-member council currently has one black member, Frederick O'Neal, president of the Actors and Artistes union. The council has never had a female member.

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"Developments in Industrial Relations" is prepared by George Ruben and other members of the staff of the Division of Trends in Employee Compensation, Bureau of Labor Statistics, and is largely based on information from secondary sources.

In other matters, the council decided to take a more active and direct role in organizing workers by establishing a unit to exchange information among affiliates on organizing tactics and techniques. Previously, the Federation generally limited its role to settling jurisdictional disputes among member unions. The change apparently resulted from the council's concern that unions represent a decreasing percentage of the Nation's workforce, despite some growth in the absolute number of workers they represent.

## United States rejoining the ILO

The United States announced it will rejoin the International Labor Organization, ending a 2-year absence because "the organization had become increasingly anti-American and pro-Soviet." (See *Monthly Labor Review*, December 1977, p. 2.) A Cabinet-level committee monitoring the organization found that a majority of ILO members "have successfully . . . returned the ILO to its original purposes." The committee unanimously recommended that the United States return to the organization and work with other ILO members to ensure that the "true potential of the organization is realized."

The ILO was founded in 1919 to improve working conditions and labor standards and to promote human rights. Its members include representatives of labor, management, and government.

## Tobacco settlements

Members of the Bakery, Confectionery and Tobacco Workers union approved 3-year wage and benefit contracts with Philip Morris, Liggett & Myers, Inc., and the American Tobacco Co.

The Philip Morris accord, which covered 8,500 workers in Richmond, Va., and Louisville, Ky., was negotiated according to the provisions of a 9-year "Long Term Agreement" (patterned after the Experimental Negotiating Agreement that controls bargaining in the steel industry) signed in May 1979. The Long Term Agreement prohibits strikes and lockouts; requires the company to give 18 months' notice of plant closings; provides for binding arbitration of issues that arise in the wage and benefit bargaining to be conducted at 3-year intervals; guarantees that the wage increases to



be negotiated will be at least 3 percent a year; provides for quarterly wage escalator adjustments of 1 cent an hour for each 0.3-point movement in the BLS Consumer Price Index, with the escalator allowance to be automatically incorporated into base wage rates on February 1 of each year; provides for \$300 bonus payments in May of each year; and makes a number of changes in the retirement plan, including a provision permitting an employee retiring at age 55 or later to receive the larger of a benefit computed according to the existing formula, or a benefit rate of \$14 a month for each year of service for retirement from May 1979 through January 1980, \$15 for retirement from February 1, 1980, through January 1981, and \$16 for retirement on February 1, 1981, or later. The agreement also established an Income Protection Program under which laid-off employees will continue to receive their pay for a period ranging from 13 weeks for those with 1 but less than 2 years service to 52 weeks for those with 20 years or more. Also, laid-off workers will receive an additional week's pay for each year of service.

The 1980 Philip Morris "basic" agreement raised the 3-percent guaranteed minimum wage increases to 48 cents an hour on February 1, 1980, and 43 cents on February 1 of 1981 and 1982. There also were inequity adjustments for certain job classifications. The \$1.34-an-hour cost-of-living allowance was incorporated into base rates, and the parties calculated that employees will receive 68, 70, and 72 cents in escalator adjustments in the respective contract years, based on assumed CPI rises of 9, 8.5, and 8 percent.

Other provisions include 4 weeks of paid vacation after 12 years of service (formerly 13), 5 weeks after 20 years (formerly 22), 6 weeks after 29 years (formerly 30), and the addition of a seventh week after 34 years; a twelfth annual paid holiday; various improvements in insurance benefits, such as \$50,000 major medical coverage per individual (formerly \$20,000), establishment of a vision care plan, with the company paying the full cost for employees and 75 percent for dependents, and sickness and accident benefits equal to 50 percent of base rate earnings up to \$170 (formerly \$115) a week.

Liggett & Myers and the American Tobacco Co. did not negotiate Long Term Agreements in 1979, but the American Tobacco contract generally provided for the same wage and benefit terms—except for the Income Protection Plan—as the Philip Morris agreements.

The Liggett & Myers accord differed in a number of areas. The wage terms consisted of an initial 48-cent increase and 25 cents "cost of living payments" on July 1 of 1981 and 1982 and on October 1, 1982. There was no provision for automatic quarterly escalator adjustments triggered by movement of the CPI. Also, there was no change in retirement benefits, paid holidays, or in the vacation schedule.

### **Steel workers accept reduced incentive pay**

Employees of Wheeling-Pittsburgh Steel Corp.'s tube and sheet mill in Allenport, Pa., accepted a company proposal to reduce incentive pay over a 30-month period. The company said that the 10-step process would ultimately lower incentive earnings to a level "slightly above" the steel industry average. The plant has about 2,000 production and maintenance employees, 92 percent of whom are eligible for incentive pay. Despite the concession, Wheeling-Pittsburgh did not guarantee Steelworkers Local 1187 that the plant would remain open.

When Wheeling-Pittsburgh raised the issue in early December, it said that average incentive pay at the plant was 33 percent higher than at its competitors. The company also claimed that the competitors' employees were more productive, despite their lower incentive pay.

This development occurred shortly after plant closings and contract concessions involving 13,000 employees of United States Steel Corp. (See *Monthly Labor Review*, March 1980, p. 56.)

In a later development on the U.S. Steel closings, Steelworkers' locals in the Youngstown, Ohio, area filed suit in Federal District Court in Cleveland seeking to prevent the company from shutting down its McDonald Works in Youngstown. The locals contended that U.S. Steel had violated a verbal agreement to keep the works open as long as they were profitable and asked the court for access to the corporation's financial records to prove that the plants are profitable.

In another effort to avert the scheduled closing, the local unions were attempting to gain support for their proposal to purchase and modernize the mill. However, U.S. Steel said that it was dismantling the mill because it was obsolete. Also, doubts about the purchase plan were expressed by some members of the local industry development agency that is responsible for advising the U.S. Department of Commerce which projects should receive Federal loan guarantees.

### **Airline cuts managerial salaries**

Trans World Airlines, which lost \$56.4 million in the fourth quarter of 1979, cut the salaries of 800 management employees earning \$35,000 or more. President Ed Meyer said that while the cut won't "save the airline," it is an indication of the seriousness of the situation and also serves to emphasize "how much we need a turnaround." He indicated that during the last 12 months the airline reduced employment from 36,000 to 34,000 to curtail costs. The salaries will be restored to their original levels—retroactive to the date of the cut—when the airline operates at a profit over a 12-month period.

### Small oil refineries yield to union demands

Twelve small oil refineries settled with locals of the Oil, Chemical and Atomic Workers, but the union continued to strike the major oil companies and some other small refineries. The settlements covered about 1,700 workers out of the 60,000 that struck 100 companies when the parties were unable to reach agreement under a reopening provision of the contracts negotiated in 1979.

The settlements—which met the revised demands of the union—generally provided for a total wage increase of 5 percent plus 55 cents an hour, but not less than a combined total of \$1 an hour, retroactive to January 1980 (the 5-percent portion was already scheduled for January 1980 under the 1979 settlement); a \$125-a-month employer payment for medical insurance for families and a lesser amount for single employees; and establishment of dental coverage financed by employer payments of \$20 a month for families and a lesser amount for single employees. There also were improvements in vacation benefits. At some companies, the new schedule provides for 5 weeks after 15 years of service, 6 weeks after 20 years, and 7 weeks after 25 years. Previously, the schedules generally provided for a maximum of 5 weeks of vacation after 20 years of service.

The refineries that had not settled generally objected to the health insurance and dental plan proposals, contending that they would be very costly, particularly because the companies would be required to assume any premium increases needed to maintain the uniform set of benefits specified in the union proposal.

At its peak, the strike involved refineries processing about 70 percent of the Nation's petroleum needs. However, the companies' white-collar employees continued to maintain operations by working extended schedules. According to the American Petroleum Institute, all U.S. refineries operated at 84.6 percent of capacity for the week that ended January 11; for the week that ended on January 25, output had declined to 80.5 percent of capacity, the "lowest in a long time," according to an official of the institute.

### Four auto parts manufacturers settle

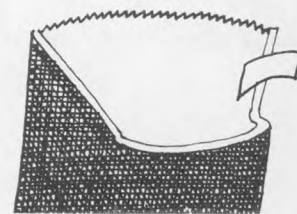
There was some progress in the Auto Workers negotiations with automobile parts manufacturers, as the union settled with four firms on contracts patterned after the 3-year General Motors Corp. contract. (See *Monthly Labor Review*, November 1979, pp. 58–59.) The accord with the Budd Co. ended a 2-week strike and covered 10,000 workers at seven plants in three States. The other agreements, reached without strikes, were with Rockwell International Corp.'s Automotive Group for 7,000 workers at 10 facilities in six States; with Champion Spark Plug Co. for 5,000 workers in three States and Canada; and with Kelsey-Hayes Co. for 1,500 workers in Michigan. The Kelsey-Hayes contract provided for the permanent withholding of 26 cents from wage escalator adjustments, compared with 14 cents at General Motors. The union agreed to the larger diversion because of higher pension costs to Kelsey-Hayes resulting from a higher ratio of retired to active employees.

The Auto Workers continued a strike against International Harvester Co. One of the major unresolved points was a company demand for more flexibility in mandating overtime work for employees to attain parity with Caterpillar Tractor Co. and Deere & Co., which had settled earlier.

### Wood shavings—suspected carcinogen at GM

General Motors Corp. will underwrite medical evaluations and cancer tests for 1,800 wood-model makers. The Michigan Cancer Foundation, in a preliminary study of 1,073 employees who make wood models of cars, found 39 cases of cancer—a high rate, compared with 26 cases that could be expected in such a group. Robert Weincek, the company's medical director, said the employees work with no known carcinogens, although wood shavings are suspect. Some of the woodworkers have asserted that the cancers resulted from exposure to chemicals.

# Book Reviews



## A woman in a man's job

*Frances Perkins: "That Woman in FDR's Cabinet!"* By Lillian Holmen Mohr. Croton-on-Hudson, N.Y., North River Press, Inc., 1979. 328 pp., bibliography. \$14.95.

This is a superb brief biography of Frances Perkins, first woman ever to be a member of a U.S. President's Cabinet. "That woman in FDR's Cabinet" served as Secretary of Labor for 12 years between 1933 and 1945. During the Great Depression of the 1930's, when unemployment was crucial, the role of the Secretary of Labor was particularly important. Madam Secretary faced problems not unlike those of today—job opportunities, job safety, and fair labor standards. Strikingly different, however, was the issue of deflation, for at that time the government *reinflated* the economy in order to drive up prices and wages. Frances Perkins was a great Secretary of Labor who made the Department a seed bed of social progress. She was a prime mover in winning social security for the elderly, unemployment insurance, abolition of oppressive child labor, minimum wage laws (25 cents an hour), the right to bargain collectively, and other progressive programs.

Lillian Holmen Mohr writes well and in a popular style. To some extent, Mohr tells the story the same way that Frances Perkins would have told it. And Frances Perkins had a way with words. But, the relatively simple language which makes the book interesting to an average reader should not hide the fact of very impressive research from a wide variety of sources.

Frances Perkins hated being praised because she was a woman in what was then considered a man's job. Often, when asked whether her sex made a difference, she replied, "only in climbing trees." She preferred winning recognition on the basis of her work. She was an intelligent and experienced person, well equipped for the position of Secretary of Labor to which she had been appointed.

Mohr does a good job in compressing Frances Perkins' 85 years of life into less than 300 pages. Born Fannie Caralie Perkins on April 10, 1880, she went to Mount Holyoke College at a time that not many women went to college. She distinguished herself as a social worker, reformer, chairman of the Industrial Board in

New York State, and head of the State Labor Department. Perhaps Mohr makes too much of Perkins' activity in the cause of women's rights and in consumer protection (or perhaps this reviewer is revealing his own prejudices). However, the several references to the distinguished Alice Hamilton, Charlotte Perkins Gilman, and other important women are fascinating.

The book is relatively free of errors, though there are a few, such as calling Assistant Secretary of Labor Edward McGrady Under Secretary before such a post existed, and getting the date of the Homestead strike wrong on page 167 and right on page 240.

In 1976, George Martin wrote a splendid biography: *Madam Secretary: Frances Perkins*. It is a much longer book. It was a major historical and biographical contribution. Mohr's new book is much shorter but equally interesting and useful. The small publishing house with no promotion and the \$14.95 price are likely to deprive Mohr's biography of the wide audience it deserves. Hopefully, some publisher will put out a reasonably priced paperback edition.

—JONATHAN GROSSMAN  
Historian  
U.S. Department of Labor

## English for doctoral candidates

*A Popularized Version of 21 Doctoral Dissertations.* (Prepared by Lawrence R. Klein and Susan Ghozeil.) Washington, U.S. Department of Labor, Employment and Training Administration, 1979. 113 pp. (R&D Monograph 70.) \$3.50, Superintendent of Documents, Washington 20402.

The wall of Lawrence R. Klein's office, while he was editor of this journal, bore this quotation attributed to H. G. Wells: "No passion in the world, no love or hate, is equal to the passion to alter someone else's draft." Klein practiced that passion for 22 years at the *Monthly Labor Review*. This little volume proves that his ardor has not cooled.

The book is the third prepared by Klein, now adjunct professor of economics at the University of Arizona, designed to make available to a broad audience



findings from dissertations in the social and behavioral sciences.

Over the past 15 years, the U.S. Department of Labor's Employment and Training Administration has financially supported more than 500 such dissertations, many of which, as Klein puts it, may result in a journal article or two, if the authors are lucky, "and then blush unseen and waste their substance in the desert air of a library, and perhaps become footnotes in somebody else's dissertation." Klein and Howard Rosen, director of research for the Employment and Training Administration, were convinced that the years of work and thought that had gone into these dissertations could be useful to nonacademics if the documents could be translated into readable and understandable English. Klein's first two efforts went part way in that direction, cutting the dissertations down to about 2,500 words, but leaving in much of the original language. For the present volume, Klein and his coauthor, Susan Ghozeil, have rewritten 21 dissertations into relatively simple language, without jargon and without mathematical equations.

To get a sense of the kind of service the authors have rendered, contemplate this sentence from one of the dissertations they considered for the book:

Extrapolating from cross-sectional data, we infer that transformations in the clustering of roles occur during the careers of engineers and scientists, with progressively greater involvement in teaching in evidence as they move through the career sequence; increasingly less involvement in both basic and applied research; and increasingly greater likelihood of administrative, managerial, and supervisory duties occurring in the middle stages of the career.

And the translation offered by the authors:

As scientists and engineers get older, they are more likely to teach and less likely to do research, but their roles as supervisors most often come in the middle stages of their careers.

The 21 dissertations summarized in this volume include studies of job search, unemployment insurance, labor market segmentation, the dual labor market, construction industry wages, the 4-day workweek, and stresses on and off the job. One of the topics that may be of particular interest at the moment is an economic analysis of conscription vs. all-volunteer armed forces in peacetime. Aside from an occasional penchant for an over-cute title or phrase, the authors do an excellent job of communicating the results of the Ph. D.s' research.

But the authors go beyond that, commenting critically on the state of the Ph. D. dissertation today. The quality of writing and the gradual abandonment of verbal for mathematical symbols, they say, are but a symptom of a larger problem with the dissertation and its potential usefulness.

The doctoral thesis should be the capstone of formal academic training, the measure and very symbol of learning in a classical sense. It should be the mark of the broadly educated person. Yet the outstanding features are its narrowness, its frequent purblind avoidance of interdisciplinary interest and lack of literary grace or niceties, its seeming disinterest in the relationship of theme to broad movements of history and social development. In short, it is barren of the philosophy that gives substance and grandeur to the symbol Ph.D. Has the title become a cliché, divorced from both meaning and significance, the shining ideal tarnished by the dross of specialization? Is today's Ph.D.—let's say in economics—truly educated or just a finely trained and sharply honed specialist-technician who is skilled in mathematical statistics, regression analysis, and the accepted truisms of the market?

Ph. D. candidates and their advisers need to ponder these questions. They also should examine the good writing in this book and emulate it.

—HENRY LOWENSTERN  
Editor-in-Chief  
Monthly Labor Review

## Publications received

### Agriculture and natural resources

Duncan, Marvin, "The Agricultural Outlook: Can Recent Income Gains Be Maintained?" *Economic Review*, Federal Reserve Bank of Kansas City, December 1979, pp. 16–25.

Verleger, Philip K., Jr., "The U.S. Petroleum Crisis of 1979," *Brookings Papers on Economic Activity*, 2, 1979, pp. 463–76.

Williams, Craig L., "Soil Conservation and Water Pollution Control: The Muddy Record of the United States Department of Agriculture," *Boston College Environmental Affairs Law Review*, Vol. 7, No. 3, pp. 365–421.

### Economic and social statistics

Clogg, Clifford C., *Measuring Underemployment: Demographic Indicators for the United States*. New York, Academic Press, Inc., 1979, 279 pp. \$21.50.

Hans, Brems, *Inflation, Interest, and Growth: A Synthesis*. Lexington, Mass., D.C. Heath and Co., Lexington Books, 1980, 169 pp. \$17.95.

Levy, Robert, "Whatever Happened to Metrics?" *Dun's Review*, January 1980, beginning on p. 48.

National Commission on Employment and Unemployment Statistics, *Counting the Labor Force: Readings in Labor Force Statistics, Appendix Vol. III*. By Diane Werneke. Washington, National Commission on Employment and Unemployment Statistics, 1980, 396 pp.

National Science Foundation, *Science Indicators 1978: Report of the National Science Board, 1979*. Washington, National Science Foundation, National Science Board, 1979, 263 pp. Stock No. 038-000-00416-6. \$6, Superintendent of Documents, Washington 20402.

"The Metropolitan Statistical Area Classification," *Statistical Reporter*, December 1979, pp. 33-45.

Yugoslavia, Federal Statistical Office, *Statistical Pocket-Book of Yugoslavia, 1979*. 25th ed. Belgrade, Yugoslavia, Federal Statistical Office, 1979, 255 pp.

### Economic growth and development

Hicks, John, *Causality in Economics*. New York, Basic Books, Inc., Publishers, 1979, 124 pp. \$8.95.

Kamrany, Nake M. and Richard H. Day, eds., *Economic Issues of the Eighties*. Baltimore, The Johns Hopkins University Press, 1979, 286 pp. \$20, cloth; \$6.95, paper.

Kozlowski, Paul J. with Phyllis R. Buskirk, *Business Conditions in Michigan Metropolitan Areas*. Kalamazoo, Mich., The W. E. Upjohn Institute for Employment Research, 1979, 182 pp. \$4.50, paper.

Liu, Ben-Chieh, "Economic Growth and Quality of Life: A Comparative Indicator Analysis Between China (Taiwan), U.S.A. and Other Developed Countries," *The American Journal of Economics and Sociology*, January 1980, pp. 1-21.

"Methodology in Economics Symposium Issue: Part I," *Journal of Economic Issues*, December 1979, pp. 869-1037.

Nolting, Louvan E. and Murray Feshbach, "R&D Employment in the U.S.S.R.," *Science*, Feb. 1, 1980, pp. 493-503.

### Education

Carnegie Council on Policy Studies in Higher Education, *Education and Youth Employment in Belgium*, by Henri Janne (112 pp.); *Education and Youth Employment in the Federal Republic of Germany*, by Klaus von Dohnanyi (102 pp.); *Education and Youth Employment in Great Britain*, by Stuart Maclure (145 pp.); *Education and Youth Employment in Japan*, by Hidetoshi Kato (70 pp.); *Education and Youth Employment in Less Developed Countries: Mexico*, by Alberto Hernandez Medina and Carlos Muñoz Izquierdo; *South Asia*, by Manzoor Ahmed (115 pp.); *Education and Youth Employment in Poland*, by Barbara Liberska (83 pp.); *Youth Education and Unemployment Problems: An International Perspective*, by Margaret S. Gordon with a chapter by Martin Trow. Berkeley, Calif., Carnegie Council on Policy Studies in Higher Education, 1979. Copies are available from Margaret S. Gordon, Institute of Industrial Relations, University of California, Berkeley, Calif., 94720. \$1 per book for shipping costs.

Great Britain, Department of Employment Gazette, "Education and Training in the 80s: A Personal View," by Ron Johnson, *Employment Gazette*, November 1979, pp. 1093-96.

### Industrial relations

American Enterprise Institute for Public Policy Research, *Proposals to Revise the Lobbying Law*. Washington, American Enterprise Institute for Public Policy Research, 1980, 52 pp. (AEI Legislative Analysis, 11, 96th Cong., 2d sess.)

Bennett, James T. and Manuel H. Johnson, *Pushbutton Unionism*. Fairfax, Va., George Mason University, Contemporary Economics and Business Association, 1980, 26 pp.

Friedman, Milton, "Problems of Cross-Examination in Labor Arbitration," *The Arbitration Journal*, December 1979, pp. 6-11.

Heintz, Duane H., "Medical Malpractice Arbitration: A Viable Alternative," *The Arbitration Journal*, December 1979, pp. 12-18.

Leap, Terry and Irving Kovarsky, "The Age Discrimination in Employment Act and the Vocational Rehabilitation Act: A Proposed Consolidation," *Labor Law Journal*, January 1980, pp. 13-26.

Martin, Benjamin and Everett M. Kassalow, eds., *Labor Relations in Advanced Industrial Societies: Issues and Problems*. Washington, Carnegie Endowment for International Peace, 1980, 206 pp. \$10.

Marshall, F. Ray, Allan G. King, Vernon M. Briggs, Jr., *Labor Economics: Wages, Employment, and Trade Unionism*. 4th ed. Homewood, Ill., Richard D. Irwin, Inc., 1980, 594 pp. \$18.95.

Mitchell, Daniel, J. B. and John Clapp, *Legal Constraints on Teenage Employment: A New Look at Child Labor and School Leaving Laws*. Los Angeles, University of California, Institute of Industrial Relations, 1979, 197 pp. (Monograph Series, 22.) \$7.50, paper.

Moynihan, Daniel Patrick, "What Do You Do When the Supreme Court Is Wrong?" *The Public Interest*, Fall 1979, pp. 3-24.

Samoff, Bernard, "NLRB Priority and Injunctions for Discriminatory Discharges," *Labor Law Journal*, January 1980, pp. 54-61.

Servais, Jean Michel, *Inviolability of Trade Union Premises and Communications*. Geneva, International Labor Organization, 1980, 42 pp. Distributed in the United States by Washington Branch of ILO.

Shawe, Earle K., "Preparation of the Arbitration Hearing," *Labor Law Journal*, January 1980, pp. 46-53.

The Japan Institute of Labor, *Labor and the Economy Illustrated*. Tokyo, The Japan Institute of Labor, 1980, 28 pp. (Japanese Industrial Relations Series, 4.)

### Industry and government organization

American Enterprise Institute for Public Policy Research, *Telecommunications Law Reform*. Washington, 1980, 64 pp. (AEI Legislative Analysis, 12, 96th Cong., 2d sess.)

Economic Council of Canada, *Responsible Regulation: An Interim Report by the Economic Council of Canada; Synopsis and Recommendations from Responsible Regulation*. Hull, Quebec, Economic Council of Canada, 1979, 127 and 33 pp. \$7.25, each, Canada; \$8.70, each, other countries. Available from Canadian Government Publishing Center, Supply and Services Canada, Hull, Quebec.

Green, Mark and others, *The Case for a Corporate Democracy Act of 1980*. Washington, Americans Concerned About Corporate Power, 1979, 127 pp., bibliography.

Mashaw, Jerry L., "Regulation, Logic, and Ideology," *Regulation*, November-December 1979, pp. 44-51.

Shenefield, John H., "Government Enterprise—A New Frontier for Regulatory Reformers," *Regulation*, November-December 1979, pp. 16-18.

## International economics

- Coldrick, A. P. and Philip Jones, *The International Directory of the Trade Union Movement: A Comprehensive Guide to Trade Union Conditions and Industrial Relations in Each Country*. New York, Facts on File, Inc., 1979, 1,365 pp. \$55.
- Destler, I. M., *Making Foreign Economic Policy*. Washington, The Brookings Institution, 1980, 244 pp. \$11.95, cloth; \$4.95, paper.
- Haendel, Dan, *Foreign Investments and the Management of Political Risk*. Boulder, Colo., Westview Press, 1979, 206 pp. \$18.50.
- Martin, Benjamin and Everett M. Kassalow, eds., *Labor Relations in Advanced Industrial Societies: Issues and Problems*. Washington, Carnegie Endowment for International Peace, 1980, 206 pp.
- "The Middle East, 1980," *Current History*, January 1980, pp. 1-41.
- U.S. Bureau of International Labor Affairs, *Country Labor Profile: France*. By Thomas D. Bowie. Washington, U.S. Department of Labor, Bureau of International Labor Affairs, 1979, 8 pp. 60 cents, Superintendent of Documents, Washington 20402.
- *Country Labor Profile: Tunisia*. By Burnie Merson. Washington, U.S. Department of Labor, Bureau of International Labor Affairs, 1980, 6 pp. 60 cents, Superintendent of Documents, Washington 20402.

## Labor and economic history

- "Fortune's Fiftieth Anniversary Issue: The Best as Prologue—A Fabulous 50 Years; The Depression; The War; Postwar Prosperity; New Strains on the System: A Time of Testing," *Fortune*, Feb. 11, 1980, 248 pp.
- Rodgers, Daniel T., *The Work Ethic in Industrial America, 1850-1920*. Chicago, The University of Chicago Press, 1979, 300 pp. \$5.95, paper.

## Labor force

- Korns, Alexander, "The Difference Between the Payroll and Household Measures of Employment, 1975-79," *Survey of Current Business*, December 1979, pp. 45-49.
- Lloyd, Cynthia B. and Beth T. Niemi, *The Economics of Sex Differentials*. New York, Columbia University Press, 1979, 355 pp., bibliography. \$16.50.
- Maurer, Harry, *Not Working: An Oral History of the Unemployed*. New York, Holt, Rinehart and Winston, 1980, 297 pp. \$12.95.

## Management and organization theory

- Baron, Alma S., "Communication Skills for the Woman Manager—A Practice Seminar," *Personnel Journal*, January 1980, pp. 55-58.
- Berenbeim, Ronald, *Nonunion Complaint Systems: A Corporate Appraisal*. New York, The Conference Board, Inc., 1980, 50 pp., bibliography. (Conference Board Report, 770.) \$5, members; \$15, nonmembers.
- Budde, James F., *Measuring Performance in Human Service Systems: Planning, Organization and Control*. New York, AMACOM, A division of American Management Associations, 1979, 207 pp., bibliography. \$14.95.

- Danzig, Selig M., "What We Need to Know About Performance Appraisals," *Management Review*, February 1980, pp. 20-24.
- Fragner, Berwyn N., "Affirmative Action Through Hiring and Promotion: How Fast a Rate?" *Personnel*, November-December 1979, pp. 67-71.
- Gandz, Jeffrey, "Resolving Conflict: A Guide for the Industrial Relations Manager," *Personnel*, November-December 1979, pp. 22-32.
- Genua, Robert L., *The Employer's Guide to Interviewing: Strategy and Tactics for Picking a Winner*. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1979, 180 pp.
- Ginsburg, Sigmund G., "The Business Executive in Government: Look Before You Leap," *Management Review*, February 1980, pp. 64-66.
- Glover, Robert W. and others, *Stepping Up: Placing Minority Women into Managerial and Professional Jobs*. Salt Lake City, Utah, Olympus Publishing Co., 1979, 105 pp., bibliography.
- Greenlaw, Paul S. and Diana L. Foderaro, "Some Further Implications of the Pregnancy Discrimination Act," *Personnel Journal*, January 1980, pp. 36-43.
- Halcomb, Ruth, "Mentors and the Successful Woman," *Across the Board*, February 1980, pp. 13-18.
- Hanan, Mack, *Fast-Growth Management: How to Improve Profits with Entrepreneurial Strategies*. New York, AMACOM, A division of American Management Associations, 1979, 145 pp. \$14.95.
- Hunsaker, Philip L., "Organizational Growth: The Implications for Human Resources," *Personnel*, November-December 1979, pp. 12-21.
- Lynch, Dudley, "The Case for Disorderly Conduct: How to Get the Most Out of Managerial Brainpower," *Management Review*, February 1980, pp. 14-19.
- Perham, John, "Top Management Views the 1980s," *Dun's Review*, January 1980, beginning on p. 68.
- Schick, Melvin E., "The 'Refined' Performance Evaluation Monitoring System: Best of Both Worlds," *Personnel Journal*, January 1980, pp. 47-50.
- Smith, Martin R., *Qualitysense: Organizational Approaches to Improving Product Quality and Service*. New York, AMACOM, A Division of American Management Associations, 1979, 194 pp. \$16.95.
- Szilagyi, Andrew D., "Keeping Employee Turnover Under Control," *Personnel*, November-December 1979, pp. 42-52.
- Thierauf, Robert J., *Management Auditing: A Questionnaire Approach*. New York, AMACOM, A division of American Management Associations, 1980, 239 pp., bibliography. \$19.95.
- Toedtman, James C., "A Decade of Rapid Change: The Outlook for Human Resources Management in the '80s," *Personnel Journal*, January 1980, pp. 29-35.

## Monetary and fiscal policy

- Brownlee, Oswald H., *Taxing the Income from U.S. Corporation Investments Abroad*. Washington, American Enterprise Institute for Public Policy Research, 1979, 34 pp., bibliography. (AEI Studies, 264.) \$3.25, paper.



Cacy, J. A. and Glenn H. Miller, Jr., "Review and Outlook: A New Approach to Solving Old Problems," *Economic Review*, Federal Reserve Bank of Kansas City, December 1979, pp. 3-15.

Courchene, T. J., P. Fortin, G. R. Sparks, and W. R. White, "Monetary Policy in Canada: A Symposium," *The Canadian Journal of Economics*, November 1979, pp. 590-646.

Froyen, Richard, "Systematic Monetary Policy and Short-run Real Income Determination," *Journal of Economics and Business*, Fall 1979, pp. 14-22.

Gambis, Carl M., "Federal Reserve Intermediate Targets: Money or the Monetary Base?" *Economic Review*, Federal Reserve Bank of Kansas City, January 1980, pp. 3-15.

Guffey, Roger, "Conduct of U.S. Monetary Policy: Recent Problems and Issues," *Economic Review*, Federal Reserve Bank of Kansas City, December 1979, pp. 26-29.

Hettich, Walter, "A theory of partial tax reform," *The Canadian Journal of Economics*, November 1979, pp. 692-712.

Jaffee, Dwight M. and Kenneth T. Rosen, "Mortgage Credit Availability and Residential Construction," *Brookings Papers on Economic Activity*, 2, 1979, pp. 333-86.

Pechman, Joseph A., ed., *What Should Be Taxed: Income or Expenditure?* Washington, The Brookings Institution, 1980, 332 pp. \$14.95, cloth; \$5.95, paper.

Rymes, T. K., "Money, efficiency, and knowledge," *The Canadian Journal of Economics*, November 1979, pp. 575-89.

Ture, Norman B., "The Value Added Tax: Facts and Fancies," *Management Review*, February 1980, pp. 8-13.

### Prices and living conditions

Dewald, William G., "Fast vs. Gradual Policies for Controlling Inflation," *Economic Review*, Federal Reserve Bank of Kansas City, January 1980, pp. 16-25.

Hershman, Arlene, "Why Recessions Don't Cure Inflation," *Dun's Review*, January 1980, beginning on p. 56.

Mayer, Henry C. and Edward J. O'Boyle, "Inflation: A Moral and Economic Erosive," *The Louisiana Economy*, Louisiana Tech University, Vol. XIII, No. 1, 1979, pp. 1-8.

### Productivity and technological change

Barks, Joseph V., "Getting a Big Payback from Those You Pay," *Iron Age*, Jan. 28, 1980, pp. 28-31. (Reprint 3456.) Single copy, free; additional copies, 50 cents.

Chamot, Dennis and Joan M. Baggett, eds., *Silicon, Satellites and Robots: The Impacts of Technological Change on the Workplace*. Washington, Department for Professional Employees, AFL-CIO, 1979, 52 pp.

Clark, Peter K., "Issues in the Analysis of Capital Formation and Productivity Growth," *Brookings Papers on Economic Activity*, 2, 1979, pp. 423-45.

Gordon, Robert J., "The 'End-of-Expansion' Phenomenon in Short-Run Productivity Behavior," *Brookings Papers on Economic Activity*, 2, 1979, pp. 447-61.

Norsworthy, J. R., Michael J. Harper, Kent Kunze, "The Slowdown in Productivity Growth: Analysis of Some Contributing Factors," *Brookings Papers on Economic Activity*, 2, 1979, pp. 387-421.

### Social institutions and social change

Binkin, Martin and Irene Kyriakopoulos, *Youth or Experience? Manning the Modern Military*. Washington, The Brookings Institution, 1979, 84 pp. \$2.95, paper.

Sowell, Thomas, *Knowledge and Decisions*. New York, Basic Books, Inc., 1980, 422 pp. \$18.50.

Toby, Jackson, "Crime in American Public Schools," *The Public Interest*, Winter 1980, pp. 18-42.

### Welfare programs and social insurance

Keyfitz, Nathan, "Why Social Security is in Trouble," *The Public Interest*, Winter 1980, pp. 102-19.

"Pension Plan Financial Management in Today's World," *Hay Huggins Bulletin*, January 1980, 4 pp.

"Pension Plan Termination: Quo Vadis?" *Pension World*, December 1979, pp. 64-65.

"Sixth Annual Survey of State Retirement Systems," *Pension World*, November 1979, pp. 57-63.

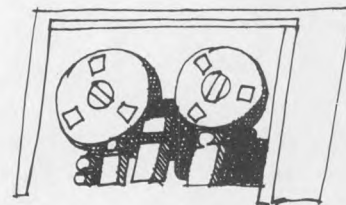
Taft, Julia Vadala, David S. North, David A. Ford, *Refugee Resettlement in the U.S.: Time for a New Focus*. Washington, New TransCentury Foundation, 1979, 222 pp.

### Worker training and development

Mirengoff, William and others, *CETA: Assessment of Public Service Employment Programs*. Washington, National Academy of Sciences, National Research Council, Committee on Evaluation of Employment and Training Programs, 1980, 197 pp.

The National Urban Coalition, *Understanding CETA: A Community Guide*. Washington, The National Urban Coalition, 1979, 32 pp.

# Current Labor Statistics



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## 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. For a technical discussion of the method used to make seasonal adjustments, see "Appendix A. The BLS Seasonal Factor Method," *BLS Handbook of Methods for Surveys and Studies*, Bulletin 1910 (Bureau of Labor Statistics, 1976), pp. 272-78, and *X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15 (Bureau of the Census, 1967). Seasonally adjusted labor force data in tables 2-7 were last revised in the February 1980 issue of the *Review* to reflect the preceding year's experience. 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, September 1979).

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 in tables 11, 13, 16, and 18 was last introduced in the November 1979 issue of the *Review*. New seasonal factors for productivity data in

tables 33 and 34 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. The *Handbook of Labor Statistics 1978*, Bulletin 2000, provides more detailed data and greater historical coverage for most of the statistical series presented in the *Monthly Labor Review*. More information from the household and establishment surveys is provided in *Employment and Earnings*, a monthly publication of the Bureau, and in two comprehensive data books issued annually—*Employment and Earnings, United States* and *Employment and Earnings, States and Areas*. 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 major BLS statistical series**

Title and frequency (monthly except where indicated)	Release date	Period covered	Release date	Period covered	MLR table number
Employment situation	April 4	March	May 2	April	1-11
Producer Price Indexes	April 4	March	May 9	April	26-30
Consumer Price Index	April 22	March	May 23	April	22-25
Real earnings	April 22	March	May 23	April	14-20
Major collective bargaining settlements (quarterly)	April 25	1st quarter	.....	.....	35-36
Productivity and costs (quarterly):					
Nonfarm business and manufacturing	April 25	1st quarter	.....	.....	31-34
Nonfinancial corporations	.....	.....	May 28	1st quarter	31-34
Work stoppages	April 29	March	May 28	April	37
Labor turnover in manufacturing	April 30	March	May 30	April	12-13



## 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 65,000 households beginning in January 1980, 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** are (1) those 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. 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 **unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population; the **total labor force** includes military personnel. Persons **not in the labor force** are

those not classified as employed or unemployed; this group includes persons retired, those engaged in their own housework, those not working while attending school, those unable to work because of longterm 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.

**Full-time workers** are those employed at least 35 hours a week; **part-time workers** are those who work fewer hours. Workers on part-time schedules for economic reasons (such as slack work, terminating or starting a job during the week, material shortages, or inability to find full-time work) are among those counted as being on full-time status, under the assumption that they would be working full time if conditions permitted. The survey classifies unemployed persons in full-time or part-time status by their reported preferences for full-time or part-time work.

### 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 2-7 are seasonally adjusted, based on the seasonal experience through December 1979.

