



MONTHLY LABOR REVIEW

August 1972

U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics

In this issue:

Manpower programs
for criminal offenders

New price indexes
by size of city





U.S. DEPARTMENT OF LABOR

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BUREAU OF LABOR STATISTICS

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August covers:

"Seated Youth (The Friend)," bronze sculpture, 1915-17, by Wilhelm Lehmbruck, from the collection of the Wilhelm Lehmbruck Museum, Duisburg, Germany, exhibited at the National Gallery of Art, Washington, D.C.

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MONTHLY LABOR REVIEW

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Labor Month in Review



WHAT DO POLICYMAKERS need from researchers? And what do researchers need from policymakers? Under Secretary of Labor L. H. Silberman offered some answers to these questions in addressing the North American Conference of Labor Statistics in Denver on June 28.

A sense of discipline. The policymaker, Mr. Silberman said, must be prepared to accept—indeed, to demand—research that challenges the very premises on which he is basing his decisions. This may mean, at times, encouragement of long-term research that does not appear relevant to immediate needs. Policymakers are recognizing increasingly that the choice of a research project is itself a policy decision of the highest magnitude, perhaps too important a decision, Mr. Silberman added, to be left entirely to the policymakers.

The Under Secretary suggested that policy officials and administrators need to have tougher skins about research they finance that comes up with answers critical of their policy initiatives. Ideally, government policymakers have open minds and are willing to accept the answer that the idea behind a project is dead wrong. Ideally, too, researchers have the

strength to face sharp rebuffs and to present their findings without fear or equivocation.

Many persons are attracted to the social sciences because they have opinions about policy. But researchers must free themselves of “personal policy bias” if they are to find government responsive to their research.

Reconciling demand and supply. Both sides must work to reconcile the demand from policymakers for research relevant to their needs with the interests of the researchers. More effort is needed also to synthesize the results of research—rather than concentration on additional, often repetitive, studies. Since the reward system in academia tends to downgrade this synthesizing approach, the policymaker must encourage it if he wants help in solving the problems he faces.

To illustrate the practical application of research, Mr. Silberman cited a particular study sponsored by the Labor Department. The study showed that minor arrest records acquired early in life by many young men in the minority groups were a real barrier to employment, particularly in public agencies hidebound by stringent civil service regulations. Because this particular research data surfaced at the right moment in the right place, policy changes could be made that have significantly enhanced the prospects of minority employment in public service. Similarly, research on the rehabilitation of prisoners led to a new policy seeking labor market adjustments for former prisoners.

The 30th North American Conference on Labor Statistics attracted 270 participants from public agencies, labor organizations, business concerns, universities, and community action groups in the United States and Canada. The program included workshops, panels, presentation of new government statistical programs, and a look at the place of labor statistics in the stabilization of prices and wages. Proceedings—including the full text of Mr. Silberman’s talk—will be published by the Bureau of Labor Statistics. □

Monthly Labor Review honored

The Federal Editors Association has honored the *Monthly Labor Review* with a Blue Pencil Award for excellence in writing and editing. In a competition open to all publications issued by agencies of the Federal Government in 1971, the *Review* placed first in its field of technical publications.

Editors who served on the *Review* staff at some time during 1971 included Olivia G. Amiss, Catherine C. Defina, Robert W. Fisher, Barbara Freund, Mary Hogya, Merv Knobloch, Diana LaPlante, Georgena Potts, and Eugene Skotzko.

The *Review* also won Blue Pencil Awards in 1970 and 1969.

New consumer price indexes
for most goods and services
rose faster in larger
than in smaller urban areas between
December 1966 and December 1971

RICHARD C. BAHR, MARK R. MEINERS,
AND TOSHIKO NAKAYAMA

New consumer price indexes by size of city

THE BUREAU OF LABOR STATISTICS has developed a new set of consumer price indexes which measure price change in urban areas grouped by size of population. These indexes add a new dimension to analysis of price data by providing alternate measures for comparison with the U.S. city average and by permitting comparisons of price change among areas with different size populations. They will be published four times a year for the months of March, June, September, and December. This article describes the new indexes and provides a brief analysis of their behavior over the 5-year period from December 1966 to December 1971.

The new indexes are calculated from price data collected in 56 metropolitan and nonmetropolitan urban areas of the United States for the national Consumer Price Index. For the new price indexes, the 56 areas are grouped by their 1960 population into five groups. (See the listing of the areas included in each group at the end of the article.) The first group consists of the five largest metropolitan areas included in the national CPI, all with an urban population of at least 3.5 million (class A-1) in 1960. The other groups had populations of 1.4 million to 3.5 million (class A-2); 250,000 to 1.4 million (class B); 50,000 to 250,000 (class C); and 2,500 to 50,000 (class D), the later being nonmetropolitan urban areas.

For each of the urban population classes, indexes for all items and for the subgroups of food, housing, apparel and upkeep, transportation, and health and recreation will be available. Table 1 shows the relative importance in the weighting structure of the U.S. City Average Consumer Price Index of the all items and major subgroup indexes for each urban classi-

fication. (Tables 2 through 6 show historical indexes for the five population classes.)

These new indexes are not designed to replace any of the individual city indexes currently published. The Bureau will continue to publish separate monthly indexes for each of the five largest metropolitan areas in the CPI and separate quarterly indexes for each of the 18 other areas. As is the case with indexes for individual areas, the indexes for urban areas classified by size of population cannot be used to determine differences in price levels or living costs at a point in time. They indicate only that prices in one group have changed more, less, or the same as in another.

In addition, these new indexes should not be construed necessarily as the best indicator of price behavior for a given city or geographic area because that city or area falls within the population ranges of the new indexes. Population is only one of several factors that have a significant effect on price behavior in a city. For example, differences in price movement may also be related to differences in eco-

Table 1. Relative importance¹ in the U.S. Consumer Price Index of all items and major groups, urban areas grouped by population,² December 1971

Population class	All items	Food	Housing	Apparel and upkeep	Transportation	Health and recreation
U.S. total.....	100.00	22.28	33.97	10.49	13.32	19.94
3.5 million or more (A-1).....	32.74	7.53	10.87	3.52	4.30	6.52
1.4 to 3.5 million (A-2).....	11.88	2.66	4.05	1.25	1.56	2.36
250,000 to 1.4 million (B).....	25.85	5.46	9.00	2.65	3.55	5.19
50,000 to 250,000 (C).....	12.50	2.77	4.23	1.32	1.68	2.50
2,500 to 50,000 (D).....	17.03	3.86	5.82	1.75	2.23	3.37

¹ These data indicate the percentage of the U.S. "all items" Consumer Price Index weight represented by each population size class index as of December 1971.

² Based upon 1960 Census of Population.

Richard C. Bahr, Mark R. Meiners, and Toshiko Nakayama are economists in the Division of Consumer Prices and Price Indexes, Bureau of Labor Statistics.

conomic structure, demographic characteristics, and geographic location. The Bureau intends to develop additional data that would permit analysis of price behavior by region in order to supply yet another dimension to its price data.

Historical patterns

The new indexes for urban areas show that between December 1966 and December 1971, the index of all items and the indexes for all subgroups of goods and services, except apparel and upkeep, tended to increase more (in percentage terms) in the larger urban population classes than in the smallest:

Population class	All items	Food	Housing	Apparel, upkeep	Transportation	Health, recreation
3.5 million or more (A-1)	26.3	22.5	29.4	23.0	25.4	28.4
1.4 to 3.5 million (A-2)	25.2	20.6	28.2	25.4	22.5	27.2
250,000 to 1.4 million (B)	24.6	19.9	29.3	24.1	18.7	26.5
50,000 to 250,000 (C)	23.4	19.5	27.0	24.2	17.4	26.4
2,500 to 50,000 (D)	22.6	19.4	25.8	23.1	17.5	24.2
United States	24.8	20.7	28.2	23.7	20.8	26.8

The index of all items for the largest urban areas rose 26.3 percent between December 1966 and December 1971, 3.7 percentage points more than the increase for the smallest areas. Differences between these two were similar for the food, housing, and health and recreation subgroups. For the transportation subgroups, however, the difference between them was almost 8 percentage points. For the apparel and upkeep subgroup, the difference between increases in the largest and the smallest population classes was only 0.1 percentage point. The largest increase in apparel prices occurred in the 1.4 to 3.5 million population class. The increase for this class was 2.3 percentage points higher than that for the smallest class, still the smallest difference between size classes for any subgroup.

Relationship to overall price change

Analyzing changes in indexes over the entire period (December 1966–December 1971) masks some aspects of the behavior of the indexes since significant changes in the overall behavior of prices occurred during the period. At the national level, the rate of increase in prices, measured in terms of December to December percent changes, accelerated from 3.0

percent in December 1967 to 6.1 percent in December 1969. In 1970 the rate of advance slowed to 5.5 percent and in December 1971 it was down to 3.4 percent. Annual percent changes in the all items indexes for each population class followed the same general pattern as those in the U.S. all items index, although there were differences in the magnitude of changes. Prices rose at about the same pace in each size class in 1967. However, when prices began to accelerate in 1968, the rates of increase (all items indexes) from December to December of each year began to diverge.

The acceleration of price increases in 1968 and 1969 was greater in the larger population classes than in the smaller ones, and the deceleration in 1970 and 1971 was slightly less in the larger than in

Table 2. Consumer Price Index for urban wage earners and clerical workers in areas with an urban population of 3.5 million or more (class A-1),¹ 1967–72
[1967=100]

Period	All items	Food	Housing	Apparel and upkeep	Transportation	Health and recreation
1967						
March.....	99.0	99.1	99.4	99.0	98.5	98.6
June.....	99.7	99.7	99.8	99.8	99.7	99.4
September.....	100.8	100.7	100.3	101.8	101.0	101.2
December.....	101.6	101.2	101.2	102.4	101.7	102.3
Annual average..	100.0	100.0	100.0	100.0	100.0	100.0
1968						
March.....	102.8	102.3	102.4	103.5	103.2	103.6
June.....	104.0	103.5	103.5	105.0	103.7	104.8
September.....	105.5	105.0	105.3	108.3	103.3	106.2
December.....	106.6	105.5	106.6	109.4	104.3	107.6
Annual average..	104.3	103.8	103.9	105.4	103.5	105.2
1969						
March.....	108.5	106.7	108.7	110.5	109.0	108.9
June.....	110.0	109.3	109.9	111.1	109.1	110.9
September.....	111.7	111.3	112.4	113.9	108.1	112.4
December.....	113.4	113.7	113.9	114.2	111.1	113.2
Annual average..	110.2	109.5	110.5	111.4	108.7	110.9
1970						
March.....	115.4	115.3	116.7	114.8	113.6	115.1
June.....	117.2	116.4	118.8	115.4	116.1	117.1
September.....	118.9	116.8	120.8	118.6	117.5	119.1
December.....	120.4	116.7	123.4	118.7	121.2	120.5
Annual average..	117.4	116.2	119.0	115.7	117.0	117.3
1971						
March.....	121.5	118.7	123.5	118.4	123.0	122.3
June.....	123.2	121.1	125.4	119.3	124.0	123.9
September.....	124.2	121.1	127.3	121.3	123.4	125.1
December.....	124.8	122.0	128.4	120.9	123.3	125.4
Annual average..	123.0	120.2	125.6	119.0	123.3	123.8
1972						
March.....	126.3	124.4	129.8	121.6	124.1	126.8
June.....	127.1	125.1	131.1	120.4	125.1	128.2

¹ Based upon 1960 Census of Population.

the smaller, as the following tabulation shows:

Urban population class	1967	1968	1969	1970	1971
3.5 million and over (A-1)	2.8	4.9	6.4	6.2	3.7
1.4 to 3.5 million (A-2)	2.9	5.1	6.2	5.4	3.4
250,000 to 1.4 million (B)	3.1	4.5	6.5	5.0	3.4
50,000 to 250,000 (C)	3.1	4.6	5.6	4.9	3.2
2,500 to 50,000 (D)	2.9	4.3	5.4	5.3	2.9
United States	3.0	4.7	6.1	5.5	3.4

Analysis of the price indexes by subgroup for each population class (not shown in the tabulation) adds another dimension to the cyclical behavior of prices. Indexes for food followed the same general pattern as the all items indexes, although there were variations in the magnitudes of price

Table 3. Consumer Price Index for urban wage earners and clerical workers in areas with an urban population of 1.4 million to 3.5 million (class A-2),¹ 1967-72

(1967=100)

Period	All items	Food	Housing	Apparel and upkeep	Transportation	Health and recreation
1967						
March	99.0	98.9	99.2	98.7	98.9	98.8
June	99.7	99.8	99.8	99.8	99.9	99.4
September	100.7	101.0	100.5	100.6	100.6	101.0
December	101.6	100.7	101.3	102.2	101.9	102.4
Annual average	100.0	100.0	100.0	100.0	100.0	100.0
1968						
March	102.9	102.3	102.5	102.9	102.5	104.3
June	104.3	103.5	104.3	105.7	103.2	105.2
September	105.4	105.0	105.6	106.7	103.4	106.1
December	106.8	105.6	107.3	109.1	105.2	107.9
Annual average	104.4	103.7	104.4	105.5	103.3	105.4
1969						
March	108.4	106.6	108.9	109.8	107.7	109.1
June	110.1	109.4	110.4	111.9	108.6	110.5
September	111.7	111.0	112.9	112.9	108.2	112.1
December	113.4	113.3	114.4	115.6	110.1	113.2
Annual average	110.4	109.4	111.1	112.0	108.2	110.8
1970						
March	114.8	114.5	117.0	114.4	110.0	114.9
June	116.3	115.4	118.0	116.6	113.2	116.7
September	117.8	116.0	120.5	117.1	114.2	118.3
December	119.5	116.1	122.1	120.1	118.4	119.8
Annual average	116.6	115.3	118.8	116.7	113.3	116.9
1971						
March	120.2	117.6	122.1	119.3	118.4	121.5
June	121.7	119.0	123.5	120.8	121.1	122.6
September	122.6	118.6	125.9	121.3	120.1	124.1
December	123.6	120.2	126.9	123.3	120.3	124.3
Annual average	121.7	118.5	124.2	120.9	119.8	122.8
1972						
March	124.2	121.9	127.7	122.2	119.6	125.3
June	125.1	122.4	128.8	122.7	121.1	126.3

¹ Based upon 1960 Census of Population.

changes for each class. For other CPI subgroups the pattern was somewhat different.

The rise in the indexes for housing accelerated in all population groups in 1968 and 1969, and in all except the 250,000 to 1.4 million class in 1970. In the latter class, the peak increase occurred in 1969, followed by a somewhat slower rise in 1970. The rate of price advance in housing for all population classes slowed substantially in 1971.

Price changes for transportation were the only ones which showed a deceleration in 1968. The slowdown occurred in all population classes, but was particularly sharp in the smallest class. The rate of advance became faster in 1969, and continued to accelerate in 1970. The 9-percent increase for the largest population class was considerably larger than

Table 4. Consumer Price Index for urban wage earners and clerical workers in areas with an urban population of 250,000 to 1.4 million (class B),¹ 1967-72

(1967=100)

Period	All items	Food	Housing	Apparel and upkeep	Transportation	Health and recreation
1967						
March	98.9	99.1	99.0	98.8	98.7	98.9
June	99.8	100.1	99.7	100.0	99.9	99.6
September	100.7	100.4	100.8	100.5	100.8	100.8
December	101.6	100.8	101.6	102.0	101.7	102.0
Annual average	100.0	100.0	100.0	100.0	100.0	100.0
1968						
March	102.7	102.4	102.6	102.8	102.2	103.6
June	103.9	103.2	104.1	104.7	103.1	104.5
September	104.8	104.0	105.3	106.1	102.9	105.6
December	106.2	105.0	107.1	108.0	103.4	107.0
Annual average	104.0	103.3	104.3	104.9	102.8	104.8
1969						
March	107.9	106.0	109.3	108.6	106.2	108.3
June	109.8	108.7	111.6	111.4	106.4	109.6
September	111.1	110.5	113.0	112.4	105.6	111.7
December	113.1	112.5	115.2	114.9	107.9	112.9
Annual average	109.9	108.8	111.6	111.3	106.2	110.1
1970						
March	114.5	113.9	118.0	114.4	107.3	114.4
June	116.3	114.6	120.0	115.9	111.0	115.9
September	117.3	115.2	121.6	116.6	110.6	117.5
December	118.7	114.6	123.2	119.2	114.5	118.7
Annual average	116.2	114.4	120.0	116.2	110.3	116.1
1971						
March	119.2	116.0	122.6	118.4	115.4	120.3
June	120.9	118.1	124.1	120.0	116.9	121.6
September	121.6	118.0	125.5	120.4	116.1	123.4
December	122.7	119.5	127.2	122.0	116.3	123.8
Annual average	120.8	117.5	124.5	120.0	116.0	121.9
1972						
March	123.4	121.6	127.9	121.1	115.5	124.9
June	124.5	122.1	128.6	123.0	117.9	125.9

¹ Based upon 1960 Census of Population.

that for the other population classes, reflecting widespread increases in local transit fares. By comparison with the 9-percent rise in the largest population category, transportation prices rose 7.5 percent in areas with 1.4 to 3.5 million population, and about 6 percent in the other three areas. In contrast, in 1971, the increases in the three largest classes were each 1.6 percent, 0.6 percent in groupings with 50,000-250,000 population, and 0.9 percent in groupings with 2,500 to 50,000 population. Repeal of the automobile excise tax in the second half of 1971 contributed to the slowdown that year.

Compared with other CPI subgroups, health and recreation indexes ascended steadily upward in 1967, 1968, and 1969 in all the population strata. In 1970, the rate of advance accelerated sharply, ranging from 6.4 percent in the largest population category to

5.8 percent in the next largest category, and about 5 percent in the three smallest population categories. With the wage-price-rent freeze in effect after August 15, 1971, increases that year slowed to a rate of 3.7 percent in the smallest population category, to 3.8 percent in the 1.4 to 3.5 million class, and from 4.1 percent to 4.3 percent in other classes.

The indexes for apparel and upkeep rose at a more rapid rate in 1968 than in 1967. Subsequently, however, the rate of advance slowed in all classes except the 250,000 to 1.4 million category. In this class, the rise in the index continued to accelerate through 1969, slowed in 1970, and became slightly faster in 1971. In contrast to the indexes for other subgroups, which usually showed larger increases in the index for apparel and upkeep in the largest classes each year were not the biggest.

Table 5. Consumer Price Index for urban wage earners and clerical workers in areas with urban population of 50,000 to 250,000 (class C),¹ 1967-72

[1967=100]

Period	All items	Food	Housing	Apparel and upkeep	Transportation	Health and recreation
1967						
March.....	98.7	99.1	98.8	98.3	98.3	98.5
June.....	99.9	100.1	99.9	100.1	100.1	99.5
September.....	100.6	100.3	100.7	100.5	100.7	100.9
December.....	101.8	100.9	101.5	102.5	102.0	102.7
Annual average..	100.0	100.0	100.0	100.0	100.0	100.0
1968						
March.....	103.0	102.3	102.8	103.1	102.5	104.3
June.....	104.1	103.5	103.8	105.7	102.5	105.7
September.....	105.1	104.0	105.2	107.5	102.7	106.7
December.....	106.5	104.9	107.1	109.7	103.6	107.9
Annual average..	104.3	103.3	104.3	105.9	102.7	105.7
1969						
March.....	107.9	106.1	108.6	109.5	106.5	108.8
June.....	109.6	108.8	110.4	111.3	106.8	110.6
September.....	110.7	110.4	111.8	112.0	106.0	112.1
December.....	112.5	112.1	113.5	114.9	108.6	113.0
Annual average..	109.7	108.8	110.5	111.5	106.6	110.7
1970						
March.....	113.9	113.6	116.1	114.8	108.7	113.8
June.....	115.5	114.2	117.7	116.6	111.6	115.7
September.....	116.5	114.7	119.6	116.0	111.2	117.4
December.....	118.0	113.6	121.4	119.7	114.9	118.6
Annual average..	115.5	113.9	118.0	116.4	111.1	115.9
1971						
March.....	118.5	115.6	121.0	118.7	115.4	119.6
June.....	120.5	117.9	122.9	120.9	117.6	121.3
September.....	120.8	117.8	123.9	120.1	115.8	123.3
December.....	121.8	119.0	125.3	122.1	115.6	123.7
Annual average..	120.1	117.1	123.0	120.3	116.0	121.6
1972						
March.....	122.6	121.4	126.1	120.6	115.3	124.2
June.....	123.8	121.4	127.9	123.6	116.7	125.1

¹ Based upon 1960 Census of Population.

Table 6. Consumer Price Index for urban wage earners and clerical workers in areas with urban population of 2,500 to 50,000 (class D),¹ 1967-72

[1967=100]

Period	All items	Food	Housing	Apparel and upkeep	Transportation	Health and recreation
1967						
March.....	98.8	99.3	98.9	98.2	98.5	98.8
June.....	99.9	100.0	99.8	99.9	100.0	99.6
September.....	100.7	100.5	100.7	100.3	100.8	100.8
December.....	101.6	100.5	101.5	102.9	101.9	102.1
Annual average..	100.0	100.0	100.0	100.0	100.0	100.0
1968						
March.....	102.6	102.2	102.5	102.8	102.8	103.2
June.....	103.9	103.3	103.7	105.1	103.7	104.4
September.....	104.8	104.0	105.1	106.2	103.6	105.3
December.....	106.0	104.8	106.8	109.0	102.7	106.7
Annual average..	104.0	103.2	104.1	105.3	103.1	104.5
1969						
March.....	107.3	105.5	108.4	108.8	106.2	107.6
June.....	109.0	108.2	109.9	111.1	106.5	108.9
September.....	110.2	109.7	111.7	111.9	105.2	110.8
December.....	111.7	111.6	113.0	114.3	107.4	111.5
Annual average..	109.1	108.2	110.2	111.1	105.9	109.3
1970						
March.....	113.1	113.1	115.8	114.1	107.0	112.3
June.....	114.9	114.2	117.4	115.8	110.2	114.3
September.....	115.9	114.8	119.2	115.9	109.8	115.7
December.....	117.6	114.4	121.0	118.6	114.0	117.4
Annual average..	114.9	113.9	117.7	115.7	109.7	114.4
1971						
March.....	118.0	115.7	120.9	118.2	114.2	118.6
June.....	119.9	118.1	122.4	120.3	116.7	120.0
September.....	120.1	117.8	123.1	119.1	115.4	121.4
December.....	121.0	119.0	124.2	121.7	115.0	121.7
Annual average..	119.5	117.3	122.4	119.6	115.2	120.1
1972						
March.....	121.9	120.8	125.5	120.6	114.7	122.7
June.....	122.8	121.7	126.3	122.2	116.2	123.3

¹ Based upon 1960 Census of Population.

Statistical analysis

The foregoing analysis indicates that there are some differences in the rate of price change by urban area classified by population size. The differences, however, are small and do not always show a consistent pattern. Therefore, to determine whether price changes by population size are statistically significant with respect to time and each other, a series of analytical tests were undertaken. The first test, a

Areas included in each population class (based on 1960 Census of Population)

Class A-1: 3.5 million or more

Chicago, Ill.—Northwestern Indiana

Detroit, Mich.

Los Angeles—Long Beach, Calif.

New York, N.Y.—Northeastern New Jersey
Philadelphia, Pa.

Class A-2: 1.4 to 3.5 million

Baltimore, Md.

Boston, Mass.

Cleveland, Ohio

Pittsburgh, Pa.

St. Louis, Mo.

San Francisco—Oakland,
Calif.

Washington, D.C.

Class B: 250,000 to 1.4 million

Atlanta, Ga.

Buffalo, N.Y.

Cincinnati, Ohio

Dallas, Tex.

Dayton, Ohio

Denver, Colo.

Hartford, Conn.

Honolulu, Hawaii

Houston, Tex.

Indianapolis, Ind.

Kansas City, Mo.

Milwaukee, Wis.

Minneapolis—St. Paul,
Minn.

Nashville, Tenn.

San Diego, Calif.

Seattle, Wash.

Wichita, Kansas

Class C: 50,000 to 250,000

Austin, Tex.

Bakersfield, Calif.

Baton Rouge, La.

Cedar Rapids, Iowa

Champaign—Urbana, Ill.

Durham, N.C.

Green Bay, Wis.

Lancaster, Pa.

Orlando, Fla.

Portland, Me.

Class D: 2,500 to 50,000

Anchorage, Alas.

Crookston, Minn.

Devil's Lake, N. Dak.

Findlay, Ohio

Florence, Ala.

Kingston, N.Y.

Klamath Falls, Oreg.

Logansport, Ind.

McAllen, Tex.

Mangum, Okla.

Martinsville, Va.

Millville, N.J.

Niles, Mich.

Orem, Utah

Southbridge, Mass.

Union, S.C.

Vicksburg, Miss.

regression analysis, was done by taking the natural log of the quarterly "all items" indexes for the five population classes and the United States as functions of time, for example, $\text{Log CPI} = a + b(\text{time})$. The coefficient (b) of the independent variable (time) is the average quarterly rate of change in the index between December 1966 and December 1971. When multiplied by 100, this change gives the average quarterly percentage change in the index over this period.

The results of these regressions, shown in table 7, indicate a great deal of similarity in the average quarterly percentage changes with the range going from a low of 1.13 percent in the smallest population class to a high of 1.33 percent in the largest class. The results also show that during this period the trend of upward price movement was greater the larger the population group. The coefficient on the time variable for each group compares with an average quarterly percent change of 1.25 for the U.S. "all items" CPI over the same period. In each case the coefficient revealed by the regression was found to be highly significant.

To test whether the quarterly rates of change found in the preceding analysis are significantly different from one another, another log equation was employed. The second method was to take the log of the ratio of the two indexes which were to be compared as a function of time:

$$\text{Log}(\text{CPI}_{A1}/\text{CPI}_{A2}) = \alpha + \beta(\text{time})$$

This is the same as subtracting the log equations in the preceding analysis:

$$\begin{aligned} \text{Log}(\text{CPI}_{A1}/\text{CPI}_{A2}) &= \text{Log CPI}_{A1} - \text{Log CPI}_{A2} \\ &= a + b \text{ time} - (a' + b' \text{ time}) \\ &= (a - a') + (b - b') \text{ time} \\ &= \alpha + \beta \text{ time.} \end{aligned}$$

If the difference between the two regression co-

Table 7. Results of regression analysis¹ testing statistical significance of findings

Dependent Variable ²	b Coefficient	Standard error	t Value	Coefficient of determination (R ²)
Log (A1-CPI).....	0.013305	0.000233	59.18	0.995
Log (A2-CPI).....	0.012555	0.000191	65.86	0.996
Log (B-CPI).....	0.012193	0.000236	51.77	0.993
Log (C-CPI).....	0.011690	0.000177	66.22	0.996
Log (D-CPI).....	0.011375	0.000184	61.91	0.995
Log (U.S.-CPI)....	0.012460	0.000201	62.12	0.995

¹ Regression equation: $\text{Log}(\text{CPI}) = a + b(\text{time})$.

² "A1" refers to urban areas with population of 3.5 million or more; "A2", 1.4 to 3.5 million; "B", 250,000 to 1.4 million; "C", 50,000 to 250,000; and "D", 2,500 to 50,000.

efficients or rate of change in prices of the original equations is not significant it will be indicated by the resulting "t" test of the coefficient $\beta = (b - b')$.

Table 8. Results of regression analysis¹ testing significance of findings

Dependent variable ²	b Coefficient	Standard error	t Value	Coefficient of determination (R ²)
Log (A1-CPI/A2-CPI).....	0.000749	0.000109	6.84	0.722
Log (A1-CPI/B-CPI).....	0.001111	0.000122	9.12	0.8222
Log (A1-CPI/C-CPI).....	0.001615	0.000144	11.20	0.874
Log (A1-CPI/D-CPI).....	0.001929	0.000105	18.45	0.950
Log (A2-CPI/B-CPI).....	0.000362	0.000078	4.62	0.543
Log (A2-CPI/C-CPI).....	0.000866	0.000079	11.02	0.871
Log (A2-CPI/D-CPI).....	0.001180	0.000077	15.27	0.928
Log (B-CPI/C-CPI).....	0.000504	0.000090	5.58	0.633
Log (B-CPI/D-CPI).....	0.000818	0.000097	8.48	0.800
Log (C-CPI/D-CPI).....	0.000314	0.000064	4.92	0.574

¹ Regression equation: $\text{Log}(CPI_1/CPI_2) = \alpha + \beta(\text{time})$.

² See footnote 2, table 7.