Year	Total non-institutional population	Total labor force		Civilian labor force					Not in labor force	
		Number	Percent of population	Total	Employed			Unemployed		
					Total	Agriculture	Nonagricultural industries	Number		Percent of labor force
1950	106,645	63,858	59.9	62,208	58,918	7,160	51,758	3,288	5.3	42,787
1955	112,732	68,072	60.4	65,023	62,170	6,450	55,722	2,852	4.4	44,660
1960	119,759	72,142	60.2	69,628	65,778	5,458	60,318	3,852	5.5	47,617
1964	127,224	75,830	59.6	73,091	69,305	4,523	64,782	3,786	5.2	51,394
1965	129,236	77,178	59.7	74,455	71,088	4,361	66,726	3,366	4.5	52,058
1966	131,180	78,893	60.1	75,770	72,895	3,979	68,915	2,875	3.8	52,288
1967	133,319	80,793	60.6	77,347	74,372	3,844	70,527	2,975	3.8	52,527
1968	135,562	82,272	60.7	78,737	75,920	3,817	72,103	2,817	3.6	53,291
1969	137,841	84,240	61.1	80,734	77,902	3,606	74,296	2,832	3.5	53,602
1970	140,182	85,903	61.3	82,715	78,627	3,462	75,165	4,088	4.9	54,280
1971	142,596	86,929	61.0	84,113	79,120	3,387	75,732	4,993	5.9	55,666
1972	145,775	88,991	61.0	86,542	81,702	3,472	78,230	4,840	5.6	56,785
1973	148,263	91,040	61.4	88,714	84,409	3,452	80,957	4,304	4.9	57,222
1974	150,827	93,240	61.8	91,011	83,935	3,492	82,443	5,076	5.6	57,587
1975	153,449	94,793	61.8	92,613	84,783	3,380	81,403	7,830	8.5	58,655
1976	156,048	96,917	62.1	94,773	87,485	3,297	84,188	7,288	7.7	59,130
1977	158,559	99,534	62.8	97,401	90,546	3,244	87,302	6,855	7.0	59,025
1978	161,058	102,537	63.7	100,420	94,373	3,342	91,031	6,047	6.0	58,521
1979	163,620	104,996	64.2	102,908	96,945	3,297	93,648	5,963	5.8	58,623

**2. Employment status by sex, age, and race, seasonally adjusted**

[Numbers in thousands]

Employment status	Annual Average		1979												1980	
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>TOTAL</b>																
Total noninstitutional population <sup>1</sup>	161,058	163,620	162,633	162,909	163,008	163,260	163,469	163,685	163,891	164,106	164,468	164,682	164,898	165,101	165,298	
Total labor force	102,537	104,996	104,473	104,595	104,280	104,476	104,552	105,475	105,218	105,586	105,688	105,744	106,088	106,310	106,346	
Civilian noninstitutional population <sup>1</sup>	158,941	161,532	160,539	160,819	160,926	161,182	161,393	161,604	161,801	162,013	162,375	162,589	162,809	163,020	163,211	
Civilian labor force	100,420	102,908	102,379	102,505	102,198	102,398	102,476	103,093	103,128	103,494	103,595	103,652	103,999	104,229	104,260	
Employed	94,373	96,945	96,496	96,623	96,254	96,495	96,652	97,184	97,004	97,504	97,474	97,608	97,912	97,804	97,953	
Agriculture	3,342	3,297	3,307	3,320	3,215	3,246	3,243	3,267	3,315	3,364	3,294	3,385	3,359	3,270	3,326	
Nonagricultural industries	91,031	93,648	93,189	93,303	93,039	93,249	93,409	93,917	93,689	94,140	94,180	94,223	94,553	94,534	94,626	
Unemployed	6,047	5,963	5,883	5,882	5,944	5,903	5,824	5,909	6,124	5,990	6,121	6,044	6,087	6,425	6,307	
Unemployment rate	6.0	5.8	5.7	5.7	5.8	5.8	5.7	5.7	5.9	5.8	5.9	5.8	5.9	6.2	6.0	
Not in labor force	58,521	58,623	58,160	58,314	58,728	58,784	58,917	58,511	58,673	58,519	58,780	58,937	58,810	58,791	58,951	
<b>Men, 20 years and over</b>																
Civilian noninstitutional population <sup>1</sup>	67,006	68,293	67,816	67,939	67,997	68,123	68,227	68,319	68,417	68,522	68,697	68,804	68,940	69,047	69,140	
Civilian labor force	53,464	54,486	54,349	54,315	54,239	54,288	54,370	54,579	54,597	54,735	54,760	54,709	54,781	54,855	55,038	
Employed	51,212	52,264	52,211	52,151	52,049	52,158	52,201	52,325	52,311	52,453	52,443	52,374	52,478	52,279	52,531	
Agriculture	2,361	2,350	2,329	2,350	2,295	2,301	2,305	2,327	2,375	2,377	2,371	2,438	2,427	2,387	2,435	
Nonagricultural industries	48,852	49,913	49,882	49,801	49,754	49,857	49,896	49,998	49,936	50,076	50,072	49,936	50,051	49,892	50,096	
Unemployed	2,252	2,223	2,138	2,164	2,190	2,130	2,169	2,254	2,286	2,282	2,317	2,335	2,303	2,577	2,507	
Unemployment rate	4.2	4.1	3.9	4.0	4.0	3.9	4.0	4.1	4.2	4.2	4.2	4.3	4.2	4.7	4.6	
Not in labor force	13,541	13,807	13,467	13,624	13,758	13,835	13,857	13,740	13,820	13,787	13,937	14,095	14,159	14,192	14,102	
<b>Women, 20 years and over</b>																
Civilian noninstitutional population <sup>1</sup>	75,489	76,860	76,332	76,476	76,532	76,670	76,784	76,897	77,006	77,124	77,308	77,426	77,542	77,656	77,766	
Civilian labor force	37,416	38,910	38,399	38,574	38,415	38,619	38,653	39,033	39,304	39,239	39,362	39,445	39,659	39,878	39,857	
Employed	35,180	36,698	36,197	36,362	36,216	36,411	36,457	36,873	37,000	37,075	37,112	37,248	37,402	37,574	37,604	
Agriculture	586	591	593	595	572	577	583	585	600	628	572	612	582	540	567	
Nonagricultural industries	34,593	36,107	35,604	35,767	35,644	35,834	35,874	36,288	36,400	36,447	36,540	36,636	36,820	37,034	37,037	
Unemployed	2,236	2,213	2,202	2,212	2,199	2,208	2,196	2,160	2,304	2,164	2,250	2,197	2,257	2,304	2,254	
Unemployment rate	6.0	5.7	5.7	5.7	5.7	5.7	5.5	5.5	5.9	5.5	5.7	5.6	5.7	5.8	5.7	
Not in labor force	38,073	37,949	37,933	37,902	38,117	38,051	38,131	37,864	37,702	37,885	37,946	37,981	37,883	37,778	37,909	
<b>Both sexes, 16 - 19 years</b>																
Civilian noninstitutional population <sup>1</sup>	16,447	16,379	16,391	16,404	16,397	16,389	16,381	16,387	16,377	16,367	16,370	16,360	16,326	16,317	16,305	
Civilian labor force	9,540	9,512	9,631	9,616	9,544	9,491	9,453	9,481	9,227	9,520	9,473	9,498	9,559	9,497	9,365	
Employed	7,981	7,984	8,088	8,110	7,989	7,926	7,994	7,986	7,693	7,976	7,919	7,986	8,032	7,952	7,818	
Agriculture	395	356	385	375	348	368	355	355	340	359	351	335	350	344	325	
Nonagricultural industries	7,586	7,628	7,703	7,735	7,641	7,558	7,639	7,631	7,353	7,617	7,568	7,651	7,682	7,608	7,493	
Unemployed	1,559	1,528	1,543	1,506	1,555	1,565	1,459	1,495	1,534	1,544	1,554	1,512	1,527	1,545	1,547	
Unemployment rate	16.3	16.1	16.0	15.7	16.3	16.5	15.4	15.8	16.6	16.2	16.4	15.9	16.0	16.3	16.5	
Not in labor force	6,907	6,867	6,760	6,788	6,853	6,898	6,928	6,906	7,150	6,847	6,897	6,862	6,767	6,820	6,940	
<b>White</b>																
Civilian noninstitutional population <sup>1</sup>	139,580	141,614	140,825	141,063	141,123	141,331	141,492	141,661	141,822	141,981	142,296	142,461	142,645	142,806	142,951	
Civilian labor force	88,456	90,602	90,250	90,260	89,996	90,120	90,215	90,659	90,759	91,082	91,147	91,242	91,579	91,852	91,977	
Employed	83,836	86,025	85,786	85,754	85,497	85,632	85,775	86,120	85,976	86,425	86,454	86,571	86,894	86,895	87,081	
Unemployed	4,620	4,577	4,464	4,506	4,499	4,488	4,440	4,539	4,783	4,657	4,693	4,671	4,685	4,957	4,896	
Unemployment rate	5.2	5.1	4.9	5.0	5.0	5.0	4.9	5.0	5.3	5.1	5.1	5.1	5.1	5.4	5.3	
Not in labor force	51,124	51,011	50,430	50,648	51,200	51,313	51,213	51,107	51,161	50,900	51,149	51,219	51,066	50,954	50,975	
<b>Black and other</b>																
Civilian noninstitutional population <sup>1</sup>	19,361	19,918	19,714	19,755	19,802	19,850	19,901	19,943	19,979	20,032	20,079	20,128	20,163	20,214	20,261	
Civilian labor force	11,964	12,306	12,177	12,238	12,191	12,219	12,260	12,386	12,343	12,404	12,512	12,391	12,432	12,453	12,362	
Employed	10,537	10,920	10,746	10,860	10,767	10,816	10,887	11,023	10,982	11,063	11,076	11,044	11,024	10,979	10,937	
Unemployed	1,427	1,386	1,431	1,378	1,424	1,403	1,373	1,363	1,361	1,341	1,436	1,347	1,408	1,474	1,424	
Unemployment rate	11.9	11.3	11.8	11.3	11.7	11.5	11.2	11.0	11.0	10.8	11.5	10.9	11.3	11.8	11.5	
Not in labor force	7,397	7,612	7,486	7,504	7,627	7,674	7,629	7,579	7,639	7,264	7,567	7,737	7,731	7,761	7,899	

<sup>1</sup>As in table 1, population figures are not seasonally adjusted.

NOTE: The data in this table have been revised to reflect seasonal experience through 1979.

### 3. Selected employment indicators, seasonally adjusted

[In thousands]

Selected categories	Annual average		1979												1980	
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>CHARACTERISTIC</b>																
Total employed, 16 years and over	94,373	96,945	96,496	96,623	96,254	96,495	96,652	97,184	97,004	97,504	97,474	97,608	97,912	97,804	97,953	
Men	55,491	56,499	56,476	56,449	56,294	56,372	56,477	56,570	56,408	56,714	56,629	56,580	56,734	56,486	56,732	
Women	38,882	40,446	40,020	40,174	39,960	40,123	40,175	40,614	40,596	40,790	40,845	41,028	41,178	41,318	41,221	
Married men, spouse present	38,688	39,090	39,291	39,193	38,910	39,045	39,079	39,176	39,180	39,198	39,124	38,845	38,924	38,749	38,955	
Married women, spouse present	21,881	22,724	22,522	22,605	22,376	22,547	22,664	22,908	22,869	22,937	22,919	22,940	23,027	23,111	23,178	
<b>OCCUPATION</b>																
White-collar workers	47,205	49,342	48,836	48,996	49,061	49,136	49,192	49,536	49,663	49,816	49,738	49,912	49,911	50,313	50,448	
Professional and technical	14,245	15,050	14,950	15,012	15,091	15,100	15,010	15,057	15,068	15,141	15,057	15,131	15,272	15,337	15,444	
Managers and administrators, except farm	10,105	10,516	10,379	10,392	10,398	10,427	10,534	10,612	10,698	10,659	10,639	10,617	10,535	10,608	10,971	
Salesworkers	5,951	6,163	6,090	6,055	6,084	6,101	6,103	6,163	6,145	6,181	6,261	6,362	6,346	6,452	6,185	
Clerical workers	16,904	17,613	17,417	17,537	17,488	17,508	17,545	17,704	17,752	17,835	17,781	17,802	17,758	17,915	17,848	
Blue-collar workers	31,531	32,066	32,176	32,041	31,705	31,904	31,992	32,051	31,849	32,209	32,205	32,110	32,302	31,882	31,754	
Craft and kindred workers	12,386	12,880	12,898	12,792	12,703	12,820	12,944	12,876	12,761	12,993	13,001	12,925	13,041	12,814	12,728	
Operatives, except transport	10,875	10,909	10,901	10,991	10,770	10,755	10,804	10,884	10,909	10,964	10,967	10,963	11,042	10,678	10,661	
Transport equipment operatives	3,541	3,612	3,602	3,569	3,564	3,644	3,605	3,627	3,604	3,617	3,593	3,628	3,635	3,616	3,571	
Nonfarm laborers	4,729	4,665	4,775	4,689	4,668	4,685	4,639	4,664	4,575	4,635	4,644	4,594	4,584	4,774	4,795	
Service workers	12,839	12,834	12,804	12,847	12,907	12,772	12,805	12,766	12,621	12,859	12,937	12,899	12,970	12,979	13,080	
Farmworkers	2,798	2,703	2,746	2,774	2,659	2,628	2,679	2,678	2,707	2,722	2,695	2,718	2,694	2,660	2,764	
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>																
Agriculture:																
Wage and salary workers	1,419	1,413	1,425	1,415	1,379	1,424	1,423	1,419	1,384	1,399	1,381	1,475	1,451	1,428	1,417	
Self-employed workers	1,607	1,580	1,558	1,583	1,553	1,519	1,539	1,558	1,614	1,642	1,602	1,622	1,596	1,554	1,648	
Unpaid family workers	316	304	334	314	291	283	291	291	310	325	313	310	310	293	283	
Nonagricultural industries:																
Wage and salary workers	84,253	86,540	86,192	86,439	86,105	86,232	86,309	86,454	86,421	86,912	86,982	87,020	87,384	87,578	87,419	
Government	15,289	15,369	15,322	15,281	15,359	15,616	15,318	15,393	15,279	15,407	15,423	15,358	15,397	15,414	15,540	
Private industries	68,966	71,171	70,870	71,158	70,746	70,616	70,991	71,061	71,142	71,505	71,559	71,662	71,987	72,163	71,879	
Private households	1,363	1,240	1,328	1,262	1,172	1,195	1,235	1,219	1,211	1,313	1,261	1,211	1,228	1,132	1,178	
Other industries	67,603	69,931	69,542	69,896	69,574	69,421	69,756	69,842	69,931	70,192	70,298	70,451	70,759	71,031	70,702	
Self-employed workers	6,305	6,652	6,591	6,542	6,463	6,608	6,629	6,752	6,689	6,731	6,812	6,781	6,737	6,752	6,899	
Unpaid family workers	472	455	455	446	465	460	474	519	450	449	430	417	409	379	397	
<b>PERSONS AT WORK<sup>1</sup></b>																
Nonagricultural industries	85,693	88,133	87,543	87,847	86,608	87,785	87,749	88,769	88,855	88,723	88,638	88,617	89,180	89,454	88,985	
Full-time schedules	70,543	72,647	72,212	72,529	71,659	72,496	72,243	72,915	73,053	73,159	73,204	72,997	73,137	73,223	73,110	
Part time for economic reasons	3,216	3,281	3,176	3,211	3,279	3,283	3,284	3,274	3,298	3,167	3,315	3,392	3,519	3,513	3,406	
Usually work full time	1,249	1,325	1,246	1,254	1,287	1,273	1,322	1,334	1,401	1,273	1,354	1,413	1,491	1,549	1,380	
Usually work part time	1,967	1,956	1,930	1,957	1,992	2,010	1,962	1,940	1,897	1,894	1,961	1,979	2,028	1,964	2,026	
Part time for noneconomic reasons	11,934	12,205	12,155	12,107	11,670	12,006	12,222	12,580	12,504	12,397	12,119	12,228	12,524	12,718	12,469	

<sup>1</sup>Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

NOTE: The data in this table have been revised to reflect seasonal experience through 1979.



4. Selected unemployment indicators, seasonally adjusted

Employment status	Annual average		1979										1980		
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>CHARACTERISTIC</b>															
Total, 16 years and over	6.0	5.8	5.7	5.7	5.8	5.8	5.7	5.7	5.9	5.8	5.9	5.8	5.9	6.2	6.0
Men, 20 years and over	4.2	4.1	3.9	4.0	4.0	3.9	4.0	4.1	4.2	4.2	4.2	4.3	4.2	4.7	4.6
Women, 20 years and over	6.0	5.7	5.7	5.7	5.7	5.7	5.7	5.5	5.9	5.5	5.7	5.6	5.7	5.8	5.7
Both sexes, 16-19 years	16.3	16.1	16.0	15.7	16.3	16.5	15.4	15.8	16.6	16.2	16.4	15.9	16.0	16.3	16.5
White, total	5.2	5.1	4.9	5.0	5.0	5.0	4.9	5.0	5.3	5.1	5.1	5.1	5.1	5.4	5.3
Men, 20 years and over	3.7	3.6	3.4	3.4	3.5	3.4	3.5	3.6	3.7	3.7	3.7	3.7	3.7	4.1	4.0
Women, 20 years and over	5.2	5.0	5.0	5.0	5.0	5.0	4.9	4.8	5.2	4.8	5.0	4.9	5.0	5.1	5.2
Both sexes, 16-19 years	13.9	13.9	13.6	13.6	13.9	14.2	13.2	13.8	14.8	14.3	14.1	13.9	13.9	14.0	13.8
Black and other, total	11.9	11.3	11.8	11.3	11.7	11.5	11.2	11.0	11.0	10.8	11.5	10.9	11.3	11.8	11.5
Men, 20 years and over	8.6	8.4	8.6	8.7	8.6	8.4	8.1	8.4	8.1	8.0	8.6	8.4	8.6	9.6	9.2
Women, 20 years and over	10.6	10.1	10.4	10.0	10.5	10.0	10.4	10.0	10.3	9.8	10.2	9.5	10.0	10.0	9.0
Both sexes, 16-19 years	36.3	33.5	34.9	31.5	34.3	36.1	33.5	31.5	32.6	32.3	35.1	32.8	34.3	34.6	37.9
Married men, spouse present	2.8	2.7	2.6	2.6	2.7	2.5	2.7	2.8	2.9	2.9	2.9	2.9	2.8	3.4	3.1
Married women, spouse present	5.5	5.1	5.3	5.2	5.2	5.2	5.1	4.9	5.3	4.8	5.2	4.8	5.0	5.2	5.4
Women who head families	8.5	8.3	8.3	8.2	8.3	8.6	9.0	8.1	7.9	7.7	8.4	8.4	8.4	9.2	8.5
Full-time workers	5.5	5.3	5.2	5.2	5.3	5.2	5.2	5.3	5.4	5.3	5.4	5.4	5.4	5.7	5.6
Part-time workers	9.0	8.7	8.8	9.0	8.7	9.3	8.6	8.3	8.8	8.4	8.9	8.3	8.5	8.7	8.9
Unemployed 15 weeks and over	1.4	1.2	1.2	1.3	1.2	1.2	1.1	1.0	1.1	1.1	1.2	1.1	1.2	1.3	1.2
Labor force time lost <sup>1</sup>	6.5	6.3	6.2	6.2	6.4	6.3	6.3	6.4	6.4	6.2	6.4	6.4	6.4	6.7	6.6
<b>OCCUPATION</b>															
White-collar workers	3.5	3.3	3.4	3.3	3.3	3.2	3.4	3.3	3.5	3.3	3.4	3.2	3.3	3.4	3.4
Professional and technical	2.6	2.4	2.4	2.2	2.3	2.1	2.5	2.5	2.5	2.4	2.7	2.4	2.3	2.2	2.3
Managers and administrators, except farm	2.1	2.1	2.0	2.1	2.3	2.2	2.1	2.0	2.3	2.2	2.2	1.9	2.0	1.9	2.2
Salesworkers	4.1	3.9	4.2	4.1	4.0	4.0	4.4	3.5	4.0	3.8	3.8	3.7	3.8	4.4	4.5
Clerical workers	4.9	4.6	4.7	4.8	4.5	4.5	4.6	4.5	4.9	4.5	4.7	4.4	4.6	4.8	4.7
Blue-collar workers	6.9	6.9	6.5	6.6	6.9	6.8	6.6	6.8	7.3	7.1	7.2	7.5	7.2	8.0	7.7
Craft and kindred workers	4.6	4.5	4.5	4.5	4.4	4.2	4.3	4.4	4.7	4.3	4.6	4.9	4.4	4.9	4.8
Operatives, except transport	8.1	8.4	7.8	7.8	8.5	8.2	7.7	8.3	8.9	9.0	9.1	9.0	9.0	9.9	9.2
Transport equipment operatives	5.2	5.4	5.0	5.2	5.9	5.4	5.7	5.1	6.2	6.1	5.6	5.2	5.0	6.9	6.7
Nonfarm laborers	10.7	10.8	9.7	10.2	10.6	11.1	10.6	11.0	11.3	11.0	10.7	12.2	12.2	12.3	12.0
Service workers	7.4	7.1	7.3	7.3	7.3	7.2	7.2	7.1	7.1	6.7	6.8	6.6	6.6	6.9	6.9
Farmworkers	3.8	3.8	3.4	3.3	3.4	3.6	3.2	4.2	3.9	4.1	4.3	4.5	4.3	4.4	3.9
<b>INDUSTRY</b>															
Nonagricultural private wage and salary workers <sup>2</sup>	5.9	5.7	5.6	5.6	5.7	5.7	5.6	5.7	6.0	5.8	5.9	5.8	5.8	6.2	6.0
Construction	10.6	10.2	10.9	10.1	10.5	10.0	10.0	10.1	9.6	9.9	10.2	10.3	10.3	10.8	10.5
Manufacturing	5.5	5.5	4.9	5.2	5.3	5.4	5.4	5.7	5.9	6.0	6.0	5.9	5.9	6.7	6.4
Durable goods	4.9	5.0	4.2	4.4	4.7	4.4	4.9	5.4	5.4	5.3	5.5	5.6	5.5	6.7	6.3
Nondurable goods	6.3	6.4	5.9	6.4	6.3	6.9	6.3	6.2	6.8	7.1	6.8	6.3	6.4	6.8	6.7
Transportation and public utilities	3.7	3.7	3.2	3.9	3.0	3.6	3.1	3.8	3.7	4.0	3.8	4.2	4.1	4.4	4.4
Wholesale and retail trade	6.9	6.5	6.5	6.3	6.6	6.4	6.7	6.3	6.5	6.4	6.4	6.5	6.4	6.6	6.4
Finance and service industries	5.1	4.9	4.8	4.8	4.8	4.9	4.7	4.9	5.2	4.7	4.9	4.6	4.7	4.6	4.6
Government workers	3.9	3.7	3.8	4.1	3.7	3.6	3.6	3.6	3.7	3.3	4.0	3.6	3.6	3.8	4.0
Agricultural wage and salary workers	8.8	9.1	8.6	8.0	8.7	9.3	7.8	9.7	9.9	10.0	9.9	10.1	9.4	10.3	9.2

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

<sup>2</sup> Includes mining, not shown separately.

NOTE: The data in this table have been revised to reflect seasonal experience through 1979.

### 5. Unemployment rates, by sex and age, seasonally adjusted

Sex and age	Annual average		1979												1980	
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Total, 16 years and over	6.0	5.8	5.7	5.7	5.8	5.8	5.7	5.7	5.9	5.8	5.9	5.8	5.9	6.2	6.0	
16 to 19 years	16.3	16.1	16.0	15.7	16.3	16.5	15.4	15.8	16.6	16.2	16.4	15.9	16.0	16.3	16.5	
16 to 17 years	19.3	18.1	18.5	18.5	18.7	18.9	17.5	17.3	18.5	16.9	18.4	17.3	18.0	19.0	18.7	
18 to 19 years	14.2	14.6	14.3	13.5	14.3	15.0	14.4	14.5	15.4	15.6	15.0	14.7	14.5	14.0	15.1	
20 to 24 years	9.5	9.0	8.6	8.8	8.6	8.9	8.9	9.1	9.3	9.2	9.6	8.8	9.8	10.1	9.5	
25 years and over	4.0	3.9	3.9	3.9	4.0	3.9	3.9	3.9	4.0	3.9	4.0	4.0	3.8	4.2	4.1	
25 to 54 years	4.2	4.1	4.1	4.1	4.2	4.0	4.1	4.0	4.2	4.1	4.2	4.3	4.1	4.4	4.5	
55 years and over	3.2	3.0	3.0	3.1	3.1	3.1	2.9	3.2	3.1	2.9	3.0	2.7	2.7	3.5	2.8	
Men, 16 years and over	5.2	5.1	5.0	5.0	5.1	5.0	4.9	5.1	5.2	5.2	5.2	5.2	5.2	5.7	5.5	
16 to 19 years	15.7	15.8	16.1	15.8	16.0	16.1	14.5	15.4	16.3	16.1	15.7	15.8	15.6	16.2	15.6	
16 to 17 years	19.2	17.9	19.2	18.9	17.9	18.9	16.8	16.1	18.0	16.7	17.1	17.8	17.9	19.0	18.0	
18 to 19 years	13.2	14.2	14.2	13.6	14.1	14.0	14.0	14.8	15.1	15.3	14.4	14.0	13.6	13.9	14.1	
20 to 24 years	9.1	8.6	8.1	8.3	8.0	8.2	8.3	8.8	8.8	8.8	9.5	8.4	9.4	10.4	9.9	
25 years and over	3.3	3.3	3.2	3.2	3.3	3.1	3.2	3.3	3.4	3.3	3.4	3.5	3.2	3.7	3.6	
25 to 54 years	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.4	3.5	3.6	3.5	3.8	3.4	3.8	3.8	
55 years and over	3.1	2.9	2.8	2.8	3.0	2.8	3.1	3.3	3.1	2.8	2.8	2.6	2.6	3.5	2.6	
Women, 16 years and over	7.2	6.8	6.8	6.8	6.9	6.9	6.8	6.6	7.0	6.6	6.9	6.6	6.8	6.8	6.8	
16 to 19 years	17.0	16.4	15.9	15.5	16.6	16.9	16.5	16.2	17.0	16.4	17.2	16.1	16.4	16.3	17.6	
16 to 17 years	19.5	18.3	17.7	18.0	19.6	18.8	18.3	18.6	19.0	17.2	19.8	16.7	18.0	19.1	19.5	
18 to 19 years	15.3	15.0	14.5	13.3	14.5	16.0	14.9	14.2	15.7	15.9	15.6	15.5	15.5	14.2	16.2	
20 to 24 years	10.1	9.6	9.3	9.5	9.4	9.7	9.7	9.4	9.8	9.6	9.7	9.3	10.2	9.8	9.1	
25 years and over	5.1	4.8	5.0	4.9	4.9	4.9	4.8	4.7	4.9	4.6	4.9	4.7	4.7	4.9	4.9	
25 to 54 years	5.4	5.2	5.4	5.3	5.3	5.2	5.2	5.0	5.3	5.0	5.2	5.0	5.1	5.2	5.4	
55 years and over	3.3	3.2	3.3	3.6	3.2	3.6	2.8	3.1	3.2	2.9	3.4	2.9	2.9	3.4	3.0	

### 6. Unemployed persons, by reason for unemployment, seasonally adjusted

[Numbers in thousands]

Reason for unemployment	1979												1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>NUMBER OF UNEMPLOYED</b>														
Lost last job	2,475	2,457	2,520	2,356	2,449	2,526	2,680	2,632	2,731	2,729	2,728	2,988	2,907	
On layoff	779	791	839	725	816	797	915	855	929	987	944	1,019	1,031	
Other job losers	1,696	1,666	1,681	1,631	1,633	1,729	1,765	1,777	1,802	1,742	1,784	1,969	1,876	
Left last job	828	864	847	940	857	846	875	825	835	845	800	779	813	
Reentered labor force	1,766	1,766	1,778	1,767	1,753	1,762	1,788	1,760	1,762	1,698	1,771	1,797	1,784	
Seeking first job	858	808	800	824	781	726	745	801	804	736	858	811	827	
<b>PERCENT DISTRIBUTION</b>														
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	
Job losers	41.8	41.7	42.4	40.0	41.9	43.1	44.0	43.7	44.5	45.4	44.3	46.9	45.9	
On layoff	13.1	13.4	14.1	12.3	14.0	13.6	15.0	14.2	15.2	16.4	15.3	16.0	16.3	
Other job losers	28.6	28.3	28.3	27.7	28.0	29.5	29.0	29.5	29.4	29.0	29.0	30.9	29.6	
Job leavers	14.0	14.7	14.2	16.0	14.7	14.4	14.4	13.7	13.6	14.1	13.0	12.2	12.8	
Reentrants	29.8	30.0	29.9	30.0	30.0	30.1	29.4	29.2	28.7	28.3	28.8	28.2	28.2	
New entrants	14.5	13.7	13.5	14.0	13.4	12.4	12.2	13.3	13.1	12.3	13.9	12.7	13.1	
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>														
Job losers	2.4	2.4	2.5	2.3	2.4	2.5	2.6	2.5	2.6	2.6	2.6	2.9	2.8	
Job leavers	.8	.8	.8	.9	.8	.8	.8	.8	.8	.8	.8	.7	.8	
Reentrants	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	
New entrants	.8	.8	.8	.8	.8	.7	.7	.8	.8	.7	.8	.8	.8	

### 7. Duration of unemployment, seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		1979												1980	
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Less than 5 weeks	2,793	2,869	2,779	2,769	2,876	2,823	2,880	2,820	3,168	2,778	2,955	2,919	2,916	3,184	2,995	
5 to 14 weeks	1,875	1,892	1,877	1,860	1,884	1,919	1,808	1,934	1,738	2,035	1,963	1,869	1,966	1,907	2,081	
15 weeks and over	1,379	1,202	1,239	1,291	1,223	1,212	1,152	1,067	1,185	1,152	1,195	1,191	1,230	1,334	1,286	
15 to 26 weeks	746	684	700	729	687	705	656	615	658	644	678	660	711	795	790	
27 weeks and over	633	518	539	562	536	507	496	452	527	508	517	531	519	539	496	
Average (mean) duration, in weeks	11.9	10.8	11.3	11.8	11.0	10.9	10.5	10.1	10.7	10.7	10.5	10.6	10.5	10.5	10.7	

NOTE: The data in these tables have been revised to reflect seasonal experience through 1979.

## 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 162,000 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.

LABOR TURNOVER DATA in this section are compiled from personnel records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies. A sample of 40,000 establishments represents all industries in the manufacturing and mining sectors of the economy.

### 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 14-20 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 service 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 eliminate the effects of price change. 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. **Spendable earnings** are earnings from which estimated social security and Federal income taxes have been deducted. The

Bureau of Labor Statistics computes spendable earnings from gross weekly earnings for only two illustrative cases: (1) a worker with no dependents and (2) a married worker with three dependents.

**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.

**Labor turnover** is the movement of all wage and salary workers from one employment status to another. **Accession rates** indicate the average number of persons added to a payroll in a given period per 100 employees; **separation rates** indicate the average number dropped from a payroll per 100 employees. Although month-to-month changes in employment can be calculated from the labor turnover data, the results are not comparable with employment data from the employment and payroll survey. The labor turnover survey measures changes during the calendar month while the employment and payroll survey measures changes from midmonth to midmonth.

### 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 September 1979 data, published in the November 1979 issue of the *Review*. Consequently, data published in the *Review* prior to that issue are not necessarily comparable to current data. Complete comparable historical unadjusted and seasonally adjusted data are published in a Supplement to Employment and Earnings (unadjusted data from April 1977 through June 1979 and seasonally adjusted data from January 1974 through June 1979) and in *Employment and Earnings, United States, 1909-78*, BLS Bulletin 1312-11 (for prior periods).

Data on recalls were shown for the first time in tables 12 and 13 in the January 1978 issue of the *Review*. For a detailed discussion of the recalls series, along with historical data, see "New Series on Recalls from the Labor Turnover Survey," *Employment and Earnings*, December 1977, pp. 10-19.

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 for Surveys and Studies*, Bulletin 1910 (Bureau of Labor Statistics, 1976).

The formulas used to construct the spendable average weekly earnings series reflect the latest provisions of the Federal income tax and social security tax laws. For the spendable average weekly earnings formulas for the years 1978-80, see *Employment and Earnings*, March 1980, pp. 10-11. Real earnings data are adjusted using the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).



## 8. Employment by industry, 1950-79

[Nonagricultural payroll data, in thousands]

Year	Total	Mining	Construction	Manufacturing	Transportation and public utilities	Wholesale and retail trade	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government		
											Total	Federal	State and local
1950	45,197	901	2,364	15,241	4,034	9,386	2,635	6,751	1,888	5,357	6,026	1,928	4,098
1951	47,819	929	2,637	16,393	4,226	9,742	2,727	7,015	1,956	5,547	6,389	2,302	4,087
1952	48,793	898	2,668	16,632	4,248	10,004	2,812	7,192	2,035	5,699	6,609	2,420	4,188
1953	50,202	866	2,659	17,549	4,290	10,247	2,854	7,393	2,111	5,835	6,645	2,305	4,340
1954	48,990	791	2,646	16,314	4,084	10,235	2,867	7,368	2,200	5,969	6,751	2,188	4,563
1955	50,641	792	2,839	16,882	4,141	10,535	2,926	7,610	2,298	6,240	6,914	2,187	4,727
1956	52,369	822	3,039	17,243	4,244	10,858	3,018	7,840	2,389	6,497	7,278	2,209	5,069
1957	52,853	828	2,962	17,174	4,241	10,886	3,028	7,858	2,438	6,708	7,616	2,217	5,399
1958	51,324	751	2,817	15,945	3,976	10,750	2,980	7,770	2,481	6,765	7,839	2,191	5,648
1959 <sup>1</sup>	53,268	732	3,004	16,675	4,011	11,127	3,082	8,045	2,549	7,087	8,083	2,233	5,850
1960	54,189	712	2,926	16,796	4,004	11,391	3,143	8,248	2,629	7,378	8,353	2,270	6,083
1961	53,999	672	2,859	16,326	3,903	11,337	3,133	8,204	2,688	7,620	8,594	2,279	6,315
1962	55,549	650	2,948	16,853	3,906	11,566	3,198	8,368	2,754	7,982	8,890	2,340	6,550
1963	56,653	635	3,010	16,995	3,903	11,778	3,248	8,530	2,830	8,277	9,225	2,358	6,868
1964	58,283	634	3,097	17,274	3,951	12,160	3,337	8,823	2,911	8,660	9,596	2,348	7,248
1965	60,765	632	3,232	18,062	4,036	12,716	3,466	9,250	2,977	9,036	10,074	2,378	7,696
1966	63,901	627	3,317	19,214	4,158	13,245	3,597	9,648	3,058	9,498	10,784	2,564	8,220
1967	65,803	613	3,248	19,447	4,268	13,606	3,689	9,917	3,185	10,045	11,391	2,719	8,672
1968	67,897	606	3,350	19,781	4,318	14,099	3,779	10,320	3,337	10,567	11,839	2,737	9,102
1969	70,384	619	3,575	20,167	4,442	14,705	3,907	10,798	3,512	11,169	12,195	2,758	9,437
1970	70,880	623	3,588	19,367	4,515	15,040	3,993	11,047	3,645	11,548	12,554	2,731	9,823
1971	71,214	609	3,704	18,623	4,476	15,352	4,001	11,351	3,772	11,797	12,881	2,696	10,185
1972	73,675	628	3,889	19,151	4,541	15,949	4,113	11,836	3,908	12,276	13,334	2,684	10,649
1973	76,790	642	4,087	20,154	4,656	16,607	4,277	12,329	4,046	12,857	13,732	2,663	11,068
1974	78,265	697	4,020	20,077	4,725	16,987	4,433	12,554	4,148	13,441	14,170	2,724	11,446
1975	76,945	752	3,525	18,323	4,542	17,060	4,415	12,645	4,165	13,892	14,686	2,748	11,937
1976	79,382	779	3,576	18,997	4,582	17,755	4,546	13,209	4,271	14,551	14,871	2,733	12,138
1977	82,423	813	3,851	19,682	4,713	18,516	4,708	13,808	4,467	15,303	15,079	2,727	12,352
1978	86,446	851	4,271	20,476	4,927	19,499	4,957	14,542	4,727	16,220	15,476	2,753	12,723
1979	89,482	957	4,644	20,972	5,154	20,137	5,170	14,966	4,963	17,043	15,612	2,773	12,839

<sup>1</sup>Data include Alaska and Hawaii beginning in 1959.