The results of applying the test to all the possible combinations of the new all items indexes are given in table 8¹. These indicate that the average quarterly percentage change in price for any one population class is significantly different from that of any other population class even at the 1-percent level of significance (at which the "t" test value with 18 degrees of freedom is 2.88). The "t" values along with the coefficients also indicate that the extent to which the quarterly price movements differ from one another increases as the difference in the size of the population classes increases. These results support the earlier regression results which indicated a faster pace of price movement the larger the urban areas. □

— FOOTNOTE —

¹ In testing any two indexes, it does not matter which way the ratio is tested ($\text{Log}(A_1/A_2)$ or $\text{Log}(A_2/A_1)$) since this only affects the sign of the coefficient and not the significance test. The test used is a two-tailed "t" test.

Achieving a perspective on the technological order

We must approach nature with a good deal less bumptiousness than we have in the past. Modesty and absence of arrogance are essential ethical correlates to the enormous powers we have achieved. We can't commit acts of overweening pride against inanimate nature or we will suffer disastrous consequences. This is the Greek idea of hubris. In *The Persians* of Aeschylus, Xerxes is guilty of hubris—not only because he has attacked the Greeks, but because he has done something outrageous to nature. To us his action seems harmless enough—he built a bridge across the Hellespont. But to Aeschylus this seemed an outrage. The realization that nature cannot be recklessly outraged exists in the minds of good applied sci-

entists and good technologists. It deeply affects their thinking. . . .

We can only live in symbiosis with nature. If we treat the relationship intelligently we shall benefit. But thinking we can push nature around is absolutely wrong. It is absurd to attempt—to use that dreadful old-fashioned phrase—to conquer nature. We must take care before embarking on our grandiose technological schemes. The natural balance is easily upset, and we quickly get responses we have not anticipated.

—ALDOUS HUXLEY,

in Melvin Kranzberg and William H. Davenport,
editors, *Technology and Culture*
(New York, Schocken Books, 1972).

Special Labor Force Report
finds male household heads
account for smaller
proportion of joblessness
now than 10 years ago

PAUL O. FLAIM AND CHRISTOPHER G. GELLNER

An analysis of unemployment by household relationship

MUCH ATTENTION has been directed recently to the changing composition of unemployment during the decade of the 1960's. It has been pointed out that the increase in the teenage sector of the population coupled with reduced job market participation among adult men and increased participation among women have gradually altered the composition of the labor force and materially affected the make-up of unemployment.

One of the most widely known studies of the subject was George Perry's, who, in 1970, analyzed the changing age-sex composition of unemployment and the effect of the change on the trade-off between unemployment and inflation.¹ More recently, Carol S. Greenwald focused on the shifting proportion of unemployment accounted for by married men.² Both observed that during the past decade much of the burden of unemployment has shifted from adult men to women and teenagers. They concluded that, consequently, a given unemployment rate reflects less economic hardship on families today than 10 or 15 years ago.

This article examines unemployment in terms of the household status of persons out of work, utilizing data from the Current Population Survey covering the 1962-71 period.³ Our analysis of these data show some of the burden of unemployment has shifted from male household heads—who head most families—to the female members of the household since 1962. This holds for the period before 1969; the trend was reversed during the 1970-71 economic slowdown. (In early 1972, the unemployment rate for household heads leveled off.)

Changing structure of unemployment

In most societies, including this one, it has been the head of the household who traditionally has the primary responsibility for providing sustenance for the family. It follows, therefore, that the welfare of the family is more seriously impaired when the head

of the household becomes unemployed than when any of the other household members lose their jobs. For this reason, it is important, when examining the trend in the levels and rate of unemployment, to disaggregate the numbers to see how unemployment affects each household member.

(It must be remembered that each household group is comprised of persons of many different ages. The data in this article are analyzed by household relationship, not specifically by age. Therefore, any comparison between figures in this article and other data for specific age-sex groups or other demographic groups from the CPS should be made with caution. See the box on data and definitions on p. 11 and table 1.)

Male heads of households. Between 1962 and 1969, the total number of unemployed declined from 3.9 to 2.8 million and the national unemployment rate dropped from 5.5 to 3.5 percent. This decline was attributable largely to a rapid improvement in the unemployment situation for male heads of household. In fact, these workers accounted for about seven-tenths of the decline in the number of unemployed persons over the period, as their jobless rate dropped from 3.6 to 1.6 percent, or by more than half.

Although other household members also experienced a decline in joblessness during the 1962-69 period, they did not fare as well as male household heads. As a result, the proportion of total unemployment accounted for by male heads shrank from 36 to 24 percent of the total during those 7 years. (See table 2.)

It should be noted, however, that part of the reduction in relative unemployment among male household heads stemmed from other though less

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Table 1. Civilian labor force by household relationship and age, 1971 annual averages

Household relationship	Age groups				
	16 and over	16-19	20-24	25-54	55 and over
Total (in thousands).....	84,113	7,453	11,265	50,888	14,507
Household head.....	49,417	354	3,931	33,975	11,156
Wife of head.....	18,224	307	2,301	13,046	2,570
Relative of head ¹	14,887	6,629	4,507	3,162	588
Not related to head ¹	1,585	1,162	526	705	193
Total (percent distribution).....	100.0	8.9	13.4	60.5	17.2
Household head.....	100.0	.7	8.0	68.8	22.6
Wife of head.....	100.0	1.7	12.6	71.6	14.1
Relative of head ¹	100.0	44.5	30.3	21.2	3.9
Not related to head ¹	100.0	10.2	33.2	44.5	12.2

¹ Combined as "other males" and "other females" in this article.

important factors: declining labor force participation among men workers and a simultaneous rise in participation among women, and the rapid growth of the teenage labor force reflecting the "harvesting" of the baby boom of the period immediately after World War II. In short, the proportion of the labor force accounted for by male heads of household shrank somewhat during this period.

Whatever the reasons for this shrinkage, it is clear that the economic hardship for families stemming from joblessness was reduced even more during the 1962-69 period than is evident from a glance at the overall unemployment rate. However, much of this gradual reduction in the share of unemployment borne by male household heads was erased during the ensuing 2 years.

During the 1970-71 economic slowdown, joblessness rose among all family members (as total unemployment increased by 2.2 million), but the steepest rise was clearly experienced by men heading households. As table 2 shows, their proportion of total unemployment rose from 24 percent in 1969 to 29 percent in 1971, highest since 1965.

The unemployment situation for the men heading households deteriorated substantially at the outset of the 1970 economic slowdown,⁴ because during its initial stages, the slowdown fell most severely on the defense-related manufacturing industries where employment consists largely of adult male workers, most of them heads of household. Thus, between the fourth quarter of 1969 and the fourth quarter of 1970 the number of male heads without jobs increased by 600,000 to 1.4 million and their unemployment rate doubled, from 1.7 to 3.3 percent.

It should be noted, however, that despite the de-

terioration in their employment situation in 1970-71, males heading households still accounted for a smaller proportion of joblessness in 1971 than in 1962. Their unemployment rate was slightly lower in 1971 than in 1962 (3.4 percent compared with 3.7 percent) while the rate for other household members was actually higher than in 1962. Thus, the ratio of the unemployment rate for male household heads to the total unemployment rate was lower in 1971 (.58 to 1) than in 1962 (.67 to 1). Compositional shifts in the labor force (by household make-up) also have had an effect in reducing the share of unemployment accounted for by male household heads.

The 1962-71 movements in the overall unemployment rate, in the rate for male heads of household, and in the rate for all other household members are illustrated in index form in chart 1. As shown, the rate for male heads of household dropped much faster than other rates during the 1962-69 period. Although it also increased faster during the 1969-71 period, it did not entirely close the gap opened in the previous period, indicating that at least part of the change may be attributable to long-term rather than purely cyclical factors.

Assuming that unemployment among household heads is the best measure of the economic hardship of households resulting from unemployment, joblessness was less burdensome on families in 1971 than in 1962, even though the rise in the overall unemployment rate from 5.5 to 5.9 percent between these 2 years would indicate an opposite conclusion. This would tend to support the contention that the shifting composition of the jobless population makes problematical any comparison between the current employment situation and that of the early 1960's. However, such a contention would have been clearly more valid 2 or 3 years ago, when the ratio of the unemployment rate for male household heads to the total unemployment rate was at its lowest (.46 to 1). Since then, the pendulum has swung in the other direction.

Female heads of household. Although the great majority of American households—about 78 percent—are headed by males, there is a small but important proportion where the primary responsibility for the economic welfare of household members rests upon a woman. Women heading households accounted for about 7 percent of the labor force in 1962 and about 8 percent in 1971.

To the extent that households headed by women

are less likely to contain secondary earners, the economic hardship resulting from unemployment among female heads may be even greater than that resulting from joblessness among male heads. The unemployment rate for female heads of household may thus be an important indicator of the relative well-being of a sizable proportion of American families.

Table 2 shows the unemployment rate for female heads of household has consistently been higher than that for male heads. It is also not as cyclically sensitive. It did not decline as rapidly as did that for male heads during the 1962–69 upswing. It also rose at a proportionately less rapid pace during the 1970–71 slowdown. As a result, the proportion of total unemployment accounted for by female heads did not vary much during 1962–71. It has, instead, held fairly close to the 7 percent mark.

Closer examination of recent trends, however, reveals that the jobless rate for female heads of household continued to edge upward during 1971, while that for male heads leveled off. The gap between the two rates has thus widened somewhat. Moreover, the unemployment rate for women heading families

in 1971, at 5.4 percent, was somewhat higher than their rate of 5.1 percent in 1962. (As previously noted, the rate for their male counterparts was slightly lower in 1971 than in 1962.)

Wives. Working wives' proportion of total unemployment rose from 18 to 23 percent between 1962 and 1969. This is attributable to (1) a slower decline in their unemployment rate relative to that for most other household members, particularly male household heads, and (2) a relatively rapid rise in their participation in and proportion of the labor force. The number of working wives increased by 4.1 million between 1962 and 1969, two-fifths of the period's total labor force increase.

During the 1969–71 period, the proportion of total unemployment accounted for by wives shrank from 23 to 20 percent, as their unemployment rate rose more slowly than that of male heads of household. (See table 2.) This can be traced to working women's concentration in service-producing industries, which were not as heavily affected in the early

On the data and definitions

The labor force data discussed in this article were collected and tabulated for the Bureau of Labor Statistics by the Bureau of the Census as part of the Current Population Survey (CPS) program. The CPS is a national survey conducted monthly in about 50,000 households. The national unemployment rate that the government releases in its monthly press release is derived from this survey.

For the purposes of the CPS, a household includes all of the persons who occupy a house, an apartment, or other group of rooms, or a room which constitutes a housing unit under Census rules. A group of rooms or a single room is only regarded as a housing unit when it is occupied as separate living quarters, that is, when the occupants do not live and eat with any other persons in the structure, and when there is either (1) direct access or a common hall to the outside or (2) cooking equipment for the exclusive use of the occupants.

Persons occupying a housing unit are classified by household status according to the following definitions:

Head. One person in each household is designated as the head. The head is usually the person regarded as the head by the members of the group. If a husband and wife family occupy the unit, the husband is designated as the head. The number of heads, therefore, is equal to the number of households.

Wife of head. Those women in the households who are married to the heads comprise this category. Since all households are not husband and wife families, the number of wives is somewhat smaller than the number of households.

Relative of head. Household members, except the wife, who are related by blood, adoption, or marriage to the head of household are designated as relatives of the head. Most are the sons and daughters 16–24 of the household head.

Nonrelative of head. This category consists of persons who are not related to the head by blood, adoption, or marriage. Only a very small percentage of all household members fall into this category.

Other males and other females. As used in the tables in this article, this category is the sum of the relative of head and nonrelative of head groups. Approximately 90 percent of the other males and females are related to the head. Throughout this article, both other males and females, and relatives of the head, are often referred to as sons and daughters of the household head, although all three groups are not synonymous.

Table 2. Civilian labor force, unemployment, and unemployment rate by household relationship and sex, 1962-71

Household relationship and sex	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
CIVILIAN LABOR FORCE										
Total (in thousands).....	70,614	71,833	73,091	74,555	75,770	77,347	78,737	80,733	82,715	84,113
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male household head.....	54.8	54.4	54.1	53.6	53.2	52.7	52.3	51.6	51.0	50.6
Other males.....	11.2	11.3	11.2	11.1	10.8	10.7	10.7	10.6	10.9	11.2
Female household head.....	7.3	7.5	7.5	7.7	7.8	7.8	7.7	7.9	7.9	8.1
Wife of head.....	18.7	18.8	19.2	19.5	20.0	20.5	20.9	21.4	21.7	21.7
Other females.....	7.9	8.1	8.1	8.0	8.2	8.4	8.5	8.5	8.5	8.4
UNEMPLOYMENT										
Total (in thousands).....	3,911	4,070	3,786	3,366	2,875	2,976	2,817	2,831	4,088	4,993
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male household head.....	36.4	33.4	31.3	29.9	28.1	25.8	24.8	23.8	27.8	28.9
Other males.....	25.5	27.3	27.0	27.0	25.9	24.9	25.6	25.8	26.9	26.8
Female household head.....	6.7	7.1	7.4	7.5	8.0	7.7	7.6	7.5	6.9	7.4
Wife of head.....	17.9	17.6	18.4	19.1	18.9	23.5	22.1	23.4	21.0	20.4
Other females.....	13.5	14.6	15.9	16.6	19.2	18.1	20.0	19.5	17.4	16.6
UNEMPLOYMENT RATES										
All workers.....	5.5	5.7	5.2	4.5	3.8	3.8	3.6	3.5	4.9	5.9
Male household head.....	3.7	3.5	3.0	2.5	2.0	1.9	1.7	1.6	2.7	3.4
Other males.....	12.6	13.7	12.5	11.1	9.2	9.0	8.6	8.5	12.2	14.1
Female household head.....	5.1	5.4	5.1	4.4	3.9	3.8	3.5	3.4	4.3	5.4
Wife of head.....	5.3	5.3	5.0	4.4	3.6	4.4	3.8	3.8	4.8	5.6
Other females.....	9.5	10.2	10.3	9.4	8.9	8.3	8.4	8.0	10.1	11.8

stages of the economic slowdown. Another stabilizing factor, as far as their unemployment rate is concerned, is the relative elasticity of wives' labor force participation. Their participation rate has tended to rise rapidly when the demand for labor is strong, and to slow down considerably when demand slackens off. When the unemployment rate for wives peaked at 5.7 percent in the first quarter of 1971, up from 3.8 percent in 1969, the rate of growth of their labor force contracted sharply.

Young household members. The highest incidence of unemployment among household members has long been experienced by the younger relatives (mostly sons and daughters) of the household head—generally labeled in this article “other males” and “other females.” Their rate of unemployment has, in effect, been running about four times that of male household heads (who have the lowest rate). Consequently, these young workers accounted for a much greater share of unemployment than of the labor force. (See table 2.)