## 9. Employment by State

[Nonagricultural payroll data, in thousands]

State	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	State	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>
Alabama <sup>1</sup>	1,339.8	1,378.2	1,360.8	Montana	268.9	288.7	278.1
Alaska	152.7	157.7	NA	Nebraska <sup>1</sup>	604.8	632.3	616.3
Arizona <sup>1</sup>	937.9	1,010.7	997.2	Nevada <sup>1</sup>	359.9	394.7	387.1
Arkansas <sup>1</sup>	722.0	757.8	745.3	New Hampshire	363.2	386.9	NA
California <sup>1</sup>	9,380.4	9,886.9	9,726.2	New Jersey	2,951.4	3,064.5	2,993.9
Colorado <sup>1</sup>	1,171.7	1,254.9	1,237.0	New Mexico <sup>1</sup>	446.2	476.3	469.0
Connecticut	1,366.9	1,431.5	1,402.7	New York <sup>1</sup>	6,992.8	7,271.6	7,087.9
Delaware <sup>1</sup>	247.6	261.8	253.2	North Carolina <sup>1</sup>	2,326.0	2,432.8	2,404.6
District of Columbia <sup>1</sup>	601.5	624.1	611.0	North Dakota	230.6	247.3	240.2
Florida <sup>1</sup>	3,307.9	3,511.2	3,508.6	Ohio <sup>1</sup>	4,393.4	4,534.3	4,415.3
Georgia <sup>1</sup>	2,075.7	2,147.3	2,121.8	Oklahoma <sup>1</sup>	1,047.8	1,122.1	1,105.8
Hawaii	383.5	407.4	405.2	Oregon <sup>1</sup>	1,005.0	1,065.2	1,046.4
Idaho	325.3	339.8	330.7	Pennsylvania <sup>1</sup>	4,695.6	4,882.5	4,789.5
Illinois <sup>1</sup>	4,679.3	4,976.9	4,674.8	Rhode Island <sup>1</sup>	389.5	404.7	391.7
Indiana <sup>1</sup>	2,210.0	2,262.6	2,208.7	South Carolina <sup>1</sup>	1,144.9	1,197.6	1,184.1
Iowa <sup>1</sup>	1,098.6	1,141.8	1,116.4	South Dakota	230.6	239.8	233.6
Kansas <sup>1</sup>	914.2	967.6	944.9	Tennessee <sup>1</sup>	1,731.2	1,810.6	1,775.6
Kentucky <sup>1</sup>	1,211.5	1,262.5	1,236.4	Texas <sup>1</sup>	5,406.6	5,754.9	5,725.2
Louisiana <sup>1</sup>	1,471.7	1,525.8	1,512.1	Utah	530.6	574.3	561.1
Maine <sup>1</sup>	398.1	418.7	406.7	Vermont	191.2	202.7	199.1
Maryland	1,580.8	1,645.8	1,604.0	Virginia	2,052.9	2,128.1	2,098.0
Massachusetts	2,519.5	2,625.6	2,578.6	Washington <sup>1</sup>	1,496.6	1,616.0	1,589.0
Michigan <sup>1</sup>	3,611.3	3,626.3	3,507.8	West Virginia <sup>1</sup>	626.6	659.7	633.6
Minnesota	1,683.0	1,790.1	NA	Wisconsin <sup>1</sup>	1,872.4	2,011.7	1,952.3
Mississippi <sup>1</sup>	818.4	850.3	835.9	Wyoming	185.8	212.5	209.0
Missouri <sup>1</sup>	1,941.6	2,014.0	1,963.5				

<sup>1</sup>Revised series; not strictly comparable with previously published data.

10. Employment by industry division and major manufacturing group

[Nonagricultural payroll data, in thousands]

Industry division and group	Annual average		1979										1980		
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>P</sup>	Feb. <sup>P</sup>
<b>TOTAL</b> .....	86,446	89,482	87,331	88,207	88,820	89,671	90,541	89,618	89,673	90,211	90,678	90,902	91,009	89,225	89,301
<b>MINING</b> .....	851	957	915	926	932	944	968	976	986	980	982	984	984	985	987
<b>CONSTRUCTION</b> .....	4,271	4,644	3,957	4,226	4,413	4,662	4,881	4,993	5,048	4,984	4,976	4,879	4,711	4,350	4,287
<b>MANUFACTURING</b> .....	20,476	20,972	20,775	20,887	20,907	20,988	21,234	20,965	20,996	21,192	21,094	20,966	20,902	20,692	20,658
Production workers .....	14,714	15,010	14,908	14,993	15,002	15,061	15,240	14,946	14,960	15,172	15,082	14,954	14,891	14,654	14,649
<b>Durable goods</b> .....	12,246	12,690	12,579	12,664	12,697	12,739	12,877	12,712	12,598	12,805	12,737	12,661	12,649	12,524	12,528
Production workers .....	8,786	9,053	9,018	9,081	9,105	9,129	9,223	9,031	8,907	9,116	9,058	8,983	8,971	8,810	8,825
Lumber and wood products .....	752.4	758.4	737.7	745.5	748.8	763.8	783.2	776.8	780.0	776.3	771.3	748.9	729.2	704.2	698.1
Furniture and fixtures .....	491.1	487.3	495.2	491.8	487.8	483.9	484.2	475.5	483.5	485.3	487.6	488.7	486.9	484.0	480.0
Stone, clay, and glass products .....	698.0	710.8	680.6	697.2	706.6	718.6	733.1	727.1	728.2	723.6	721.0	712.9	699.6	679.9	676.3
Primary metal industries .....	1,212.7	1,243.9	1,244.8	1,251.1	1,259.0	1,258.6	1,274.3	1,260.7	1,244.5	1,244.3	1,225.1	1,216.7	1,204.4	1,199.7	1,199.2
Fabricated metal products .....	1,673.4	1,727.2	1,715.6	1,719.8	1,723.7	1,727.8	1,749.0	1,715.7	1,716.1	1,735.3	1,738.3	1,738.2	1,730.4	1,702.5	1,703.0
Machinery, except electrical .....	2,319.2	2,462.5	2,446.4	2,459.5	2,468.0	2,463.6	2,491.2	2,485.1	2,467.1	2,496.4	2,447.2	2,440.9	2,455.8	2,507.2	2,509.9
Electric and electronic equipment .....	1,999.5	2,108.7	2,071.0	2,082.6	2,086.1	2,095.2	2,128.2	2,111.7	2,089.5	2,136.1	2,143.7	2,146.3	2,153.1	2,144.9	2,138.9
Transportation equipment .....	1,991.7	2,048.3	2,062.7	2,083.9	2,082.2	2,091.8	2,077.9	2,027.7	1,933.2	2,051.0	2,040.9	2,009.7	2,043.4	1,965.0	1,985.5
Instruments and related products .....	653.5	690.4	680.2	683.2	686.5	686.5	698.8	692.9	695.3	692.7	695.4	695.9	699.8	699.2	700.3
Miscellaneous manufacturing .....	454.0	452.4	444.8	449.0	448.0	448.9	457.4	438.6	460.6	463.8	466.9	462.8	446.4	436.9	437.1
<b>Nondurable goods</b> .....	8,230	8,283	8,196	8,223	8,210	8,249	8,357	8,253	8,398	8,387	8,357	8,305	8,253	8,168	8,130
Production workers .....	5,928	5,957	5,890	5,912	5,897	5,932	6,017	5,915	6,053	6,056	6,024	5,971	5,920	5,844	5,824
Food and kindred products .....	1,721.2	1,716.3	1,658.1	1,666.9	1,657.3	1,669.6	1,716.6	1,737.8	1,810.0	1,814.1	1,766.8	1,725.0	1,695.9	1,650.1	1,639.1
Tobacco manufactures .....	69.6	66.2	66.4	64.4	62.5	61.9	62.1	62.1	69.0	72.2	71.9	64.8	66.7	65.0	63.9
Textile mill products .....	900.2	891.9	896.4	894.4	890.4	892.5	900.4	875.5	890.4	888.9	889.8	893.9	893.5	886.7	888.3
Apparel and other textile products .....	1,332.5	1,313.1	1,320.6	1,326.6	1,323.7	1,327.5	1,333.1	1,278.7	1,308.9	1,309.1	1,317.0	1,306.2	1,292.0	1,282.3	1,300.7
Paper and allied products .....	700.9	714.1	703.4	708.8	710.8	712.7	724.6	719.6	723.3	718.5	717.7	715.9	714.0	712.2	710.2
Printing and publishing .....	1,193.1	1,242.9	1,225.7	1,229.5	1,231.0	1,234.7	1,243.4	1,245.8	1,245.4	1,246.1	1,254.5	1,265.6	1,272.0	1,266.9	1,275.2
Chemicals and allied products .....	1,096.3	1,112.7	1,099.7	1,103.9	1,106.7	1,110.9	1,126.6	1,123.0	1,121.2	1,114.9	1,115.0	1,115.2	1,115.6	1,113.1	1,111.9
Petroleum and coal products .....	208.7	213.8	206.4	208.3	210.8	212.9	216.8	218.0	218.3	218.1	218.1	217.2	214.9	213.3	163.6
Rubber and miscellaneous plastics products .....	751.9	767.5	773.8	774.4	772.0	777.0	779.4	767.4	765.8	762.0	762.6	757.6	747.5	742.4	738.1
Leather and leather products .....	255.6	243.8	245.1	245.7	245.1	249.2	253.7	224.7	245.8	243.1	243.1	243.2	240.7	235.8	239.4
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	4,927	5,154	5,028	5,060	4,989	5,125	5,231	5,200	5,210	5,242	5,244	5,255	5,254	5,144	5,130
<b>WHOLESALE AND RETAIL TRADE</b> .....	19,499	20,137	19,548	19,690	19,957	20,119	20,222	20,118	20,137	20,260	20,314	20,580	20,932	20,192	20,025
<b>WHOLESALE TRADE</b> .....	4,957	5,170	5,067	5,098	5,112	5,146	5,211	5,208	5,211	5,206	5,235	5,251	5,234	5,206	5,215
<b>RETAIL TRADE</b> .....	14,542	14,966	14,481	14,592	14,845	14,973	15,011	14,910	14,926	15,054	15,079	15,329	15,698	14,986	14,810
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	4,727	4,963	4,845	4,870	4,900	4,936	5,003	5,032	5,053	5,002	5,013	5,029	5,041	5,042	5,046
<b>SERVICES</b> .....	16,220	17,043	16,545	16,749	16,897	17,039	17,239	17,314	17,312	17,225	17,292	17,281	17,270	17,084	17,247
<b>GOVERNMENT</b> .....	15,476	15,612	15,718	15,799	15,825	15,858	15,763	15,020	14,931	15,326	15,763	15,928	15,915	15,736	15,921
Federal .....	2,753	2,773	2,738	2,740	2,750	2,773	2,824	2,838	2,844	2,751	2,756	2,760	2,770	2,763	2,771
State and local .....	12,723	12,839	12,980	13,059	13,075	13,085	12,939	12,182	12,087	12,575	13,007	13,168	13,145	12,973	13,150

### 11. Employment by industry division and major manufacturing group, seasonally adjusted

[Nonagricultural payroll data, in thousands]

Industry division and group	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. P	Feb. P
<b>TOTAL</b> .....	88,700	89,039	89,036	89,398	89,626	89,713	89,762	89,803	89,982	90,100	90,241	90,590	90,731
<b>MINING</b> .....	937	940	940	944	949	956	968	973	979	983	991	1,003	1,010
<b>CONSTRUCTION</b> .....	4,486	4,614	4,559	4,648	4,662	4,688	4,674	4,671	4,694	4,714	4,783	4,893	4,861
<b>MANUFACTURING</b> .....	21,025	21,073	21,066	21,059	21,063	21,079	20,957	20,949	20,899	20,836	20,881	20,882	20,900
Production workers .....	15,128	15,153	15,134	15,112	15,096	15,090	14,956	14,957	14,894	14,829	14,865	14,824	14,862
<b>Durable goods</b> .....	12,715	12,751	12,752	12,739	12,760	12,786	12,714	12,737	12,650	12,587	12,615	12,600	12,659
Production workers .....	9,138	9,158	9,146	9,119	9,123	9,124	9,044	9,066	8,972	8,908	8,931	8,875	8,939
Lumber and wood products .....	768	769	761	762	757	753	752	758	760	751	740	732	727
Furniture and fixtures .....	496	493	490	487	485	488	484	480	482	483	483	484	480
Stone, clay, and glass products .....	712	718	714	715	715	711	710	708	709	704	706	707	707
Primary metal industries .....	1,256	1,259	1,260	1,254	1,257	1,256	1,245	1,236	1,226	1,223	1,208	1,206	1,210
Fabricated metal products .....	1,733	1,732	1,732	1,730	1,737	1,730	1,714	1,716	1,723	1,726	1,725	1,711	1,720
Machinery, except electrical .....	2,437	2,450	2,466	2,471	2,484	2,500	2,492	2,496	2,455	2,438	2,444	2,497	2,500
Electric and electronic equipment .....	2,079	2,093	2,101	2,106	2,124	2,131	2,092	2,117	2,125	2,125	2,140	2,149	2,147
Transportation equipment .....	2,094	2,094	2,084	2,077	2,057	2,073	2,079	2,086	2,025	1,994	2,019	1,959	2,016
Instruments and related products .....	682	685	689	688	683	694	695	692	696	694	698	701	702
Miscellaneous manufacturing .....	458	458	455	449	451	450	451	448	449	449	452	454	450
<b>Nondurable goods</b> .....	8,310	8,322	8,314	8,320	8,303	8,293	8,243	8,212	8,249	8,249	8,266	8,282	8,241
Production workers .....	5,990	5,995	5,988	5,993	5,973	5,966	5,912	5,891	5,922	5,921	5,934	5,949	5,923
Food and kindred products .....	1,729	1,736	1,728	1,725	1,720	1,707	1,696	1,691	1,707	1,710	1,715	1,706	1,709
Tobacco manufactures .....	68	69	69	70	69	68	64	65	65	60	62	64	65
Textile mill products .....	899	897	892	893	892	892	886	884	887	889	893	890	891
Apparel and other textile products .....	1,327	1,324	1,325	1,324	1,312	1,324	1,302	1,294	1,299	1,292	1,297	1,307	1,307
Paper and allied products .....	711	716	717	714	715	711	717	714	715	714	713	718	717
Printing and publishing .....	1,229	1,232	1,234	1,236	1,242	1,250	1,247	1,245	1,252	1,262	1,263	1,271	1,279
Chemicals and allied products .....	1,108	1,108	1,111	1,114	1,119	1,116	1,111	1,110	1,113	1,114	1,119	1,122	1,120
Petroleum and coal products .....	212	213	213	213	212	212	213	215	217	217	217	219	168
Rubber and miscellaneous plastics products .....	779	780	781	784	775	777	764	751	751	749	745	745	743
Leather and leather products .....	248	247	244	247	247	229	243	243	243	242	242	240	242
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	5,094	5,116	5,024	5,130	5,190	5,169	5,194	5,180	5,218	5,229	5,223	5,206	5,198
<b>WHOLESALE AND RETAIL TRADE</b> .....	20,016	20,054	20,088	20,129	20,116	20,122	20,126	20,169	20,243	20,308	20,254	20,396	20,505
<b>WHOLESALE TRADE</b> .....	5,118	5,134	5,138	5,156	5,180	5,182	5,185	5,190	5,209	5,235	5,218	5,243	5,268
<b>RETAIL TRADE</b> .....	14,898	14,920	14,950	14,973	14,936	14,940	14,941	14,979	15,034	15,073	15,036	15,153	15,237
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	4,884	4,899	4,915	4,936	4,958	4,972	5,003	4,997	5,018	5,039	5,056	5,083	5,087
<b>SERVICES</b> .....	16,763	16,833	16,880	16,954	17,051	17,092	17,141	17,191	17,257	17,298	17,357	17,415	17,474
<b>GOVERNMENT</b> .....	15,495	15,510	15,564	15,598	15,637	15,635	15,699	15,673	15,674	15,693	15,696	15,712	15,696
Federal .....	2,757	2,757	2,758	2,770	2,788	2,785	2,813	2,762	2,770	2,771	2,771	2,791	2,791
State and local .....	12,738	12,753	12,806	12,828	12,849	12,850	12,886	12,911	12,904	12,922	12,925	12,921	12,905



**12. Labor turnover rates in manufacturing, 1977 to date**

[Per 100 employees]

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Total accessions											
1977	4.0	3.7	3.7	4.0	3.8	4.6	4.9	4.3	5.3	4.6	3.9	3.1	2.4
1978	4.1	3.8	3.2	3.8	4.0	4.7	4.9	4.4	5.4	4.9	4.3	3.3	2.4
1979	3.9	4.0	3.4	3.8	3.9	4.7	4.8	4.3	4.9	4.4	4.1	2.9	2.2
1980	...	P3.8	...	...	...	...	...	...	...	...	...	...	...
New hires													
1977	2.8	2.2	2.1	2.6	2.7	3.5	3.7	3.0	4.0	3.5	3.0	2.2	1.6
1978	3.1	2.5	2.2	2.7	2.9	3.6	3.9	3.3	4.2	3.9	3.5	2.6	1.7
1979	2.9	2.8	2.5	2.8	2.9	3.6	3.8	3.1	3.7	3.4	3.1	2.2	1.5
1980	...	P2.4	...	...	...	...	...	...	...	...	...	...	...
Recalls													
1977	.9	1.2	1.3	1.1	.9	.8	.8	.9	1.0	.8	.6	.6	.6
1978	.7	1.0	.7	.8	.8	.8	.7	.8	.9	.7	.6	.5	.5
1979	.7	.9	.7	.7	.7	.8	.7	.9	.9	.8	.7	.5	.5
1980	...	P1.1	...	...	...	...	...	...	...	...	...	...	...
Total separations													
1977	3.8	3.9	3.4	3.4	3.4	3.5	3.5	4.3	5.1	4.9	3.8	3.4	3.4
1978	3.9	3.6	3.1	3.5	3.6	3.7	3.8	4.1	5.3	4.8	4.1	3.5	3.4
1979	4.0	3.8	3.2	3.6	3.6	3.8	3.9	4.3	5.7	4.7	4.2	3.8	3.5
1980	...	P4.1	...	...	...	...	...	...	...	...	...	...	...
Quits													
1977	1.8	1.4	1.3	1.6	1.7	1.9	1.9	1.9	3.1	2.8	1.9	1.5	1.2
1978	2.1	1.5	1.4	1.8	2.0	2.1	2.2	2.1	3.5	3.1	2.3	1.7	1.3
1979	2.0	1.8	1.6	1.9	2.0	2.1	2.1	2.0	3.3	2.7	2.1	1.6	1.1
1980	...	P1.6	...	...	...	...	...	...	...	...	...	...	...
Layoffs													
1977	1.1	1.7	1.4	1.0	.9	.8	.8	1.5	1.0	1.1	1.1	1.1	1.5
1978	.9	1.2	.9	.9	.8	.7	.7	1.0	.8	.8	.9	1.0	1.4
1979	1.1	1.1	.8	.8	.9	.7	.8	1.4	1.3	1.1	1.2	1.5	1.7
1980	...	P1.6	...	...	...	...	...	...	...	...	...	...	...

**13. Labor turnover rates in manufacturing, by major industry group**

[Per 100 employees]

Major industry group	Accession rates									Separation rates									
	Total			New hires			Recalls			Total			Quits			Layoffs			
	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	Jan. 1979	Dec. 1979	Jan. 1980 <sup>P</sup>	
<b>MANUFACTURING</b>	4.0	2.2	3.8	2.8	1.5	2.4	0.9	0.5	1.1	3.8	3.5	4.1	1.8	1.1	1.6	1.1	1.7	1.6	
Seasonally adjusted	4.3	4.0	4.1	3.3	3.0	2.9	...	...	...	4.1	4.0	4.2	2.3	1.9	2.0	...	9	1.2	1.3
<b>Durable goods</b>	3.8	1.9	3.5	2.7	1.3	2.1	.7	.5	1.0	3.5	3.2	3.9	1.6	.9	1.4	.9	1.6	1.6	
Lumber and wood products	5.1	2.4	5.2	4.1	1.7	3.2	.8	.6	1.7	5.9	6.0	6.0	3.0	1.8	2.6	1.8	3.3	2.6	
Furniture and fixtures	5.5	2.5	4.6	4.9	1.8	3.6	.4	.6	.7	5.2	3.5	5.0	3.3	1.6	2.5	.8	1.2	1.4	
Stone, clay, and glass products	3.7	1.9	3.7	2.4	1.2	1.9	1.1	.5	1.6	4.9	4.8	5.0	1.7	1.1	1.4	2.3	3.0	2.7	
Primary metal industries	2.9	1.9	3.0	1.8	.7	1.2	.8	.9	1.5	2.5	3.3	3.2	.9	.5	.7	.6	2.0	1.6	
Fabricated metal products	4.0	2.1	4.0	3.1	1.5	2.5	.8	.5	1.2	3.9	3.4	4.4	1.8	1.1	1.6	1.1	1.6	2.0	
Machinery, except electrical	3.3	1.8	2.8	2.7	1.3	2.0	.4	.3	.5	2.5	1.9	2.7	1.3	.7	1.2	.4	.6	.7	
Electric and electronic equipment	3.6	2.0	3.0	2.6	1.4	2.1	.6	.3	.5	3.2	2.2	3.3	1.5	.9	1.4	.7	.6	1.0	
Transportation equipment	3.7	1.6	...	2.1	.7	...	1.0	.6	...	3.2	3.5	...	1.1	.5	...	1.1	2.4	...	
Instruments and related products	2.9	1.8	3.1	2.4	1.5	2.5	.3	.1	.3	2.5	1.9	2.7	1.4	.9	1.6	.3	.5	.4	
Miscellaneous manufacturing	5.6	2.2	5.4	3.5	1.7	3.1	2.0	.5	2.0	5.8	6.5	6.3	2.5	1.4	2.1	2.1	4.4	3.3	
<b>Nondurable goods</b>	4.3	2.6	4.2	3.0	1.8	2.7	1.1	.7	1.3	4.3	4.0	4.4	2.1	1.4	2.0	1.3	1.9	1.6	
Food and kindred products	5.3	3.4	4.8	3.4	2.3	2.9	1.6	1.0	1.6	5.9	6.1	6.0	2.6	2.0	2.4	2.4	3.4	2.6	
Tobacco manufacturers	2.4	4.2	...	.9	1.2	...	.8	2.6	...	5.3	3.0	...	.7	.5	...	3.6	1.9	...	
Textile mill products	4.5	2.4	4.7	3.4	1.8	3.6	.7	.3	.8	4.5	3.4	4.6	2.7	1.6	2.6	.8	1.1	.9	
Apparel and other products	6.2	3.1	6.9	3.8	1.9	4.0	2.2	1.1	2.7	6.0	5.4	5.9	3.0	1.8	3.0	2.2	3.0	2.2	
Paper and allied products	2.6	1.7	2.7	1.8	1.0	1.5	.7	.5	1.0	2.7	2.6	2.8	1.2	.7	1.0	.8	1.3	1.0	
Printing and publishing	3.6	2.7	3.4	2.9	2.1	2.8	.5	.5	.5	3.4	2.9	3.3	1.9	1.6	1.8	.8	.7	.8	
Chemicals and allied products	1.7	1.1	1.6	1.3	.8	1.2	.3	.2	.3	1.7	1.3	1.7	.7	.5	.7	.4	.4	.4	
Petroleum and coal products	2.0	1.2	1.7	1.7	1.0	1.4	.2	.1	.2	2.0	2.1	2.3	.7	.5	.7	.5	1.2	.6	
Rubber and miscellaneous plastics products	5.1	2.7	4.5	3.8	1.6	2.7	1.0	.8	1.5	4.4	4.4	5.2	2.4	1.6	1.9	.9	2.1	2.2	
Leather and leather products	6.9	3.8	7.0	4.3	2.5	4.2	2.1	1.0	2.6	6.5	5.9	7.4	3.7	2.4	3.2	1.8	2.8	3.1	

### 14. Hours and earnings, by industry division, 1948-79

[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
	Total private			Mining			Construction			Manufacturing		
1948	\$49.00	40.0	\$1.225	\$65.56	39.4	\$1.664	\$65.27	38.1	\$1.713	\$53.12	40.0	\$1.328
1949	50.24	39.4	1.275	62.33	36.3	1.717	67.56	37.7	1.792	53.88	39.1	1.378
1950	53.13	39.8	1.335	67.16	37.9	1.772	69.68	37.4	1.863	58.32	40.5	1.440
1951	57.86	39.9	1.45	74.11	38.4	1.93	76.96	38.1	2.02	63.34	40.6	1.56
1952	60.65	39.9	1.52	77.59	38.6	2.01	82.86	38.9	2.13	66.75	40.7	1.64
1953	63.76	39.6	1.61	83.03	38.8	2.14	86.41	37.9	2.28	70.47	40.5	1.74
1954	64.52	39.1	1.65	82.60	38.6	2.14	88.91	37.2	2.39	70.49	39.6	1.78
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
1956	70.74	39.3	1.80	95.06	40.8	2.33	96.38	37.5	2.57	78.78	40.4	1.95
1957	73.33	38.8	1.89	98.25	40.1	2.45	100.27	37.0	2.71	81.19	39.8	2.04
1958	75.08	38.5	1.95	96.08	38.9	2.47	103.78	36.8	2.82	82.32	39.2	2.10
1959 <sup>1</sup>	78.78	39.0	2.02	103.68	40.5	2.56	108.41	37.0	2.93	88.26	40.3	2.19
1960	80.67	38.6	2.09	105.04	40.4	2.60	112.67	36.7	3.07	89.72	39.7	2.26
1961	82.60	38.6	2.14	106.92	40.5	2.64	118.08	36.9	3.20	92.34	39.8	2.32
1962	85.91	38.7	2.22	110.70	41.0	2.70	122.47	37.0	3.31	96.56	40.4	2.39
1963	88.46	38.8	2.28	114.40	41.6	2.75	127.19	37.3	3.41	99.23	40.5	2.45
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	332.11	43.3	7.67	318.32	36.8	8.65	249.27	40.4	6.17
1979	219.91	39.7	6.16	364.64	43.0	8.48	341.69	36.9	9.26	268.94	40.2	6.69
	Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services		
1948				\$40.80	40.4	\$1.010	\$45.48	37.9	\$1.200			
1949				42.93	40.5	1.060	47.63	37.8	1.260			
1950				44.55	40.5	1.100	50.52	37.7	1.340			
1951				47.79	40.5	1.18	54.67	37.7	1.45			
1952				49.20	40.0	1.23	57.08	37.8	1.51			
1953				51.35	39.5	1.30	59.57	37.7	1.58			
1954				53.33	39.5	1.35	62.04	37.6	1.65			
1955				55.16	39.4	1.40	63.92	37.6	1.70			
1956				57.48	39.1	1.47	65.68	36.9	1.78			
1957				59.60	38.7	1.54	67.53	36.7	1.84			
1958				61.76	38.6	1.60	70.12	37.1	1.89			
1959 <sup>1</sup>				64.41	38.8	1.66	72.74	37.3	1.95			
1960				66.01	38.6	1.71	75.14	37.2	2.02			
1961				67.41	38.3	1.76	77.12	36.9	2.09			
1962				69.91	38.2	1.83	80.94	37.3	2.17			
1963				72.01	38.1	1.89	84.38	37.5	2.25			
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	178.36	36.4	4.90	163.67	32.8	4.99
1979	326.38	39.9	8.18	164.96	32.6	5.06	191.66	36.3	5.28	175.27	32.7	5.36

<sup>1</sup> Data include Alaska and Hawaii beginning in 1959.

**15. Weekly hours, by industry division and major manufacturing group**

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual Average		1979										1980		
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. P	Feb. P
<b>TOTAL PRIVATE</b> .....	35.8	35.7	35.4	35.7	35.1	35.5	35.9	36.0	36.0	35.8	35.7	35.6	35.9	35.1	35.1
<b>MINING</b> .....	43.3	43.0	42.6	42.9	42.6	42.8	43.3	41.7	43.1	43.5	43.7	43.7	43.9	43.2	43.0
<b>CONSTRUCTION</b> .....	36.8	36.9	35.4	37.0	35.5	37.2	37.9	37.7	38.0	37.9	37.6	36.5	37.1	34.9	35.5
<b>MANUFACTURING</b> .....	40.4	40.2	40.2	40.6	38.9	40.1	40.4	39.9	40.0	40.3	40.3	40.4	40.9	39.8	39.7
Overtime hours .....	3.6	3.3	3.5	3.6	2.5	3.3	3.4	3.2	3.3	3.6	3.4	3.4	3.4	3.0	2.9
<b>Durable goods</b> .....	41.1	40.8	41.1	41.4	39.3	40.8	41.0	40.4	40.4	40.8	40.8	40.8	41.6	40.4	40.3
Overtime hours .....	3.8	3.5	3.9	3.9	2.6	3.6	3.6	3.4	3.4	3.6	3.5	3.5	3.5	3.1	3.0
Lumber and wood products .....	39.8	39.5	39.0	39.7	39.1	39.6	40.2	39.4	39.9	40.1	39.8	38.8	39.2	38.4	38.3
Furniture and fixtures .....	39.3	38.6	38.1	39.0	37.5	38.2	38.8	38.0	38.6	39.0	39.3	39.2	39.9	38.5	38.3
Stone, clay, and glass products .....	41.6	41.5	40.6	41.8	41.1	41.9	42.1	41.5	41.7	41.7	41.7	41.7	41.8	40.1	39.9
Primary metal industries .....	41.8	41.4	42.1	41.9	41.7	41.4	41.6	41.3	40.8	41.3	40.9	40.7	40.9	40.6	40.5
Fabricated metal products .....	41.0	40.8	40.9	41.3	38.8	40.7	41.0	40.3	40.5	40.8	41.0	41.0	41.9	40.6	40.4
Machinery except electrical .....	42.0	41.8	42.5	42.6	40.3	41.7	42.0	41.2	41.3	41.9	41.6	41.9	42.8	41.4	41.4
Electric and electronic equipment .....	40.3	40.3	40.5	40.7	38.8	40.2	40.5	39.6	39.7	40.5	40.3	40.9	41.3	40.3	40.1
Transportation equipment .....	42.2	41.2	42.1	42.3	37.9	41.6	41.3	40.9	40.5	40.7	41.3	40.8	42.6	40.4	40.7
Instruments and related products .....	40.9	40.8	41.0	41.3	40.0	40.8	40.7	40.3	40.3	40.7	40.8	41.4	41.6	41.1	40.7
Miscellaneous manufacturing .....	38.8	38.9	38.6	39.2	37.6	38.5	39.0	38.7	38.9	39.3	39.3	39.6	39.7	39.0	39.2
<b>Nondurable goods</b> .....	39.4	39.3	38.9	39.3	38.2	39.1	39.4	39.2	39.4	39.6	39.4	39.6	39.9	39.0	38.8
Overtime hours .....	3.2	3.1	3.0	3.1	2.5	2.9	3.0	3.0	3.2	3.5	3.2	3.3	3.2	2.9	2.8
Food and kindred products .....	39.7	39.9	39.2	39.6	39.0	39.6	39.8	40.1	40.3	40.6	40.0	40.2	40.3	39.4	38.9
Tobacco manufactures .....	38.1	38.0	36.2	38.1	37.6	38.9	39.0	36.1	37.6	39.1	38.8	39.0	39.5	37.4	36.1
Textile mill products .....	40.4	40.3	39.9	40.4	38.6	40.1	40.6	39.9	40.3	40.8	40.8	41.3	41.5	40.9	40.9
Apparel and other textile products .....	35.6	35.2	34.9	35.4	33.9	35.1	35.6	35.4	35.6	35.4	35.5	35.6	35.9	35.2	35.3
Paper and allied products .....	42.9	42.6	42.2	42.6	41.6	42.4	42.8	42.5	42.6	42.7	42.6	42.9	43.5	42.6	42.1
Printing and publishing .....	37.6	37.5	37.3	37.7	36.8	37.3	37.4	37.4	37.9	37.9	37.5	37.9	38.1	37.3	37.0
Chemicals and allied products .....	41.9	41.8	41.7	41.9	41.9	41.8	41.8	41.7	41.8	41.8	41.7	42.1	42.2	41.6	41.5
Petroleum and coal products .....	43.6	43.8	42.7	43.8	43.9	43.7	43.4	44.1	43.6	44.7	44.1	44.8	43.4	36.0	41.9
Rubber and miscellaneous plastics products .....	40.9	40.5	41.2	41.4	39.4	40.5	40.7	40.2	40.0	40.5	40.5	40.3	40.7	40.3	39.6
Leather and leather products .....	37.1	36.5	35.9	35.9	35.3	36.4	37.1	36.9	36.6	36.8	36.5	36.8	37.3	36.9	36.9
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	40.0	39.9	39.9	39.8	39.0	39.6	40.0	40.0	40.3	39.9	39.9	40.2	40.0	39.3	39.3
<b>WHOLESALE AND RETAIL TRADE</b> .....	32.9	32.6	32.1	32.4	32.5	32.4	32.9	33.3	33.2	32.7	32.5	32.4	32.9	31.8	31.8
<b>WHOLESALE TRADE</b> .....	38.8	38.8	38.4	38.9	38.6	38.9	39.0	39.0	38.9	38.8	38.9	38.9	39.1	38.4	38.3
<b>RETAIL TRADE</b> .....	31.0	30.7	30.1	30.3	30.6	30.4	31.0	31.5	31.4	30.7	30.4	30.4	31.0	29.7	29.7
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	36.4	36.3	36.4	36.3	36.4	36.1	36.2	36.4	36.2	36.3	36.3	36.4	36.4	36.3	36.3
<b>SERVICES</b> .....	32.8	32.7	32.4	32.6	32.5	32.5	32.9	33.3	33.2	32.7	32.6	32.6	32.8	32.5	32.5



### 16. 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	1979											1980	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>P</sup>	Feb. <sup>P</sup>
<b>TOTAL PRIVATE</b> .....	35.7	35.9	35.3	35.7	35.6	35.6	35.6	35.7	35.6	35.7	35.7	35.6	35.4
<b>MINING</b> .....	43.1	43.1	42.9	42.8	43.0	41.6	43.2	43.1	43.1	43.2	43.9	44.2	43.5
<b>CONSTRUCTION</b> .....	36.6	37.1	35.5	37.1	37.2	36.8	37.2	37.5	36.6	36.8	37.1	37.4	36.7
<b>MANUFACTURING</b> .....	40.6	40.6	39.1	40.2	40.1	40.2	40.1	40.2	40.2	40.1	40.2	40.3	40.1
Overtime hours .....	3.7	3.7	2.7	3.5	3.4	3.3	3.2	3.2	3.2	3.3	3.2	3.2	3.1
<b>Durable goods</b> .....	41.4	41.4	39.5	40.9	40.7	40.7	40.7	40.7	40.8	40.6	40.7	40.9	40.6
Overtime hours .....	4.1	4.0	2.7	3.8	3.6	3.5	3.3	3.3	3.3	3.4	3.3	3.3	3.1
Lumber and wood products .....	39.6	40.0	39.1	39.4	39.4	39.3	39.5	39.7	39.4	38.9	39.0	39.8	38.9
Furniture and fixtures .....	38.8	39.1	38.1	38.5	38.5	38.4	38.3	38.6	38.8	38.9	39.0	39.1	39.0
Stone, clay, and glass products .....	41.6	42.0	41.2	41.7	41.6	41.4	41.3	41.5	41.3	41.5	41.6	41.3	40.8
Primary metal industries .....	42.2	42.0	41.8	41.4	41.2	41.3	41.0	41.0	41.1	40.7	40.6	40.7	40.6
Fabricated metal products .....	41.3	41.3	39.1	40.7	40.7	40.8	40.6	40.7	40.9	40.7	41.0	40.9	40.8
Machinery, except electrical .....	42.5	42.4	40.5	42.0	42.0	41.9	41.6	41.9	41.6	41.6	41.6	41.6	41.4
Electric and electronic equipment .....	40.7	40.7	39.0	40.4	40.3	40.2	39.8	40.3	40.3	40.6	40.5	40.5	40.3
Transportation equipment .....	42.7	42.3	37.9	41.5	40.8	40.9	41.7	40.6	41.3	40.6	41.0	41.3	41.2
Instruments and related products .....	41.2	41.2	40.3	40.8	40.6	40.7	40.5	40.6	40.7	41.0	40.8	41.6	40.9
Miscellaneous manufacturing .....	39.0	39.0	37.6	38.6	38.9	39.3	39.1	39.1	39.1	39.1	39.2	39.4	39.6
<b>Nondurable goods</b> .....	39.3	39.4	38.6	39.2	39.2	39.2	39.2	39.3	39.3	39.4	39.4	39.5	39.3
Overtime hours .....	3.2	3.3	2.7	3.0	3.0	3.0	3.0	3.1	3.0	3.2	3.1	3.1	3.0
Food and kindred products .....	39.8	40.0	39.6	39.8	39.8	39.8	39.7	40.0	39.9	40.0	39.9	39.9	39.5
Tobacco manufactures .....	36.9	38.0	37.6	38.9	37.6	38.5	38.0	38.6	38.3	37.8	38.8	38.5	36.8
Textile mill products .....	40.1	40.3	38.8	40.0	40.1	40.1	40.1	40.6	40.8	41.1	41.0	41.7	41.2
Apparel and other textile products .....	35.4	35.4	34.2	35.2	35.2	35.5	35.3	35.3	35.3	35.3	35.6	35.9	35.8
Paper and allied products .....	42.7	42.8	41.8	42.6	42.5	42.5	42.6	42.4	42.6	42.7	42.9	42.8	42.6
Printing and publishing .....	37.7	37.7	37.1	37.4	37.4	37.5	37.7	37.5	37.4	37.6	37.4	37.9	37.4
Chemicals and allied products .....	42.0	41.9	41.7	41.9	41.7	41.9	42.0	41.7	41.7	41.9	41.7	41.9	41.8
Petroleum and coal products .....	43.6	44.0	43.9	43.7	43.3	43.6	43.7	44.1	43.7	44.4	43.5	36.5	42.8
Rubber and miscellaneous plastics products .....	41.2	41.3	39.7	40.9	40.7	40.6	40.2	40.3	40.3	40.0	39.9	40.6	39.6
Leather and leather products .....	36.4	36.3	35.6	36.1	36.4	36.6	36.5	37.0	36.5	36.7	36.9	37.4	37.4
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	40.0	40.0	39.2	39.8	39.8	39.7	39.9	39.9	39.9	40.2	39.8	39.7	39.4
<b>WHOLESALE AND RETAIL TRADE</b> .....	32.5	32.7	32.8	32.6	32.6	32.6	32.5	32.6	32.6	32.7	32.6	32.4	32.2
<b>WHOLESALE TRADE</b> .....	38.7	39.0	38.7	39.0	38.8	38.8	38.7	38.7	38.8	38.9	38.9	38.7	38.6
<b>RETAIL TRADE</b> .....	30.6	30.7	30.9	30.6	30.6	30.6	30.5	30.7	30.6	30.7	30.6	30.4	30.2
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	36.4	36.4	36.5	36.1	36.2	36.3	36.1	36.4	36.2	36.5	36.4	36.2	36.3
<b>SERVICES</b> .....	32.6	32.8	32.7	32.7	32.7	32.8	32.7	32.7	32.6	32.7	32.9	32.7	32.7

**17. 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		1979										1980		
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. P	Feb. P
<b>TOTAL PRIVATE</b> .....	\$5.69	\$6.16	\$6.00	\$6.02	\$6.03	\$6.09	\$6.12	\$6.16	\$6.19	\$6.31	\$6.32	\$6.35	\$6.39	\$6.42	\$6.46
<b>MINING</b> .....	7.67	8.48	8.21	8.27	8.54	8.45	8.49	8.52	8.48	8.57	8.57	8.70	8.73	8.87	8.91
<b>CONSTRUCTION</b> .....	8.65	9.26	9.02	8.97	9.02	9.14	9.13	9.24	9.32	9.51	9.49	9.50	9.57	9.49	9.63
<b>MANUFACTURING</b> .....	6.17	6.69	6.52	6.56	6.54	6.63	6.66	6.71	6.69	6.80	6.82	6.86	6.97	6.95	6.98
<b>Durable goods</b> .....	6.58	7.12	6.96	6.99	6.95	7.07	7.11	7.15	7.12	7.24	7.25	7.29	7.41	7.37	7.44
Lumber and wood products .....	5.60	6.08	5.83	5.84	5.90	5.97	6.16	6.23	6.32	6.32	6.24	6.23	6.25	6.20	6.36
Furniture and fixtures .....	4.68	5.06	4.93	4.95	4.94	4.97	5.05	5.04	5.10	5.18	5.20	5.23	5.27	5.26	5.29
Stone, clay, and glass products .....	6.32	6.84	6.58	6.64	6.73	6.78	6.85	6.89	6.90	6.98	7.00	7.07	7.10	7.06	7.11
Primary metal industries .....	8.20	8.97	8.75	8.75	8.92	8.83	8.91	9.04	9.10	9.16	9.10	9.26	9.28	9.26	9.35
Fabricated metal products .....	6.34	6.82	6.65	6.72	6.62	6.77	6.81	6.80	6.83	6.93	6.96	6.99	7.12	7.06	7.12
Machinery, except electrical .....	6.77	7.33	7.16	7.19	7.10	7.25	7.34	7.35	7.35	7.48	7.45	7.51	7.65	7.64	7.67
Electric and electronic equipment .....	5.82	6.31	6.13	6.16	6.11	6.21	6.25	6.27	6.36	6.46	6.48	6.51	6.64	6.66	6.71
Transportation equipment .....	7.91	8.53	8.35	8.42	8.26	8.56	8.53	8.55	8.44	8.59	8.67	8.68	8.90	8.77	8.83
Instruments and related products .....	5.71	6.17	6.02	6.04	6.03	6.11	6.11	6.16	6.14	6.21	6.32	6.39	6.49	6.57	6.62
Miscellaneous manufacturing .....	4.69	5.04	4.95	4.95	4.96	5.00	4.99	5.03	5.04	5.07	5.12	5.15	5.22	5.30	5.31
<b>Nondurable goods</b> .....	5.53	6.00	5.82	5.85	5.90	5.91	5.94	6.03	6.04	6.11	6.14	6.21	6.26	6.28	6.27
Food and kindred products .....	5.80	6.27	6.10	6.12	6.19	6.22	6.22	6.28	6.28	6.33	6.36	6.51	6.56	6.63	6.66
Tobacco manufactures .....	6.13	6.69	6.53	6.64	6.80	6.83	6.82	6.83	6.59	6.54	6.43	7.01	7.04	7.06	7.14
Textile mill products .....	4.30	4.66	4.51	4.52	4.48	4.52	4.54	4.65	4.77	4.82	4.83	4.86	4.87	4.90	4.91
Apparel and other textile products .....	3.94	4.24	4.17	4.19	4.19	4.20	4.21	4.23	4.21	4.28	4.32	4.32	4.39	4.44	4.43
Paper and allied products .....	6.52	7.12	6.83	6.88	6.92	6.96	7.05	7.17	7.22	7.32	7.34	7.42	7.48	7.46	7.47
Printing and publishing .....	6.50	6.91	6.73	6.77	6.72	6.83	6.88	6.90	6.94	7.04	7.06	7.09	7.17	7.21	7.21
Chemicals and allied products .....	7.01	7.59	7.32	7.36	7.50	7.47	7.53	7.60	7.65	7.73	7.82	7.87	7.91	7.94	7.95
Petroleum and coal products .....	8.63	9.37	9.10	9.31	9.44	9.39	9.32	9.39	9.35	9.51	9.49	9.57	9.49	9.54	9.53
Rubber and miscellaneous plastics products .....	5.52	5.96	5.84	5.86	5.82	5.90	5.91	5.95	5.94	6.03	6.12	6.14	6.21	6.25	6.24
Leather and leather products .....	3.89	4.23	4.14	4.17	4.18	4.18	4.19	4.19	4.22	4.29	4.31	4.34	4.36	4.45	4.46
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	7.57	8.18	7.92	7.90	7.88	7.94	8.03	8.23	8.32	8.45	8.45	8.52	8.55	8.54	8.57
<b>WHOLESALE AND RETAIL TRADE</b> .....	4.67	5.06	4.97	4.98	5.00	5.00	5.02	5.05	5.06	5.13	5.15	5.18	5.18	5.34	5.36
<b>WHOLESALE TRADE</b> .....	5.88	6.39	6.21	6.23	6.30	6.29	6.34	6.39	6.41	6.51	6.51	6.57	6.68	6.72	6.75
<b>RETAIL TRADE</b> .....	4.20	4.53	4.47	4.47	4.49	4.49	4.50	4.51	4.52	4.58	4.59	4.62	4.61	4.77	4.78
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	4.90	5.28	5.19	5.16	5.23	5.22	5.22	5.29	5.29	5.38	5.37	5.42	5.49	5.57	5.61
<b>SERVICES</b> .....	4.99	5.36	5.27	5.26	5.29	5.27	5.27	5.29	5.30	5.45	5.48	5.54	5.60	5.65	5.68

**18. Hourly Earnings Index for production or nonsupervisory workers on private nonagricultural payrolls, by industry division**

[Seasonally adjusted data: 1967 = 100]

Industry	1979											1980		Percent change	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. P	Feb. P	Jan. 1980 to Feb. 1980	Feb. 1979 to Feb. 1980
<b>TOTAL PRIVATE (in current dollars)</b> ..	224.0	225.2	226.8	227.5	229.0	230.9	232.2	234.3	234.9	237.3	239.5	240.3	242.2	0.8	8.1
Mining .....	253.7	256.1	264.1	262.7	264.9	266.9	265.6	266.1	268.0	271.6	273.2	274.2	275.5	.5	8.6
Construction .....	216.7	216.5	218.1	220.4	220.4	222.1	223.1	224.4	224.0	225.8	227.6	225.4	230.7	2.3	6.5
Manufacturing .....	227.2	228.7	231.0	232.3	233.9	235.4	236.9	238.7	240.0	242.1	244.3	244.9	247.3	1.0	8.9
Transportation and public utilities .....	241.7	243.1	241.7	243.7	246.4	251.3	252.6	255.6	255.8	258.9	260.7	260.5	262.0	.6	8.4
Wholesale and retail trade .....	218.1	219.4	220.9	221.0	222.6	223.8	225.4	227.0	227.4	229.5	231.3	234.5	235.4	.4	8.0
Finance, insurance, and real estate .....	204.2	204.8	207.5	207.0	208.0	210.8	211.5	214.4	213.1	216.2	218.5	219.5	220.9	.6	8.1
Services .....	222.2	223.3	225.0	224.3	225.7	227.0	228.4	231.5	232.3	234.7	237.7	238.1	239.2	.5	7.7
<b>TOTAL PRIVATE (in constant dollars)</b> ..	107.8	107.3	107.0	106.3	105.8	105.6	105.1	104.9	104.1	104.1	103.8	102.7	...	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Not available.

### 19. 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		1979											1980	
	1978	1979	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. P	Feb. P
	<b>TOTAL PRIVATE</b> .....	\$203.70	\$219.91	\$212.40	\$214.91	\$211.65	\$216.20	\$219.71	\$221.76	\$222.84	\$225.90	\$225.62	\$226.06	\$229.40	\$225.34
<b>MINING</b> .....	332.11	364.64	349.75	354.78	363.80	361.66	367.62	355.28	365.49	372.80	374.51	380.19	383.25	383.18	383.13
<b>CONSTRUCTION</b> .....	318.32	341.69	319.31	331.89	320.21	340.01	346.03	348.35	354.16	360.43	356.82	346.75	355.05	331.20	341.87
<b>MANUFACTURING</b> .....	249.27	268.94	262.10	266.34	254.41	265.86	269.06	267.73	267.60	274.04	274.85	277.14	285.07	276.61	277.11
<b>Durable goods</b> .....	270.44	290.50	286.06	289.39	273.14	288.46	291.51	288.86	287.65	295.39	295.80	297.43	308.26	297.75	299.83
Lumber and wood products .....	222.88	240.16	227.37	231.85	230.69	236.41	247.63	245.46	248.58	253.43	248.35	241.72	245.00	238.08	243.59
Furniture and fixtures .....	183.92	195.32	187.83	193.05	185.25	189.85	195.94	191.52	196.86	202.02	204.36	205.02	210.27	202.51	202.61
Stone, clay, and glass products .....	262.91	283.86	267.15	277.55	276.60	284.08	288.39	285.94	287.73	291.07	291.90	294.82	296.78	283.11	283.69
Primary metal industries .....	342.76	371.36	368.38	366.63	371.96	365.56	370.66	373.35	371.28	378.31	372.19	376.88	379.55	375.96	378.68
Fabricated metal products .....	259.94	278.26	271.99	277.54	256.86	275.54	279.21	274.04	276.62	282.74	285.36	286.59	298.33	286.64	287.65
Machinery except electrical .....	284.34	306.39	304.30	306.29	286.13	302.33	308.28	302.82	303.56	313.41	309.92	314.67	327.42	316.30	317.54
Electric and electronic equipment .....	234.55	254.29	248.27	250.71	237.07	249.64	253.13	248.29	252.49	261.63	261.14	266.26	274.23	268.40	269.07
Transportation equipment .....	333.80	351.44	351.54	356.17	313.05	356.10	352.29	349.70	341.82	349.61	358.07	354.14	379.14	354.31	359.38
Instruments and related products .....	233.54	251.74	246.82	249.45	241.20	249.29	248.68	248.25	247.44	252.75	257.86	264.55	269.98	270.03	269.43
Miscellaneous manufacturing .....	181.97	196.06	191.07	194.04	186.50	192.50	194.61	194.66	196.06	199.25	201.22	203.94	207.23	206.70	208.15
<b>Nondurable goods</b> .....	217.88	235.80	226.40	229.91	225.38	231.08	234.04	236.38	237.98	241.96	241.92	245.92	249.77	244.92	243.28
Food and kindred products .....	230.26	250.17	239.12	242.35	241.41	246.31	247.56	251.83	253.08	257.00	254.40	261.70	264.37	261.22	259.07
Tobacco manufactures .....	233.55	254.22	236.39	252.98	255.68	265.69	265.98	246.56	247.78	255.71	249.48	273.39	278.08	264.04	257.75
Textile mill products .....	173.72	187.80	179.50	182.61	172.93	181.25	184.32	185.54	192.23	196.66	197.06	200.72	202.11	200.41	200.82
Apparel and other textile products .....	140.26	149.25	145.53	148.33	142.04	147.42	149.88	149.74	149.88	151.51	153.36	153.79	157.60	156.29	156.38
Paper and allied products .....	279.71	303.31	288.23	293.09	287.87	295.10	302.74	304.73	307.57	312.56	312.68	318.32	325.38	317.80	314.49
Printing and publishing .....	244.40	259.13	251.03	255.23	247.30	254.76	257.31	258.06	263.03	266.82	264.75	268.71	273.18	268.93	266.77
Chemicals and allied products .....	293.72	317.26	305.24	308.38	314.25	312.25	314.75	316.92	319.77	323.11	326.09	331.33	333.80	330.30	329.93
Petroleum and coal products .....	376.27	410.41	388.57	407.78	414.42	410.34	404.49	414.10	407.66	425.10	418.51	428.74	411.87	343.44	399.31
Rubber and miscellaneous plastics products .....	225.77	241.38	240.61	242.60	229.31	238.95	240.54	239.19	237.60	244.22	247.86	247.44	252.75	251.88	247.10
Leather and leather products .....	144.32	154.40	148.63	149.70	147.55	152.15	155.45	154.61	154.45	157.87	157.32	159.71	162.63	164.21	164.57
<b>TRANSPORTATION AND PUBLIC UTILITIES</b> .....	302.80	326.38	316.01	314.42	307.32	314.42	321.20	329.20	335.30	337.16	337.16	342.50	342.00	335.62	336.80
<b>WHOLESALE AND RETAIL TRADE</b> .....	153.64	164.96	159.54	161.35	162.50	162.00	165.16	168.17	167.99	167.75	167.38	167.83	170.42	169.81	170.45
<b>WHOLESALE TRADE</b> .....	228.14	247.93	238.46	242.35	243.18	244.68	247.26	249.21	249.35	252.59	253.24	255.57	261.19	258.05	258.53
<b>RETAIL TRADE</b> .....	130.20	139.07	134.55	135.44	137.39	136.50	139.50	142.07	141.93	140.61	139.54	140.45	142.91	141.67	141.97
<b>FINANCE, INSURANCE, AND REAL ESTATE</b> .....	178.36	191.66	188.92	187.31	190.37	188.44	188.96	192.56	191.50	195.29	194.93	197.29	199.84	202.19	203.64
<b>SERVICES</b> .....	163.67	175.27	170.75	171.48	171.93	171.28	173.38	176.16	175.96	178.22	178.65	180.60	183.68	183.63	184.60



**20. Gross and spendable weekly earnings, in current and 1967 dollars, 1960 to date**

[Averages for production or nonsupervisory workers on private nonagricultural payrolls]

Year and month	Private nonagricultural workers						Manufacturing workers					
	Gross average weekly earnings		Spendable average weekly earnings				Gross average weekly earnings		Spendable average weekly earnings			
			Worker with no dependents		Married worker with 3 dependents				Worker with no dependents		Married worker with 3 dependents	
	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars
1960	\$80.67	\$90.95	\$65.59	\$73.95	\$72.96	\$82.25	\$89.72	\$101.15	\$72.57	\$81.82	\$80.11	\$90.32
1961	82.60	92.19	67.08	74.87	74.48	83.13	92.34	103.06	74.60	83.26	82.18	91.72
1962	85.91	94.82	69.56	76.78	76.99	84.98	96.56	106.58	77.86	85.94	85.53	94.40
1963	88.46	96.47	71.05	77.48	78.56	85.67	99.23	108.21	79.51	86.71	87.25	95.15
1964	91.33	98.31	75.04	80.78	82.57	88.88	102.97	110.84	84.40	90.85	92.18	99.22
1965	95.45	101.01	79.32	83.94	86.63	91.67	107.53	113.79	89.08	94.26	96.78	102.41
1966	98.82	101.67	81.29	83.63	88.66	91.21	112.19	115.42	91.45	94.08	99.33	102.19
1967	101.84	101.84	83.38	83.38	90.86	90.86	114.49	114.49	92.97	92.97	100.93	100.93
1968	107.73	103.39	86.71	83.21	95.28	91.44	122.51	117.57	97.70	93.76	106.75	102.45
1969	114.61	104.38	90.96	82.84	99.99	91.07	129.51	117.95	101.90	92.81	111.44	101.49
1970	119.83	103.04	96.21	82.73	104.90	90.20	133.33	114.64	106.32	91.42	115.58	99.38
1971	127.31	104.95	103.80	85.57	112.43	92.69	142.44	117.43	114.97	94.78	124.24	102.42
1972	136.90	109.26	112.19	89.54	121.68	97.11	154.71	123.47	125.34	100.03	135.57	108.20
1973	145.39	109.23	117.51	88.29	127.38	95.70	166.46	125.06	132.57	99.60	143.50	107.81
1974	154.76	104.78	124.37	84.20	134.61	91.14	176.80	119.70	140.19	94.92	151.56	102.61
1975	163.53	101.45	132.49	82.19	145.65	90.35	190.79	118.36	151.61	94.05	166.29	103.16
1976	175.45	102.90	143.30	84.05	155.87	91.42	209.32	122.77	167.83	98.43	181.32	106.35
1977	189.00	104.13	155.19	85.50	169.93	93.63	228.90	126.12	183.80	101.27	200.06	110.23
1978	203.70	104.30	165.39	84.69	180.71	92.53	249.27	127.63	197.40	101.08	214.87	110.02
1979	219.91	101.02	178.00	81.76	194.82	89.49	268.94	123.54	212.43	97.58	232.07	106.60
1979: February	212.40	102.56	172.53	83.31	188.98	91.25	262.10	126.56	207.69	100.28	223.89	109.56
March	214.91	102.68	174.35	83.30	190.93	91.22	266.34	127.25	210.65	100.65	230.10	109.94
April	211.65	99.93	171.98	81.20	188.39	88.95	254.41	120.12	202.32	95.52	221.05	104.37
May	216.20	100.89	175.29	81.80	191.93	89.56	265.86	124.06	210.04	98.14	229.74	107.20
June	219.71	101.30	177.85	82.00	194.67	89.75	269.06	124.05	212.51	97.98	232.17	107.04
July	221.76	101.08	179.35	81.75	196.26	89.45	267.73	122.03	211.61	96.45	231.16	105.36
August	222.84	100.60	180.13	81.32	197.11	88.99	267.60	120.81	211.52	95.49	231.06	104.32
September	225.90	100.98	182.36	81.52	199.42	89.15	274.04	122.50	215.89	96.51	235.94	105.47
October	225.62	100.01	182.16	80.74	199.21	88.30	274.85	121.83	216.44	95.94	236.56	104.86
November	226.06	99.32	182.48	80.18	199.54	87.67	277.14	121.77	217.99	95.78	238.30	104.70
December	229.40	99.74	184.84	80.37	202.08	87.86	285.07	123.94	223.38	97.12	244.31	106.22
1980: January <sup>P</sup>	225.34	96.59	181.96	77.99	199.00	85.30	276.61	118.56	217.64	93.29	237.89	101.97
February <sup>P</sup>	226.75	( <sup>1</sup> )	182.98	( <sup>1</sup> )	200.07	( <sup>1</sup> )	277.11	( <sup>1</sup> )	217.97	( <sup>1</sup> )	238.27	( <sup>1</sup> )

<sup>1</sup>Not available.

NOTE: The earnings expressed in 1967 dollars have been adjusted for changes in price level as measured by the Bureau's Consumer Price Index for Urban Wage Earners and Clerical Workers.

These series are described in "The Spendable Earnings Series: A Technical Note on its Calculation", *Employment and Earnings and Monthly Report on the Labor Force*, February 1969, pp. 6-13. See also "Spendable Earnings Formulas, 1978-80" *Employment and Earnings*, March 1980, pp. 10-11.

## UNEMPLOYMENT INSURANCE DATA

UNEMPLOYMENT INSURANCE DATA are compiled monthly by the Employment and Training Administration of the U.S. Department of Labor from records of State and Federal unemployment insurance claims filed and benefits paid. 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 the State, Ex-Servicemen, and UCFE programs, 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 unem-

ployed. Persons not covered by unemployment insurance (about one-third 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.

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.

### 21. Unemployment Insurance and employment service operations

[All items except average benefits amounts are in thousands]

Item	1979												1980
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
All programs:													
Insured unemployment	3,198	3,209	2,921	2,610	2,230	2,119	2,429	2,377	2,164	2,236	2,559	3,047	3,740
State unemployment insurance program: <sup>1</sup>													
Initial claims <sup>2</sup>	2,421	1,576	1,396	1,589	1,309	1,400	1,978	1,545	1,219	1,641	1,826	2,246	.....
Insured unemployment (average weekly volume)	3,037	3,053	2,750	2,440	2,078	1,991	2,300	2,245	2,024	2,057	2,384	2,864	3,537
Rate of insured unemployment	3.9	4.0	3.6	3.1	2.6	2.5	2.8	2.7	2.4	2.4	2.8	3.4	4.1
Weeks of unemployment compensated	11,371	10,762	11,105	8,956	8,442	7,197	7,889	8,830	6,993	7,638	8,151	9,149	.....
Average weekly benefit amount for total unemployment	\$88.28	\$90.31	\$90.28	\$89.25	\$88.37	\$87.25	\$86.40	\$88.56	\$89.07	\$90.59	\$92.23	\$94.52	.....
Total benefits paid	\$972,820	\$915,146	\$975,641	\$777,699	\$725,229	\$610,269	\$665,687	\$767,025	\$606,095	\$673,965	\$731,273	\$841,643	.....
Unemployment compensation for ex-servicemen: <sup>3</sup>													
Initial claims <sup>1</sup>	24	21	21	20	20	24	28	28	23	26	24	24	.....
Insured unemployment (average weekly volume)	54	53	52	48	45	45	51	52	52	52	54	56	60
Weeks of unemployment compensated	262	219	241	207	214	193	216	234	211	236	232	233	.....
Total benefits paid	\$24,425	\$20,489	\$22,794	\$19,617	\$20,440	\$18,623	\$20,965	\$23,861	\$19,634	\$23,325	\$23,143	\$23,083	.....
Unemployment compensation for Federal civilian employees: <sup>4</sup>													
Initial claims	21	13	12	12	12	13	16	13	13	18	15	15	.....
Insured unemployment (average weekly volume)	37	35	33	27	24	23	2.5	25	25	28	29	31	34
Weeks of unemployment compensated	158	133	143	112	106	91	96	107	91	109	118	117	.....
Total benefits paid	\$14,222	\$12,256	\$13,168	\$10,345	\$9,330	\$8,341	\$8,802	\$9,829	\$8,453	\$10,093	\$11,088	\$11,120	.....
Railroad unemployment insurance:													
Applications	8	6	5	3	3	9	15	8	13	11	10	11	22
Insured unemployment (average weekly volume)	26	24	23	18	10	8	11	12	21	18	20	19	40
Number of payments	50	50	23	40	29	19	20	26	32	51	36	41	80
Average amount of benefit payment	\$200.80	\$200.54	\$204.72	\$195.55	\$177.39	\$183.13	\$190.10	\$195.61	\$189.08	\$189.61	\$183.38	\$197.22	\$199.01
Total benefits paid	\$9,634	\$9,871	\$10,538	\$7,276	\$5,681	\$3,314	\$3,699	\$3,767	\$5,747	\$8,003	\$6,462	\$8,085	\$14,967
Employment service: <sup>5</sup>													
New applications and renewals	5,630	.....	8,059	9,180	10,452	11,907	13,186	14,479	.....	.....	.....	.....	.....
Nonfarm placements	1,414	.....	1,991	2,291	2,616	3,051	3,482	3,935	.....	.....	.....	.....	.....

<sup>1</sup> Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.

<sup>2</sup> Includes interstate claims for the Virgin Islands. Excludes transition claims under State programs.

<sup>3</sup> Excludes data on claims and payments made jointly with other programs.

<sup>4</sup> Includes the Virgin Islands. Excludes data on claims and payments made jointly with State programs.

<sup>5</sup> Cumulative total for fiscal year (October 1 - September 30).

NOTE: Data for Puerto Rico included. Dashes indicate data not available.

## 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. One index, a new CPI for All Urban Consumers, covers 80 percent of the total noninstitutional population; and the other index, a revised CPI for Urban Wage Earners and Clerical Workers, covers about half the new index population. The All Urban Consumers index includes, 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, doctor's and dentist's 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. Prices are collected from over 18,000 tenants, 24,000 retail establishments, and 18,000 housing units for property taxes 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 producers 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

Beginning with the May 1978 issue of the *Review*, regional CPI's cross classified by population size, were introduced. These indexes will 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 will be published bimonthly. (See table 24.)

For further details about the new and the revised indexes and a comparison of various aspects of these indexes with the old unrevised CPI, see *Facts About the Revised Consumer Price Index*, a pamphlet in the Consumer Price Index Revision 1978 series. See also *The Consumer Price Index: Concepts and Content Over the Years*. Report 517, revised edition (Bureau of Labor Statistics, May 1978).

For interarea comparisons of living costs at three hypothetical standards of living, see the family budget data published in the *Handbook of Labor Statistics, 1977*, Bulletin 1966 (Bureau of Labor Statistics, 1977), tables 122-133. Additional data and analysis on price changes are provided in the *CPI Detailed Report* and *Producer Prices and Price Indexes*, both monthly publications of the Bureau.

As of January 1976, the Wholesale Price Index (as it was then called) incorporated a revised weighting structure reflecting 1972 values of shipments. From January 1967 through December 1975, 1963 values of shipments were used as weights.

For a discussion of the general method of computing consumer, producer, and industry price indexes, see *BLS Handbook of Methods for Surveys and Studies*, Bulletin 1910 (Bureau of Labor Statistics, 1976), chapters 13-15. See also John F. Early, "Improving the measurement of producer price change," *Monthly Labor Review*, April 1978, pp. 7-15. For industry prices, see also Bennett R. Moss, "Industry and Sector Price Indexes," *Monthly Labor Review*, August 1965, pp. 974-82.



## 22. Consumer Price index for Urban Wage Earners and Clerical Workers, annual averages and changes, 1967-79

[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	116.8	5.8
1971	121.3	4.3	118.3	3.1	123.4	4.4	119.8	3.2	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	6.0	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

## 23. 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 (revised)									
	1979						1980		1979						1980	
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.		
All items	204.7	221.1	223.4	225.4	227.5	229.9	233.2	204.7	221.5	223.7	225.6	227.6	230.0	233.3		
Food and beverages	218.3	230.2	231.0	232.1	233.1	235.5	237.5	218.3	230.4	231.2	232.3	233.1	235.7	237.8		
Housing	213.1	231.5	234.6	237.7	240.8	243.6	247.3	212.8	231.5	234.5	237.7	240.7	243.6	247.3		
Apparel and upkeep	160.7	166.3	169.8	171.0	171.7	172.2	171.0	161.1	166.2	169.3	170.8	171.3	171.4	169.8		
Transportation	193.9	219.6	221.4	222.7	224.9	227.7	233.5	194.5	220.7	222.4	223.4	225.7	228.3	234.1		
Medical care	230.7	241.8	243.7	245.9	248.0	250.7	253.9	230.2	242.6	244.7	247.2	249.1	251.7	254.9		
Entertainment	182.3	190.2	191.1	192.0	192.8	193.4	195.3	182.1	188.9	190.2	191.4	192.0	192.3	193.9		
Other goods and services	190.5	197.0	201.7	202.3	202.9	204.0	206.3	190.3	197.2	200.6	201.4	202.0	203.0	206.0		
Commodities	195.8	212.2	214.1	215.6	217.4	219.4	222.4	195.9	212.6	214.4	215.8	217.4	219.4	222.3		
Commodities less food and beverages	183.0	200.9	203.3	204.9	206.9	208.8	212.0	183.0	201.3	203.5	205.0	206.9	208.7	212.0		
Nondurables less food and beverages	182.3	208.8	213.2	214.9	216.6	219.0	224.6	182.8	210.5	214.8	216.6	218.1	220.5	226.3		
Durables	182.0	193.6	194.5	196.0	198.4	199.8	201.3	181.7	192.9	195.5	194.8	196.9	198.2	199.6		
Services	221.1	237.6	240.7	243.6	246.2	249.3	253.1	221.0	237.9	241.0	244.0	246.7	249.6	253.6		
Rent, residential	170.3	177.5	179.0	181.4	182.1	182.9	184.1	170.3	177.3	178.9	181.2	181.9	182.7	183.9		
Household services less rent	247.5	272.8	276.7	280.7	284.6	289.2	295.1	247.7	274.1	278.2	282.3	286.3	291.1	297.2		
Transportation services	204.3	214.9	216.6	218.5	221.5	224.2	226.8	204.9	215.3	216.8	218.6	221.5	224.0	226.6		
Medical care services	248.3	260.6	262.8	265.3	267.6	270.7	274.4	247.4	261.2	263.8	266.8	268.8	271.8	275.6		
Other services	192.8	200.5	204.7	205.7	206.5	207.1	209.0	193.2	201.2	204.9	206.4	207.3	207.4	209.3		
<b>Special Indexes:</b>																
All items less food	199.8	216.9	219.6	221.8	224.1	226.4	229.9	199.7	217.3	219.8	222.0	224.2	226.4	230.0		
All items less mortgage interest costs	200.3	214.7	216.7	218.3	219.8	221.7	224.3	200.4	215.3	217.2	218.7	220.1	222.0	224.7		
Commodities less food	181.9	199.5	201.8	203.4	205.4	207.2	210.4	181.9	199.9	202.0	203.5	205.4	207.1	210.3		
Nondurables less food	180.3	205.4	209.6	211.3	212.9	215.2	220.5	180.8	207.0	211.0	212.9	214.4	216.7	222.1		
Nondurables less food and apparel	193.7	228.3	232.7	234.8	236.8	240.1	248.6	193.9	229.7	234.2	236.3	238.2	241.5	250.2		
Nondurables	201.0	220.4	223.1	224.5	225.8	228.2	232.0	201.4	221.3	223.9	225.3	226.5	229.0	232.9		
Services less rent	230.4	248.8	252.1	255.1	258.2	261.6	266.1	230.3	249.2	252.6	255.7	258.8	262.1	266.7		
Services less medical care	216.8	233.6	236.7	239.6	242.3	245.3	249.2	216.8	233.9	236.9	239.9	242.6	245.5	249.5		
Domestically produced farm foods	213.3	223.5	223.7	224.1	224.5	227.5	229.2	213.3	223.4	223.6	224.0	224.4	227.5	229.0		
Selected beef cuts	229.1	253.0	255.3	257.3	256.5	263.2	265.7	231.4	255.5	258.0	259.1	259.2	265.2	268.1		
Energy	231.5	296.3	304.3	307.5	307.8	313.7	327.9	231.8	298.8	307.0	310.2	310.7	317.0	331.5		
All items less energy	202.9	215.4	217.3	219.2	221.4	223.6	225.9	202.9	215.3	217.0	218.8	221.0	223.0	225.3		
All items less food and energy	197.0	209.4	211.5	213.6	216.1	218.1	220.6	196.8	209.0	211.0	213.0	215.4	217.3	219.6		
Commodities less food and energy	177.3	186.8	188.2	189.6	191.4	192.6	193.7	177.2	186.4	187.5	188.7	190.4	191.4	192.4		
Energy commodities	226.4	314.5	325.3	329.0	332.5	340.0	361.5	226.9	315.8	326.5	330.2	333.8	341.5	362.8		
Services less energy	219.7	235.4	238.4	241.3	244.6	247.6	251.6	219.6	235.7	237.9	241.7	245.1	248.0	252.2		
Purchasing power of the consumer dollar, 1967 = \$1	\$0.489	\$0.452	\$0.448	\$0.444	\$0.440	\$0.435	\$0.429	\$0.489	\$0.451	\$0.447	\$0.443	\$0.439	\$0.435	\$0.429		