The household group denoted as “other males” has accounted for slightly over one-tenth of the labor force and slightly over one-quarter of the unemployment. These proportions have varied only modestly during 1962-69's declining unemployment and 1969-71's rising joblessness. Such variations as oc-

curred—a slight decline around 1966-67 and a slight increase in 1970-71—appear to reflect temporary absorption of many youths into the Armed Forces, rather than cyclical swings of the economy.

By contrast, the labor force share of “other females”—made up mostly of daughters of the household head—has not changed much during the past decade, inching up only slightly from 1962 to 1971. Their share of the unemployment total, on the other hand, rose substantially—from 13.5 to 19.5 percent during 1962-69—as their unemployment rate declined more slowly than the overall rate. From 1969 to 1971, the unemployment rate for these young women rose more slowly than the overall rate, and their share of total unemployment declined significantly—from 19.5 to 16.6 percent. As in the case of older women, particularly working wives, labor force participation among younger women also tended to rise rapidly during 1962-69 and to slacken off when the employment situation deteriorated (1969-71).

Together the young household members (“other males” and “other females”) accounted for 43.4 percent of unemployment in 1971, down from 45.3 percent in 1969, but still substantially above their 39.0-percent share in 1962. Conversely, despite the rapid increase in their population, young workers still account for barely 20 percent of the labor force.

Of the male and female relatives of the household head in the job market in 1971, three-fourths were 16 to 24 years old; however, among those unemployed nearly nine-tenths were in that age bracket. During the 1960's, there was a decline in the median age of both, reflecting the massive entry into the labor market of young workers born during the 1946-56 "baby boom." When first entering the job market, young workers have little or no job experience and frequently change jobs, thus experiencing much joblessness during turnover periods.⁵

Unemployment among young members of households should be viewed in the context of our assumption about the relative importance of unemployment of household heads to that of other household members. Only a small proportion of youths can be considered their families' main earners or a

source of vital supplemental family income. Many are still in school, seek only part-time work, and thus have only marginal ties to the labor force.

Moreover, the rapid growth of the youth labor force witnessed during the 1960's will not continue in the 1970's. In fact, the proportion of the population accounted for by 16- to 24-year-olds will decline as persons born during the "baby boom" grow older. This demographic change should lead to less relative unemployment for youths during the decade because their labor force will be smaller.

Unemployment distribution by color

In 1971, nearly one-third of the white jobless, compared with less than one-fourth of the Negro unemployed, were men heading households. On the

Chart 1. Indexes of trends in unemployment rates of male household heads and other workers, 1962-71

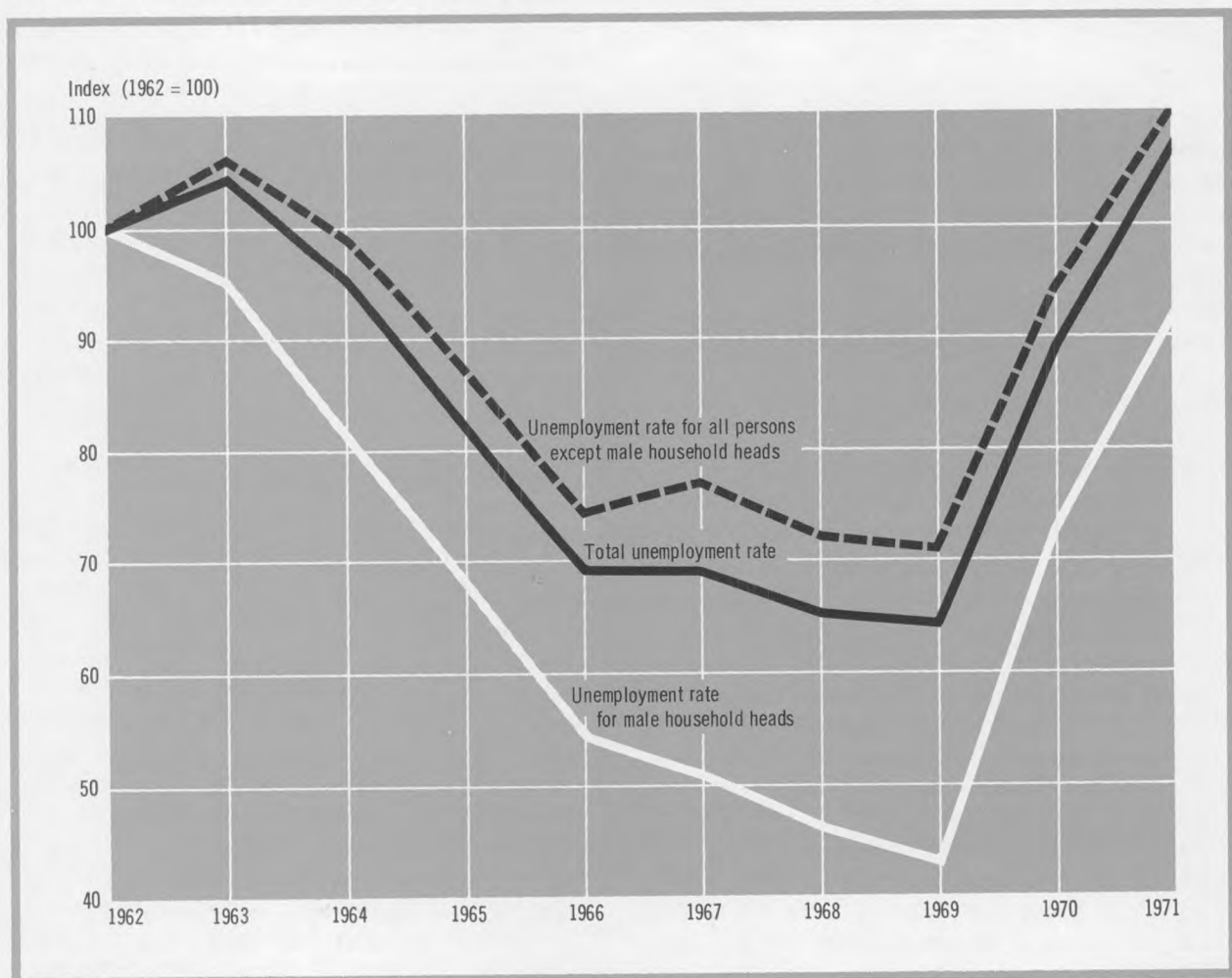


Table 3. Unemployment distribution by household relationship, sex, and color, 1963-71¹

Household relationship and sex	1963	1964	1965	1966	1967	1968	1969	1970	1971
WHITE									
Unemployed (in thousands).....	3,208	2,999	2,691	2,253	2,338	2,226	2,261	3,337	4,074
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male head.....	34.6	32.6	31.0	29.4	27.5	26.3	25.3	29.4	30.2
Other male.....	26.9	26.8	26.8	25.7	24.2	25.1	25.0	26.2	26.3
Female head.....	6.6	6.9	6.7	7.1	6.9	7.0	6.7	6.2	6.4
Wife of head.....	18.2	18.8	19.6	19.8	24.7	23.0	24.8	22.1	21.4
Other female.....	13.7	14.9	15.9	18.0	16.7	18.7	18.1	16.2	15.7
NEGRO AND OTHER RACES									
Unemployed (in thousands).....	864	786	676	621	638	590	570	752	19.9
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male head.....	28.5	26.4	25.1	23.2	19.4	19.3	17.7	20.8	23.0
Other male.....	29.0	27.7	28.1	26.8	27.5	27.6	28.9	29.6	28.6
Female head.....	9.1	9.2	10.8	11.3	10.5	9.7	10.7	10.1	11.9
Wife of head.....	15.5	16.9	17.0	15.4	19.2	18.6	17.7	16.4	15.8
Other female.....	17.9	19.7	19.0	23.3	23.3	24.7	24.9	23.2	20.9

¹ The year 1963 is the first for which unemployment data by household relationship and color are available.

other hand, the proportion of unemployment accounted for by women heading households and by the young members of the family is greater among blacks than among whites. (See tables 3 and 4.)

These differences in the composition of unemployment are related to a larger proportion of Negro households being headed by women than is the case with whites. Moreover, younger members of black households are less likely to continue in school than whites, and thus they make up a relatively large share of the Negro labor force. Also important, the incidence of unemployment among black youths, particularly girls, has been inordinately high.

Despite differences in the proportion of female household heads, changes in the composition of unemployment during the 1963-71⁶ period have been fairly similar for blacks and whites (table 3). Among both, it was male household heads who benefited most from the decrease in unemployment during the 1960's and who, in turn, experienced a disproportionate share of rising joblessness in 1970-71. However, as table 3 shows, the share of black unemployment accounted for by male family heads continued to grow through 1971, while the increase among men heading white families leveled off after 1970. Notwithstanding these differences, black and white men heading families experienced the same relative proportion of unemployment in 1971 as in 1966.

Since a relatively large proportion of black women head families, their unemployment situation should be looked at in the context of our basic assumption about joblessness of household heads. Table 3 indi-

cates their situation has not been as sensitive to the business cycle as that of their male counterparts but they have been accounting for a steadily increasing share of Negro unemployment since 1968. A relatively rapid increase in the number of black households headed by women has led to their increased representation among the unemployed.

Black wives were also not strongly affected by cyclical developments during 1963-71. Their rate of job market participation did not rise as much as that of white wives. Largely because the participation rate of white wives increased relatively rapidly during the 1960's, the proportion of total white unemployment accounted for by wives rose from 18 percent in 1963 to 25 percent in 1969. In comparison, black wives' share of black unemployment rose from 16 to 18 percent, the entire increase occurring before 1967.

In both black and white households, the unemployment of wives rose relatively less than that of other members of the household between 1969 and 1971. (See table 3.) The rise in unemployment among wives was dampened by a temporary curtailment in their rate of entry into the labor force during 1971 which was probably induced by the economic slowdown. Partly due to these developments, wives' share of unemployment among whites fell to 21 percent in 1971, lowest since 1966. Wives' share of Negro joblessness moved down to 16 percent in 1971, the same as in 1963.

The relative unemployment of both black and white sons of the household head ("other males")

has been twice as large as their proportion of the labor force. However, their proportionate unemployment has remained relatively stable since 1963. By contrast, the shares of unemployment accounted for by daughters in black and white families ("other females") increased markedly between 1963 and 1969 but receded somewhat in 1970-71. One explanation for this decline was the curtailment in the growth of the young women's labor force, which resulted in part from discouragement over job prospects.

The number of black daughters in the labor force did not increase throughout the entire 1970-71 period, although their population continued to grow. Apparently, the entry of the younger female members of the black household into the job market is extremely sensitive to their perception of the availability of job opportunities.

Long-term joblessness

The severity of unemployment depends not only on the number and proportion of a group's members who are unemployed but also on the length of time they remain jobless. In 1971, for example, about one-third of jobless men heading households and one-fourth of women heading households were unemployed 15 weeks or longer. Table 5 shows the proportion of both male and female household heads remaining unemployed for at least 15 weeks declined substantially between 1964 and 1969. How-

ever, it also rose dramatically between 1969 and 1971, erasing practically all of the previous improvement. Most of the recent rise in long-term joblessness among heads of households occurred in 1971. (See table 5.)

Working wives and young family members tend to remain unemployed for shorter periods than the household head, even though they are more likely to be unemployed at any given time. Both groups leave the labor force in time of poor job prospects more quickly than men or women household heads.

In 1971, about 21 percent of the jobless wives were out of work 15 weeks or longer, up from 13 percent in 1969. Long-term joblessness also increased significantly among younger members of the household in 1970-71, after declining gradually but steadily during 1964-69. The proportion of sons of household heads jobless at least 15 weeks doubled (10 percent in 1969 to 21 percent in 1971); the proportion for young females in this category increased from 10 to 15 percent. The comparatively larger increase among young men may be attributed partly to the influx of a larger number of young veterans into the job market and the long delay many encountered before finding jobs.

Family responsibilities and job experience of heads of household account for the apparent anomaly of their having the lowest unemployment rate coupled with the highest proportion of long-term joblessness. Household heads tend not to drop out

Table 4. Civilian labor force, unemployment, and unemployment rate by household relationship, sex, and color, 1969-71

Color, household relationship, and sex	1969			1970			1971		
	Civilian labor force	Unemployment	Unemployment rate	Civilian labor force	Unemployment	Unemployment rate	Civilian labor force	Unemployment	Unemployment rate
White	71,779	2,261	3.1	73,518	3,337	4.5	74,790	4,074	5.4
Male household head.....	37,836	572	1.5	38,309	981	2.6	38,694	1,230	3.2
Male relative of head.....	6,791	543	8.0	7,099	822	11.6	7,410	1,004	13.5
Male nonrelative of head.....	558	22	4.0	606	53	8.8	698	68	9.8
Female household head.....	5,235	152	2.9	5,316	206	3.8	5,603	261	4.7
Wife of head.....	15,478	561	3.6	16,090	736	4.6	16,320	873	5.3
Female relative of head.....	5,298	390	7.4	5,447	507	9.3	5,447	597	11.0
Female nonrelative of head.....	584	20	3.4	606	32	5.2	618	42	6.7
Negro and other races	8,954	570	6.4	9,197	752	8.2	9,322	919	9.9
Male household head.....	3,795	101	2.7	3,899	156	4.0	3,892	211	5.4
Male relative of head.....	1,071	156	14.6	1,126	207	18.4	1,168	248	21.2
Male nonrelative of head.....	170	9	5.1	157	15	9.8	160	15	9.4
Female household head.....	1,108	61	5.5	1,133	76	6.7	1,228	109	8.9
Wife of head.....	1,833	101	5.5	1,899	123	6.5	1,904	145	7.6
Female relative of head.....	871	136	15.6	865	165	19.1	862	181	20.9
Female nonrelative of head.....	105	6	6.0	118	9	7.8	108	11	10.1

of the labor force when unemployed. On the other hand, other members of the household often leave the labor market when job prospects are poor. Nearly half of unemployed household heads (men and women) are over 45 years old. Thus, they have most of their work experience in a particular profession or occupational specialty. When unemployed, they prefer re-employment in their special field. Moreover, many employers are reluctant to hire older workers outside their specialties because re-training might be required and older workers can return fewer years of service for the training investment. Many unemployed household heads, therefore, continue their search until they find a job in their former occupational specialty or one which requires similar skills.