MONTHLY LABOR REVIEW April 1980 • Current Labor Statistics: Consumer Prices

**23. Continued—Consumer Price Index—U.S. city average**

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1979						1980	1979					1980	
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<b>FOOD AND BEVERAGES</b> .....	218.3	230.2	231.0	232.1	233.1	235.5	237.5	218.3	230.4	231.2	232.3	233.1	235.7	237.8
<b>Food</b> .....	223.9	236.3	237.1	238.2	239.1	241.7	243.8	223.9	236.5	237.3	238.3	239.1	241.8	244.0
Food at home .....	223.1	233.9	234.7	235.4	236.0	238.7	240.6	222.9	233.5	234.2	234.8	235.4	238.3	240.1
Cereals and bakery products .....	210.0	223.7	225.6	227.0	228.7	231.6	234.2	210.9	224.1	226.6	227.9	229.7	232.3	234.7
Cereals and cereal products (12/77 = 100) .....	112.6	118.5	120.0	120.8	121.1	122.9	125.0	112.8	119.0	120.6	121.4	122.1	123.8	126.1
Flour and prepared flour mixes (12/77 = 100) .....	113.0	122.5	123.4	124.0	122.8	123.8	125.7	114.1	123.3	125.1	125.0	124.6	125.1	126.9
Cereal (12/77 = 100) .....	112.1	118.0	118.8	119.2	119.7	122.8	123.7	112.2	118.5	118.7	119.3	119.9	122.9	124.2
Rice, pasta, and cornmeal (12/77 = 100) .....	112.9	115.7	118.6	120.4	121.6	122.2	126.4	112.3	115.8	119.1	120.8	122.7	123.9	127.9
Bakery products (12/77 = 100) .....	110.6	118.3	119.2	119.9	121.0	122.4	123.5	111.2	118.5	119.7	120.3	121.3	122.7	123.6
White bread .....	184.7	198.4	200.7	202.5	204.5	207.4	208.6	185.3	198.0	200.5	202.3	203.9	206.6	207.4
Other breads (12/77 = 100) .....	111.0	118.6	119.6	120.5	121.3	123.3	123.8	112.7	120.8	122.5	123.8	124.2	126.0	126.9
Fresh biscuits, rolls, and muffins (12/77 = 100) .....	111.8	118.1	119.0	119.4	121.2	123.1	124.8	111.5	117.7	118.6	118.7	120.8	122.3	123.1
Fresh cakes and cupcakes (12/77 = 100) .....	108.9	116.6	116.7	117.6	119.4	120.3	121.7	109.5	116.3	116.8	118.1	119.1	120.1	120.8
Cookies (12/77 = 100) .....	110.6	115.6	115.9	116.6	117.1	117.8	119.7	111.7	117.2	117.8	118.3	118.4	119.6	121.5
Crackers and bread and cracker products (12/77 = 100) .....	106.5	114.7	114.8	115.0	114.5	116.2	117.5	106.9	114.9	114.9	115.0	116.1	116.3	118.4
Fresh sweetrolls, coffeecake, and donuts (12/77 = 100) .....	108.3	117.5	118.8	118.9	119.9	121.5	122.2	110.1	119.3	121.6	120.7	121.9	123.4	124.1
Frozen and refrigerated bakery products and fresh pies, tarts, and turnovers (12/77 = 100) .....	111.9	120.8	121.7	122.5	123.7	124.8	125.7	111.0	117.1	118.6	118.8	120.8	121.4	122.5
Meats, poultry, fish, and eggs .....	223.3	230.2	231.0	230.3	230.2	235.5	238.0	223.3	229.6	230.5	229.7	230.0	235.1	237.5
Meats, poultry, and fish .....	227.0	235.8	236.0	235.9	235.2	239.8	243.0	226.9	235.3	235.4	235.3	235.0	239.2	242.5
Meats .....	227.6	237.8	238.1	238.6	237.4	242.3	244.1	227.5	237.6	237.7	238.1	237.3	241.8	243.7
Beef and veal .....	227.7	251.9	254.2	256.2	255.5	262.2	264.6	229.8	254.1	256.4	257.5	257.7	263.7	266.7
Ground beef other than canned .....	235.7	260.3	261.4	263.4	264.2	271.2	271.4	237.5	261.9	263.5	265.8	266.0	273.0	272.7
Chuck roast .....	233.3	257.5	261.0	263.3	263.1	268.1	274.7	241.0	264.0	267.9	268.3	273.1	274.2	283.6
Round roast .....	206.2	222.2	229.2	230.3	229.1	238.1	241.9	208.4	225.9	231.0	233.0	232.7	240.5	245.1
Round steak .....	214.2	238.1	239.2	242.2	241.9	247.5	249.8	214.2	235.4	235.7	239.4	239.7	246.2	249.4
Sirloin steak .....	219.6	247.5	251.0	250.4	247.0	250.8	250.9	219.0	247.3	253.9	249.6	247.4	253.5	253.5
Other beef and veal (12/77 = 100) .....	130.3	145.0	145.6	147.1	146.3	150.2	151.8	130.9	146.0	146.6	147.0	146.6	149.9	151.9
Pork .....	226.7	207.4	206.5	204.3	201.0	205.0	206.4	226.0	207.6	206.1	204.7	201.5	205.6	206.8
Bacon .....	221.2	192.5	194.0	190.5	186.3	193.6	194.5	222.6	195.0	195.6	194.4	188.7	195.8	195.3
Pork chops .....	213.7	195.3	198.1	195.1	188.8	187.8	192.1	212.7	196.2	196.1	194.9	188.1	189.1	194.8
Ham other than canned (12/77 = 100) .....	110.2	96.4	95.2	94.8	95.9	102.5	99.1	109.3	94.9	94.3	94.0	95.4	100.9	96.5
Sausage .....	275.9	263.8	258.4	257.6	254.5	256.5	256.6	273.9	263.2	258.4	258.1	255.8	258.3	260.3
Canned ham .....	235.0	221.1	216.6	218.2	214.8	218.9	220.8	235.6	218.9	215.3	215.8	214.6	219.1	219.3
Other pork (12/77 = 100) .....	125.0	118.3	117.4	115.2	112.9	112.6	116.2	123.8	118.4	117.5	115.1	112.7	112.7	116.2
Other meats .....	223.7	243.5	240.2	240.7	242.0	243.0	243.2	220.8	239.9	236.6	238.0	238.5	239.5	239.3
Frankfurters .....	218.8	241.9	235.9	236.8	238.9	239.3	239.0	216.6	242.6	236.1	237.7	232.7	238.7	239.5
Bologna, liverwurst, and salami (12/77 = 100) .....	122.9	134.3	133.2	134.2	133.4	134.4	134.1	120.8	129.7	129.5	130.7	130.4	130.8	130.5
Other lunchmeats (12/77 = 100) .....	117.0	122.7	121.6	120.3	121.6	121.5	121.2	115.1	120.8	119.0	118.8	119.5	119.4	118.7
Lamb and organ meats (12/77 = 100) .....	121.3	137.6	135.6	137.7	138.3	140.0	141.6	121.6	137.9	136.9	138.8	139.8	141.7	142.5
Poultry .....	181.2	177.1	174.8	170.3	171.6	176.2	187.8	179.5	174.3	172.8	168.3	170.1	173.9	184.3
Fresh whole chicken .....	179.8	171.3	169.9	159.7	166.7	175.2	191.1	176.4	166.7	165.8	157.7	163.3	169.8	183.8
Fresh and frozen chicken parts (12/77 = 100) .....	114.9	112.1	111.8	110.1	110.8	112.3	120.7	115.5	111.1	110.9	108.4	110.7	111.8	118.7
Other poultry (12/77 = 100) .....	121.3	123.0	119.2	120.3	115.9	116.9	119.3	119.8	122.1	119.8	119.8	119.8	117.4	120.1
Fish and seafood .....	290.4	306.5	309.7	311.5	312.2	312.6	316.7	288.5	301.4	304.4	306.5	307.5	309.1	315.4
Canned fish and seafood (12/77 = 100) .....	108.4	112.7	113.9	115.2	116.8	117.1	118.5	107.8	111.5	113.5	114.5	116.0	116.5	118.4
Fresh and frozen fish and seafood (12/77 = 100) .....	111.9	119.2	120.4	120.7	120.1	120.2	121.9	111.2	116.9	117.5	118.1	117.8	118.5	121.2
Eggs .....	180.4	161.8	170.7	161.3	170.1	185.9	178.2	181.2	160.5	170.5	160.3	169.6	186.6	177.0
Dairy Products .....	198.4	208.6	211.3	213.3	216.0	216.9	218.4	198.7	208.9	212.0	214.0	216.3	217.4	218.9
Fresh milk and cream (12/77 = 100) .....	111.8	117.7	119.0	120.3	121.9	122.7	123.2	111.7	117.9	119.5	120.4	121.8	122.6	123.2
Fresh whole milk .....	183.5	192.8	195.4	197.6	200.4	201.2	202.3	183.1	193.0	195.6	197.4	199.7	200.9	201.8
Other fresh milk and cream (12/77 = 100) .....	110.9	117.4	118.1	119.2	120.6	122.0	122.1	111.1	117.7	119.3	119.8	121.1	122.2	122.8
Processed dairy products (12/77 = 100) .....	112.7	118.2	120.1	120.9	122.3	122.5	123.8	113.2	118.4	120.5	121.7	123.0	123.3	124.5
Butter .....	195.8	203.0	209.9	213.3	214.4	214.0	216.9	197.0	205.7	212.3	216.6	217.1	216.6	219.8
Cheese (12/77 = 100) .....	112.9	118.4	120.1	121.0	122.7	122.6	123.5	112.9	118.4	120.2	121.1	122.5	122.7	123.6
Ice cream and related products (12/77 = 100) .....	111.8	117.8	120.1	120.4	121.4	122.6	124.0	113.1	118.1	120.7	121.9	123.4	124.3	125.6
Other dairy products (12/77 = 100) .....	110.1	115.4	115.5	116.4	117.8	117.9	119.8	110.8	115.4	115.6	116.9	118.2	118.3	120.4
Fruits and vegetables .....	221.6	237.8	231.8	232.0	229.5	230.2	229.8	219.6	237.0	229.6	230.2	226.7	228.3	227.2
Fresh fruits and vegetables .....	224.3	247.5	234.7	235.5	230.1	230.1	227.2	221.6	247.9	232.9	233.6	226.7	228.5	224.9
Fresh fruits .....	209.1	286.9	271.6	260.4	247.2	234.9	233.6	205.6	288.9	271.2	260.6	238.3	233.3	232.7
Apples .....	205.8	275.2	244.7	212.7	207.2	221.8	230.4	202.0	275.9	243.1	212.9	207.7	220.2	230.1
Bananas .....	179.2	202.3	210.3	206.6	209.0	225.2	221.9	177.3	202.5	208.4	199.7	206.5	222.0	219.5
Oranges .....	250.4	316.2	312.3	306.7	293.9	256.7	236.2	242.6	298.6	291.8	290.3	283.3	249.5	231.3
Other fresh fruits (12/77 = 100) .....	104.1	157.5	147.1	143.9	127.5	121.1	122.5	103.0	163.5	152.3	149.7	125.7	121.6	122.7
Fresh vegetables .....	238.6	210.7	200.3	212.2	218.4	225.7	221.2	236.2	211.0	198.4	209.4	216.4	224.2	217.9
Potatoes .....	191.4	211.4	199.3	191.1	195.7	207.0	203.8	193.1	212.1	193.4	183.8	191.7	199.6	200.9
Lettuce .....	342.0	235.7	219.6	262.9	244.2	227.5	197.6	335.7	240.3	222.9	264.2	239.0	231.3	193.2
Tomatoes .....	218.7	187.0	178.5	194.4	225.3	227.9	216.7	216.8	185.6	1				

23. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1979						1980	1979						1980
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<b>FOOD AND BEVERAGES—Continued</b>														
<b>Food—Continued</b>														
Food at home—Continued														
Fruits and vegetables—Continued														
Cut corn and canned beans except lima (12/77=100)	111.0	113.9	114.7	113.6	113.4	114.4	114.5	109.9	112.0	112.6	111.9	111.8	113.0	112.7
Other canned and dried vegetables (12/77=100)	105.8	109.7	110.1	109.9	110.0	110.9	112.9	104.6	108.1	108.7	108.5	108.1	109.1	110.4
Other foods at home	260.0	272.8	276.0	278.0	279.6	281.1	283.5	259.4	271.8	274.7	276.5	278.3	279.9	282.6
Sugar and sweets	268.2	281.0	282.0	283.1	283.2	284.6	289.8	267.6	279.9	281.2	282.2	281.9	284.1	289.6
Candy and chewing gum (12/77=100)	112.7	119.4	119.7	119.9	120.1	120.1	121.3	112.6	119.0	119.3	119.6	119.8	119.9	121.2
Sugar and artificial sweeteners (12/77=100)	113.2	115.6	115.9	119.0	116.2	117.2	122.2	113.1	115.5	116.4	116.9	116.2	117.6	122.7
Other sweets (12/77=100)	108.8	114.6	115.3	115.9	116.4	117.5	118.7	107.9	113.6	114.0	114.8	114.6	116.6	117.5
Fats and oils (12/77=100)	218.1	228.9	231.5	231.9	232.3	233.0	233.9	219.1	228.9	230.7	231.9	232.8	233.7	234.9
Margarine	233.6	240.3	245.5	244.4	246.2	247.7	248.3	234.1	239.8	242.8	244.9	246.7	247.8	248.8
Nondairy substitutes and peanut butter (12/77=100)	108.9	114.0	114.6	115.1	115.1	115.7	115.3	109.0	114.0	114.5	114.6	115.0	115.8	116.1
Other fats, oils, and salad dressings (12/77=100)	112.6	119.7	120.6	121.1	121.0	121.1	121.9	113.3	119.6	120.4	121.0	121.3	121.5	122.3
Nonalcoholic beverages	345.4	361.8	367.7	372.1	374.3	375.4	378.5	344.3	360.0	365.0	368.2	370.7	372.3	375.6
Cola drinks, excluding diet cola	230.1	239.2	242.7	246.4	247.5	247.2	249.5	228.4	236.9	240.1	242.0	243.6	243.4	246.5
Carbonated drinks, including diet cola (12/77=100)	111.6	116.2	117.9	118.5	118.4	118.7	119.9	109.5	114.2	115.7	116.1	115.6	116.4	116.4
Roasted coffee	363.0	411.7	425.9	432.4	438.1	440.7	443.2	362.6	406.1	418.2	424.4	430.8	435.3	440.1
Freeze dried and instant coffee	340.2	349.5	359.9	366.5	370.2	374.3	378.2	340.2	349.4	358.9	365.3	369.3	372.9	376.8
Other noncarbonated drinks (12/77=100)	111.2	114.2	114.0	114.8	115.7	116.3	116.8	109.9	113.0	112.7	113.5	114.8	115.5	116.2
Other prepared foods	200.1	210.5	212.6	213.4	215.3	217.4	218.8	199.9	210.4	212.4	213.4	215.7	217.2	219.1
Canned and packaged soup (12/77=100)	108.2	113.2	113.1	113.4	114.3	115.9	116.5	107.9	113.3	113.3	113.3	114.8	116.3	116.8
Frozen prepared foods (12/77=100)	112.2	120.7	123.1	123.1	124.5	125.6	126.0	111.4	118.7	121.1	122.0	122.9	123.9	125.1
Snacks (12/77=100)	109.6	115.7	118.4	119.6	120.4	121.3	121.8	110.5	116.4	119.0	120.6	121.7	122.2	122.8
Seasonings, olives, pickles, and relish (12/77=100)	112.5	115.9	117.4	118.8	118.9	120.1	121.4	112.0	115.4	116.3	117.6	118.2	119.0	121.1
Other condiments (12/77=100)	109.2	115.2	115.9	115.8	116.8	119.5	120.8	109.7	116.2	117.5	117.0	118.5	120.2	121.4
Miscellaneous prepared foods (12/77=100)	111.2	116.3	116.8	117.2	119.0	118.9	119.6	111.3	116.3	116.3	116.7	118.6	118.7	119.7
Other canned and packaged prepared foods (12/77=100)	111.8	116.8	116.7	116.7	117.7	118.6	119.4	110.9	116.7	116.7	116.9	118.0	118.6	119.5
Food away from home	230.2	246.5	247.6	249.6	251.3	253.4	256.1	230.6	248.3	249.3	251.3	252.7	255.1	258.0
Lunch (12/77=100)	112.3	120.3	120.7	121.3	122.3	123.3	124.6	112.4	121.3	121.7	122.2	123.2	124.0	125.7
Dinner (12/77=100)	111.6	119.8	120.3	121.6	122.4	123.4	124.8	111.7	120.5	120.9	122.4	123.0	124.2	125.6
Other meals and snacks (12/77=100)	110.9	117.8	118.6	119.5	120.2	121.4	122.5	111.2	119.1	119.9	120.5	120.9	122.5	123.7
<b>Alcoholic beverages</b>	166.0	173.3	174.2	176.0	177.4	178.0	179.3	166.1	173.6	174.9	176.9	178.0	178.7	179.7
Alcoholic beverages at home (12/77=100)	107.8	112.7	113.3	114.6	115.6	116.0	116.8	108.5	113.4	114.3	115.7	116.5	117.0	117.6
Beer and ale	160.8	170.6	172.3	175.1	176.9	177.8	179.0	161.5	170.3	171.8	175.2	176.9	177.6	178.8
Whiskey	124.4	128.4	129.0	129.4	130.7	130.8	131.6	125.2	129.9	130.4	131.0	131.9	132.0	132.9
Wine	187.0	196.0	195.2	198.0	198.1	199.1	201.6	191.1	199.4	202.7	202.5	201.5	204.0	203.8
Other alcoholic beverages (12/77=100)	104.2	105.4	105.5	105.9	107.0	106.9	107.1	103.3	105.1	105.3	105.9	106.2	106.4	106.4
Alcoholic beverages away from home (12/77=100)	110.6	114.6	115.1	115.9	116.4	116.8	118.0	107.8	112.8	113.4	114.2	114.9	115.2	115.9
<b>HOUSING</b>	213.1	231.5	234.6	237.7	240.8	243.6	247.3	212.8	231.5	234.5	237.7	240.7	243.6	247.3
<b>Shelter</b>	222.8	243.9	247.4	251.5	255.9	259.4	264.0	222.9	244.5	248.2	252.4	256.9	260.4	265.1
Rent, residential	170.3	177.5	179.0	181.4	182.1	182.9	184.1	170.3	177.3	178.9	181.2	181.9	182.7	183.9
Other rental costs	221.3	238.2	239.3	241.6	243.1	244.9	251.1	221.2	237.6	238.6	241.3	242.6	244.4	251.1
Lodging while out of town	230.4	251.2	251.8	254.2	256.2	258.4	267.0	229.8	249.5	249.9	253.0	254.6	256.9	266.1
Tenants' insurance (12/77=100)	104.5	112.0	113.7	114.1	114.6	115.1	116.2	104.6	112.6	114.1	114.7	115.0	115.5	116.8
Homeownership	241.6	267.6	271.9	276.7	282.4	286.9	292.5	242.0	268.9	273.0	278.3	284.1	288.7	294.6
Home purchase (12/77=100)	208.1	226.9	229.8	233.4	237.3	239.9	242.1	207.9	227.0	230.0	233.6	237.7	240.2	242.3
Financing, taxes, and insurance	276.6	316.4	323.0	330.5	340.1	348.3	359.8	277.9	318.7	325.6	333.5	343.5	351.6	363.4
Property insurance	293.0	314.6	316.7	319.9	320.8	323.1	327.7	292.6	314.2	318.5	321.9	322.6	324.5	328.8
Property taxes	179.9	183.1	184.7	185.1	185.1	186.0	186.7	181.3	184.6	186.1	186.5	186.6	187.4	188.2
Contracted mortgage interest cost	328.2	387.2	396.7	408.1	423.1	435.3	452.8	328.0	387.4	397.1	408.8	424.2	436.1	453.7
Mortgage interest rates	155.1	167.7	169.7	172.0	175.4	178.3	183.7	155.2	167.8	169.7	172.0	175.6	178.4	183.8
Maintenance and repairs	245.2	259.7	262.5	264.7	266.4	268.3	270.6	244.5	260.8	263.4	265.3	266.5	268.9	271.9
Maintenance and repair services	265.1	281.8	284.4	287.0	288.8	290.4	293.2	265.0	284.2	287.2	289.4	290.3	292.8	295.9
Maintenance and repair commodities	198.7	208.1	211.5	212.5	214.0	216.6	217.6	198.4	209.0	210.8	211.9	213.6	215.8	218.4
Paint and wallpaper, supplies, tools, and equipment (12/77=100)	109.1	114.3	117.0	117.4	118.8	121.6	122.5	109.1	115.0	116.1	116.6	118.1	120.3	122.2
Lumber, awnings, glass, and masonry (12/77=100)	108.7	113.7	115.2	116.0	115.5	115.4	115.9	109.4	114.8	115.7	116.2	117.2	118.1	118.6
Plumbing, electrical, heating, and cooling supplies (12/77=100)	105.3	110.8	111.9	112.8	113.4	114.7	114.7	105.7	111.5	112.6	113.8	114.0	114.5	117.0
Miscellaneous supplies and equipment (12/77=100)	107.2	111.1	112.9	113.3	113.8	114.3	115.4	104.9	110.3	111.2	111.9	112.2	112.3	113.2
<b>Fuel and other utilities</b>	221.5	247.2	251.2	252.9	252.0	255.1	258.6	221.7	247.7	251.7	253.4	252.4	255.7	259.2
Fuels	256.3	299.7	306.6	310.3	307.0	311.8	318.0	256.3	299.8	306.6	310.1	306.9	311.8	318.1
Fuel oil, coal, and bottled gas	316.4	438.6	461.6	470.8	477.4	488.0	514.0	316.6	439.0	462.5	471.7	478.2	489.0	515.1
Fuel oil	318.8	458.2	482.5	491.2	497.2	507.3	534.4	319.0	458.5	483.3	491.9	497.7	508.1	534.9
Other fuels (6/78 = 100)	99.7	109.3	114.4	118.5	121.7	126.0	132.7	99.7	109.4	114.6	118.8	122.2	126.6	133.7
Gas (piped) and electricity	239.5	266.5	270.1	272.5	267.3	270.8	273.0	239.5	266.5	269.9	272.2	267.1	270.7	273.0
Electricity	204.0	229.2	230.6	228.7	221.5	224.7	226.6	204.3	229.7	231.1	228.8	221.5	224.9	226.8
Utility (piped) gas	282.8	309.7	317.5	329.1	328.9	332.6	335.1	281.7	308.5	315.8	327.4	327.8	331.1	333.8



23. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1979					1980	1979					1980		
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	
<b>HOUSING—Continued</b>														
<b>Fuel and other utilities—Continued</b>														
Other utilities and public services	159.0	159.8	159.8	158.8	161.0	161.9	161.5	159.1	159.8	159.8	158.9	160.9	161.8	161.5
Telephone services	132.5	132.5	132.4	131.2	133.3	134.3	133.4	132.5	132.5	132.4	131.3	133.3	134.2	133.4
Local charges (12/77 = 100)	100.6	100.5	100.4	98.7	101.8	103.2	102.6	100.7	100.6	100.5	98.8	101.8	103.2	102.6
Interstate toll calls (12/77 = 100)	98.7	98.5	98.4	98.4	98.4	98.4	97.7	98.8	98.5	98.4	98.4	98.4	98.4	97.7
Intrastate toll calls (12/77 = 100)	100.9	101.5	101.4	101.7	101.5	101.5	100.8	100.9	101.4	101.3	101.5	101.3	101.3	100.6
Water and sewerage maintenance	239.3	244.6	245.3	245.6	247.1	247.2	250.0	239.6	244.6	245.5	245.8	247.2	247.3	250.5
<b>Household furnishings and operations</b>	184.8	191.2	192.2	193.3	195.1	195.8	196.9	183.6	189.8	190.6	191.7	193.2	193.9	194.9
Housefurnishings	158.9	163.2	164.1	165.2	166.6	166.9	167.6	158.5	163.0	163.5	164.4	165.5	165.9	166.5
Textile housefurnishings	167.1	172.8	175.3	177.8	178.9	178.6	176.7	168.5	173.0	174.9	177.2	178.4	177.3	175.3
Household linens (12/77 = 100)	101.1	103.6	106.7	107.7	108.8	108.3	105.4	102.4	103.7	106.3	107.4	108.3	107.2	106.0
Curtains, drapes, slipcovers, and sewing materials (12/77 = 100)	107.3	112.0	112.0	114.2	114.4	114.6	115.1	108.1	112.7	112.2	114.1	114.5	114.4	113.2
Furniture and bedding	171.6	177.1	178.3	180.0	182.2	182.8	184.0	171.1	177.3	178.5	180.3	182.1	182.7	183.6
Bedroom furniture (12/77 = 100)	109.3	114.0	114.8	116.4	117.7	118.3	119.1	107.8	112.7	113.0	114.8	115.9	116.0	116.8
Sofas (12/77 = 100)	103.0	106.3	107.1	107.3	107.9	108.2	108.2	104.1	108.2	108.6	109.6	111.7	111.6	110.6
Living room chairs and tables (12/77 = 100)	103.1	104.9	105.1	106.2	107.7	108.1	108.9	103.8	106.1	106.7	107.5	108.6	109.2	109.4
Other furniture (12/77 = 100)	109.5	112.7	113.9	115.0	116.8	117.1	118.1	108.6	112.5	114.2	114.7	115.3	115.9	117.8
Appliances including TV and sound equipment	133.9	135.8	136.2	136.9	137.5	137.5	137.8	133.3	135.5	135.7	135.7	136.2	136.9	137.2
Television and sound equipment (12/77 = 100)	103.8	104.3	104.7	104.9	105.0	105.3	102.9	104.0	104.4	104.4	104.4	104.4	104.8	104.9
Television	102.9	102.8	102.9	103.4	103.6	103.6	103.7	101.9	101.9	101.9	102.0	102.4	102.2	102.2
Sound equipment (12/77 = 100)	105.6	106.8	107.5	107.4	107.4	107.8	107.8	104.8	106.7	107.4	106.9	107.1	108.0	108.2
Household appliances	152.1	155.5	155.8	156.9	158.2	157.9	158.5	151.9	155.1	155.2	155.6	156.2	157.1	157.7
Refrigerators and home freezer	150.2	154.6	154.1	155.3	156.0	156.7	156.7	152.7	157.9	156.5	157.9	158.1	159.0	159.4
Laundry equipment (12/77 = 100)	107.4	110.7	110.9	112.1	113.1	113.6	114.1	107.0	110.2	111.2	111.3	112.2	112.8	113.8
Other household appliances (12/77 = 100)	107.1	108.6	109.1	109.8	110.8	109.9	110.5	106.0	107.1	107.2	107.2	107.6	108.2	108.6
Stoves, dishwashers, vacuums, and sewing machines (12/77 = 100)	108.5	108.5	108.6	109.0	109.7	108.6	110.0	107.2	107.7	107.7	106.9	107.1	108.1	109.2
Office machines, small electric appliances, and air conditioners (12/77 = 100)	105.4	108.8	109.7	110.7	112.1	111.4	111.1	104.6	106.4	106.8	107.6	108.2	108.3	107.8
Other household equipment (12/77 = 100)	106.5	110.7	110.9	111.2	112.4	113.0	114.6	106.2	110.6	110.3	110.8	111.6	111.8	113.3
Floor and window coverings, infants' laundry cleaning and outdoor equipment (12/77 = 100)	106.0	109.5	111.1	109.8	111.1	111.7	113.1	102.5	105.9	105.8	105.5	107.7	107.4	108.9
Clocks, lamps, and decor items (12/77 = 100)	103.0	107.1	108.0	108.6	110.0	110.1	111.6	103.8	106.7	107.0	107.1	108.2	107.3	109.4
Tableware, serving pieces, and nonelectric kitchenware (12/77 = 100)	109.5	115.1	114.7	115.4	116.8	117.2	119.9	108.7	113.9	114.5	114.7	115.2	115.2	117.3
Lawn equipment, power tools, and other hardware (12/77 = 100)	105.4	108.5	107.6	108.5	109.0	110.3	110.6	106.7	111.5	109.5	111.0	111.1	112.5	113.0
<b>Housekeeping supplies</b>	215.9	223.4	224.1	224.8	228.3	229.2	231.1	214.9	221.6	222.6	223.9	226.7	227.2	228.8
Soaps and detergents	209.0	212.5	215.1	217.9	220.6	221.2	224.1	207.6	210.9	214.5	216.3	218.2	219.7	222.2
Other laundry and cleaning products (12/77 = 100)	108.0	112.0	112.3	113.7	114.1	114.7	116.1	107.4	111.9	112.4	113.5	113.7	114.5	115.6
Cleansing and toilet tissue, paper towels and napkins (12/77 = 100)	112.5	116.2	116.4	117.2	119.2	120.5	120.6	112.4	116.3	117.1	117.9	119.6	120.9	121.8
Stationery, stationery supplies, and gift wrap (12/77 = 100)	105.7	109.5	109.9	109.5	111.3	111.9	111.6	104.7	108.5	108.3	108.6	109.2	109.3	109.0
Miscellaneous household products (12/77 = 100)	109.5	112.9	113.3	114.3	115.6	116.9	117.7	108.0	111.3	111.6	112.7	114.1	114.7	115.0
Lawn and garden supplies (12/77 = 100)	107.0	113.8	112.7	110.0	113.8	112.5	114.4	107.2	111.3	109.9	108.8	113.2	109.9	111.3
<b>Housekeeping services</b>	239.6	251.6	253.4	254.6	256.6	258.1	260.0	238.5	250.4	252.1	253.9	255.9	257.5	259.2
Postage	257.3	257.3	257.3	257.3	257.3	257.3	257.3	257.2	257.2	257.2	257.2	257.2	257.2	257.2
Moving, storage, freight, household laundry, and drycleaning services (12/77 = 100)	109.4	117.3	118.1	118.8	120.4	121.2	122.9	109.9	117.7	118.6	119.7	121.2	122.3	123.3
Appliance and furniture repair (12/77 = 100)	106.4	110.7	111.7	112.3	112.9	113.4	114.0	105.5	110.3	111.1	112.1	112.9	113.4	114.4
<b>APPAREL AND UPKEEP</b>	160.7	166.3	169.8	171.0	171.7	172.2	171.0	161.1	166.2	169.3	170.8	171.3	171.4	169.8
<b>Apparel commodities</b>	155.8	160.6	164.2	165.2	165.9	166.1	164.3	156.4	160.7	163.9	165.3	165.7	165.7	163.6
Apparel commodities less footwear	153.6	157.7	161.5	162.3	162.9	163.0	161.1	154.3	157.9	161.2	162.4	162.7	162.6	160.2
Men's and boys'	157.4	159.6	162.7	164.2	165.4	165.4	162.8	158.1	161.1	163.2	164.4	165.3	165.0	162.4
Men's (12/77 = 100)	99.7	100.6	102.7	103.5	104.3	104.3	102.6	100.3	101.9	103.2	103.8	104.5	104.2	102.3
Suits, sport coats, and jackets (12/77 = 100)	97.7	97.1	100.0	101.6	101.2	100.9	98.8	96.6	96.2	98.3	99.1	98.7	98.8	94.9
Coats and jackets (12/77 = 100)	95.3	95.5	96.5	97.8	98.1	98.0	95.5	98.4	99.2	99.1	99.5	99.7	99.1	95.6
Furnishings and special clothing (12/77 = 100)	104.8	109.3	110.6	109.9	112.4	112.3	112.2	104.1	107.0	108.6	109.1	110.0	109.9	109.3
Shirts (12/77 = 100)	101.5	103.2	107.2	108.5	109.7	110.5	108.6	101.5	104.9	107.1	108.3	109.4	111.5	108.3
Dungarees, jeans, and trousers (12/77 = 100)	98.6	98.1	99.0	99.5	100.5	100.4	98.2	100.7	101.9	102.5	102.8	104.0	103.4	102.2
Boys' (12/77 = 100)	99.9	103.3	104.8	106.3	106.6	106.6	105.6	99.5	102.7	103.9	105.3	105.6	105.8	104.7
Coats, jackets, sweaters, and shirts (12/77 = 100)	93.2	101.1	102.7	103.9	103.2	102.4	99.3	92.9	100.3	102.0	103.8	103.4	103.1	99.8
Furnishings (12/77 = 100)	105.8	107.9	109.4	110.8	111.5	111.9	111.5	105.6	107.0	108.8	110.1	109.7	110.2	109.7
Suits, trousers, sport coats, and jackets (12/77 = 100)	102.9	103.1	104.5	106.5	107.4	107.8	108.2	102.3	102.9	103.5	104.7	105.8	106.2	106.6
Women's and girls'	146.9	151.3	155.9	155.5	155.1	154.6	151.5	147.2	150.5	154.4	154.8	154.5	153.5	149.9
Women's (12/77 = 100)	98.0	100.7	103.9	103.4	103.0	102.8	100.8	98.5	100.4	103.0	103.3	103.0	102.3	100.1
Coats and jackets	158.0	170.4	174.1	173.9	173.3	170.0	166.4	159.2	173.1	175.7	174.1	172.4	167.9	165.0
Dresses	156.9	162.8	171.1	167.2	164.3	165.3	161.3	158.1	152.8	158.5	159.1	156.8	155.7	150.0
Separates and sportswear (12/77 = 100)	97.1	96.3	99.8	99.8	99.2	98.6	96.1	96.0	97.7	100.4	100.4	100.7	99.5	97.1
Underwear, nightwear, and hosiery (12/77 = 100)	102.7	106.2	106.2	106.6	108.1	108.2	108.6	103.4	107.0	107.4	107.9	108.9	109.3	109.1
Suits (12/77 = 100)	88.9	89.8	96.7	97.1	95.2	95.8	91.0	91.0	91.0	91.0	99.9	97.5	98.1	94.0
Girls' (12/77 = 100)	96.1	100.5	102.4	103.6	103.9	102.8	100.5	95.2	98.8	101.1	101.5	101.7	101.4	97.9
Coats, jackets, dresses, and suits (12/77 = 100)	92.8	100.8	102.8	102.8	102.2	100.3	97.5	92.1	95.9	98.5	97.9	97.5	97.7	91.9
Separates and sportswear (12/77 = 100)	95.6	98.3	100.3	102.5	103.6	102.6	99.9	94.7	99.7	102.1	103.5	104.3	102.9	99.8
Underwear, nightwear, hosiery, and accessories (12/77 = 100)	102.5	104.1	105.7	106.7	107.2	107.3	106.7	101.0	101.8	103.5	103.9	104.2	104.4	104.4

**23. Continued—Consumer Price Index—U.S. city average**

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1979						1980	1979						1980
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<b>APPAREL AND UPKEEP—Continued</b>														
<b>Apparel commodities—Continued</b>														
Apparel commodities less footwear—Continued														
Infants and toddlers' .....	215.9	221.2	223.4	224.8	226.3	227.1	224.9	215.6	224.2	226.0	228.7	228.7	230.5	229.1
Other apparel commodities .....	161.9	169.8	172.6	175.5	177.8	180.9	184.4	165.0	170.2	174.9	178.7	179.8	182.9	185.5
Sewing materials and notions (12/77 = 100) .....	98.7	102.3	102.3	102.2	100.8	102.4	103.2	98.7	96.8	100.4	100.8	99.7	100.8	101.2
Jewelry and luggage (12/77 = 100) .....	107.2	113.0	115.6	118.3	121.0	123.1	126.1	110.4	116.1	118.9	122.3	123.8	126.2	128.4
Footwear .....	168.7	177.5	180.1	182.6	183.8	184.3	183.7	168.0	176.9	179.4	181.9	183.2	183.8	183.3
Men's (12/77 = 100) .....	106.5	114.5	115.0	116.7	117.7	117.3	117.8	106.7	115.2	116.3	118.0	119.1	119.4	119.3
Boys' and girls' (12/77 = 100) .....	106.1	112.0	111.6	113.0	114.0	115.8	117.3	105.9	111.4	111.6	113.0	114.5	114.7	116.9
Womens' (12/77 = 100) .....	104.8	108.1	112.0	113.5	113.9	113.8	111.6	103.5	106.5	109.6	111.1	111.2	111.8	109.4
<b>Apparel services</b> .....	194.6	207.7	210.2	212.5	214.2	216.6	220.7	194.1	206.7	208.7	210.8	212.0	213.4	216.9
Laundry and drycleaning other than coin operated (12/77 = 100) .....	112.6	122.1	123.6	125.2	126.3	127.1	129.3	112.4	121.8	123.2	124.7	125.7	126.6	129.0
Other apparel services (12/77 = 100) .....	107.4	111.9	113.0	114.0	114.7	117.0	119.6	107.8	111.5	112.3	112.9	113.3	113.7	115.1
<b>TRANSPORTATION</b> .....	193.9	219.6	221.4	222.7	224.9	227.7	233.5	194.5	220.7	222.4	223.4	225.7	228.3	234.1
<b>Private</b> .....	193.9	220.4	222.0	223.1	225.0	227.5	233.5	194.2	221.2	222.7	223.7	225.7	228.2	234.1
New cars .....	161.2	166.6	166.1	167.5	170.6	171.7	173.9	160.8	166.3	165.9	167.4	170.9	171.7	174.1
Used cars .....	193.6	207.0	202.9	199.9	198.4	198.2	197.2	193.6	207.0	202.9	199.9	198.4	198.3	197.2
Gasoline .....	209.1	292.0	301.0	303.8	306.9	313.9	334.6	209.5	293.3	302.3	305.2	308.3	315.6	335.9
Automobile maintenance and repair .....	231.3	245.7	247.1	249.1	250.8	252.6	255.1	231.7	246.0	247.5	249.4	251.1	253.4	256.2
Body work (12/77 = 100) .....	110.4	118.6	119.4	120.6	121.6	123.3	125.0	111.2	118.6	119.2	120.4	121.7	123.1	124.3
Automobile drive train, brake, and miscellaneous mechanical repair (12/77 = 100) .....	110.8	117.4	118.1	119.4	120.1	120.6	121.8	111.6	118.2	119.0	120.2	120.8	121.8	123.6
Maintenance and servicing (12/77 = 100) .....	109.8	116.3	116.9	117.5	118.4	119.2	120.2	109.2	116.0	116.8	117.3	118.2	119.3	120.4
Power plant repair (12/77 = 100) .....	109.2	116.0	116.7	117.8	118.5	119.2	120.4	109.7	116.3	117.0	118.0	118.6	119.6	120.9
Other private transportation .....	191.4	200.5	201.7	203.7	205.5	207.5	209.8	192.0	201.0	202.3	204.0	206.3	208.4	210.6
Other private transportation commodities .....	165.6	175.1	177.7	182.0	183.4	185.6	188.4	168.1	176.1	178.7	181.6	183.9	186.4	188.0
Motor oil, coolant, and other products (12/77 = 100) .....	105.4	112.2	114.4	115.9	117.4	118.1	120.9	105.8	112.0	114.5	115.9	118.1	119.3	122.4
Automobile parts and equipment (12/77 = 100) .....	107.3	113.4	114.9	117.9	118.7	120.3	121.9	109.1	114.1	115.7	117.6	119.0	120.6	121.4
Tires .....	147.9	154.7	156.4	160.7	161.5	163.8	165.8	150.7	156.1	158.1	161.1	163.0	165.7	166.3
Other parts and equipment (12/77 = 100) .....	107.8	116.7	119.1	121.8	123.0	124.4	126.6	109.1	116.8	118.6	120.0	121.5	122.4	124.0
Other private transportation services .....	200.1	209.1	210.1	211.4	213.4	215.3	217.6	200.2	209.6	210.6	211.9	214.3	216.3	218.7
Automobile insurance .....	221.8	232.3	233.5	233.8	233.9	235.3	237.1	221.9	232.3	233.5	233.7	233.9	235.2	236.8
Automobile finance charges (12/77 = 100) .....	111.1	117.2	117.7	120.4	124.6	127.2	129.9	110.1	116.4	117.0	119.4	124.1	126.5	129.4
Automobile rental, registration, and other fees (12/77 = 100) .....	104.6	107.5	107.8	107.9	108.3	108.5	109.1	105.0	108.1	108.4	108.6	108.9	109.2	109.8
State registration .....	143.8	144.0	144.0	144.0	144.1	144.1	144.2	143.6	143.9	143.9	143.9	144.0	144.0	144.1
Drivers' license (12/77 = 100) .....	104.5	104.5	104.5	104.5	104.5	104.5	104.7	104.3	104.3	104.3	104.2	104.2	104.2	104.5
Vehicle inspection (12/77 = 100) .....	110.2	114.6	114.6	114.6	115.6	117.5	117.5	111.4	115.5	115.5	115.5	116.5	118.3	118.3
Other vehicle related fees (12/77 = 100) .....	108.6	115.5	116.1	116.4	117.1	117.6	118.8	111.2	119.3	120.3	120.8	121.3	122.2	123.8
<b>Public</b> .....	190.0	200.8	205.2	209.1	216.5	223.0	226.8	190.9	200.6	204.1	207.3	214.0	219.1	221.9
Airline fare .....	189.8	205.2	214.1	220.6	232.1	245.5	251.1	189.4	205.2	214.2	220.7	232.4	245.8	251.0
Inter-city bus fare .....	243.9	263.2	268.0	276.0	279.8	282.2	284.7	244.1	263.0	268.0	275.5	279.9	282.3	284.8
Intracity mass transit .....	186.4	190.5	190.5	191.3	195.6	196.4	198.5	186.3	190.2	190.2	191.0	195.1	195.7	196.7
Taxi fare .....	208.6	224.7	228.5	233.6	237.0	238.5	243.1	213.0	230.3	233.9	238.7	242.4	243.9	248.9
Inter-city train fare .....	192.8	220.6	221.0	221.1	231.0	236.3	237.2	192.8	220.8	221.3	221.4	232.1	236.6	237.1
<b>MEDICAL CARE</b> .....	230.7	241.8	243.7	245.9	248.0	250.7	253.9	230.2	242.6	244.7	247.2	249.1	251.7	254.9
<b>Medical care commodities</b> .....	148.8	155.0	155.8	156.6	157.8	159.2	160.5	149.6	156.2	156.7	157.4	158.5	159.9	161.0
Prescription drugs .....	137.3	142.8	143.5	144.5	145.5	146.4	147.9	138.1	143.7	144.4	145.2	146.2	147.4	148.8
Anti-infective drugs (12/77 = 100) .....	108.6	112.5	113.1	113.5	113.9	114.6	115.8	109.8	113.2	114.1	114.8	115.5	116.8	118.2
Tranquillizers and sedatives (12/77 = 100) .....	111.4	114.6	114.9	115.8	117.1	118.4	119.9	111.2	114.8	115.0	115.6	116.9	118.3	119.7
Circulatory and diuretics (12/77 = 100) .....	105.3	109.3	109.3	109.7	111.0	111.4	112.4	106.2	109.7	110.0	110.6	111.6	112.3	113.0
Hormones, diabetic drugs, biologicals, and prescription and supplies (12/77 = 100) .....	113.2	120.3	120.9	122.5	123.2	123.8	126.0	113.6	120.4	120.8	122.2	122.6	123.1	124.8
Pain and symptom control drugs (12/77 = 100) .....	109.4	113.7	114.8	115.6	116.8	117.8	118.8	109.8	115.2	116.0	116.3	117.5	118.2	119.0
Supplements, cough and cold preparations, and respiratory agents (12/77 = 100) .....	106.4	110.3	110.9	111.3	111.9	112.1	112.6	107.5	111.7	112.2	112.6	112.8	113.7	114.2
Nonprescription drugs and medical supplies (12/77 = 100) .....	106.8	111.4	112.0	112.5	113.4	114.6	115.3	107.5	112.5	112.8	113.2	114.0	115.1	115.6
Eyeglasses (12/77 = 100) .....	104.6	108.7	109.2	110.2	110.9	110.9	111.5	105.0	108.9	109.3	110.0	110.4	110.5	111.4
Internal and respiratory over-the-counter drugs .....	164.5	172.2	173.0	173.7	175.4	177.9	179.1	165.7	174.3	174.7	175.2	176.6	178.5	179.0
Nonprescription medical equipment and supplies (12/77 = 100) .....	106.4	110.4	110.8	111.0	111.8	113.1	113.8	106.8	111.3	111.2	111.8	112.7	114.2	115.0
<b>Medical care services</b> .....	248.3	260.6	262.8	265.3	267.6	270.7	274.4	247.4	261.2	263.8	266.8	268.8	271.8	275.6
Professional services .....	219.2	228.9	230.3	231.6	233.0	235.9	238.9	219.3	231.1	233.1	234.9	235.9	238.3	241.7
Physicians' services .....	234.5	246.6	248.4	249.7	250.8	252.5	256.0	233.7	248.7	251.5	254.4	255.5	256.5	260.3
Dental services .....	207.9	216.0	217.2	218.5	220.7	224.5	227.4	209.7	219.0	220.7	221.2	222.7	226.1	229.5
Other professional services (12/77 = 100) .....	108.3	111.9	112.4	112.7	112.8	115.1	116.6	107.6	111.5	111.7	112.1	112.2	114.8	115.9
Other medical care services .....	283.7	299.0	302.0	306.2	309.5	312.8	317.4	281.7	298.1	301.3	305.9	309.3	313.0	317.3
Hospital and other medical services (12/77 = 100) .....	112.8	118.6	119.6	121.3	122.6	123.8	125.6	112.2	117.8	118.9	120.5	121.8	123.2	124.9
Hospital room .....	355.9	374.2	376.4	380.2	385.1	389.4	395.3	354.0	371.7	374.1	379.4	383.6	388.7	393.9
Other hospital and medical care services .....	111.8	117.4	118.8	120.8	122.0	122.9	124.7	111.1	116.7	118.0	119.5	120.8	122.1	123.8