Table 5. Percent of unemployed¹ workers jobless 15 weeks or more, by household relationship and sex, 1964–71

Household relationship and sex	1964 ²	1965	1966	1967	1968	1969	1970	1971
Total unemployed.....	25.1	21.8	18.0	15.1	14.6	13.2	16.2	23.7
Male, total.....	26.8	23.2	20.4	16.8	16.0	14.5	17.8	26.4
Household head.....	30.6	27.8	24.8	21.0	20.5	19.5	21.6	31.2
Relative of head.....	22.4	18.2	15.8	12.3	11.7	10.0	13.6	20.8
Nonrelative of head.....	26.3	26.4	21.6	21.2	10.0	6.5	15.9	28.9
Female, total.....	22.7	20.0	15.2	13.2	13.2	12.0	14.3	20.2
Household head.....	26.5	27.8	21.0	18.0	18.3	14.6	18.5	26.6
Wife of head.....	23.8	19.9	14.4	12.3	12.9	13.3	14.8	21.3
Relative of head.....	19.9	16.8	13.4	12.4	12.0	9.7	12.1	16.1
Nonrelative of head.....	19.4	18.5	13.7	11.5	7.1	7.7	12.2	15.4

¹ Persons 14 and 15 years old are included in the data for the years 1964, 1965, and 1966 shown in this table (unlike other tables and the chart in this article). However, the number of unemployed 14- and 15-year-olds is small and should have only a minor effect on the proportions of the unemployed by duration of joblessness.

² 1964 is the first full year for which duration of unemployment data by household relationship are available.

THE COMPOSITION of unemployment by household relationship has changed markedly over the past decade. There has been a shift from men heading households to working wives and the younger females in the household. This shift occurred before 1969. Since then (1970–71), the relative unemployment of men heading families has grown most. Thus while male household heads account for a smaller proportion of total joblessness than in 1962, they represent a higher proportion than 2 or 3 years ago. This means that any given level or rate of unemployment reflects less economic hardship on families today than in 1962 but more than in 1969, based on the assumption that the share of unemployment accounted for by household heads is the best variable for measuring the relative economic hardship of any given level of unemployment. □

— FOOTNOTES —

¹ See George L. Perry, "Changing Labor Markets and Inflation," *Brookings Papers on Economic Activity: 3* (Washington, D.C., 1970), pp. 411–441.

² See Carol S. Greenwald, "The Changing Composition of the Unemployed," *New England Economic Review*, July/August 1971, pp. 2–10.

³ Period selected because 1962 is the first year for which labor force data by household relationship are available from the Current Population Survey (CPS).

⁴ See *Employment in Perspective* (BLS Report 380, 1970), for a detailed analysis of the initial effects of the 1970 economic slowdown on the various labor force groups.

⁵ For a discussion of the effect of turnover on the unemployment rate for different groups, see Robert E. Hall, "Why is the Unemployment Rate so High at Full Employment," *Brookings Papers on Economic Activity: 3* (Washington, D.C., 1970), pp. 369–402.

⁶ The year 1963 is the first for which labor force data by household relationship and color are available from the CPS.

Manpower programs for criminal offenders

Vocational, educational, work release, and other approaches to the complex employment needs of released prisoners are being tested

ROBERT TAGGART

THERE are now some 400,000 persons in jail and another million on parole or probation. Hundreds of thousands more have been arrested and are awaiting trial or else, having served their sentences, have been recently released into the community. Other millions carry the stigma of a criminal record.

These criminal offenders are a diverse group with complex problems. They differ in the seriousness of their offenses, their legal status, the degree of public control over their activities, and their individual characteristics.¹ A common denominator, however, is that they very often have difficulties in the world of work. Despite wide variation in their labor market potential and their amenability to assistance, a large proportion of criminal offenders have employment problems and need help.

Offenders' illicit activities are frequently related to their lack of success in the job market. A survey of men released from Federal prisons² found that—even though their median age was 29—more than one-tenth had never been employed and more than half had been employed a total of less than 2 years before incarceration, often because of earlier troubles with the law. After release, their unemployment rate was three times the average for all other males in the same age bracket.

Criminal offenders also tend to be drawn from, and end up in, the lowest paying jobs and lowest status occupations. The survey further showed that more than half the released men had worked in unskilled or service jobs prior to commitment, and more than two-fifths returned to such jobs upon release. The median monthly income of those employed was only \$256, at a time when the national average in the private nonagricultural sector was \$394.

It must be recognized, certainly, that the released

prisoner is not the only one with an employment problem. The sorting process may "weed in" to the correctional system those with the most severe difficulties, but there are many who have never been inside a court or jail who are also "losers" in the world of work. Nevertheless, the employment problems of offenders are special, for several reasons.

Offenders have special needs

First, the very fact of arrest and imprisonment exacerbates their difficulties. An individual removed from the labor market tends to have trouble in getting and holding employment upon return. This fact is recognized in the case of servicemen and women, and the veteran is helped in the transition by special government efforts and favorable public attitudes. Being in jail or prison creates even more severe frictional adjustment problems, and the released man or woman is further handicapped by constricting laws, discriminatory hiring practices, and negative public opinion.

Second, there are, in addition to the economic dimensions, criminal implications that cannot be avoided. Most notably, the circumstances or pressure which led to involvement with the law have a high probability of recurring, and consequently again leading to dropping out of work or training. On the other hand, to the extent employment problems are a casual factor in criminal activity, their solution may reduce crime and its costs.

Third, offenders' needs are special simply because they receive so little attention. Over the years, their manpower problems have been either ignored or ineffectively addressed. The justice system has done relatively little to help them with their employment-related difficulties. What rehabilitation efforts have been made—and these are limited by shortages of funds and personnel—have been directed more toward changing behavior patterns than toward helping overcome personal handicaps and institutional

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barriers conducive to failure in the labor market.

The extensive manpower system that serves other disadvantaged groups has largely ignored the employment problems of offenders. In recent years some important first steps have been taken, but to date their aggregate impact has been minimal. Persons on probation or parole, or awaiting trial, may get help from general manpower programs, such as the Concentrated Employment Programs (CEP) or Job Opportunities in the Business Sector (JOBS); they may be placed and counseled by the Employment Service; or they may get special attention in halfway houses. Nevertheless, outside of State and Federal prisons, the overwhelming majority of offenders receive little special help in preparing for or finding jobs, and they are often screened out rather than screened into manpower programs.

The burden of providing education, training, and rehabilitation has therefore fallen largely to the prison system, which has usually been unsuccessful in this mission. Less than 1 out of 20 State prisoners receives training, only 1 out of 5 receives any basic education.³ A larger proportion of Federal inmates receive vocational training, but this may consist simply of work in prison industries, which teach few transferable skills.

Innovative programs have developed

Though operational efforts are still limited, research into the employment problems of offenders and the manpower aspects of corrections has expanded dramatically in the past few years. A Justice Department survey in August 1971 estimated that a variety of agencies were spending over \$11 million on specifically research-oriented activities, and many millions more on operational efforts of an experimental nature.⁴ Many of the funded research projects, regardless of their prime focus, have manpower aspects. Most significant, however, are the efforts of the U.S. Department of Labor. In fiscal 1971, it accounted for \$4.7 million of the \$11 million spent by Federal agencies for research and experimentation and most of that dealing with manpower problems.

In addition, offender manpower programs are also beginning to be implemented on an operational basis, often as a result of previous experimental and demonstration projects. In fiscal 1971, the Department of Labor spent \$13.7 million for operational programs. In fiscal 1972, its total expenditures for offenders were planned at nearly \$30 million.⁵

Numerous strategies are needed

A variety of conceptually distinct approaches have emerged as a result of this experimentation. Some have been widely implemented, others have been given only limited tests. Among them are pretrial intervention, community treatment, vocational training in prison, education in prison, working in prison, work release, postrelease services, and jobs in the public sector.

Legislation is pending which would implement these strategies on a much broader scale. It is likely that in the near future increased funds will be provided for manpower services to offenders. It is important, therefore, to determine which of the various approaches show the most promise. Careful study of a number of separate projects embodying one or more of these approaches provides no clear-cut answers. Their lessons are disparate and subject to reservations, but they do offer clues about the effectiveness of some strategies and the lack of effectiveness of others. And, perhaps more important, they highlight the impediments that must be overcome if manpower services are to help offenders.

Pretrial intervention. Services to persons awaiting trial have been shown to be an effective manpower tool, particularly with those in the courts for only their first or second time.

Experimental programs such as the Manhattan Court Employment Project, in New York City, and Project Crossroads, in Washington, D.C., were successful in improving work experience and lowering the rates of recidivism by providing counseling, training, and especially placement to younger persons awaiting trial, with the disposition of the case depending, in part, on successful participation in these efforts. For instance, 44 percent of the participants in Project Crossroads had an average wage of \$2 an hour or more 1 year after the project, compared with 20 percent at intake.⁶ In the year prior, 30 percent worked less than four-fifths of the time, compared with nearly half in the year following. Recidivism rates also improved, at least during the supervision of the program. A cost-benefit analysis which weighed the \$200 per enrollee cost per month against employment gains and savings in correctional costs found the project worthwhile, with a cost-benefit ratio between 1.8 and 2.2.⁷

The experience suggested that, for one thing, manpower programs apparently work best with those in their early twenties, who have matured out of the

teenage life style but have not yet gained a foothold in the employment market. Careful screening is necessary to identify and screen out regular drug users and others with severe problems who need more sustained and intensive assistance. It is imperative also that predisposition agreements be worked out with the courts, so that judges and other officials will take successful participation into account in disposing of cases. With these caveats, it appears likely that the modest success of these experimental pretrial intervention programs can be repeated.

Community treatment. For many offenders, community treatment is at least as effective as institutionalization, and it certainly costs less. Recognizing this, and faced with overflowing prisons and jails, the courts have directed an increasing proportion of convicted offenders back into the community.

One approach is to enlarge upon current programs, by intensifying regular probation services, reducing caseloads, and in some cases adding specialists, including manpower personnel. A second approach is nonresidential treatment, such as guided group interaction in a daytime program that includes employment counseling and other assistance, or intensive residential treatment, in which offenders are assigned to live in community facilities outside regular prisons and jails. As a third approach, offenders may be directed, as a condition of probation, to a manpower agency that would coordinate their participation in existing community programs. This could be a community action agency, the vocational rehabilitation service, or the Employment Service.

Despite the attention these strategies have received and their expanded use, they still serve a relatively small proportion of the rapidly growing number of probationers. More than this, the extent of their effectiveness has yet to be demonstrated. For instance, data from experiments with "probation plus" have shown that merely reducing probation officers' caseloads does not increase the officers' success rate.

The most far-reaching effort, California's Community Treatment Project (CTP), provides intensive counseling along with basic education, halfway house residence, and in some cases placement; it uses a typological classification system in assigning participants to probation officers and to other activities. Followup data suggest that this works, since between 1961 and 1968, 31 percent of CTP partic-

ipants had violated parole or were arrested within 15 months, compared with 50 percent of the control group.⁸

Manpower services, however, have not yet played any significant role in these community treatment approaches for probationers. One-stop, individualized manpower services are probably needed. Existing institutions in the community can be utilized, and the court can require participation.

Training in prison. Intensive vocational training may be provided within prisons—in much the same way as it is now offered in MDTA institutional programs elsewhere—combined with supportive services such as counseling, basic education, incentive payments, and placement. So far, however, this approach has had a rather mixed record. In the early 1960's, a number of demonstration efforts suggested a positive effect—in particular, the Rikers Island Project in New York, which offered computer training to young male prisoners. A year after, of the total released, 48 percent of the experimental group had committed crimes which returned them to jail or prison, compared with 66 percent of a control group. Nearly half of the experimental group were in white-collar jobs, compared with one-fifth of the nonparticipants, and only 5 percent worked at physical labor, compared with 22 percent of the controls.

In 1966, Congress authorized prison projects under the Manpower Development and Training Act, and there are now an estimated 55 projects with some 5,000 trainees. These appear to have been less successful than the earlier demonstration projects. A study of 25 individual programs funded from 1968 through 1969 revealed meager impact.⁹ Recidivism was reduced between 3 and 5 percent, but there was little improvement in employment status. Trainees were more likely than controls to be employed after 3 months, but less likely to be employed full time after 6 months. While earning slightly higher wages, trainees worked less of the time and tended to earn less overall.

If vocational training in prison is to be successful, formidable obstacles must be overcome: inadequate resources, physical isolation of prisoners, deficiencies of inmates selected for training, lack of supportive services, and antagonism of prison staffs. Selection for training must be based on the prisoner's ability to benefit rather than on seniority, docility, or expendability from prison work. To insure that trainees have the chance to apply what they have learned,

supportive services, especially job development and placement, must be provided. And, perhaps most vital, the prison staff must be involved in and committed to the training program.

Prison education. The correlation between education and job success applies to offenders as it does to others in the labor force. While prisons offer educational opportunity more often than other manpower services, only a small proportion of the prison population are served. Generally speaking, the programs are understaffed and underfinanced and have little effect on participants.

In the past few years, however, some new approaches have been undertaken. One of these is "programmed learning," in which each student moves at his own pace through a series of discretely packaged lessons in diverse subjects. At the Draper Correctional Center in Elmore, Ala., intensive basic education was provided, along with vocational training. In the initial experiment, most inmates received 2 hours of instruction 5 days a week for half a year. Teaching machines were used extensively, the pupil-teacher ratio was 12 to 1, and each instructor had a college student aide. As a result of this intensive assistance, participants gained an average of 1.4 grades in their 208 hours of instruction, according to standardized achievement tests.¹⁰ Much of this gain was from relearning previously forgotten information, but the fact remains that out of almost 400 enrollees, 72 were able to pass a high school equivalency test. This was obviously a useful credential in the job market, since those who passed the examination increased their earnings more than four times as much as those who did not.

There are significant limitations, however, on effective education programs within prison. Physical isolation, antipathy of personnel, and negative influences from the peer group are as much of an obstacle to educational programs as they are to vocational training. Given the short duration of stay of most prisoners, only marginal gains can be made in education. Specific job skills—which permit the offender to perform on a given job—can be learned in 6 months or a year, but the contribution of an extra 1 or 2 years of schooling has no direct effect on performance or employability (although it may improve it indirectly). Unless education is combined with training, or leads to a recognized credential such as the General Educational Development (GED), it will mean little to employers.

Work in prison. It is a generally accepted principle that prisoners should work. Aside from the obvious purpose of providing some activity for those in enforced idleness, there are other benefits to the institution and to the inmates. Costs can be reduced if prisoners handle the maintenance of the institution. They will be reduced even more if the products of prison labor can be sold at a profit. The work experience itself may have some rehabilitative effect, and skills picked up on the job may be carried over to private life.

Disagreement comes over the purposes and kinds of work that should be done. Laws at the State and Federal levels restrict the use of prison labor, partially to protect against exploitation and partially to eliminate competition. Labor unions have generally strongly opposed any expansion of prison industries. For the most part, interstate transportation of convict-made goods is prohibited, and State prisons largely produce for State use (for example, making automobile licenses, renovating furniture, and recapping tires). Executive Order 325 restricts the Federal Government from buying the products of these State prison workshops.

With limited markets for their goods, prisons can employ only a minority of the inmates. Operating with out-of-date equipment and producing a limited range of specialized products, prison industries teach few skills that can be carried over into the outside world. Survey data indicate that those who worked in Federal prison industries were more likely to be unemployed upon release than those who had worked at unskilled maintenance.¹¹ Assignments are often made on the basis of seniority, docility, length of sentence, or other criteria which bear little relation to the job. With all workers often paid the same hourly rate, and supervisory positions earned through good behavior rather than job performance, there is little incentive to produce.

One proposal, as a way to overcome these problems, is to attract to the prisons competitive private businesses. These firms would have access to the inmate labor force with minimal restrictions, would pay market wages based on productivity (some proportion of which could be paid to the prison for room and board), and would produce goods for sale in the outside market. To make this approach feasible, State and Federal laws and regulations concerning the sale of prison-made goods may need to be amended.

There are obvious drawbacks to this approach.

Attracting businesses to any isolated location is difficult, and to find industries willing to work within the prison setting is not likely to be easy. If private industries were to operate within the prison, some system would have to be devised for the establishment of "prevailing" levels of wages, working conditions, and other such matters that are generally collectively bargained in the private sector.

Work release. Perhaps a better way of giving prisoners viable work experience is to release them for jobs in the private or public sector. Working full time during the day and returning to the prison at night, the prisoner will be under some control without being removed entirely from the economic and social mainstream. Out of his earnings, maintenance costs can be repaid to the prison, he can be given an allowance, his family can be supported, or he can save a nest egg to cushion his release.

This is borne out by the experience of the Federal work release program over its first 14 months, beginning in 1966. Some 2,000 inmates participated, paying State and Federal taxes amounting to \$303,000, sending \$327,000 home for families, saving \$700,000, spending \$527,000 in the local communities, and paying the prison system \$203,000 for upkeep. This total of more than \$2 million was for the most part a net addition to the economy and to the individuals. There was some problem with escapees, but it was generally within manageable proportions.¹²

Federal and most State laws permit work release. But, although experience has shown it to be relatively effective, only a small minority of prisoners are allowed to seek jobs outside. Isolated prison locations and transportation difficulties often rule out this approach. And in many cases, the custodial staff is reluctant to give special help to those they consider security risks. As a result, less than a tenth of all Federal prisoners participated in work release programs in fiscal 1970. At the State level, the proportion is much smaller,¹³ and work release is rarely used by local jails where it could have potentially the greatest impact. Here, the majority of prisoners are either awaiting trial or serving short terms; once they are jailed, they lose their jobs even though their offense and sentence may be minor. Most local jails are in close proximity to jobs and many prisoners could keep working while serving time. This would alleviate transitional employment problems and could substantially reduce costs.

Postrelease services. For the most part, parolees are left on their own to sink or swim. Parole staffs are overburdened, and they can do little outside of checking against violations. Some States have parole personnel specifically assigned to help with employment problems, but the number is inadequate to the task, and parolees ordinarily receive little assistance in finding or holding jobs.¹⁴

Project Develop, operated from 1966 to 1968 under a grant from the U.S. Department of Labor to the New York State Division of Parole, attempted to measure the effect of postrelease manpower services. It provided vocational guidance, work orientation, counseling, education, training, support, placement, and followup assistance to young (17 to 23 years old), undereducated, and underemployed parolees with above-average intelligence, at a cost of \$2,400 per person completing the program.¹⁵ Within the 2- to 10-month period involved, the proportion violating parole or rearrested for a new crime was 15 percent among participants, compared with 23 percent among the control group, and the proportion sent back to jail was halved (6 percent for the experimental group, 12 percent for the controls). Although these differences are not statistically significant, they suggest that the manpower services had a favorable effect on recidivism.

One vital component of postrelease services is job placement and development. In the MDTA prison project, placement rates were much higher when active efforts were exerted by the Employment Service and the project staff than when participants were left to their own devices. The U.S. Labor Department is funding a pilot project in five States to hire special Employment Service personnel who, working in the institutions as well as in the community, will make special efforts to assist offenders, coordinate local services, and develop jobs for and place parolees.

Public employment. The most direct way to provide jobs for offenders is to hire them for positions in the public sector. This could be handled in several ways.

First, transitional jobs could be provided to serve as a steppingstone to permanent positions in the public sector. This is the idea behind the Emergency Employment Act of 1971, which provided \$1 billion to State and local governments to hire the unemployed and disadvantaged for temporary jobs, with the expectation that they could move to permanent payrolls. Guidelines for the program specifically

stated that criminal records should not be an impediment to employment.

Second, "new careers," carefully structured to provide former prisoners with the education, training, and experience needed for advancement, could be opened in the public sector. One source of such jobs is the corrections system itself. Many of its jobs require only limited skills and could be filled from the offender population. Paraprofessional positions could be developed from which offenders, after training, might move into higher level jobs.

A few steps have been taken in this direction. Some former prisoners have been hired and trained as guards and counselors within prisons under the New Careers program.¹⁶ The Manhattan Court and Crossroads project used some released personnel as paraprofessionals, claiming that their ability to understand and communicate with the clientele made them effective counselors.

Third, temporary jobs in the public sector could be provided for offenders immediately after their release from prison or jail. These positions could serve as a short-term holding action until permanent placement was achieved in the public or private sector, thus providing income and stability during the difficult transition period.

Though the arguments for public employment efforts for offenders are compelling, there are drawbacks to any massive implementation. Experience under the Emergency Employment Act indicates the public sector can absorb a large number of unemployed in transitional jobs—150,000 were put to work within 8 months,¹⁷ but it is unlikely that anywhere near this number of offenders could be helped. Many agencies would balk at hiring former prisoners, especially if they were expected to move them onto permanent payrolls. Experience under the Emergency Employment Act has shown there is great reluctance to change or bend existing hiring policies, even for "deserving" unemployed. And where former prisoners have been hired, the results have not been such as to generate enthusiasm elsewhere. In Washington, D.C., where many participants had serious criminal records, the majority of early terminations were the result of further involvements with the law.

The provision of Federal funds for permanent rather than transitional jobs might make local, State, and Federal agencies more willing to hire former prisoners. But the number of permanent "new careers" should not be exaggerated. The effectiveness

of paraprofessionals or the potential market for their services has not yet been proved, and the reservations of correctional personnel cannot be ignored. There are, after all, some risks involved in manning prisons and jails with former inmates.

Transitional public jobs for recently released prisoners and work programs as alternatives to jail also have limitations. While some useful work can be performed by the relatively unskilled on an intermittent basis, experience with public employment of the disadvantaged has not demonstrated any great success in this line.

Though these reservations suggest that public employment is not a panacea for the employment difficulties of offenders, they do not negate the need for expanded efforts. Under current economic conditions, public employment programs—for all their shortcomings—appear to have the most potential in providing manpower services to offenders.

The lessons must be applied

Experience with manpower programs for offenders is limited. There is no rigorous proof that any strategy is effective, or that all of them together can have significant impact.

But public action cannot be delayed until everything we would like to know has been learned. Neither should it proceed by ignoring the lessons of the past, especially when these are negative. The most effective public policy is therefore one which combines experimentation and measured expansion. If this path of moderation is taken, the following lines of action would be pursued.

First, greater effort would be exerted toward monitoring and evaluating existing programs. There are no data, for instance, on the number of, and success of, former prisoners in existing manpower programs. Despite several investigations, there is little comprehensive information about the effectiveness of prison education or training. And too few projects follow up their participants in any longitudinal way to discover if the services have a longrun effect.

Second, new strategies would be put to the test to fill gaps in our knowledge. As examples, projects could be initiated offering manpower services to probationers, for whom little has been done. Competitive industries might be attracted in or near a few prisons. Training release might be offered to prisoners for participation in community manpower programs. Manpower specialists might be assigned to the court to aid in the disposition of cases.

Third, improvements would be made in the existing experimental methods. Too many agencies are now funding too many projects. The results are scattered, poorly evaluated, and difficult to assess in any aggregate way. Some jurisdictional lines and mechanisms for coordination are needed. The method used by the U.S. Department of Labor in testing the MDTA approach is optimal: from a limited number of projects demonstrating the feasibility of a strategy, it proceeded to implementation on a broader scale with a standardized approach and reporting procedure which facilitated measurement and comparison.

Fourth, greater emphasis would be placed on institutional change. Some of the experimental and demonstration projects have led to reform of the corrections system. For instance, the Draper Project contributed to the integration of Alabama prison facilities. With proper oversight and control, and more careful planning for this purpose, Federal funding could provide leverage for change.

Fifth, some services would be expanded. The experiments with pretrial intervention have been moderately successful and should be further extended. Work release has also been relatively successful, and manpower services are needed to provide counseling, placement, and followup, as well as an incentive for the prisons to cooperate in such an approach. Programmed learning and higher education in prisons have also shown promise. Finally, public employment programs for offenders can be initiated on at least a limited scale with a fair assurance of success.

Sixth, greater selectivity must be exercised in choosing participants for offender manpower programs. There are no entirely accurate predictors of success, but enough has been learned to do a better job of selection. Hard-core drug addicts are apparently not a good bet, although nonaddicted users might benefit significantly; teenagers do not seem to profit from manpower services; and the

chances of success vary inversely with the number of previous arrests, so that recurrent offenders should probably be excluded. However, rules of selection must be applied with flexibility, based on case-by-case assessments of motivation and potential.

Finally, intervention earlier in the criminal justice process should be stressed. All indications are that manpower services are more effective the earlier they enter into the individual's experience as an offender. Primary emphasis should, therefore, be given to pretrial, probation, and other programs for first and second offenders. While we would not "give up" on those who are deeply involved in crime, resources should be allocated where they will have the greatest likelihood of positive effect.

Even such modest actions, however, would require substantially increased resources. Experimentation on a scale to yield fairly unequivocal answers is costly, but this is the only way to find out whether the success of isolated experimental and demonstration projects can be replicated. On the other hand, experimentation implies trying out an idea on less than a full-scale operational basis. A doubling of the Labor Department's present \$30 million investment could accomplish most of the modest goals that have been outlined. But even an expenditure of \$100 or \$200 million, divided among the numerous strategies, might still be considered an experimental effort, at least in the sense that it would reach only a small portion of those in need.

Judgments, in any case, should not be based on inflated hope of success in increasing employability of former prisoners or reducing recidivism. There is no assurance that manpower services for offenders will significantly alleviate either their employment problems or their criminal propensities. But, in the interests of these individuals and of society as a whole, which bears the cost of further crime, something must be done, and manpower services are at least a promising place to start. □

—FOOTNOTES—

¹ Those awaiting trial are included here as a functional matter and not in any prejudgment of their guilt or innocence of the charges against them. Manpower services should be equally available to—and in many cases are equally needed by—anyone involved in the criminal justice system, whatever the outcome of the court proceedings.

² George A. Pownall, *Employment Problems of Released Prisoners* (College Park, Md., University of Maryland, 1969), mimeographed.

³ Abt Associates, Inc., *An Evaluation of MDTA Training*

in Correctional Institutions (Washington, D.C., AAI, 1971), columns 1, 2, 3, and Final Summary.

⁴ John P. Conrad, *A Compilation of Ongoing and Contemplated Research in Corrections and Rehabilitation* (Washington, Interagency Council on Corrections, 1971), mimeographed.

⁵ U.S. Senate Subcommittee on Employment, Manpower, and Poverty, *Reform of Federally Funded Manpower Training Programs*, 92d Cong., 1st Sess., December 1971, p. 147. For a discussion of Manpower Administration programs with

offenders, see *Manpower Report of the President, 1972*, p. 70-72.

⁶ Roberta Rovner-Pieczenik, *Project Crossroads as Pre-Trial Intervention: A Program Evaluation* (Washington, National Committee for Children and Youth, 1970).

⁷ John F. Holahan, *A Benefit-Cost Analysis of Project Crossroads* (Washington, National Committee for Children and Youth, 1970).

⁸ James Robinson and Gerald Smith, "The Effectiveness of Correctional Programs," *Crime and Delinquency*, January 1970.

⁹ Abt Associates, Inc., op. cit.

¹⁰ John McKee, *The Draper Project, MDTA Experimental and Demonstration Findings No. 6* (Washington, U.S. Manpower Administration, 1971).

¹¹ Pownall, op. cit.

¹² J. Kitchener and W. Lebowitz, *Preliminary Highlights from Work Release Follow-Up Study* (Washington, U.S. Bureau of Prisons, 1970), mimeographed.

¹³ Abt Associates, Inc., op. cit.

¹⁴ The President's Commission on Law Enforcement and Administration of Justice, *Task Force Report: Corrections* (Washington, the Commission, 1967).

¹⁵ Leonard Witt, *Project Develop* (New York, New York State Division of Parole, 1969).

¹⁶ John J. Galvin, "Training Correctional Manpower," *Manpower*, January 1971, pp. 14-19.

¹⁷ For an evaluation of experience under the act, see Sar A. Levitan and Robert Taggart, "The Emergency Employment Act: an interim assessment," *Monthly Labor Review*, June 1972, pp. 3-11.

Molding people to jobs, or jobs to people?

In a study . . . for the Center for Policy Research, we found that persons have deep-seated preferences in their work behavior that are very difficult to change, and we concluded that it may be unethical to try to change them. Thus, if a person prefers to engage in nonroutine work of the more creative type, at an irregular pace, training him or her to be a "good" assembly-line worker—which entails teaching not only how to turn bolts but also how to be a more "uptight" person—may be both ineffective and morally dubious, especially if we are correct in suggesting

that people's existing preferences can be readily analyzed so that they can be helped to choose jobs compatible with their personalities. It is also much less costly to test and assist people than it is to train and mold them. If we run out of compatible jobs, jobs may be changed to suit people rather than people to suit jobs.

—AMITAI ETZIONI,

"Human Beings Are Not Very Easy to Change After All," *Saturday Review*, June 3, 1972.