**23. Continued—Consumer Price Index—U.S. city average**

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1979					1980	1979					1980		
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<b>ENTERTAINMENT</b>	182.3	190.2	191.1	192.0	192.8	193.4	195.3	182.1	188.9	190.2	191.4	192.0	192.3	193.9
<b>Entertainment commodities</b>	182.6	191.0	192.0	193.1	194.0	195.2	197.6	181.9	188.4	189.9	190.7	191.3	192.4	194.2
Reading materials (12/77 = 100)	106.9	111.1	111.9	113.8	114.5	115.1	116.7	106.6	110.7	111.4	113.3	114.2	114.8	116.2
Newspapers	206.2	214.0	214.5	217.7	222.4	223.5	226.8	205.8	213.7	214.2	217.4	222.2	223.3	226.4
Magazines, periodicals, and books (12/77 = 100)	109.2	113.7	115.0	117.2	116.0	116.8	118.1	109.3	113.5	114.8	117.2	115.8	116.6	117.8
Sporting goods and equipment (12/77 = 100)	104.4	110.4	111.3	111.2	111.7	112.2	113.8	103.2	105.4	107.5	106.7	106.9	107.7	108.6
Sport vehicles (12/77 = 100)	104.3	111.3	112.3	111.5	112.2	112.9	114.9	103.3	103.9	106.7	104.6	104.8	105.8	106.6
Indoor and warm weather sport equipment (12/77 = 100)	104.5	105.9	106.1	107.5	107.8	107.5	107.6	101.6	104.7	104.7	106.0	106.1	106.3	106.4
Bicycles	154.0	163.8	165.6	167.1	167.1	167.1	170.5	153.5	162.9	164.7	166.9	167.4	167.0	170.5
Other sporting goods and equipment (12/77 = 100)	103.8	108.6	109.3	110.0	110.3	111.0	111.8	102.7	107.2	108.5	109.8	110.2	111.3	111.9
Toys, hobbies and other entertainment (12/77 = 100)	105.6	110.2	110.4	110.8	111.2	112.1	113.2	105.7	110.2	110.4	111.0	111.2	111.8	112.6
Toys, hobbies and music equipment (12/77 = 100)	106.2	110.0	110.4	110.7	110.5	111.2	112.1	105.5	109.8	109.6	110.1	109.8	109.9	110.9
Photographic supplies and equipment (12/77 = 100)	105.0	108.2	108.9	109.4	109.9	109.7	110.8	104.9	107.6	108.8	109.3	109.6	110.1	111.2
Pet supplies and expense (12/77 = 100)	105.1	111.8	111.6	112.1	113.5	115.5	116.8	106.5	112.6	112.9	113.9	114.6	116.1	116.7
<b>Entertainment services</b>	182.3	189.4	190.2	190.8	191.5	191.1	192.5	183.4	190.7	191.8	193.5	194.3	193.0	194.4
Fees for participant sports (12/77 = 100)	106.8	112.3	113.0	113.2	113.8	113.8	114.6	108.0	112.3	113.4	114.9	115.2	115.0	115.6
Admissions (12/77 = 100)	111.1	114.7	115.2	115.7	116.1	116.6	117.9	110.9	115.9	116.3	116.8	117.3	117.8	119.4
Other entertainment services (12/77 = 100)	107.2	109.7	109.4	110.0	110.0	108.6	109.1	106.8	110.9	110.9	111.4	112.0	109.0	109.3
<b>OTHER GOODS AND SERVICES</b>	190.5	197.0	201.7	202.3	202.9	204.0	206.3	190.3	197.2	200.6	201.4	202.0	203.0	206.0
<b>Tobacco products</b>	183.0	189.9	190.9	191.3	191.5	192.1	196.7	183.1	190.1	190.9	191.2	191.4	192.1	197.1
Cigarettes	185.5	192.6	193.6	193.8	194.0	194.7	199.7	185.8	193.1	193.7	193.9	194.1	194.8	200.3
Other tobacco products and smoking accessories (12/77 = 100)	107.3	111.1	112.2	113.0	112.8	113.2	113.9	106.5	110.0	111.0	112.3	112.4	112.7	113.4
<b>Personal care</b>	188.9	197.5	199.0	199.8	200.9	203.0	204.2	188.8	197.6	198.4	199.4	200.5	202.3	204.4
Toilet goods and personal care appliances	182.5	189.7	191.4	192.5	193.1	195.8	196.4	182.4	190.2	191.0	191.6	192.4	194.5	196.2
Products for the hair, hairpieces and wigs (12/77 = 100)	105.8	111.1	111.6	111.9	112.2	113.0	114.2	104.4	110.5	110.6	111.1	111.4	112.4	114.0
Dental and shaving products (12/77 = 100)	106.8	113.6	114.3	114.1	115.6	117.3	117.8	107.0	112.1	112.5	112.7	113.9	114.7	115.3
Cosmetics, bath and nail preparations, manicure and eye makeup implements (12/77 = 100)	105.2	108.9	110.4	110.7	111.4	113.0	112.9	104.7	110.0	110.6	110.1	110.2	112.1	112.9
Other toilet goods and small personal care appliances (12/77 = 100)	106.4	107.6	108.6	110.9	109.9	112.1	112.1	108.5	109.7	110.3	111.7	112.3	113.1	114.0
Personal care services	195.2	205.0	206.4	207.0	208.5	210.0	211.6	195.2	205.0	205.8	207.3	208.6	210.2	212.7
Beauty parlor services for women	196.7	206.1	207.7	208.3	210.3	212.1	213.3	197.5	206.7	207.4	209.1	210.2	212.0	214.2
Haircuts and other barber shop services for men (12/77 = 100)	109.0	115.1	115.5	115.9	116.1	116.8	118.1	108.1	114.2	114.7	115.4	116.3	117.1	118.8
<b>Personal and educational expenses</b>	207.4	210.8	223.3	224.0	224.2	224.6	226.3	207.7	211.2	223.5	224.2	224.4	224.8	226.2
School books and supplies	190.7	192.6	201.5	202.3	202.3	202.5	206.0	193.1	195.2	205.0	205.8	205.9	206.0	209.8
Personal and educational services	211.7	215.4	228.6	229.4	229.6	229.9	231.4	211.7	215.5	228.4	229.0	229.3	229.7	230.6
Tuition and other school fees	108.4	109.4	117.7	118.1	118.1	118.1	118.3	108.3	108.4	117.9	118.2	118.2	118.2	118.4
College tuition (12/77 = 100)	108.6	109.7	116.9	117.3	117.3	117.3	117.6	108.6	109.7	116.8	117.3	117.3	117.3	117.6
Elementary and high school tuition (12/77 = 100)	107.5	108.3	120.9	120.9	120.9	120.9	120.9	107.4	108.4	120.7	120.7	120.7	120.7	120.7
Personal expenses (12/77 = 100)	109.3	114.8	115.1	115.8	116.3	117.3	120.1	109.3	114.4	114.4	114.9	115.5	116.3	117.7
<b>Special indexes:</b>														
Gasoline, motor oil, coolant and other products	207.4	288.2	297.1	299.8	302.9	309.7	329.9	207.8	289.5	298.3	301.2	304.3	311.4	331.3
Insurance and finance	249.1	278.7	283.5	288.9	296.0	302.1	310.5	249.0	278.3	283.1	228.5	295.8	301.6	310.0
Utilities and public transportation	202.9	217.0	219.3	220.7	220.5	223.5	225.0	203.3	217.4	219.5	220.7	220.3	223.0	224.4
Housekeeping and home maintenance services	259.5	274.4	276.6	278.7	280.6	282.2	284.7	258.9	275.3	277.8	279.9	281.3	283.4	286.0



**24. 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)		
	1979			1979			1979			1979		
	Aug.	Oct.	Dec.	Aug.	Oct.	Dec.	Aug.	Oct.	Dec.	Aug.	Oct.	Dec.
<b>Northeast</b>												
<b>EXPENDITURE CATEGORY</b>												
All items .....	115.0	117.3	119.0	117.3	120.2	122.2	120.2	123.0	125.7	116.9	119.2	121.8
Food and beverages .....	117.9	119.2	120.6	118.9	119.6	121.9	121.7	121.9	123.2	120.4	119.4	121.2
Housing .....	114.8	117.9	119.8	116.7	121.3	123.7	122.5	127.7	132.1	116.1	119.9	123.2
Apparel and upkeep .....	104.9	107.7	108.9	106.1	109.2	109.0	104.3	107.8	108.5	103.4	108.3	109.8
Transportation .....	119.6	121.1	123.7	123.4	125.0	127.6	123.6	124.9	127.0	122.5	124.5	127.3
Medical care .....	113.6	115.4	117.3	115.3	118.5	120.0	114.8	117.0	118.9	114.8	116.3	119.0
Entertainment .....	110.6	111.4	111.5	110.9	113.6	113.5	110.4	110.0	109.8	113.6	114.1	115.1
Other goods and services .....	108.3	111.7	112.7	111.4	114.1	114.3	113.0	115.6	116.3	109.2	112.5	113.1
<b>COMMODITY AND SERVICE GROUP</b>												
Commodities .....	116.6	118.6	120.5	119.0	121.8	123.7	120.8	122.8	125.1	117.7	120.0	122.5
Commodities less food and beverages .....	115.8	118.3	120.4	119.0	122.8	124.6	120.4	123.2	126.0	116.5	120.4	123.2
Services .....	113.0	115.6	117.2	114.6	117.8	119.9	119.1	123.3	126.6	115.7	117.9	120.7
<b>North Central</b>												
<b>EXPENDITURE CATEGORY</b>												
All items .....	121.0	123.2	126.3	120.5	122.3	124.6	119.0	121.9	123.7	119.5	122.0	123.0
Food and beverages .....	120.2	121.2	123.2	118.6	119.2	120.2	120.4	121.6	123.4	122.0	122.8	124.8
Housing .....	125.8	128.7	133.1	124.1	125.7	129.3	120.3	124.5	125.9	120.5	124.0	123.6
Apparel and upkeep .....	102.8	105.3	105.6	104.6	109.9	110.9	105.3	107.4	109.0	104.0	110.0	111.9
Transportation .....	122.8	125.0	127.9	122.9	125.2	127.5	123.7	126.0	129.1	123.2	124.3	127.3
Medical care .....	115.0	115.9	119.6	117.2	118.6	119.3	116.4	117.5	119.7	117.5	119.1	121.8
Entertainment .....	111.9	112.6	113.9	109.2	110.7	111.0	110.5	112.7	114.4	111.3	112.7	113.8
Other goods and services .....	109.0	112.5	113.6	114.9	117.8	117.7	110.0	112.3	114.0	112.7	115.7	116.1
<b>COMMODITY AND SERVICE GROUP</b>												
Commodities .....	120.7	122.5	125.4	119.4	120.8	122.5	119.1	121.7	123.5	118.9	121.1	122.5
Commodities less food and beverages .....	120.9	123.0	126.4	119.7	121.5	123.5	118.5	121.7	123.6	117.6	120.4	121.6
Services .....	121.5	124.3	127.7	122.4	124.7	128.0	118.8	122.2	124.1	120.4	123.3	123.8
<b>South</b>												
<b>EXPENDITURE CATEGORY</b>												
All items .....	118.7	120.7	123.1	120.1	122.4	124.6	119.9	122.1	124.3	118.5	120.6	122.5
Food and beverages .....	121.1	122.2	123.5	120.3	121.3	122.9	121.6	122.1	123.9	120.0	121.0	122.5
Housing .....	119.9	122.0	125.0	122.4	125.8	128.4	122.7	125.9	128.4	119.3	121.6	123.9
Apparel and upkeep .....	107.5	111.2	112.3	107.3	110.8	110.3	104.5	106.4	105.7	102.8	103.9	104.8
Transportation .....	122.6	124.2	127.6	123.5	124.5	127.8	121.8	123.2	126.4	122.4	124.4	126.3
Medical care .....	113.3	116.0	117.7	115.7	116.9	118.3	115.5	117.6	120.7	118.5	122.5	124.9
Entertainment .....	108.1	109.4	109.5	111.9	113.2	113.9	111.8	113.6	113.8	115.9	117.1	119.4
Other goods and services .....	111.5	114.4	115.8	110.8	114.0	115.1	111.4	114.2	115.5	114.3	117.3	118.3
<b>COMMODITY AND SERVICE GROUP</b>												
Commodities .....	118.9	120.5	122.6	119.3	121.2	123.1	119.3	120.7	122.7	118.6	120.2	121.9
Commodities less food and beverages .....	118.0	119.8	122.2	118.9	121.2	123.2	118.3	120.1	122.2	118.0	119.9	121.6
Services .....	118.4	121.0	123.8	121.2	124.3	126.8	120.8	124.2	126.7	118.5	121.1	123.5
<b>West</b>												
<b>EXPENDITURE CATEGORY</b>												
All items .....	118.7	120.8	124.8	120.9	123.6	126.6	119.5	122.2	124.5	118.8	122.8	124.3
Food and beverages .....	119.4	121.2	123.4	121.4	123.1	125.8	120.1	121.1	122.9	121.6	121.5	123.7
Housing .....	119.0	121.2	127.0	122.4	126.2	130.2	120.5	124.8	127.8	117.8	124.8	125.4
Apparel and upkeep .....	104.8	107.9	110.0	108.8	111.0	111.5	103.9	104.4	104.4	109.5	114.0	114.9
Transportation .....	125.3	127.2	129.9	124.8	126.7	128.8	125.0	126.3	129.0	123.1	124.6	128.2
Medical care .....	116.8	119.8	121.9	116.6	117.8	121.3	116.5	118.4	119.9	119.0	120.7	122.7
Entertainment .....	109.3	109.3	111.1	114.4	115.6	115.9	112.6	113.8	114.9	115.7	117.8	119.2
Other goods and services .....	112.4	115.2	115.5	112.5	115.3	116.5	110.7	113.0	113.6	114.4	116.0	116.4
<b>COMMODITY AND SERVICE GROUP</b>												
Commodities .....	118.7	120.5	123.1	120.8	123.1	125.3	119.4	121.7	123.6	119.1	120.7	123.0
Commodities less food and beverage .....	118.3	120.2	123.0	120.6	123.1	125.1	119.1	121.9	123.8	118.0	120.4	122.7
Services .....	118.8	121.3	126.9	121.0	124.4	128.4	119.6	122.8	125.9	118.5	125.9	126.3

**25. Consumer Price Index—U.S. city average, and selected areas**

[1967 = 100 unless otherwise specified]

Area <sup>1</sup>	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979						1980	1979						1980
	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
U.S. city average <sup>2</sup>	204.7	221.1	223.4	225.4	227.5	229.9	233.2	204.7	221.5	223.7	225.6	227.6	230.0	233.3
Anchorage, Alaska (10/67 = 100)	198.1	...	213.2	...	213.7	...	218.2	197.3	...	210.9	...	211.8	...	215.9
Atlanta, Ga.	201.8	216.9	...	220.8	...	223.3	...	202.7	219.0	...	223.5	...	227.0	...
Baltimore, Md.	204.2	...	224.9	...	227.2	...	234.4	205.0	...	224.9	...	227.9	...	234.5
Boston, Mass.	201.6	...	218.1	...	222.7	...	227.3	200.7	...	217.9	...	222.5	...	226.9
Buffalo, N.Y.	...	214.6	...	218.7	...	221.2	...	...	215.3	...	218.6	...	220.7	...
Chicago, Ill.-Northwestern Ind.	199.7	218.6	221.3	221.8	225.9	228.4	230.3	199.7	218.2	220.6	221.7	225.6	227.8	229.9
Cincinnati, Ohio-Ky.-Ind.	211.2	...	229.0	...	233.4	...	239.5	212.3	...	230.8	...	235.6	...	241.0
Cleveland, Ohio	...	221.4	...	224.7	...	232.5	...	...	222.6	...	225.5	...	233.2	...
Dallas-Ft. Worth, Tex.	...	222.9	...	228.2	...	234.1	...	...	223.0	...	228.0	...	233.3	...
Denver-Boulder, Colo.	216.2	...	240.8	...	245.9	...	247.3	218.0	...	243.6	...	248.6	...	250.9
Detroit, Mich.	205.1	222.2	223.7	227.2	231.3	233.2	237.2	204.9	222.6	223.5	226.9	230.8	232.2	236.4
Honolulu, Hawaii	...	207.2	...	210.5	...	214.8	...	...	207.2	...	211.1	...	215.5	...
Houston, Tex.	...	240.6	...	244.2	...	248.7	...	...	239.0	...	241.8	...	246.0	...
Kansas City, Mo.-Kansas	...	224.6	...	229.9	...	233.7	...	...	223.1	...	227.9	...	232.4	...
Los Angeles-Long Beach, Anaheim, Calif.	199.6	217.5	220.7	221.8	224.2	228.0	232.6	199.7	219.6	223.0	224.0	225.8	229.9	235.0
Miami, Fla. (11/77 = 100)	108.9	...	117.4	...	119.4	...	123.3	109.2	...	118.7	...	120.5	...	124.9
Milwaukee, Wis.	200.6	...	226.0	...	229.8	...	236.4	201.6	...	228.7	...	232.5	...	240.8
Minneapolis-St. Paul, Minn.-Wis.	...	227.0	...	231.2	...	234.0	...	...	228.5	...	233.0	...	234.8	...
New York, N.Y.-Northeastern N.J.	202.9	215.4	218.1	219.9	221.3	222.9	226.1	202.3	215.3	217.8	219.3	220.7	222.4	225.5
Northeast, Pa. (Scranton)	200.2	...	215.4	...	220.0	...	224.4	202.1	...	217.1	...	221.1	...	225.8
Philadelphia, Pa.-N.J.	202.3	217.7	219.5	220.1	222.4	223.7	227.2	203.9	218.1	220.3	221.3	223.8	224.6	228.0
Pittsburgh, Pa.	...	219.1	...	226.0	...	229.2	...	...	220.0	...	226.1	...	229.7	...
Portland, Oreg.-Wash.	211.7	...	232.2	...	236.6	...	244.6	212.1	...	232.6	...	236.7	...	243.5
St. Louis, Mo.-Ill.	203.4	...	222.2	...	225.7	...	232.7	201.4	...	222.5	...	226.3	...	233.5
San Diego, Calif.	214.8	...	240.4	...	247.8	...	254.0	212.5	...	237.7	...	244.8	...	251.0
San Francisco-Oakland, Calif.	...	218.3	...	221.5	...	230.2	...	...	218.6	...	220.8	...	229.0	...
Seattle-Everett, Wash.	202.0	...	222.6	...	227.6	...	236.0	200.4	...	221.0	...	225.5	...	233.8
Washington, D.C.-Md.-Va.	208.7	...	222.9	...	225.4	...	231.9	209.4	...	224.4	...	226.7	...	233.0

<sup>1</sup>The 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.

<sup>2</sup>Average of 85 cities.

## 26. Producer Price Indexes, by stage of processing

[1967 = 100]

Commodity grouping	Annual average 1978	1979											1980	
		Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>FINISHED GOODS</b>														
Finished goods .....	194.6	207.7	209.1	211.4	212.7	213.7	216.2	217.3	220.7	224.2	225.9	227.8	232.1	235.4
Finished consumer goods .....	192.6	206.3	207.9	210.2	211.6	212.7	215.6	217.5	221.7	224.7	226.6	228.8	233.2	237.3
Finished consumer foods .....	206.7	225.1	226.3	227.8	226.6	223.6	224.9	223.5	228.1	226.7	230.5	232.0	231.4	231.6
Crude .....	215.5	257.2	244.6	241.8	226.7	227.1	224.9	231.7	214.0	215.5	228.0	227.8	225.9	220.0
Processed .....	204.1	220.5	222.8	224.6	224.4	221.3	222.8	220.7	227.0	225.5	228.6	230.1	229.7	230.4
Other nondurable goods .....	195.4	207.2	209.8	213.1	217.1	221.7	227.1	233.4	239.0	243.3	245.2	247.8	254.4	263.0
Durable goods .....	165.8	176.2	176.8	178.4	179.5	180.4	181.6	181.6	182.9	189.0	188.5	191.2	198.2	200.7
Capital Equipment .....	199.1	210.8	211.7	214.0	215.1	215.8	217.2	216.5	217.8	222.8	223.8	225.1	229.1	230.3
<b>INTERMEDIATE MATERIALS</b>														
Intermediate materials, supplies, and components .....	215.5	228.5	231.5	235.8	238.2	240.3	244.6	247.5	251.0	255.0	256.1	258.4	265.6	271.1
Materials and components for manufacturing .....	208.3	221.6	224.5	229.0	230.9	232.1	236.0	238.0	240.7	244.3	245.2	247.5	255.2	259.2
Materials for food manufacturing .....	202.3	217.3	219.6	222.2	222.5	222.3	226.7	225.1	228.9	225.5	227.7	230.5	225.8	245.1
Materials for nondurable manufacturing .....	195.8	205.3	208.7	213.7	216.7	218.1	222.5	225.3	227.6	231.4	233.1	235.1	240.6	243.3
Materials for durable manufacturing .....	237.2	256.8	260.0	266.0	267.2	268.9	273.3	275.2	278.8	284.7	284.2	287.5	303.5	305.9
Components for manufacturing .....	189.1	199.0	200.3	203.1	204.5	205.3	207.7	209.3	211.3	213.2	214.5	215.9	218.9	222.7
Materials and components for construction .....	224.4	239.0	241.3	244.5	245.2	245.6	247.4	249.2	252.5	254.7	253.8	253.6	257.5	261.6
Processed fuels and lubricants .....	296.4	304.8	312.9	323.9	336.8	349.5	364.8	384.6	399.4	410.6	416.5	424.6	443.9	464.3
Manufacturing industries .....	270.4	269.0	275.4	280.7	287.4	293.8	304.0	311.2	317.2	322.5	325.3	332.3	340.6	352.2
Nonmanufacturing industries .....	320.0	339.1	348.9	365.9	385.5	404.9	425.5	458.8	483.0	500.6	509.7	518.8	549.8	579.7
Containers .....	212.5	224.3	229.3	231.8	234.5	234.9	235.4	237.6	237.9	242.6	243.5	246.1	250.9	250.8
Supplies .....	196.9	209.6	211.1	212.8	213.7	216.1	219.6	219.6	221.2	224.9	226.0	228.4	232.2	238.3
Manufacturing industries .....	183.6	194.3	197.4	199.4	201.5	202.7	204.2	208.6	209.4	212.2	213.1	215.3	220.9	222.0
Nonmanufacturing industries .....	204.0	217.7	218.4	219.9	220.3	223.2	227.8	225.4	227.5	231.7	232.9	235.3	238.2	247.0
Manufactured animal feeds .....	200.2	221.6	219.3	219.5	214.6	226.2	241.3	220.8	224.0	228.9	227.3	230.8	224.2	223.3
Other supplies .....	201.9	213.6	215.0	216.8	218.3	219.2	221.5	223.1	224.9	228.9	230.7	232.9	237.8	248.6
<b>CRUDE MATERIALS</b>														
Crude materials for further processing .....	240.1	270.4	276.6	279.9	282.3	283.0	287.1	281.7	288.3	289.5	290.8	296.7	296.9	308.3
Foodstuffs and feedstuffs .....	215.3	243.7	247.4	251.5	251.9	248.2	254.1	243.7	248.7	247.5	246.4	249.7	243.0	252.6
Nonfood materials .....	286.7	320.7	331.6	333.3	339.6	348.7	349.3	353.6	363.1	368.9	374.8	385.8	399.0	413.9
Nonfood materials except fuel .....	235.4	264.7	275.5	276.5	276.6	286.6	285.2	286.1	293.3	298.1	304.6	311.5	329.9	341.5
Manufacturing industries .....	240.8	271.9	283.8	284.8	284.7	295.9	294.0	294.9	302.8	307.8	314.9	322.5	342.0	354.7
Construction .....	185.7	200.4	201.9	203.6	204.5	205.4	207.2	208.6	209.9	212.6	214.6	216.6	225.7	228.3
Crude fuel .....	463.7	513.9	525.2	529.2	556.8	563.1	570.7	586.2	604.0	612.9	616.8	641.8	637.2	663.5
Manufacturing industries .....	481.9	541.6	555.4	560.0	593.8	601.3	610.4	629.2	651.8	662.5	667.0	697.7	691.7	724.4
Nonmanufacturing industries .....	459.6	502.7	512.1	515.8	538.8	544.3	550.7	563.6	577.8	585.5	589.0	609.7	606.2	627.7
<b>SPECIAL GROUPINGS</b>														
Finished goods excluding foods .....	188.9	200.2	201.7	204.2	206.3	208.5	211.4	213.2	216.2	221.3	222.2	224.3	230.1	234.3
Finished consumer goods excluding Foods .....	183.7	194.9	196.7	199.3	202.1	205.2	208.4	212.3	216.3	220.6	222.4	225.0	231.8	237.8
Intermediate materials, supplies, and Components, excluding intermediate materials for food manufacturing and manufactured animal feeds .....	216.4	229.1	232.3	236.7	238.8	241.3	245.4	249.0	252.5	256.8	257.8	260.1	268.1	273.2
Intermediate foods and feeds .....	201.0	218.2	218.9	220.7	219.3	223.0	231.0	223.1	226.6	226.0	227.0	230.0	224.7	237.1
Crude materials for further processing excluding crude foodstuffs and feedstuffs, plant and animal fibers, oilseeds, and leaf tobacco .....	316.6	356.4	370.6	372.4	379.2	389.5	391.7	396.9	408.6	417.0	423.9	437.1	453.0	468.8

NOTE: Data for October 1979 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.



**27. Producer Price Indexes, by commodity groupings<sup>1</sup>**

[1967 = 100 unless otherwise specified]

Code	Commodity group and subgroup	Annual average 1978	1979										1980		
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
	<b>All commodities</b>	209.3	224.1	226.7	230.0	232.0	233.5	236.9	238.3	242.0	245.6	246.9	249.4	254.7	259.8
	<b>All commodities (1957 - 59 = 100)</b>	222.1	237.7	240.5	243.7	245.7	247.7	251.4	252.8	256.7	260.6	262.0	264.6	270.2	275.6
	<b>Farm products and processed foods and feeds</b>	206.6	227.2	229.0	244.0	230.8	229.0	232.2	227.5	231.8	230.6	232.3	234.5	231.9	236.9
	<b>Industrial commodities</b>	209.4	222.5	225.4	229.0	231.6	234.0	237.5	240.6	244.2	249.0	250.2	252.8	260.3	265.4
	<b>FARM PRODUCTS AND PROCESSED FOODS AND FEEDS</b>														
01	Farm products	212.5	240.9	242.8	223.3	245.4	242.8	246.8	238.5	241.0	239.6	240.2	242.5	236.4	242.3
01 - 1	Fresh and dried fruits and vegetables	216.5	263.0	235.7	234.7	228.2	226.4	226.7	241.7	208.3	218.0	216.4	210.5	218.9	220.5
01 - 2	Grains	182.5	189.3	192.0	198.3	210.3	218.7	247.4	229.1	224.4	229.0	226.6	227.9	214.6	223.3
01 - 3	Livestock	220.1	266.5	275.8	284.0	280.7	264.0	256.0	240.2	256.4	251.7	248.3	252.5	247.8	257.2
01 - 4	Live poultry	199.8	217.8	217.6	209.4	216.3	182.9	183.8	171.9	173.5	162.0	195.5	194.7	195.2	184.6
01 - 5	Plant and animal fibers	193.4	205.1	197.8	197.8	207.6	219.5	207.6	207.9	211.3	212.9	215.4	222.0	239.0	269.5
01 - 6	Fluid milk	219.7	244.6	243.7	242.4	242.0	243.8	247.6	250.0	258.5	260.8	262.5	264.0	262.3	263.8
01 - 7	Eggs	158.6	176.7	199.9	185.5	163.8	170.7	167.6	166.8	175.4	155.9	178.7	198.4	165.6	150.4
01 - 8	Hay, hayseeds, and oilseeds	215.8	246.1	249.5	248.3	240.7	258.4	260.1	251.9	240.9	235.6	229.8	230.3	218.1	224.7
01 - 9	Other farm products	274.9	253.6	254.6	255.1	264.1	281.0	311.9	310.8	315.9	313.6	318.3	319.4	301.1	304.7
02	Processed foods and feeds	202.6	218.9	220.5	222.3	222.0	220.6	223.3	220.5	225.8	224.8	227.1	229.2	228.5	233.1
02 - 1	Cereal and bakery products	190.3	199.1	200.1	203.0	204.9	206.3	212.4	216.0	218.7	219.8	222.3	223.7	225.4	229.7
02 - 2	Meats, poultry, and fish	217.1	248.5	250.6	253.0	250.4	241.4	237.7	225.5	239.9	234.2	239.5	242.8	239.5	239.5
02 - 3	Dairy products	188.4	203.2	204.9	207.1	207.9	208.4	209.0	215.2	218.3	218.1	219.0	219.6	221.4	221.2
02 - 4	Processed fruits and vegetables	202.6	219.5	219.6	220.5	221.4	221.5	223.6	224.6	225.1	223.4	222.5	222.3	222.8	223.1
02 - 5	Sugar and confectionery	197.8	208.4	208.4	208.7	207.6	211.1	215.7	218.3	217.2	218.9	222.7	224.4	234.8	287.1
02 - 6	Beverages and beverage materials	200.0	201.1	201.2	201.5	205.3	208.5	214.1	216.5	217.9	218.9	221.4	221.9	224.1	224.7
02 - 7	Fats and oils	225.3	237.5	238.6	246.2	241.8	243.6	253.2	251.7	253.3	246.0	242.1	235.8	224.9	225.9
02 - 8	Miscellaneous processed foods	199.0	208.0	217.5	219.3	220.2	211.1	212.7	217.6	219.0	220.8	222.1	222.0	224.4	223.5
02 - 9	Manufactured animal feeds	197.4	217.2	215.7	215.6	210.8	220.5	234.9	216.2	219.2	224.0	222.7	225.3	219.5	219.8
	<b>INDUSTRIAL COMMODITIES</b>														
03	Textile products and apparel	159.8	164.2	165.2	166.4	167.2	168.4	169.3	170.5	171.3	172.0	172.4	172.8	174.9	176.5
03 - 1	Synthetic fibers (12/75 = 100)	109.6	113.5	113.6	115.1	117.4	118.5	119.5	120.6	123.6	124.7	124.9	124.5	126.9	127.1
03 - 2	Processed yarns and threads (12/75 = 100)	102.4	105.3	107.0	106.8	107.8	108.6	109.5	110.6	111.7	112.1	113.0	113.1	114.4	117.3
03 - 3	Gray fabrics (12/75 = 100)	118.6	123.2	123.1	124.5	124.7	125.4	128.3	128.7	128.7	129.7	130.6	132.5	132.2	131.7
03 - 4	Finished fabrics (12/75 = 100)	103.8	104.1	105.4	105.9	107.0	107.6	108.2	109.0	109.1	108.9	108.5	109.3	109.8	110.8
03 - 81	Apparel	152.4	157.6	158.3	159.8	159.8	160.2	160.3	161.4	161.6	162.2	162.9	162.3	165.3	167.3
03 - 82	Textile housefurnishings	178.6	186.0	187.4	188.0	188.0	189.3	189.9	190.5	193.9	196.3	194.8	197.0	199.2	200.0
04	Hides, skins, leather, and related products	200.0	232.2	253.3	258.9	269.6	268.0	261.9	257.9	251.1	253.9	248.5	248.9	255.3	251.0
04 - 1	Hides and skins	360.5	497.8	639.6	642.2	666.9	611.0	566.5	511.9	465.3	478.8	447.6	443.9	468.8	404.8
04 - 2	Leather	238.6	309.2	371.9	393.6	429.4	414.6	385.2	365.9	330.0	343.6	319.8	324.8	347.6	340.3
04 - 3	Footwear	183.0	203.0	209.9	212.0	216.3	221.1	221.8	225.4	226.9	227.5	227.3	227.3	228.5	228.1
04 - 4	Other leather and related products	177.0	192.2	195.9	200.4	209.1	212.3	212.1	210.9	212.1	209.7	208.5	208.1	213.2	214.9
05	Fuels and related products and power	322.5	342.5	350.9	361.5	377.6	393.7	411.8	432.8	454.8	468.5	476.7	488.7	507.8	533.0
05 - 1	Coal	430.0	444.0	445.3	447.1	450.8	452.0	452.5	454.2	452.5	454.6	455.4	457.8	458.1	458.7
05 - 2	Coke	411.8	423.7	428.5	430.1	430.6	430.6	430.6	430.6	431.2	431.2	431.2	431.2	430.6	430.6
05 - 3	Gas fuels <sup>1</sup>	428.7	458.1	471.0	477.4	507.2	522.3	548.4	572.4	603.4	619.9	637.1	670.5	679.6	719.8
05 - 4	Electric power	250.6	251.1	257.3	260.6	265.9	269.9	274.8	278.8	280.5	283.5	282.1	287.2	290.7	299.5
05 - 61	Crude petroleum <sup>2</sup>	300.1	322.3	324.2	326.2	335.7	356.4	370.6	385.7	422.1	436.7	450.4	470.8	513.6	515.1
05 - 7	Petroleum products, refined <sup>3</sup>	321.0	350.0	360.3	378.6	400.0	423.6	449.8	482.8	513.7	533.7	544.9	554.8	582.4	620.3
06	Chemicals and allied products	198.8	207.3	209.9	215.1	218.0	219.2	225.0	228.5	230.8	234.2	235.6	238.1	245.5	247.6
06 - 1	Industrial chemicals <sup>4</sup>	225.6	237.4	239.7	248.2	255.6	259.3	270.4	277.1	280.0	285.7	287.2	291.6	302.6	306.7
06 - 21	Prepared paint	192.3	202.3	202.3	203.3	201.3	201.3	205.3	205.3	206.0	206.7	206.9	210.7	223.1	223.3
06 - 22	Paint materials	212.7	224.3	227.0	231.6	236.1	239.5	246.7	247.9	252.0	253.6	254.8	255.4	258.9	262.7
06 - 3	Drugs and pharmaceuticals	148.1	156.2	156.6	157.5	157.7	159.0	159.2	159.6	161.0	162.8	163.0	164.4	166.5	167.7
06 - 4	Fats and oils, inedible	315.8	367.9	398.5	448.7	418.3	374.1	381.6	376.4	379.9	366.9	344.3	327.1	325.6	302.2
06 - 5	Agricultural chemicals and chemical products	198.4	203.1	206.3	209.8	210.0	209.2	211.2	215.3	219.4	224.3	229.2	232.7	238.1	242.8
06 - 6	Plastic resins and materials	199.8	206.3	210.9	220.6	228.5	230.1	244.5	250.1	252.0	260.0	261.7	262.7	270.0	271.1
06 - 7	Other chemicals and allied products	181.8	184.7	186.5	186.9	188.9	190.5	191.8	194.4	195.8	197.0	199.3	201.9	209.6	211.0
07	Rubber and plastic products	174.8	183.2	185.9	188.8	190.8	193.1	195.5	198.8	200.7	203.0	204.3	205.7	208.2	210.9
07 - 1	Rubber and rubber products	185.3	197.6	199.4	201.2	202.6	204.8	209.5	214.6	217.1	220.3	223.3	223.9	227.1	232.2
07 - 11	Crude rubber	187.2	201.1	204.8	211.6	214.2	222.0	226.1	233.0	232.2	236.5	236.4	239.4	251.9	263.1
07 - 12	Tires and tubes	179.2	194.1	195.0	196.1	197.3	198.9	206.2	211.6	215.0	218.3	222.7	222.7	224.7	231.2
07 - 13	Miscellaneous rubber products	189.6	198.1	200.3	201.3	202.6	203.5	205.4	209.4	211.9	214.7	216.9	217.4	219.1	220.4
07 - 2	Plastic products (6/78 = 100)	103.5	105.7	108.0	109.5	111.0	111.2	112.2	113.0	114.0	113.8	115.2	116.2	116.5	
08	Lumber and wood products	276.0	293.9	300.5	304.9	302.8	299.8	300.1	304.7	309.7	308.8	299.0	289.8	290.0	294.8
08 - 1	Lumber	322.4	339.9	350.5	355.4	354.8	354.8	355.0	365.3	373.9	370.3	355.5	338.9	336.3	341.5
08 - 2	Millwork	235.4	251.5	257.8	266.0	261.6	258.9	252.5	249.6	250.9	255.6	252.3	250.3	254.1	258.0
08 - 3	Plywood	235.6	257.1	254.7	252.4	249.3	238.6	249.7	254.3	257.9	254.0	242.9	237.7	238.2	243.7
08 - 4	Other wood products	211.8	226.2	232.2	235.5	238.4	238.5	237.6	237.4	238.0	237.7	239.9	240.5	242.2	243.4

See footnotes at end of table.

27. Continued—Producer Price Indexes, by commodity groupings<sup>1</sup>

[1967 = 100 unless otherwise specified]

Code	Commodity groups and subgroups	Annual average 1978	1979										1980		
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>INDUSTRIAL COMMODITIES—Continued</b>															
09	Pulp, paper, and allied products . . . . .	195.6	208.8	212.3	215.0	216.2	216.6	218.3	222.2	223.0	227.5	229.3	231.0	237.4	238.9
09-1	Pulp, paper, and products, excluding building paper and board . . . . .	195.6	209.5	213.2	216.0	217.2	217.8	219.6	223.6	224.3	229.0	230.9	232.6	239.1	240.5
09-11	Woodpulp . . . . .	266.5	291.4	294.3	303.8	306.9	308.3	320.3	320.6	320.6	337.5	339.9	339.9	358.8	358.5
09-12	Wastepaper . . . . .	191.2	194.1	203.2	206.5	206.2	207.2	207.9	206.6	206.7	220.0	221.2	222.7	223.2	223.2
09-13	Paper . . . . .	206.1	221.2	223.3	226.3	227.2	227.5	228.2	229.5	230.3	238.7	242.1	243.0	245.5	247.5
09-14	Paperboard . . . . .	179.6	190.2	192.9	197.9	199.2	199.8	201.7	206.4	209.6	211.3	212.8	215.4	221.8	223.4
09-15	Converted paper and paperboard products . . . . .	185.6	199.8	204.1	205.8	207.0	207.6	209.0	214.4	214.6	217.3	218.4	220.3	227.5	228.7
09-2	Building paper and board . . . . .	187.4	183.6	182.6	183.4	183.3	180.8	178.0	179.1	182.6	183.5	183.6	184.4	186.0	191.1
10	Metals and metal products . . . . .	227.1	247.3	251.7	256.0	256.2	258.2	260.8	261.8	263.7	269.6	270.9	273.5	284.5	288.6
10-1	Iron and steel . . . . .	253.6	274.9	279.9	280.2	279.5	283.2	286.8	286.1	285.5	289.2	291.6	292.7	297.3	300.2
10-13	Steel mill products . . . . .	254.5	271.8	272.5	275.0	276.7	277.3	284.6	284.7	284.8	288.3	288.7	289.3	293.7	294.2
10-2	Nonferrous metals . . . . .	207.8	239.2	246.6	259.6	258.2	259.7	262.3	263.1	269.3	283.1	283.7	291.2	326.1	336.5
10-3	Metal containers . . . . .	243.4	256.8	264.5	270.1	268.5	267.3	267.2	268.4	268.7	279.9	280.7	280.7	283.3	283.3
10-4	Hardware . . . . .	200.4	213.3	214.2	215.8	216.9	217.1	218.5	220.1	221.5	224.0	225.4	226.5	228.4	229.4
10-5	Plumbing fixtures and brass fittings . . . . .	199.1	207.8	209.7	212.0	213.8	217.0	219.6	222.4	223.0	223.5	225.4	226.4	229.7	236.6
10-6	Heating equipment . . . . .	174.4	180.9	183.4	183.8	185.7	185.2	186.0	188.1	191.3	192.2	192.7	195.2	197.3	199.9
10-7	Fabricated structural metal products . . . . .	226.4	240.5	241.3	243.8	247.0	248.2	250.5	252.2	253.7	256.3	256.6	257.7	258.8	259.5
10-8	Miscellaneous metal products . . . . .	212.0	223.4	225.2	227.0	228.5	230.1	231.8	235.6	236.7	238.5	239.4	239.9	241.5	242.5
11	Machinery and equipment . . . . .	196.1	206.5	207.9	209.8	211.4	212.4	214.8	216.0	217.7	220.0	221.0	222.9	227.1	229.7
11-1	Agricultural machinery and equipment . . . . .	213.1	223.9	224.8	226.4	228.3	229.4	231.2	233.3	237.4	240.0	241.4	243.2	247.6	249.1
11-2	Construction machinery and equipment . . . . .	232.9	247.9	248.7	251.7	253.7	254.0	257.0	258.5	258.9	263.9	264.5	268.2	275.4	277.5
11-3	Metalworking machinery and equipment . . . . .	217.0	232.0	233.0	235.3	237.6	239.1	241.4	243.5	246.4	249.6	251.4	254.6	258.7	261.3
11-4	General purpose machinery and equipment . . . . .	216.6	227.7	230.4	232.6	234.0	235.1	237.1	238.3	240.2	242.8	243.7	246.1	249.6	252.0
11-6	Special industry machinery and equipment . . . . .	223.0	237.0	239.1	243.4	245.1	246.1	249.8	251.0	251.2	253.8	255.3	256.2	260.7	262.9
11-7	Electrical machinery and equipment . . . . .	164.9	172.8	173.8	175.0	176.5	177.6	179.9	181.2	182.5	184.3	185.0	186.5	190.5	194.2
11-9	Miscellaneous machinery . . . . .	194.7	203.4	204.0	205.4	207.1	207.4	209.7	212.0	213.6	215.2	216.0	217.5	220.0	220.8
12	Furniture and household durables . . . . .	160.4	167.9	168.3	168.7	169.6	170.2	170.7	171.5	172.7	175.1	175.6	177.0	182.1	183.4
12-1	Household furniture . . . . .	173.5	181.3	181.8	182.7	184.8	185.3	185.8	186.2	188.5	190.1	192.4	194.3	195.4	196.5
12-2	Commercial furniture . . . . .	201.5	221.2	221.2	221.7	221.9	221.8	222.7	222.7	222.7	223.3	223.3	225.1	227.1	230.1
12-3	Floor coverings . . . . .	141.6	143.6	144.0	144.4	146.0	146.5	149.1	150.0	150.4	152.1	152.8	152.9	159.8	159.4
12-4	Household appliances . . . . .	153.0	158.3	158.8	158.7	159.3	160.0	161.1	162.2	162.7	163.2	164.5	165.2	166.6	168.7
12-5	Home electronic equipment . . . . .	90.2	92.3	92.3	92.3	92.4	92.8	90.2	90.2	90.3	87.9	88.1	88.1	88.5	88.7
12-6	Other household durable goods . . . . .	203.1	216.6	217.9	218.6	219.5	220.6	223.7	226.6	231.0	245.6	246.6	252.1	283.1	284.2
13	Nonmetallic mineral products . . . . .	222.8	240.5	240.8	243.4	245.6	246.9	249.5	249.9	254.6	256.2	257.1	259.2	268.0	272.6
13-11	Flat glass . . . . .	172.8	183.1	183.1	183.1	183.1	184.0	184.1	184.1	184.5	184.7	185.4	186.4	190.9	190.9
13-2	Concrete ingredients . . . . .	217.7	238.2	239.8	242.0	242.5	243.3	245.1	245.9	246.7	248.3	248.4	249.9	263.5	265.2
13-3	Concrete products . . . . .	214.0	236.4	237.8	240.5	241.6	243.7	245.2	246.3	248.7	250.1	250.5	253.2	264.9	266.2
13-4	Structural clay products excluding refractories . . . . .	197.2	210.7	212.8	214.8	215.7	216.5	220.3	222.3	223.7	221.1	221.1	226.8	229.6	231.1
13-5	Refractories . . . . .	216.5	227.8	228.3	228.4	228.5	232.6	240.8	241.7	242.4	244.6	248.2	248.7	249.3	251.9
13-6	Asphalt roofing . . . . .	292.0	317.8	303.1	316.4	317.9	323.0	328.4	325.9	333.0	337.5	345.9	342.9	356.5	372.3
13-7	Gypsum products . . . . .	229.1	250.6	251.0	252.2	248.8	251.3	251.8	252.3	254.9	255.3	256.2	255.0	255.4	262.2
13-8	Glass containers . . . . .	244.4	250.7	250.7	250.7	265.2	265.2	265.2	265.2	265.2	265.2	265.5	273.6	274.5	274.6
13-9	Other nonmetallic minerals . . . . .	275.6	293.7	294.5	300.0	303.0	302.0	310.5	309.9	336.0	341.2	342.2	342.2	351.6	374.3
14	Transportation equipment (12/68 = 100) . . . . .	173.5	183.5	183.8	186.8	187.2	187.5	188.4	185.9	186.6	194.2	194.4	195.1	198.3	198.1
14-1	Motor vehicles and equipment . . . . .	176.0	185.9	186.1	189.4	189.8	190.1	190.8	187.8	188.6	197.1	197.0	197.6	200.3	199.9
14-4	Railroad equipment . . . . .	252.8	268.0	268.9	271.7	271.6	274.7	280.6	280.9	281.6	286.3	288.2	289.0	295.0	299.3
15	Miscellaneous products . . . . .	184.3	199.8	200.6	201.4	203.3	205.2	207.0	208.9	213.1	218.9	219.0	227.2	242.2	261.8
15-1	Toys, sporting goods, small arms, ammunition . . . . .	163.2	171.0	171.5	173.2	174.3	174.7	176.9	177.6	179.8	181.1	181.7	183.5	190.4	193.2
15-2	Tobacco products . . . . .	198.5	213.6	214.0	214.4	214.4	214.4	214.8	221.3	221.9	222.1	221.9	226.3	236.3	236.9
15-3	Notions . . . . .	182.0	188.2	190.2	190.2	190.6	190.6	192.0	191.9	191.9	195.7	196.0	197.0	203.1	203.2
15-4	Photographic equipment and supplies . . . . .	145.7	150.2	150.2	150.1	150.6	151.6	152.0	152.2	154.3	157.4	161.3	164.5	166.0	218.7
15-51	Mobile Homes (12/74 = 100) . . . . .	126.4	132.5	133.8	135.2	137.2	137.9	138.2	139.5	140.7	142.9	143.5	143.6	144.2	146.0
15-9	Other miscellaneous products . . . . .	210.6	244.0	245.5	246.1	250.6	255.8	261.4	261.4	272.5	288.3	284.9	307.9	349.7	375.3

<sup>1</sup> Prices for natural gas are lagged 1 month.

<sup>2</sup> Includes only domestic production.

<sup>3</sup> Most prices for refined petroleum products are lagged 1 month.

<sup>4</sup> Some prices for industrial chemicals are lagged 1 month.

<sup>5</sup> Not available.

NOTE: Data for October 1979 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.

**28. Producer Price Indexes, for special commodity groupings**

[1967 = 100 unless otherwise specified]

Commodity grouping	Annual average 1978	1979											1980	
		Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
All commodities—less farm products	208.4	222.0	224.7	228.0	230.1	232.0	235.4	237.5	241.4	245.3	246.7	249.2	219.3	260.5
All foods	206.4	225.0	225.9	227.7	226.4	223.8	225.4	224.7	228.5	226.9	229.9	232.1	219.9	235.7
Processed foods	206.7	223.5	225.6	227.8	227.5	224.7	226.4	224.8	230.8	228.9	231.8	234.1	219.8	238.5
Industrial commodities less fuels	197.2	209.6	211.9	214.7	216.0	217.0	219.0	220.3	222.0	225.9	226.4	228.1	207.3	237.5
Selected textile mill products (Dec. 1975 = 100)	108.8	110.8	111.6	112.3	112.8	113.5	114.0	115.1	115.8	116.4	116.1	117.0	109.8	119.4
Hosiery	106.3	109.9	110.5	112.5	112.5	112.7	114.1	113.0	112.7	113.3	114.6	115.3	110.1	119.6
Underwear and nightwear	158.9	166.3	167.1	167.3	167.7	168.3	168.5	170.8	170.8	171.2	171.6	172.9	164.6	177.8
Chemicals and allied products, including synthetic rubber and manmade fibers and yarns	190.5	198.0	200.0	204.1	207.6	209.5	215.0	218.6	220.9	224.3	226.0	228.6	196.3	238.2
Pharmaceutical preparations	140.6	149.0	149.4	150.0	150.1	151.7	151.7	152.0	153.6	155.6	155.4	156.9	148.1	160.4
Lumber and wood products, excluding millwork and other wood products	298.3	317.0	323.7	326.4	325.1	321.7	325.3	333.9	341.0	337.3	323.5	310.3	314.8	314.0
Special metals and metal products	209.6	225.6	228.2	232.7	232.4	233.7	235.5	234.9	236.4	243.4	244.2	245.9	222.0	255.7
Fabricated metal products	216.2	228.6	230.6	232.9	234.6	235.7	237.4	238.8	241.1	244.0	244.8	245.6	227.0	248.3
Copper and copper products	155.6	188.2	197.9	212.1	199.0	193.0	191.9	197.1	200.5	212.2	213.6	216.1	168.8	258.2
Machinery and motive products	190.4	200.8	201.7	204.1	205.3	206.0	207.7	207.2	208.5	213.4	214.0	215.4	199.6	220.6
Machinery and equipment, except electrical	214.3	226.1	227.7	230.0	231.8	232.6	235.1	236.2	238.2	240.8	242.0	244.1	224.9	250.4
Agricultural machinery, including tractors	216.3	228.5	229.6	230.8	232.1	233.8	235.8	238.4	243.6	246.3	247.9	250.0	227.6	256.0
Metalworking machinery	228.8	247.4	248.9	251.2	254.3	256.8	260.1	261.7	265.6	269.5	272.5	276.2	245.2	284.8
Numerically controlled machine tools (Dec. 1971 = 100)	179.1	190.9	192.6	192.7	195.7	195.8	202.2	204.2	206.5	208.5	209.0	211.3	188.9	213.5
Total tractors	228.7	242.5	243.1	245.4	247.7	248.2	251.2	253.8	256.0	261.2	260.9	264.9	240.8	275.6
Agricultural machinery and equipment less parts	212.7	224.4	225.5	226.7	228.1	229.5	231.4	233.7	238.4	241.0	242.4	244.6	223.5	250.4
Farm and garden tractors less parts	216.1	225.8	226.7	228.5	230.5	231.8	233.9	237.6	244.1	247.6	248.8	250.4	225.6	256.7
Agricultural machinery excluding tractors less parts	216.7	230.9	232.1	233.0	233.6	235.7	237.6	239.2	243.5	245.4	247.4	250.0	229.5	255.6
Industrial valves	232.3	247.8	249.5	252.4	255.0	255.8	257.0	258.2	260.1	261.8	261.1	262.2	245.4	272.2
Industrial fittings	232.7	249.9	252.0	255.5	259.3	260.4	260.8	262.3	264.3	272.6	276.8	276.8	249.9	280.4
Abrasive grinding wheels	208.1	220.2	220.3	220.3	221.6	222.8	222.8	224.6	224.6	239.0	235.3	239.0	220.2	244.0
Construction materials	228.3	244.1	246.9	250.0	250.3	250.3	252.3	254.3	256.6	258.5	256.5	255.3	241.4	262.2

NOTE: Data for October 1979 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.

**29. Producer Price Indexes, by durability of product**

[1967 = 100]

Commodity grouping	Annual average 1978	1979											1980	
		Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Total durable goods	204.9	218.9	221.0	223.9	224.7	225.8	227.6	228.0	230.1	234.6	234.9	236.6	243.4	246.4
Total nondurable goods	211.9	227.3	230.4	234.1	236.9	238.8	243.7	245.8	251.1	253.7	256.0	259.2	263.0	270.0
Total manufactures	204.2	217.5	219.7	223.1	225.0	226.5	229.8	231.7	235.2	239.0	240.2	242.3	248.2	252.7
Durable	204.7	218.0	219.8	222.7	223.8	224.6	226.6	227.2	229.4	234.0	234.1	235.8	242.2	245.0
Nondurable	203.0	216.1	219.0	222.8	225.6	227.8	232.5	235.9	241.0	244.0	246.3	248.8	253.8	260.7
Total raw or slightly processed goods	234.6	258.5	263.3	266.1	268.2	269.7	274.3	272.1	276.9	278.7	281.1	286.4	287.5	295.9
Durable	209.6	253.9	273.6	272.5	262.9	272.8	265.4	259.8	255.7	259.2	265.8	267.8	282.7	305.2
Nondurable	235.6	258.0	261.6	264.7	267.6	268.5	274.0	272.0	277.5	279.2	281.3	286.8	286.9	294.2

NOTE: Data for October 1979 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.

**30. Producer Price Indexes for the output of selected SIC Industries**

[1967 = 100 unless otherwise specified]

1972 SIC code	Industry Description	Annual average 1978	1979											1980	
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>MINING</b>															
1011	Iron ores (12/75 = 100)	121.9	127.3	127.3	131.9	131.9	136.0	136.0	138.8	138.1	140.2	140.2	142.0	142.0	147.3
1092	Mercury ores (12/75 = 100)	126.6	168.7	178.3	202.1	237.5	277.0	270.8	245.8	252.1	275.0	252.1	300.0	308.3	335.4
1211	Bituminous coal and lignite	430.2	444.4	445.7	447.5	451.3	452.5	453.1	454.8	452.9	455.1	455.8	458.1	458.0	458.7
1311	Crude petroleum and natural gas	358.2	397.2	403.8	407.6	427.2	444.1	457.5	476.0	508.4	522.1	533.5	553.3	583.2	597.4
1442	Construction sand and gravel	194.6	210.4	210.9	214.1	216.0	217.0	219.3	220.1	221.0	224.0	224.3	225.7	238.0	242.1
1455	Kaolin and ball clay (6/76 = 100)	111.8	125.4	125.4	125.4	125.4	125.5	125.5	125.5	125.5	126.7	114.7	119.7	128.5	128.5
<b>MANUFACTURING</b>															
2011	Meat packing plants	216.7	250.8	256.6	265.0	259.2	249.1	243.8	229.3	247.2	238.9	241.6	243.9	240.7	240.1
2013	Sausages and other prepared meats	215.2	230.4	235.6	224.4	227.7	217.1	214.7	203.4	211.7	211.9	214.2	219.9	211.5	207.4
2016	Poultry dressing plants	192.5	204.6	206.1	199.7	203.5	177.8	178.4	169.6	171.2	163.1	188.3	188.5	186.1	178.2
2021	Creamery butter	205.2	211.1	216.1	224.7	225.3	225.3	227.5	237.9	240.6	240.1	241.7	243.1	241.9	242.8

See footnotes at end of table.



### 30. Continued—Producer Price Indexes for the output of selected SIC Industries

[1967 = 100 unless otherwise specified]

1972 SIC code	Industry description	Annual average 1978	1979										1980		
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>MANUFACTURING—Continued</b>															
2022	Cheese natural and processed (12/72 = 100)	169.6	179.4	182.5	186.8	185.2	185.6	186.3	195.4	200.8	196.8	193.4	192.6	197.1	194.6
2024	Ice cream and frozen desserts (12/72 = 100)	154.8	166.7	166.7	167.3	171.0	171.5	171.5	175.0	176.1	177.5	178.4	180.2	180.9	181.5
2033	Canned fruits and vegetables	193.2	204.4	205.2	206.2	207.2	207.5	209.9	210.5	212.0	212.9	212.4	212.0	213.5	213.5
2034	Dehydrated food products (12/73 = 100)	131.3	181.2	180.9	181.7	182.1	181.0	182.0	180.7	170.0	158.2	156.3	157.3	157.6	159.0
2041	Flour mills (12/71 = 100)	147.0	160.5	157.5	158.1	166.7	174.6	190.9	176.9	183.5	184.2	184.9	184.9	181.7	183.6
2044	Rice milling	207.6	166.6	171.0	206.8	206.8	206.8	206.8	218.7	223.5	227.3	231.8	218.1	217.5	233.0
2048	Prepared foods, n.e.c. (12/75 = 100)	107.3	118.4	118.3	117.5	115.2	118.9	128.1	119.4	120.9	123.6	124.6	125.3	122.3	122.9
2061	Raw cane sugar	190.7	198.2	195.7	197.5	195.6	207.0	209.0	216.8	216.7	224.3	223.3	248.4	260.5	374.9
2063	Beet sugar	188.5	197.0	198.6	199.3	199.7	199.7	202.0	199.4	200.0	204.7	209.6	223.4	223.5	290.6
2067	Chewing gum	218.0	242.5	242.5	242.6	242.2	242.2	242.9	242.9	242.9	242.9	262.2	262.2	262.3	262.3
2074	Cottonseed oil mills	183.1	204.5	202.8	198.5	192.5	210.4	224.5	214.1	217.9	214.9	204.7	205.6	182.2	184.3
2075	Soybean oil mills	225.6	241.2	242.0	244.7	237.7	251.1	262.8	250.0	248.6	244.7	242.6	241.8	230.2	226.2
2077	Animal and marine fats and oils	287.9	344.5	362.6	393.1	363.8	335.3	352.0	321.4	333.8	333.7	315.2	300.7	296.0	292.6
2083	Malt	181.5	190.8	190.8	190.8	190.8	201.4	201.4	201.4	214.9	214.9	228.2	228.2	244.1	244.1
2085	Distilled liquor, except brandy (12/75 = 100)	106.7	109.4	109.4	109.4	113.6	113.6	113.6	115.7	117.1	117.1	118.1	118.1	118.6	118.7
2091	Canned and cured seafoods (12/73 = 100)	136.4	137.9	138.5	139.2	140.9	142.1	148.5	148.2	154.0	154.3	155.6	159.8	160.9	164.0
2092	Fresh or frozen packaged fish	303.8	361.9	359.4	375.8	382.4	397.6	403.7	391.5	389.2	400.1	392.4	389.3	390.7	386.6
2095	Roasted coffee (12/72 = 100)	262.3	222.5	221.6	220.5	231.7	244.2	271.0	279.2	279.2	280.0	287.5	287.5	281.3	273.9
2098	Macaroni and spaghetti	176.9	184.7	184.7	184.7	186.6	188.6	203.5	210.4	210.4	210.4	221.5	227.7	227.7	227.7
2111	Cigarettes	204.6	221.2	221.3	221.4	221.4	221.4	221.5	228.9	229.1	229.2	229.2	234.3	245.8	245.9
2121	Cigars	141.4	143.0	145.0	145.4	145.4	145.3	149.8	150.1	150.1	149.8	147.2	147.2	147.9	151.6
2131	Chewing and smoking tobacco	222.0	236.4	240.9	245.9	245.9	245.9	246.4	246.4	255.8	260.4	260.8	260.8	260.9	265.1
2211	Weaving mills, cotton (12/72 = 100)	181.1	190.1	190.4	191.8	192.7	194.3	196.1	196.5	198.7	201.1	200.1	200.8	203.1	206.5
2221	Weaving mills, synthetic (12/77 = 100)	109.0	112.7	112.4	113.3	113.6	114.1	116.2	116.3	116.2	116.8	116.9	117.3	117.6	117.8
2251	Women's hosiery, except socks (12/75 = 100)	91.5	94.3	94.4	97.3	97.3	97.6	99.6	98.1	97.5	98.2	100.3	100.2	103.6	103.6
2254	Knit underwear mills	164.1	169.9	172.6	172.8	173.1	173.3	172.9	174.0	174.0	174.3	174.6	178.2	182.9	184.5
2257	Circular knit fabric mills (6/76 = 100)	98.5	91.7	93.9	93.2	94.1	95.8	96.1	96.4	96.2	96.9	96.4	98.4	98.8	100.0
2261	Finishing plants, cotton (6/76 = 100)	111.0	117.4	118.2	119.0	120.8	120.9	122.5	123.2	124.0	126.1	123.1	123.4	124.9	129.5
2262	Finishing plants, synthetics, silk (6/76 = 100)	101.4	105.0	105.2	105.9	106.3	107.0	107.5	108.2	108.3	109.3	108.9	109.2	109.8	109.3
2271	Woven carpets and rugs (12/75 = 100)	114.7	115.8	116.0	116.0	116.7	117.1	(1)	(1)	(1)	(1)	...	...	...	...
2272	Tufted carpets and rugs	125.3	126.0	126.5	127.0	127.7	128.1	127.6	129.0	129.8	130.0	130.1	135.6	135.2	135.2
2281	Yarn mills, except wool (12/71 = 100)	167.4	171.4	172.3	173.1	174.5	175.7	177.5	177.4	179.4	181.2	182.9	184.6	188.3	197.4
2282	Throwing and winding mills (6/76 = 100)	99.2	102.7	106.0	104.4	106.3	107.5	108.5	109.7	111.2	110.4	111.0	109.2	109.3	108.8
2284	Thread mills (6/76 = 100)	114.6	120.3	120.3	120.4	120.4	120.4	120.5	128.1	128.1	128.4	128.4	128.5	128.7	129.2
2298	Cordage and twine (12/77 = 100)	99.3	98.6	98.6	101.7	102.8	105.4	105.4	113.5	115.1	114.9	115.0	115.0	115.0	117.2
2311	Men's and boys' suits and coats	194.3	199.6	199.9	203.9	204.2	204.5	205.8	206.5	206.5	206.6	206.8	206.6	207.5	209.6
2321	Men's and boys' shirts and nightwear	180.8	191.4	191.6	191.8	192.4	193.5	194.7	195.9	196.0	196.1	194.7	194.5	198.8	196.6
2322	Men's and boys' underwear	180.6	184.6	188.7	188.7	188.7	188.7	188.7	190.0	190.0	190.0	190.0	194.0	200.0	202.2
2323	Men's and boys' neckwear (12/75 = 100)	102.3	103.4	103.4	103.4	103.4	103.4	103.4	103.4	109.9	109.9	109.9	109.9	110.9	112.4
2327	Men's and boys' separate trousers	152.7	157.8	157.8	162.3	162.3	162.5	162.5	162.7	162.7	162.9	163.4	163.4	164.2	174.3
2328	Men's and boys' work clothing	195.2	199.8	200.0	206.5	206.5	208.0	208.9	210.7	210.9	213.4	218.9	219.4	225.3	234.1
2331	Women's and misses' blouses and waists (6/78 = 100)	...	99.1	99.2	99.1	100.3	100.5	102.6	102.7	102.8	103.0	105.9	106.8	107.0	107.2
2335	Women's and misses' dresses (12/77 = 100)	100.7	104.9	106.6	106.6	105.9	105.9	106.4	108.3	108.3	108.7	108.8	108.8	112.9	113.9
2341	Women's and children's underwear (12/72 = 100)	132.1	142.3	142.3	142.6	143.3	143.3	144.2	145.3	145.3	146.7	147.4	147.7	149.4	150.1
2342	Brassieres and allied garments (12/75 = 100)	111.7	116.0	116.0	116.1	116.2	117.5	117.5	117.8	117.8	117.8	118.8	118.8	119.7	123.0
2361	Children's dresses and blouses (12/77 = 100)	(1)	105.4	105.5	106.7	106.7	102.1	102.4	102.4	103.7	105.7	105.7	105.6	106.1	105.3
2381	Fabric dress and work gloves	214.4	232.2	232.2	241.5	243.9	243.9	245.4	245.4	245.4	245.4	246.9	246.9	257.7	261.7
2394	Canvas and related products (12/77 = 100)	99.6	105.9	105.9	105.9	105.9	106.9	108.4	111.0	111.4	112.3	112.1	120.1	122.1	122.8
2396	Automotive and apparel trimmings (12/77 = 100)	106.3	107.1	107.1	107.1	107.1	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3
2421	Sawmills and planing mills (12/71 = 100)	228.9	241.9	249.5	252.5	251.6	250.9	251.3	259.1	265.6	262.2	250.1	237.5	234.8	239.6
2436	Softwood veneer and plywood (12/75 = 100)	150.1	162.2	160.1	157.3	151.1	140.7	148.1	153.4	156.0	153.1	143.3	138.7	138.5	143.9
2439	Structural wood members, n.e.c. (12/75 = 100)	136.2	148.1	148.3	150.1	150.1	150.0	150.0	149.9	150.8	158.2	158.2	158.2	158.2	158.2
2448	Wood pallets and skids (12/75 = 100)	149.4	161.8	163.8	166.8	166.7	167.0	166.9	166.8	167.9	167.9	171.0	170.5	169.8	167.0
2451	Mobile homes (12/74 = 100)	126.5	132.5	133.8	135.3	137.3	138.0	138.2	139.6	140.7	143.0	143.5	143.6	144.2	146.1
2492	Particleboard (12/75 = 100)	159.7	141.9	142.7	143.8	141.6	137.4	134.3	134.7	138.5	139.5	136.9	134.1	136.5	149.0
2511	Wood household furniture (12/71 = 100)	152.4	160.3	160.9	162.7	164.6	164.0	164.5	164.6	168.0	169.3	171.3	173.6	175.7	177.4
2512	Upholstered household furniture (12/71 = 100)	143.1	146.9	147.6	147.4	149.2	149.4	150.0	150.2	151.6	151.8	153.9	155.8	155.9	156.6
2515	Mattresses and bedsprings	156.3	162.9	162.9	163.1	163.2	164.1	164.5	165.8	165.8	168.9	172.1	172.1	169.7	169.7
2521	Wood office furniture	194.4	213.1	213.1	214.2	214.3	214.2	216.8	216.8	216.8	217.6	217.6	221.9	226.2	233.7
2611	Pulp mills (12/73 = 100)	178.5	187.3	189.9	192.5	195.2	196.6	205.4	205.7	205.8	213.5	215.6	215.6	227.2	227.0
2621	Paper mills, except building (12/74 = 100)	115.7	124.7	126.0	128.5	129.3	129.5	130.2	131.0	131.4	135.1	136.7	137.0	139.2	140.0
2631	Paperboard mills (12/74 = 100)	106.4	112.9	114.4	117.1	118.1	118.5	119.7	121.9	123.4	125.4	126.7	127.7	131.4	132.3
2647	Sanitary paper products	251.4	267.6	269.2	270.8	271.7	271.9	276.4	285.9	285.4	286.3	286.5	289.1	294.0	303.8
2654	Sanitary food containers	170.8	179.4	179.5	184.1	189.1	189.1	189.6	189.6	191.8	195.8	198.1	199.9	202.6	202.6
2655	Fiber cans, drums, and similar products (12/75 = 100)	123.0													

30. Continued—Producer Price Indexes for the output of selected SIC Industries

[1967 = 100 unless otherwise specified]