Special Labor Force Report shows
that more than half
the teenage labor force
was enrolled in school
in October 1971

CARL ROSENFELD AND KATHRYN R. GOVER

Employment of school-age youth

INCREASING PROPORTIONS of young people are remaining in high school and college, and more of the students are in the work force. Thirty-one percent of the 16- to 24-year-olds working or looking for work were enrolled in school in October 1971, compared with 22 percent a decade earlier.¹ Thirty-five percent of young whites and 23 percent of young Negroes in the labor force were in school.²

In the last 2 years, school enrollment rates of men 18 to 21 years old declined from 54 percent to 48 percent in 1971, probably because of developments related to the Vietnam war. Enrollment rates had risen sharply after draft calls increased beginning in 1965, in part because of deferment of college students. The recent decrease in enrollment rates may indicate that some young men have decided not to go to college because, under revised Selective Service regulations, college students are no longer being deferred.

The number of unemployed workers 16 to 24 years old held steady over the year at 2.2 million, and there were no sharp changes in unemployment rates by age, sex, or race for either students or those not in school. The unemployment rates for male students, who generally want part-time jobs, were somewhat higher in October 1971 than for young men not in school; for young women, the two rates were about the same. (See table 1.)

The age composition of students in the labor force was markedly younger than that of workers not in school. Only about 30 percent of the students were 20 to 24 years old; among the out-of-school group, most of whom had graduated from high school or even college, 75 percent were in this age group. Consequently, there were differences between the two

groups in the age distribution of the unemployed. Of the jobless, only 20 percent of the students were 20 to 24, compared with 60 percent of those not in school.

The differences in the age composition of the student labor force also account to some extent for the fact that the overall student unemployment rate, at 13.4 percent in October 1971, was above that of the under age 25 out-of-school group, 10.9 percent, even though the rates are generally higher for the latter in each detailed age group. This seeming paradox is explained by the fact that unemployment rates are higher for younger persons whether in or out of school, and a much greater percentage of students were teenagers.

Because of time spent in school and on assignments, students who earn money hold part-time jobs, but nearly all those out of school, especially the men, work full time. For example, among male students going to college full time, about 80 percent of those employed in nonfarm industries held part-time jobs compared with fewer than 10 percent of men in a comparable age group who were not in school.

Teenage workers

The sharp rise in the past decade in the number of teenagers 16 to 19 in the population (up 4.5 million to over 15 million in October 1971) was accompanied by increased proportions both in school and working or looking for work. In 1971, about 71 percent of the teenagers were enrolled in school compared with 61 percent in 1961. The increases in enrollment rates were greatest for the groups that had the lowest proportions at the start of the decade—the 18- and 19-year-olds, the Negroes,² and the women. Among the blacks, for example, fewer than 60 percent were in school in 1961, compared with about 70 percent in 1971.

Along with the increase in school enrollment, the proportion who remain in school long enough to

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graduate from high school also increased. Sixty-eight percent of out-of-school teenage workers had at least a high school education in October 1971, compared with 58 percent in 1963 (the earliest year for which comparable data are available for teenagers).

As one would expect, more than half the teenage labor force was enrolled in school. Seven million were working or looking for work, of whom 4 million, or 56 percent, were in school. Since the early 1960's the number of students in the labor force had doubled, but the number of teenagers no longer in school and in the labor force had risen only slightly to 3.1 million. (See chart 1.)

Labor force participation rates increased sharply among students in the past decade, but remained

virtually unchanged among teenagers no longer in school. The proportion of teenage students who combined school with work hovered at about 37 percent in the last few years, compared with under 30 percent in the early 1960's. The increase in the labor force rate reflects a number of factors: the greatest increase in enrollment was among 18- and 19-year-olds who are more likely than younger students to work; the rise in tuition and other school-related expenses; and the increase in the number of available jobs.

The number of teenage full-time college students doubled to 2.8 million, but the number also in the labor force rose threefold to 1 million as the labor force rate of collegians climbed from 22 to 35 per-

Table 1. Employment status of persons 16 to 24 years old by school enrollment status, October 1970 and 1971

(Numbers in thousands)

Enrollment status, sex, and employment status	16 to 24 years		16 to 21 years						22 to 24 years	
			Total		16 to 19 years		20 and 21 years			
	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971
ENROLLED IN SCHOOL										
MEN										
Civilian noninstitutional population	7,420	7,795	6,489	6,700	5,359	5,576	1,130	1,122	931	1,095
Civilian labor force.....	3,181	3,460	2,614	2,822	2,125	2,297	489	525	567	638
Labor force participation rate ¹	42.9	44.4	40.3	42.1	39.7	41.2	43.3	46.8	60.9	58.3
Employed.....	2,744	2,987	2,223	2,391	1,783	1,924	440	467	521	596
Unemployed.....	437	473	391	431	342	373	49	58	46	42
Unemployment rate ²	13.7	13.7	15.0	15.3	16.1	16.2	10.0	11.0	8.1	6.6
WOMEN										
Civilian noninstitutional population.....	6,187	6,469	5,708	6,024	4,891	5,080	817	944	479	445
Civilian labor force.....	2,354	2,341	2,066	2,102	1,700	1,682	366	420	288	239
Labor force participation rate ¹	38.0	36.2	36.2	34.9	34.8	33.1	44.8	44.5	60.1	53.7
Employed.....	2,062	2,035	1,785	1,800	1,442	1,431	343	369	277	235
Unemployed.....	292	306	281	302	258	251	23	51	11	4
Unemployment rate ²	12.4	13.1	13.6	14.4	15.2	14.9	6.3	12.1	3.8	1.7
NOT ENROLLED IN SCHOOL										
MEN										
Civilian noninstitutional population.....	6,840	7,265	3,387	3,655	1,865	1,892	1,522	1,763	3,453	3,610
Civilian labor force.....	6,288	6,680	2,990	3,261	1,580	1,627	1,410	1,634	3,298	3,419
Labor force participation rate ¹	91.9	91.9	88.3	89.2	84.7	86.0	92.6	92.7	95.5	94.7
Employed.....	5,587	5,969	2,535	2,795	1,320	1,365	1,215	1,430	3,052	3,174
Unemployed.....	701	711	455	466	260	262	195	204	246	245
Unemployment rate ²	11.1	10.6	15.2	14.3	16.5	16.1	13.8	12.5	7.5	7.2
WOMEN										
Civilian noninstitutional population.....	9,804	10,011	5,193	5,130	2,542	2,552	2,651	2,578	4,611	4,881
Civilian labor force.....	5,881	6,018	3,187	3,170	1,521	1,488	1,666	1,682	2,694	2,848
Labor force participation rate ¹	60.0	60.1	61.4	61.8	59.8	58.3	62.8	65.2	58.4	58.3
Employed.....	5,253	5,339	2,767	2,742	1,249	1,213	1,518	1,529	2,486	2,597
Unemployed.....	628	679	420	428	262	275	148	153	208	251
Unemployment rate ²	10.7	11.3	13.2	13.5	17.9	18.5	8.9	9.1	7.7	8.8

¹ Percent of civilian noninstitutional population in the labor force.

² Percent of civilian labor force who were unemployed.

Chart 1. School enrollment, unemployment rates, and number unemployed for persons 16 to 19 years old, October 1960–71

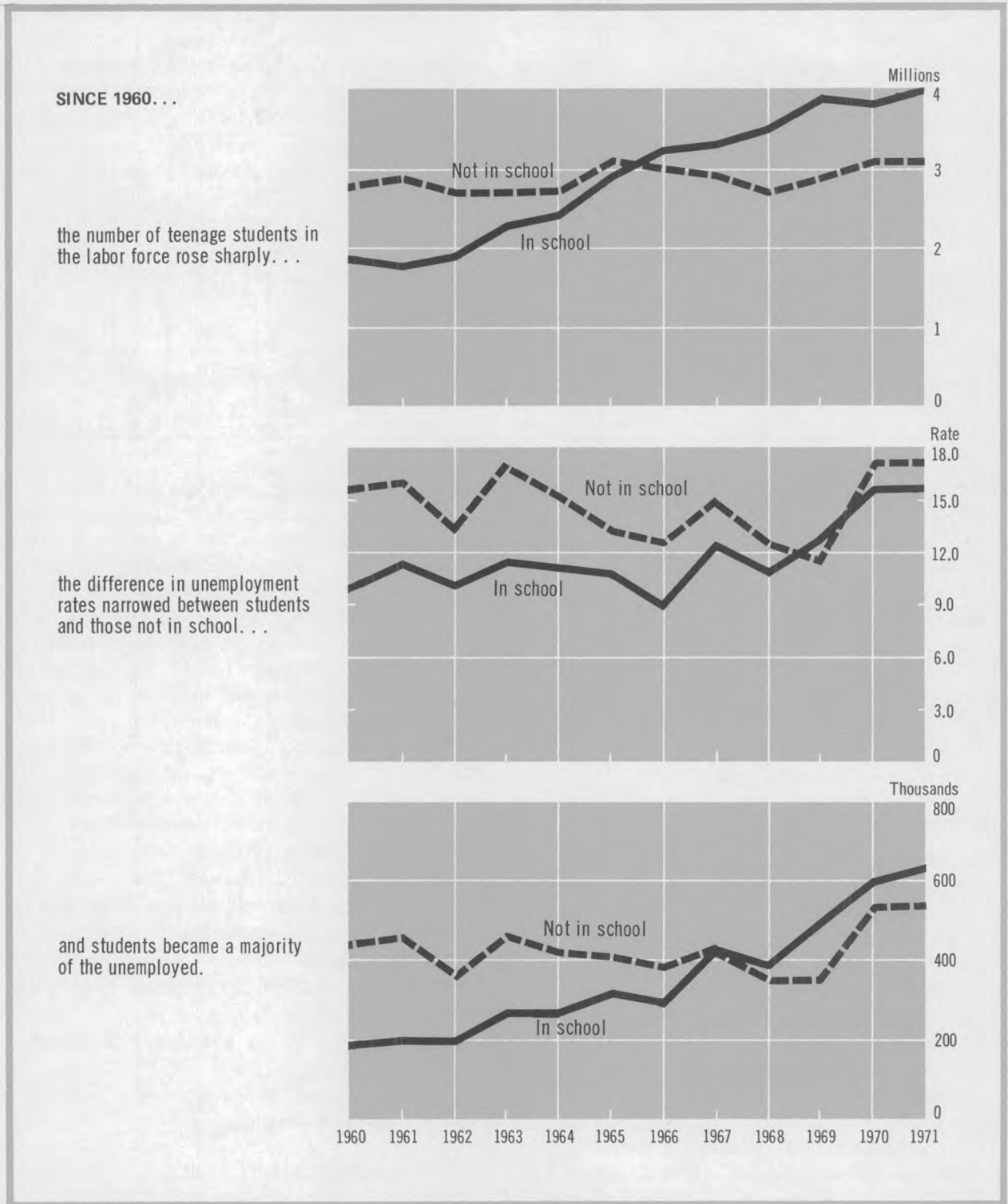


Table 2. Occupation of persons 16 to 19 years old, by school enrollment status and sex, October 1960 and 1971

Occupation	Men				Women			
	Enrolled		Not enrolled		Enrolled		Not enrolled	
	1960	1971	1960	1971	1960	1971	1960	1971
Total: Number (in thousands).....	1,049	1,924	1,189	1,365	654	1,431	1,143	1,213
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White collar.....	26.8	20.6	15.0	13.2	47.1	48.4	64.6	53.7
Professional and managerial.....	3.2	3.8	3.1	2.9	6.2	3.4	5.6	3.0
Clerical.....	9.8	8.3	8.9	5.6	23.2	30.0	51.6	43.5
Sales.....	13.8	8.5	3.0	4.7	17.7	15.0	7.4	7.2
Blue collar.....	38.6	45.6	55.8	69.8	3.4	5.2	11.8	18.9
Craftsmen.....	2.5	4.1	7.4	11.8	.3	.3	.8	.4
Operatives.....	16.5	16.9	31.5	33.1	3.1	3.3	10.6	17.4
Laborers, except farm.....	19.6	24.56	16.9	24.9	—	1.6	.4	1.1
Service.....	15.7	25.6	7.9	10.6	42.5	45.1	18.8	25.0
Private household.....	.8	.3	.2	.1	23.6	17.5	8.7	4.8
Other service.....	14.9	25.3	7.7	10.5	18.9	27.6	10.1	20.2
Farm workers.....	18.9	8.2	21.2	6.5	7.0	1.3	5.0	2.3

cent. Increases in the number both in elementary or high school and the labor force were greater than for college students, but the percentage increase in the labor force was not as large.

All of the rise in students' labor force rates was among whites. The participation rates for Negroes were virtually the same in the last few years as in the early 1960's, about 25 percent; for whites, the rate rose about 10 points to 40 percent. The failure of the Negro students' labor force rate to rise undoubtedly reflects narrower job opportunities and consistently very high unemployment rates.

Number employed doubles

In line with the increases in the labor force, the number of students employed in October 1971, 3.4 million, was double the level in the early 1960's. For the 2.6 million teenagers no longer in school, employment was only a little higher.

Among the young men, greater proportions of the students than those not in school worked in service and white-collar occupations in October 1971 and a much smaller proportion of the students were in blue-collar occupations, particularly as operatives or craftsmen. (See table 2.) Over the 1960's a major shift occurred in the occupational distribution of working youths as the farm exodus continued and the demand for workers in the service sector increased. The proportion of farm workers dropped sharply; other laborers increased regardless of school

status. Among students, there was also a large rise in the proportion in service occupations, where part-time jobs were numerous, and a modest decline in the proportion in sales. The changes in occupational distribution of 16- and 17-year-old male students were sharper than for the 18- and 19-year-olds because all of the decline in farm employment was among the younger boys; few 18- and 19-year-olds had been farm workers even in the earlier period.

Among young women, regardless of school status, the two dominant occupational groups were clerical and service. Among students, a larger proportion were in service than in clerical jobs, while among those not in school more were in clerical jobs. From 1960, the proportion of female students in service occupations remained relatively stable, with a decrease in private household workers offset by a rise in other service occupations. In clerical jobs, the proportion of female students rose somewhat, while the proportion declined for women not in school. Among the latter, the proportion in service occupations (excluding private household) had doubled since 1960.

Unemployed exceed million

Unemployment among teenagers exceeded one million in October 1971 as in October 1970, and over one-half of these youths were students. (Persons are counted as unemployed if they are looking

for and are available for work, regardless of whether they are in school.) The following are unemployment rates for October 1971:

	All teenagers	White	Negro and other races
Total	16.4	14.7	31.0
In school	15.7	13.8	35.2
Not in school	17.2	15.7	27.4

Statistically the 15.7-percent rate for students was not significantly different from the 17.2 percent for teenagers not in school.