1972 SIC code	Industry description	Annual average 1978	1979										1980		
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
3021	Rubber and plastic footwear (12/71 = 100)	158.7	169.0	169.0	169.0	169.5	169.6	171.0	173.4	173.4	173.5	173.4	173.4	173.7	173.8
3031	Reclaimed rubber (12/73 = 100)	154.3	161.3	162.1	164.5	167.6	169.1	169.2	169.2	177.7	178.8	177.1	177.4	177.6	177.9
3079	Miscellaneous plastic products (6/78 = 100)		103.4	105.4	107.5	109.0	110.7	111.4	112.3	113.1	114.3	114.1	115.6	116.6	116.8
3111	Leather tanning and finishing (12/77 = 100)	119.1	143.7	173.8	182.9	201.3	195.8	181.8	172.9	155.2	161.9	150.8	153.5	164.3	160.8
3142	House slippers (12/75 = 100)	122.5	134.7	136.3	136.3	138.5	142.0	135.0	135.0	135.0	135.8	137.0	137.0	144.8	146.7
3143	Men's footwear, except athletic (12/75 = 100)	127.1	141.0	145.6	147.6	152.8	155.4	155.4	158.2	160.1	160.4	159.2	159.2	159.3	157.9
3144	Women's footwear, except athletic	164.1	178.4	189.2	190.3	192.2	195.4	198.7	201.5	201.6	202.3	204.0	204.0	205.7	206.4
3171	Women's handbags and purses (12/75 = 100)	111.4	123.0	123.0	123.0	131.7	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.9	131.9
3211	Flat glass (12/71 = 100)	142.7	150.8	150.8	150.8	150.8	151.8	151.9	151.9	152.3	152.6	153.3	153.9	157.4	157.4
3221	Glass containers	244.3	250.7	250.7	250.7	265.2	265.2	265.2	265.2	265.2	265.2	265.5	273.6	274.5	274.5
3241	Cement, hydraulic	251.2	278.8	280.3	283.1	283.2	283.7	285.4	285.4	285.4	285.4	282.9	283.6	302.8	303.2
3251	Brick and structural clay tile	230.8	250.9	252.8	256.7	258.3	259.7	261.0	263.3	265.9	261.3	261.3	262.7	268.3	270.4
3253	Ceramic wall and floor tile (12/75 = 100)	107.7	111.6	113.0	113.0	113.0	113.0	120.2	120.2	120.2	120.2	130.2	130.2	130.4	130.4
3255	Clay refractories	221.4	233.2	234.1	234.4	234.6	236.9	246.5	246.7	247.1	251.0	254.4	255.4	256.5	260.9
3259	Structural clay products, n.e.c.	176.3	184.4	186.7	186.8	186.8	187.8	188.2	192.1	192.1	192.8	192.6	196.9	196.7	198.6
3261	Vitreous plumbing fixtures	189.7	198.6	198.9	201.6	204.6	206.4	210.1	212.4	213.1	214.5	215.7	217.3	219.2	224.6
3262	Vitreous china food utensils	268.8	290.6	290.6	290.6	290.6	290.6	297.5	297.5	298.0	298.0	305.3	307.9	307.9	307.9
3263	Fine earthenware food utensils	228.1	237.0	237.1	237.1	237.1	236.4	238.8	238.8	246.0	246.0	246.9	290.3	290.3	290.3
3269	Pottery products, n.e.c. (12/75 = 100)	122.2	129.2	129.2	129.2	129.2	129.0	131.0	131.0	133.3	133.3	135.0	148.8	148.8	148.8
3271	Concrete block and brick	202.0	223.1	227.0	230.8	232.6	232.7	232.7	235.7	237.8	240.0	240.0	240.1	249.5	250.6
3273	Ready-mixed concrete	217.6	241.1	241.7	244.5	245.2	247.5	249.6	250.5	252.4	254.0	254.5	257.0	270.1	271.9
3274	Lime (12/75 = 100)	129.5	136.6	137.5	139.9	139.8	140.1	141.8	142.9	144.2	144.6	144.4	144.7	149.6	153.7
3275	Gypsum products	229.5	251.1	251.5	252.7	249.4	251.9	252.3	252.8	255.4	255.9	256.8	255.6	255.9	262.8
3291	Abrasive products (12/71 = 100)	172.3	182.2	182.4	184.0	185.1	185.8	187.7	188.6	190.4	195.1	194.7	197.1	199.2	202.2
3292	Nonclay refractories (12/74 = 100)	133.6	140.3	140.4	140.5	140.5	143.9	148.1	149.1	149.7	150.1	152.3	152.4	152.6	153.3
3317	Blast furnaces and steel mills	262.3	280.3	281.1	283.5	285.3	285.8	292.8	293.0	293.2	296.0	297.0	297.6	302.3	302.9
3313	Electrometallurgical products (12/75 = 100)	94.8	104.0	104.0	106.8	111.7	112.3	116.5	116.5	116.0	116.2	117.5	117.6	117.8	117.8
3316	Cold finishing of steel shapes	241.0	258.3	258.4	259.1	259.8	261.3	270.6	270.8	270.9	271.7	273.2	273.9	274.2	277.2
3317	Steel pipes and tubes	255.2	265.1	265.8	265.0	264.5	264.5	271.9	271.3	271.3	272.7	272.8	273.0	280.9	281.2
3321	Gray iron foundries (12/68 = 100)	233.5	244.7	249.4	253.9	253.3	254.5	253.9	253.8	254.8	267.1	266.0	268.3	272.3	275.4
3333	Primary zinc	223.2	260.6	260.9	274.2	274.5	275.2	281.4	265.5	264.2	265.2	267.9	265.7	266.1	272.4
3334	Primary aluminum	217.4	226.1	232.4	235.8	237.4	238.5	244.9	247.4	248.2	256.0	263.2	266.6	267.0	267.0
3351	Copper rolling and drawing	170.2	199.9	211.0	220.1	215.6	211.7	211.2	213.6	216.7	226.3	222.7	225.1	231.1	253.2
3353	Aluminum sheet plate and foil (12/75 = 100)	137.6	146.4	146.5	148.0	148.7	148.8	149.6	149.8	150.0	150.7	151.5	151.9	153.4	153.5
3354	Aluminum extruded products (12/75 = 100)	134.3	141.6	142.5	146.1	147.5	147.6	150.3	151.9	151.9	155.2	157.3	157.8	158.8	158.9
3355	Aluminum rolling, drawing, n.e.c. (12/75 = 100)	119.7	126.5	127.5	129.6	131.5	131.6	132.7	133.1	133.5	136.9	139.9	140.3	140.5	140.8
3411	Metal cans	238.5	253.9	260.9	264.4	263.8	262.2	262.2	262.9	263.5	273.8	273.8	273.9	276.6	276.6
3425	Hand saws and saw blades (12/72 = 100)	147.9	157.8	157.9	159.6	161.9	162.5	162.8	166.3	166.4	167.1	169.4	169.6	173.0	173.6
3431	Metal sanitary ware	209.1	217.4	219.2	220.8	222.2	224.1	226.4	228.9	229.2	230.1	231.7	232.9	237.3	242.1
3465	Automotive stampings (12/75 = 100)	118.8	125.0	125.7	126.2	127.0	127.1	127.8	130.9	131.6	132.4	132.7	132.7	132.8	132.8
3482	Small arms ammunition (12/75 = 100)	119.5	129.3	125.9	128.3	130.4	131.4	134.0	134.0	134.0	133.2	137.9	149.2	147.9	147.9
3493	Steel springs, except wire	204.6	212.6	216.7	218.1	218.7	220.5	221.6	222.1	222.8	223.7	223.9	225.4	226.0	226.5
3494	Valves and pipe fittings (12/71 = 100)	185.5	197.6	199.0	201.4	203.6	204.2	205.3	206.2	207.5	210.4	211.6	213.9	216.5	218.8
3498	Fabricated pipe and fittings	265.5	276.7	276.8	284.9	288.2	290.7	294.8	294.8	294.9	297.3	297.4	297.4	301.7	301.8
3519	Internal combustion engines, n.e.c.	220.1	233.8	234.0	237.1	239.0	239.2	242.3	245.7	251.8	254.2	253.7	253.7	259.2	260.5
3531	Construction machinery (12/76 = 100)	114.0	121.1	121.6	123.0	123.9	124.0	125.6	126.3	126.5	128.9	129.0	130.7	134.2	135.3
3532	Mining machinery (12/72 = 100)	209.5	223.4	224.2	228.0	228.4	226.4	231.2	231.5	232.7	233.1	234.7	235.8	243.1	244.2
3533	Oilfield machinery and equipment	246.2	281.4	281.8	283.5	288.4	290.0	292.0	293.3	296.8	300.5	301.3	308.0	314.0	308.0
3534	Elevators and moving stairways	204.2	214.1	213.4	213.9	213.6	214.2	215.4	214.6	219.1	219.4	220.6	220.9	223.9	220.9
3542	Machine tools, metal forming types (12/71 = 100)	213.6	233.3	234.1	237.8	238.8	240.6	244.6	245.1	247.9	249.8	253.5	256.7	266.0	256.7
3546	Power driven hand tools (12/76 = 100)	111.1	116.3	116.9	117.7	117.8	118.7	119.2	120.2	120.4	122.0	122.7	124.2	126.2	124.2
3552	Textile machinery (12/69 = 100)	179.9	189.6	190.4	191.6	191.7	192.6	195.0	197.5	198.2	199.3	200.6	200.6	202.7	200.6
3553	Woodworking machinery (12/72 = 100)	165.1	177.3	179.2	181.0	183.2	184.5	185.9	187.7	190.0	192.6	193.1	193.3	201.7	219.3
3576	Scales and balances, excluding laboratory	179.7	191.1	191.1	191.3	192.8	193.7	194.8	195.4	195.4	195.7	196.6	197.7	200.9	197.7
3592	Carburetors, pistons, rings, valves (6/76 = 100)	128.2	135.7	136.9	137.6	138.6	138.7	139.2	139.6	140.7	142.8	143.5	144.6	147.3	144.6
3612	Transformers	158.3	165.4	167.0	168.5	168.0	168.5	167.9	167.6	168.4	171.2	170.5	171.7	173.0	171.7
3623	Welding apparatus, electric (12/72 = 100)	178.1	186.0	186.6	187.3	191.5	191.9	193.5	194.1	195.1	196.9	197.9	199.6	200.6	199.6
3631	Household cooking equipment (12/75 = 100)	114.8	119.2	120.2	120.3	120.7	120.9	122.0	123.4	124.3	124.4	125.8	126.1	128.6	126.1
3632	Household refrigerators, freezers (6/76 = 100)	109.6	112.5	112.7	111.8	111.9	112.6	113.6	114.3	115.1	115.1	115.3	115.9	116.6	115.9
3633	Household laundry equipment (12/73 = 100)	141.0	146.3	146.9	146.9	147.0	147.2	148.8	149.9	150.6	150.9	153.5	154.7	155.2	154.7
3635	Household vacuum cleaners	135.5	138.1	140.4	140.4	141.2	141.5	141.6	141.7	141.9	144.5	144.7	145.8	146.2	145.8
3636	Sewing machines (12/75 = 100)	111.2	119.8	119.8	121.1	121.1	121.1	121.8	122.2	122.2	122.6	122.0	122.0	122.0	122.0
3641	Electric lamps	214.7	226.8	227.1	229.8	229.8	229.7	240.8	244.3	242.7	244.8	240.8	240.5	248.3	240.5
3644	Noncurrent-carrying wiring devices (12/72 = 100)	185.8	197.1	198.0	200.4	202.6	203.0	203.7	209.1	210.5	214.2	217.3	215.2	217.3	217.3
3646	Commercial lighting fixtures (12/75 = 100)	112.7	119.6	121.2	124.3	126.8	127.4	127.9	127.9	130.5	131.4	132.0	132.3	133.9	132.3
3648	Lighting equipment, n.e.c. (12/75 = 100)	114.6	121.9	122.3	123.5	124.0	124.6	127.6	128.2	128.5	129.6	129.8	130.5	133.0	130.5
3671	Electron tubes receiving type	200.9	210.9	211.0	211.2	211.3	226.4	226.5	226.6	227.2	227.2	227.3	227.6	229.1	227.6
3674	Semiconductors and related devices	85.3	84.2	84.4	84.7	84.7	84.7	84.2	84.3	84.7	85.1	85.0	86.6	86.6	86.0
3675	Electronic capacitors (12/75 = 100)	111.5	114.4	115.9	119.8	120.1	122.1	126.7	129.3	134.1	133.9	134.9	137.9	147.7	137.9
3676	Electronic resistors (12/75 = 100)	118.3	122.8	123.1	123.2	123.2	123.2	124.0	124.6	125.2	126.6	127.8	127.3	127.4	127.3
3678	Electronic connectors (12/75 = 100)	118.9	125.4	125.6	125.8	126.6	126.9	133.4	134.1	137.6	138.9	140.7	141.		

## 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.

The use of the term "man-hours" to identify the labor component of productivity and costs, in tables 31 through 34, has been discontinued. **Hours of all persons** is now used to describe the labor input of payroll workers, self-employed persons, and unpaid family workers. **Output per all-employee hour** is now used to describe labor productivity in nonfinancial corporations where there are no self-employed.

### Notes on the data

In the private 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.

Beginning with the September 1976 issue of the *Review*, tables 31-34 were revised to reflect changeover to the new series—private business sector and nonfarm business sector—which differ from the previously published total private economy and nonfarm sector in that output imputed for owner-occupied dwellings and the household and institutions sectors, as well as the statistical discrepancy, are omitted. For a detailed explanation, see J. R. Norsworthy and L. J. Fulco, "New sector definitions for productivity series," *Monthly Labor Review*, October 1976, pages 40-42.

**31. Indexes of productivity and related data, selected years, 1950-79**

[1967 = 100]

Item	1950	1955	1960	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979
<b>Private business sector:</b>													
Output per hour of all persons	61.0	70.3	78.7	95.0	104.2	111.4	113.6	110.1	112.4	116.4	118.6	119.2	118.1
Compensation per hour	42.4	55.8	71.9	88.7	123.1	139.7	151.2	164.9	181.3	197.2	213.0	231.2	252.8
Real compensation per hour	58.9	69.6	81.1	93.8	105.8	111.5	113.6	111.7	112.5	115.6	117.3	118.3	116.3
Unit labor cost	69.6	79.4	91.3	93.3	118.2	125.4	133.1	149.8	161.3	169.4	179.6	194.0	214.0
Unit nonlabor payments	73.2	80.5	85.5	95.9	105.8	119.0	124.9	130.4	150.4	158.0	165.6	174.3	184.6
Implicit price deflator	70.8	79.8	89.3	94.2	113.9	123.2	130.3	143.1	157.5	165.5	174.8	187.2	203.8
<b>Nonfarm business sector:</b>													
Output per hour of all persons	66.9	74.3	80.9	95.9	103.0	110.1	112.0	108.5	110.5	114.4	116.2	116.8	115.5
Compensation per hour	45.4	58.7	74.2	89.4	121.7	138.4	149.2	162.8	178.9	193.8	209.3	227.3	247.6
Real compensation per hour	63.0	73.2	83.7	94.6	104.6	110.4	112.1	110.2	111.0	113.7	115.3	116.3	113.9
Unit labor cost	67.9	79.1	91.7	93.2	118.1	125.7	133.2	150.0	161.8	169.4	180.1	194.5	214.3
Unit nonlabor payments	71.5	80.1	84.5	95.8	106.0	117.5	117.8	124.7	146.0	156.0	163.9	169.9	178.8
Implicit price deflator	69.1	79.4	89.2	94.1	114.0	122.9	127.9	141.4	156.4	164.8	174.5	186.1	202.2
<b>Nonfinancial corporations:</b>													
Output per hour of all employees	( <sup>1</sup> )	( <sup>1</sup> )	80.2	96.8	103.5	110.5	112.8	108.5	111.9	115.5	116.8	117.9	<sup>P</sup> 117.5
Compensation per hour	( <sup>1</sup> )	( <sup>1</sup> )	75.7	90.0	121.5	136.7	147.5	161.4	177.4	192.2	207.6	224.8	<sup>P</sup> 244.7
Real compensation per hour	( <sup>1</sup> )	( <sup>1</sup> )	85.4	95.3	104.4	109.1	110.8	109.3	110.1	112.7	114.4	115.0	<sup>P</sup> 112.6
Unit labor cost	( <sup>1</sup> )	( <sup>1</sup> )	94.3	93.0	117.4	123.7	130.7	148.8	158.6	166.4	177.7	190.6	<sup>P</sup> 208.3
Unit nonlabor payments	( <sup>1</sup> )	( <sup>1</sup> )	90.8	100.1	103.5	114.8	116.8	124.8	148.1	156.8	164.4	170.6	<sup>P</sup> 179.8
Implicit price deflator	( <sup>1</sup> )	( <sup>1</sup> )	93.1	95.5	112.5	120.5	125.8	140.2	154.9	163.0	173.0	183.5	<sup>P</sup> 198.2
<b>Manufacturing:</b>													
Output per hour of all persons	65.0	74.1	78.9	98.3	104.5	115.7	118.8	112.6	118.2	123.4	127.2	128.0	130.2
Compensation per hour	45.1	60.5	77.1	91.0	121.8	136.6	146.4	161.1	180.2	195.1	212.0	229.5	250.5
Real compensation per hour	62.5	75.4	87.0	96.3	104.7	109.0	110.0	109.1	111.8	114.5	116.8	117.5	115.2
Unit labor cost	69.4	81.6	97.7	92.6	116.5	118.1	123.2	143.1	152.4	158.2	166.6	179.4	192.4
Unit nonlabor payments	82.4	88.6	92.4	103.3	96.2	107.4	106.4	105.6	128.4	139.6	147.4	152.4	( <sup>1</sup> )
Implicit price deflator	73.3	83.8	96.1	95.9	110.3	114.8	118.0	131.6	145.1	152.5	160.7	171.1	( <sup>1</sup> )

<sup>1</sup> Not available.



**32. Annual percent change in productivity and related data, 1969-79**

Item	Year											Annual rate of change	
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1950-78	1960-78
<b>Private business sector:</b>													
Output per hour of all persons	0.2	0.7	3.3	3.5	1.9	-3.0	2.1	3.5	1.9	0.5	-0.9	2.6	2.2
Compensation per hour	6.8	7.1	6.7	6.3	8.2	9.1	9.9	8.8	8.0	8.5	9.3	5.8	6.8
Real compensation per hour	1.4	1.1	2.4	2.9	1.9	-1.7	.7	2.8	1.5	0.8	-1.7	2.6	2.1
Unit labor cost	6.6	6.4	3.3	2.8	6.2	12.5	7.7	5.0	6.0	8.0	10.3	3.2	4.5
Unit nonlabor payments	1.0	1.2	6.8	5.2	5.0	4.4	15.3	5.1	4.8	5.3	5.9	2.8	4.0
Implicit price deflator	4.7	4.7	4.4	3.6	5.8	9.8	10.1	5.0	5.6	7.1	8.9	3.1	4.3
<b>Nonfarm business sector:</b>													
Output per hour of all persons	-3	.1	3.1	3.7	1.7	-3.1	1.9	3.5	1.6	.5	-1.2	2.2	2.0
Compensation per hour	6.3	6.7	6.7	6.5	7.8	9.1	9.9	8.3	8.0	8.6	8.9	5.5	6.5
Real compensation per hour	.9	.7	2.3	3.1	1.5	-1.7	.7	2.4	1.4	.9	-2.1	2.3	1.9
Unit labor cost	6.7	6.5	3.5	2.8	6.0	12.7	7.9	4.7	6.3	8.0	10.2	3.2	4.5
Unit nonlabor payments	.4	1.6	6.7	3.8	.3	5.9	17.1	6.9	5.0	3.7	5.2	2.8	3.9
Implicit price deflator	4.5	4.9	4.5	3.1	4.1	10.5	10.6	5.4	5.9	6.6	8.6	3.1	4.3
<b>Nonfinancial corporations:</b>													
Output per hour of all employees	.3	-1	3.4	3.3	2.1	-3.8	3.1	3.2	1.1	1.0	<sup>P</sup> -4	( <sup>1</sup> )	2.0
Compensation per hour	6.7	6.7	6.2	5.9	7.9	9.4	10.0	8.3	8.0	8.3	<sup>P</sup> 8.9	( <sup>1</sup> )	6.3
Real compensation per hour	1.2	.7	1.9	2.5	1.6	-1.4	.7	2.4	1.5	.6	<sup>P</sup> -2.1	( <sup>1</sup> )	1.7
Unit labor cost	6.3	6.8	2.7	2.5	5.7	13.8	6.6	4.9	6.8	7.3	<sup>P</sup> 9.3	( <sup>1</sup> )	4.2
Unit nonlabor payments	0	.5	7.3	3.3	1.8	6.8	18.7	5.8	4.9	3.8	<sup>P</sup> 5.4	( <sup>1</sup> )	3.4
Implicit price deflator	4.1	4.6	4.2	2.8	4.4	11.5	10.5	5.2	6.1	6.1	<sup>P</sup> 8.0	( <sup>1</sup> )	3.9
<b>Manufacturing:</b>													
Output per hour of all persons	1.1	-3	5.3	5.1	2.7	-5.2	4.9	4.4	3.1	.6	1.8	2.6	2.6
Compensation per hour	6.4	6.9	6.3	5.5	7.2	10.1	11.8	8.3	8.6	8.3	<sup>1</sup> 9.2	5.4	6.3
Real compensation per hour	1.0	.9	2.0	2.1	.9	-8	2.4	2.4	2.0	.6	-1.9	2.2	1.6
Unit labor cost	5.2	7.2	.9	4	4.3	16.1	6.6	3.8	5.3	7.7	7.2	2.7	3.6
Unit nonlabor payments	-4.4	-3.2	9.2	2.3	-1.0	-7	21.6	8.8	5.5	3.4	N.A.	1.8	2.3
Implicit price deflator	2.3	4.2	3.1	1.0	2.8	11.5	10.2	5.1	5.4	6.5	N.A.	2.5	3.3

<sup>1</sup> Not available.

**33. Indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted**

[1967 = 100]

Item	Annual average		Quarterly indexes										
			1977			1978				1979			
	1978	1979	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Private business sector:</b>													
Output per hour of all persons	119.2	118.1	117.9	119.4	118.8	118.4	119.0	119.7	119.8	118.9	118.2	117.8	<sup>1</sup> 117.6
Compensation per hour	231.2	252.8	210.8	215.3	218.5	224.2	228.5	233.6	238.4	244.8	250.3	255.6	<sup>1</sup> 260.1
Real compensation per hour	118.3	116.3	116.7	117.6	117.9	118.7	118.1	118.2	118.0	118.0	116.9	115.8	<sup>1</sup> 114.2
Unit labor cost	194.0	<sup>1</sup> 214.0	178.8	180.2	183.8	189.4	192.1	195.2	199.0	205.9	211.7	217.0	<sup>1</sup> 221.1
Unit nonlabor payments	174.3	<sup>1</sup> 184.6	164.7	167.9	168.6	164.8	173.9	177.0	181.3	180.8	183.7	185.6	<sup>1</sup> 189.0
Implicit price deflator	187.2	203.8	173.9	176.0	178.6	180.9	185.8	188.9	192.9	197.2	202.0	206.1	<sup>1</sup> 210.0
<b>Nonfarm business sector:</b>													
Output per hour of all persons	116.8	115.5	115.8	116.7	116.3	116.0	116.5	117.3	117.6	116.6	115.4	115.0	<sup>1</sup> 115.1
Compensation per hour	227.3	247.6	207.3	211.2	214.8	220.6	224.6	229.4	234.3	240.2	244.4	249.9	<sup>1</sup> 255.4
Real compensation per hour	116.3	113.9	114.7	115.4	115.9	116.8	116.1	116.1	116.0	115.8	114.3	113.2	<sup>1</sup> 112.2
Unit labor cost	194.5	<sup>1</sup> 214.3	179.0	180.9	184.7	190.2	192.7	195.6	199.3	206.0	212.1	217.3	<sup>1</sup> 221.8
Unit nonlabor payments	169.9	178.8	163.2	167.1	166.0	161.1	169.2	173.0	176.1	174.3	177.6	180.5	<sup>1</sup> 183.3
Implicit price deflator	186.1	202.2	173.6	176.2	178.3	180.2	184.7	187.8	191.4	195.1	200.3	204.7	<sup>1</sup> 208.6
<b>Nonfinancial corporations:</b>													
Output per hour of all employees	117.9	<sup>P</sup> 117.5	116.5	117.4	116.7	116.7	117.8	118.4	118.8	118.1	117.3	117.2	( <sup>1</sup> )
Compensation per hour	224.8	<sup>P</sup> 244.7	205.7	209.5	212.8	218.5	222.3	226.9	231.3	237.4	242.1	247.1	( <sup>1</sup> )
Real compensation per hour	115.0	<sup>P</sup> 112.6	113.8	114.5	114.8	115.7	114.9	114.8	114.5	114.5	113.1	112.0	( <sup>1</sup> )
Total unit costs	193.3	<sup>P</sup> 210.3	180.5	182.4	186.3	190.8	191.6	194.0	196.8	202.3	208.0	213.2	( <sup>1</sup> )
Unit labor cost	190.6	<sup>P</sup> 208.3	176.6	178.4	182.3	187.3	188.7	191.5	194.8	201.0	206.4	210.8	( <sup>1</sup> )
Unit nonlabor costs	201.8	<sup>P</sup> 216.6	192.4	194.8	198.7	201.5	200.8	201.6	203.1	206.5	213.2	220.5	( <sup>1</sup> )
Unit profits	127.2	<sup>P</sup> 128.4	123.3	130.9	122.2	107.1	129.2	132.7	138.7	130.3	129.2	127.5	( <sup>1</sup> )
Implicit price deflator	183.5	<sup>P</sup> 198.2	172.0	174.7	176.8	178.3	182.3	184.9	188.2	191.6	196.3	200.4	( <sup>1</sup> )
<b>Manufacturing:</b>													
Output per hour for all persons	128.0	130.2	127.3	128.4	127.8	125.7	127.2	129.2	129.8	129.0	130.0	131.1	130.6
Compensation per hour	229.5	250.5	209.7	214.1	217.5	223.2	226.6	231.4	236.5	242.4	248.2	253.0	<sup>1</sup> 258.2
Real compensation per hour	117.5	115.2	116.1	117.0	117.4	118.1	117.1	117.0	117.1	116.9	115.9	114.6	<sup>1</sup> 113.4
Unit labor cost	179.4	192.4	164.7	166.7	170.2	177.5	178.1	179.1	182.2	187.9	190.9	193.0	197.6

**34. Percent change from preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted at annual rate**

[1967 = 100]

Item	Quarterly percent change at annual rate						Percent change from same quarter a year ago					
	II 1978 to III 1978	III 1978 to IV 1978	IV 1978 to I 1979	I 1979 to II 1979	II 1979 to III 1979	III 1979 to IV 1979	III 1977 to III 1978	IV 1977 to IV 1978	I 1978 to I 1979	II 1978 to II 1979	III 1978 to III 1979	IV 1978 to IV 1979
	Private business sector:											
Output per hour of all persons	2.4	0.3	-3.0	-2.2	-1.3	-0.6	0.2	0.8	0.4	-0.6	-1.6	-1.8
Compensation per hour	9.2	8.5	11.1	9.3	8.8	7.2	8.5	9.1	9.2	9.5	9.4	9.1
Real compensation per hour	.3	-.7	.1	-3.8	-3.6	-5.4	0.4	.1	-.6	-1.0	-2.0	-3.2
Unit labor cost	6.6	8.1	14.6	11.8	10.3	7.8	8.3	8.3	8.7	10.2	11.2	11.1
Unit nonlabor payments	7.4	9.9	-1.0	6.5	4.1	7.7	5.4	7.5	9.7	5.6	4.8	4.3
Implicit price deflator	6.9	8.7	9.3	10.1	8.3	7.8	7.4	8.0	9.0	8.7	9.1	8.9
Nonfarm business sector:												
Output per hour of all persons	2.7	.8	-3.2	-4.1	-1.4	-.5	.5	1.1	.5	-1.0	-2.0	-2.0
Compensation per hour	8.8	8.8	10.4	7.9	8.5	9.2	8.7	9.1	8.9	9.0	8.9	9.0
Real compensation per hour	.0	-.4	-.6	-5.0	-3.9	3.6	.6	.1	-.8	-1.5	-2.5	-3.3
Unit labor cost	6.0	8.0	14.0	12.5	10.1	8.6	8.1	7.9	8.3	10.1	11.1	11.1
Unit nonlabor payments	9.4	7.3	-4.0	7.8	6.6	6.4	3.5	6.1	8.2	5.0	4.3	4.1
Implicit price deflator	7.0	7.8	8.1	11.0	9.0	7.9	6.6	7.3	8.3	8.5	9.0	9.0
Nonfinancial corporations:												
Output per hour of all employees	2.0	1.1	-2.1	-2.8	-0.2	( <sup>1</sup> )	0.8	1.8	1.3	.5	-1.0	( <sup>1</sup> )
Compensation per hour	8.4	8.1	11.0	8.0	8.6	( <sup>1</sup> )	8.3	8.7	8.7	8.9	8.9	( <sup>1</sup> )
Real compensation per hour	-.4	-1.0	.0	-4.9	-3.8	( <sup>1</sup> )	.2	-.3	-1.0	-1.6	-2.5	( <sup>1</sup> )
Total unit costs	5.1	5.9	11.7	11.8	10.2	( <sup>1</sup> )	6.4	5.6	6.1	8.6	9.9	( <sup>1</sup> )
Unit labor costs	6.2	6.9	13.4	11.2	8.8	( <sup>1</sup> )	7.4	6.8	7.3	9.4	10.1	( <sup>1</sup> )
Unit nonlabor costs	1.7	2.9	6.8	13.5	14.6	( <sup>1</sup> )	3.5	2.2	2.5	6.2	9.4	( <sup>1</sup> )
Unit profits	11.4	19.5	-22.1	-3.4	-5.3	( <sup>1</sup> )	1.4	13.6	21.7	0	-3.9	( <sup>1</sup> )
Implicit price deflator	5.7	7.3	7.6	10.2	8.6	( <sup>1</sup> )	5.8	6.4	7.5	7.7	8.4	( <sup>1</sup> )
Manufacturing:												
Output per hour of all persons	6.3	2.0	-2.4	2.9	3.5	-1.3	.6	1.6	2.6	2.2	1.5	0.6
Compensation per hour	8.7	9.3	10.3	9.8	8.1	8.4	8.1	8.7	8.6	9.5	9.4	9.2
Real compensation per hour	-.1	0	-.6	-3.4	-4.3	4.3	0	-.3	-1.1	-1.0	-2.1	-3.1
Unit labor cost	2.2	7.1	13.0	6.7	4.4	9.9	7.4	7.1	5.9	7.2	7.8	8.5

## LABOR-MANAGEMENT DATA

MAJOR COLLECTIVE BARGAINING DATA are obtained from contracts on file at the Bureau of Labor Statistics, direct contact with the parties, and from secondary sources. Additional detail is published in *Current Wage Developments*, a monthly periodical of the Bureau. Data on work stoppages are based on confidential responses to questionnaires mailed by the Bureau of Labor Statistics to parties involved in work stoppages. Stoppages initially come to the attention of the Bureau from reports of Federal and State mediation agencies, newspapers, and union and industry publications.

### Definitions

Data on wage changes apply to private nonfarm industry agreements covering 1,000 workers or more. Data on wage and benefit changes *combined* apply only to those agreements covering 5,000 workers or more. **First-year wage settlements** refer to pay changes going into effect within the first 12 months after the effective date of

the agreement. **Changes over the life of the agreement** refer to total agreed upon settlements (exclusive of potential cost-of-living escalator adjustments) expressed at an average annual rate. **Wage-rate changes** are expressed as a percent of straight-time hourly earnings, while **wage and benefit changes** are expressed as a percent of total compensation.

**Effective wage-rate adjustments** going into effect in major bargaining units measure changes actually placed into effect during the reference period, whether the result of a newly negotiated increase, a deferred increase negotiated in an earlier year, or as a result of a cost-of-living escalator adjustment. Average adjustments are affected by workers receiving no adjustment, as well as by those receiving increases or decreases.

**Work stoppages** include all known strikes or lockouts involving six workers or more and lasting a full shift or longer. Data 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.

**35. Wage and benefit settlements in major collective bargaining units, 1975 to date**

[In percent]

Sector and measure	Annual average					Quarterly average							
	1975	1976	1977	1978	1979 <sup>P</sup>	1978			1979 <sup>P</sup>				
						II	III	IV	I	II	III	IV	
Wage and benefit settlements, all industries:													
First-year settlements .....	11.4	8.5	9.6	8.3	8.9	6.8	7.2	6.1	2.5	10.6	9.0	8.1	
Annual rate over life of contract .....	8.1	6.6	6.2	6.3	6.6	6.0	5.9	5.2	5.2	7.7	6.0	6.0	
Wage rate settlements, all industries:													
First-year settlements .....	10.2	8.4	7.8	7.6	7.4	6.9	7.5	7.4	4.8	9.0	6.6	6.3	
Annual rate over life of contract .....	7.8	6.4	5.8	6.4	6.0	6.2	6.4	5.9	6.6	7.0	4.8	4.9	
Manufacturing:													
First-year settlements .....	9.8	8.9	8.4	8.3	7.0	7.1	8.4	9.5	8.7	9.9	6.2	5.9	
Annual rate over life of contract .....	8.0	6.0	5.5	6.6	5.4	5.8	7.2	7.4	8.6	8.1	4.6	4.2	
Nonmanufacturing (excluding construction):													
First-year settlements .....	11.9	8.6	8.0	8.0	7.5	7.7	7.4	6.4	2.3	8.5	9.1	7.2	
Annual rate over life of contract .....	8.0	7.2	5.9	6.5	5.9	6.9	5.9	5.1	5.6	5.7	5.8	7.5	
Construction:													
First-year settlements .....	8.0	6.1	6.3	6.5	8.9	6.4	7.0	8.4	11.0	9.1	10.4	7.9	
Annual rate over life of contract .....	7.5	6.2	6.3	6.2	8.4	6.0	7.2	7.1	7.7	8.2	9.1	7.1	



### 36. Effective wage adjustments going into effect in major collective bargaining units, 1975 to date

[In percent]

Sector and measure	Average annual changes					Average quarterly changes								
	1975	1976	1977	1978	1979	1977	1978				1979 <sup>P</sup>			
						IV	I	II	III	IV	I	II	III	IV
Total effective wage rate adjustment, all industries .....	8.7	8.1	8.0	8.2	8.8	1.1	1.3	2.6	2.7	1.4	1.4	2.6	3.2	1.5
Change resulting from—														
Current settlement .....	2.8	3.2	3.0	2.0	2.8	0.5	0.5	0.6	0.5	0.4	0.2	1.1	1.0	0.4
Prior settlement .....	3.7	3.2	3.2	3.7	3.0	.3	.6	1.4	1.2	.5	.6	.9	1.0	.4
Escalator provision .....	2.2	1.6	1.7	2.4	3.0	.3	.3	.6	1.0	.5	.6	.5	1.2	.6
Manufacturing .....	8.5	8.5	8.4	8.6	9.2	1.4	1.4	2.2	2.9	1.9	1.4	2.3	3.1	2.2
Nonmanufacturing .....	8.9	7.7	7.6	7.9	8.5	.8	1.3	2.9	2.5	1.1	1.4	2.8	3.4	.9

p = preliminary

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

### 37. Work stoppages, 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 (thousands)	In effect during month (thousands)	Number (thousands)	Percent of estimated working time
1947 .....	3,693	.....	2,170	.....	34,600	.30
1948 .....	3,419	.....	1,960	.....	34,100	.28
1949 .....	3,606	.....	3,030	.....	50,500	.44
1950 .....	4,843	.....	2,410	.....	38,800	.33
1951 .....	4,737	.....	2,220	.....	22,900	.18
1952 .....	5,117	.....	3,540	.....	59,100	.48
1953 .....	5,091	.....	2,400	.....	28,300	.22
1954 .....	3,468	.....	1,530	.....	22,600	.18
1955 .....	4,320	.....	2,650	.....	28,200	.22
1956 .....	3,825	.....	1,900	.....	33,100	.24
1957 .....	3,673	.....	1,390	.....	16,500	.12
1958 .....	3,694	.....	2,060	.....	23,900	.18
1959 .....	3,708	.....	1,880	.....	69,000	.50
1960 .....	3,333	.....	1,320	.....	19,100	.14
1961 .....	3,367	.....	1,450	.....	16,300	.11
1962 .....	3,614	.....	1,230	.....	18,600	.13
1963 .....	3,362	.....	941	.....	16,100	.11
1964 .....	3,655	.....	1,640	.....	22,900	.15
1965 .....	3,963	.....	1,550	.....	23,300	.15
1966 .....	4,405	.....	1,960	.....	25,400	.15
1967 .....	4,595	.....	2,870	.....	42,100	.25
1968 .....	5,045	.....	2,649	.....	49,018	.28
1969 .....	5,700	.....	2,481	.....	42,869	.24
1970 .....	5,716	.....	3,305	.....	66,414	.37
1971 .....	5,138	.....	3,280	.....	47,589	.26
1972 .....	5,010	.....	1,714	.....	27,066	.15
1973 .....	5,353	.....	2,251	.....	27,948	.14
1974 .....	6,074	.....	2,778	.....	47,991	.24
1975 .....	5,031	.....	1,746	.....	31,237	.16
1976 .....	5,648	.....	2,420	.....	37,859	.19
1977 .....	5,506	.....	2,040	.....	35,822	.17
1978: September .....	453	854	448	551	4,446	.25
October .....	370	721	117	216	2,352	.13
November .....	268	569	64	136	1,691	.09
December .....	157	408	53	143	1,377	.08
1979: January .....	262	.....	68	.....	1,925	.10
February .....	299	.....	75	.....	1,670	.10
March .....	391	.....	112	.....	1,871	.10
April .....	512	.....	426	.....	5,126	.27
May .....	556	.....	132	.....	3,682	.19
June .....	536	.....	137	.....	2,989	.16
July .....	471	.....	168	.....	3,001	.16
August .....	463	.....	119	.....	3,152	.15
September .....	464	.....	135	.....	2,319	.13
October .....	443	.....	230	.....	2,968	.15
November .....	257	.....	91	.....	2,720	.15
December .....	134	.....	42	.....	1,976	.11
1980: January <sup>P</sup> .....	352	441	207	292	3,142	.16
February <sup>P</sup> .....	354	590	114	332	3,025	.17

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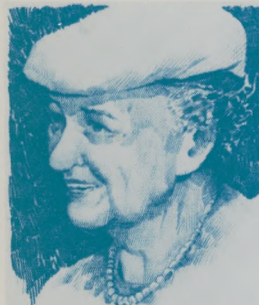
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