The number of unemployed students had exceeded the number of jobless teenagers not in school since 1968. In 1971, over one-half (54 percent) of the unemployed youths were students, compared with fewer than one-third in the early 1960's. Nearly all of the increase in unemployment among teenagers since then had been among students. This development reflects not only the greater rise in the number of students in the labor force, but also the sharper rise in the unemployment rate of students than of those not in school. In 1960 and 1961, the unemployment rate for teenagers in school was about one-third lower than for the out-of-school youth. The difference between these two rates narrowed irregularly during the decade; in the last few years, the

rates were virtually the same. One reason for the higher unemployment rate among students was slower expansion of convenient part-time jobs than the rise in the numbers who wanted to work.

Work experience in 1970

In March of each year, information is obtained on the number of weeks workers are employed during the prior calendar year. This section analyzes the extent to which teenagers worked in 1970 by school status in March 1971. The proportion of persons, whether students or not, who worked at some time during the year was greater than the proportion at a given time because many were in the labor force for only the summer or shorter periods. For example, 64 percent of all teenagers worked at some time during 1970, but only about 47 percent were in the labor force in October 1970. The proportion of teenagers who worked in 1970 was lower than in the prior few years, in part because of the economic slowdown.

Teenagers who were students in March 1971 were much less likely than those not in school to have worked at some time during 1970. Among both boys and girls, the proportion of students with work experience was about 20 percentage points lower than

Table 3. Work experience in 1970 of persons 16 to 21 years old, by major activity and age in March 1971, by sex

Work experience in 1970	Major activity: in school ¹						Major activity: not in school ¹					
	Men			Women			Men			Women		
	Total 16 to 21 years	16 to 19 years	20 and 21 years	Total 16 to 21 years	16 to 19 years	20 and 21 years	Total 16 to 21 years	16 to 19 years	20 and 21 years	Total 16 to 21 years	16 to 19 years	20 and 21 years
Total: Number (in thousands)	6,012	5,068	944	5,727	4,866	861	4,099	2,292	1,807	5,279	2,655	2,624
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Worked in 1970	66.5	63.7	81.7	53.8	50.8	70.7	88.0	86.5	89.9	73.5	71.0	76.1
Did not work in 1970	33.5	36.3	18.3	46.2	49.2	29.3	12.0	13.5	10.1	26.5	29.0	23.9
Worked in 1970: Number (in thousands)	3,998	3,227	771	3,081	2,472	609	3,607	1,983	1,624	3,880	1,884	1,996
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Worked at full-time jobs	36.9	31.7	58.6	27.0	22.2	46.6	67.4	54.7	82.8	69.1	56.6	80.9
1 to 13 weeks	25.4	22.6	37.2	19.0	15.3	33.8	8.7	9.6	7.6	12.4	14.1	10.7
14 to 26 weeks	7.2	5.6	13.6	4.2	3.4	7.7	11.8	11.7	11.9	14.0	14.8	13.2
27 to 49 weeks	2.2	1.6	4.8	2.4	2.1	3.4	18.6	15.3	22.6	17.4	12.4	22.1
50 to 52 weeks	2.2	2.0	2.9	1.4	1.4	1.6	28.3	18.1	40.8	25.4	15.3	34.9
Worked at part-time jobs	63.1	68.3	41.4	73.0	77.8	53.4	32.6	45.3	17.2	30.9	43.4	19.1
1 to 13 weeks	23.9	27.3	10.0	28.9	31.8	17.2	5.6	7.4	3.4	8.7	13.3	4.5
14 to 26 weeks	11.7	12.5	8.7	17.6	19.4	10.3	6.3	9.5	2.5	7.1	10.0	4.4
27 to 49 weeks	11.5	12.2	8.3	14.0	14.2	13.3	7.3	10.0	4.1	8.1	11.1	5.2
50 to 52 weeks	16.0	16.3	14.4	12.5	12.5	12.5	13.4	18.5	7.2	7.0	9.0	5.1

¹ Respondents in the survey were asked, "What were you doing most of last week?" On the basis of their replies, young persons were classified into 2 groups: Major activity—in school; major activity—not in school.

Table 4. Earnings in 1970 of students 16 to 21 years old in March 1971, by age and sex

Age in March 1971 and sex	Total with earnings	Under \$500	\$500 to \$999	\$1,000 to \$1,499	\$1,500 to \$1,999	\$2,000 to \$2,999	\$3,000 and over	Median earnings, 1970
BOTH SEXES								
16 to 21 years old, total.....	100.0	45.7	25.6	12.3	6.4	5.6	4.1	\$ 584
MEN								
16 to 21 years old.....	100.0	38.9	26.8	14.3	8.0	7.4	4.7	707
16 to 19 years.....	100.0	44.1	27.0	12.8	6.7	6.3	3.1	609
16 and 17 years.....	100.0	57.0	26.0	8.9	3.9	2.9	1.4	439
18 and 19 years.....	100.0	27.6	28.4	17.8	10.3	10.6	5.3	894
20 and 21 years.....	100.0	17.5	25.8	20.4	13.4	11.9	11.0	1,162
WOMEN								
16 to 21 years old.....	100.0	54.5	24.0	10.2	4.4	3.4	3.4	459
16 to 19 years.....	100.0	60.3	22.2	8.4	3.4	2.8	2.8	415
16 and 17 years.....	100.0	73.1	17.0	5.3	2.0	1.2	1.4	341
18 and 19 years.....	100.0	44.9	28.6	12.2	5.2	4.8	4.3	589
20 and 21 years.....	100.0	31.2	31.3	17.4	8.1	5.8	6.1	799

for those not in school. (See table 4.)

More than 70 percent of the employed students had part-time jobs during 1970, compared with fewer than half of those not in school. On the other hand, fewer than 5 percent of those in school held full-time jobs for 27 weeks or more compared with about 30 percent of the employed teenagers not in school.

Average (median) earnings of teenage male students during 1970 were above those for female students, and earnings of those 16 and 17 years old were below those 18 and 19. (See table 4.) The lower earnings for women and for the 16- and 17-year-olds reflect fewer weeks of work and more part-time work. Also, to some extent, the hourly earnings of the younger students may be less than for the older ones and the earnings for the girls may be lower than for the boys because of the difference in the types of jobs they hold. □

—FOOTNOTES—

¹ This article is based mainly on supplementary questions in the October 1971 Current Population Survey conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census. The data relate to persons in the civilian noninstitutional population in the calendar week ending October 16, 1971. All members of the Armed Forces and inmates of institutions are excluded.

Because the estimates are based on a sample, they may differ from the figures that would have been obtained from a complete census. Sampling variability may be relatively large in cases where the numbers are small. Small estimates, or differences between estimates, should be interpreted with caution.

The most recent report in this series was published in the *Monthly Labor Review*, August 1971, pp. 13-18, and was reprinted with additional tabular data and an explanatory note as Special Labor Force Report 135.

² Data for persons other than white are used to represent data for Negroes, since the latter constitute about 92 percent of all persons other than white in the United States.

Study shows shift
from cash allowances
to service benefits
and addition of new
dental benefits

KEVIN G. WETMORE

SINCE the late 1960's, employees in major industries have realized significant improvements in health insurance benefits. Existing plans were liberalized either by increasing cash allowances or by switching from cash allowances to service benefits.¹ In recent years, companies moved away from providing cash allowances, partly because the costs of health care often rose more rapidly than plans could be adjusted for such increases. Service benefits, providing built-in cost adjustment, became more prevalent, as companies attempted to help employees meet the rapidly rising cost of health care for themselves and their dependents. Many plans also were improved by the addition of new benefits, including coverage of regular dental expenses.

This article analyzes health benefits in 50 plans for office employees and 96 plans for nonoffice employees in 1971 and reports on changes in these plans since 1969 and 1966, respectively. Office employees include executive, professional, and clerical employees; nonoffice include production and maintenance workers, miners, construction workers, and sales persons. These classifications have evolved from an earlier grouping of company plans for salaried office employees and plans negotiated by factory workers under collective bargaining.² The current office-nonoffice classifications recognize that these salary and collective bargaining distinctions no longer apply.

Plans are described in digests of health and insurance plans published by the Bureau of Labor Statistics.³ These plans are not statistically representative of all health and insurance plans, but they cover a large number of employees in major industries and illustrate different approaches to health insurance planning.

Both office workers and nonoffice workers have received substantially improved benefits. Office em-

Improvements in employee health care benefits

ployees generally had more complete coverage, as has typically been the case. However, companies more frequently financed the full cost of health insurance in plans covering nonoffice workers.

Hospital benefits

The level of basic hospital benefits provided by the plans covering nonoffice employees and their dependents has continued to rise substantially.⁴ In plans providing a cash benefit in both 1966 and 1971, the average allowance for daily semiprivate room and board increased more than 75 percent—somewhat less than the concurrent CPI increase of more than 100 percent for this service. The average cash allowance for ancillary services in these plans increased by more than one-third during the same period.

Service benefits, which provide the full cost of services or of specified services, provide automatic protection against rising costs. The percentage of plans providing them for daily room and board increased from 58 percent in 1966 to over 75 percent in 1971. A similar shift to service benefits occurred for ancillary services: over 71 percent provided these in 1971, up from about 61 percent in 1966.

Many plans also increased the maximum number of days for which full benefits were payable. In 1971 almost half provided full hospital benefits for 365 days or more, compared with roughly one quarter in 1966, while the percentage providing full benefits for only 21 to 120 days declined.⁵

Hospital benefits for office employees showed less improvement than those for nonoffice employees partly because the study for office employees covers a shorter period (1969–71) than does the study for nonoffice employees (1966–71). Moreover, since plans covering office employees generally provided more complete coverage, there was less room for improvement.

In 1971, 84 percent of plans for office workers

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provided service benefits for daily room and board—up 13 percent from 1969. Only 9 percent still provided cash allowances. A similar shift to service benefits occurred in the coverage of ancillary services.

However, there was little change in the duration of benefits from 1969 to 1971. The proportion of plans providing full benefits for 21 to 120 days and the proportion providing benefits for 365 days or more remained unchanged at 60 percent and 33 percent, respectively.

Surgical and medical benefits

Cash allowances for surgical procedures were either increased or changed to service benefits covering "reasonable and customary charges." From 1966 to 1971, the proportion of nonoffice worker plans providing cash allowances dropped by one-third to 55 percent. Half of those plans retaining cash allowances increased them substantially—usually about 33 to 100 percent for the more expensive operations. Virtually all of the plans which dropped cash allowances switched to a service benefit, boosting the proportion of such plans to approximately 38 percent.

Among plans for office workers, there was also a movement from cash allowances to service benefits. By 1971, 32 percent provided service benefits for surgical procedures, double the proportion of 2 years earlier.

About four-fifths of all plans for both office and nonoffice workers paid for physicians' visits in the hospital, including those for dependents. Twenty percent of plans for office workers and 25 percent of those for nonoffice workers paid for physicians' visits in the home and office. Some plans covering nonoffice employees limited coverage to employees only. Several plans changed to reasonable and customary charges, but cash allowances are still more common in plans for both groups of workers.

Major medical

Major medical programs are of two major types: supplemental programs that add benefits to the basic hospital and surgical-medical sections of a health plan, and comprehensive programs that combine all health benefits into a single package.

Since 1966 the number of supplemental major medical program covering nonoffice employees has nearly doubled. They generally paid a specified per-

centage of certain expenses not covered by the basic benefits. Almost all had deductibles ranging from \$50 to \$300, which usually had to be satisfied once a year. In more than half the programs the deductible was \$100.

Most supplemental major medical programs now pay a larger share of charges than they did in 1966. In 1971 about 5 out of 6 paid 80 percent of all covered charges in excess of the deductible, up from 46 percent in 1966. However, about one-third paid only 50 percent for mental and nervous disorders.

Major medical programs almost always set a maximum on the amount of their benefit payments. In 1966, almost half the supplemental ones had maximums for each disability; by 1971 about 62 percent utilized a per lifetime basis. (See table 1 for maximums.) Since benefits paid on a per lifetime basis generally provide more protection than benefits paid on a disability basis, this shift indicates more liberal coverage.

The major medical benefits for office employees are similar to those provided nonoffice employees. In 1971, 4 out of 5 plans provided members with a supplemental major medical program. Deductibles were similar to those covering nonoffice employees, as was a provision for remaining expenses. Per lifetime maximums, generally higher than the maximums for nonoffice employees, was the basis of payment in 75 percent of these programs.

There were only two comprehensive major medi-

Table 1. Major medical benefits: maximum payments and basis of payment, 1971

Maximum payment	Plans with limit per disability period		Plans with lifetime limits	
	Office employees	Nonoffice employees	Office employees	Nonoffice employees
Total.....	10	¹ 21	² 35	³ 40
\$5,000.....		5		1
7,500.....		2		
10,000.....	4	6	7	14
15,000.....	1	1		3
20,000.....	2	5	11	10
25,000.....	2	1	4	4
30,000.....			1	2
50,000.....			5	
100,000.....	1	1	5	3
Other.....			⁴ 2	⁵ 3

¹ Includes 5 plans not included in 1966 Digest.

² Includes 1 plan not included in 1969 Digest.

³ Includes 2 plans not included in 1966 Digest.

⁴ Includes 1 plan with maximum payments based on employees annual salary and 1 plan with a family maximum.

⁵ Includes 2 plans with no maximum and 1 plan with maximum payments based on employees annual salary.

cal programs for nonoffice employees and four for office workers. Comprehensive programs usually differed from the supplemental programs: deductibles and coinsurance provisions were frequently not uniform. (For example, one program had a \$25 deductible for hospital expenses and \$50 for all other expenses. How much of the remaining expense the program covered was also different for hospital expenses and other expenses.) Maximums in comprehensive programs, at least \$20,000 in 1971, were higher than in supplemental programs.

Other health benefits

A number of plans have recently added a benefit to cover regular dental expenses.⁶ Fifteen plans for nonoffice employees and six for office employees provided this benefit in 1971. (Four of the nonoffice and six of the office worker plans were new additions to the 1971 digest.)

Many of the plans were set up similar to major medical plans. Deductibles were usually about \$25, and 80 percent of additional charges were usually covered. The most liberal maximums were \$1,000 a year and \$2,500 during a member's lifetime. Other plans paid a specified percentage of allowable charges or according to a fee schedule. In most plans with benefits for regular dental expenditures, coverage of the more expensive services, such as orthodontics or fixed bridgework, was frequently limited or excluded.

Active older workers

Most plans continue health benefits for active workers after they become eligible for Medicare at age 65. One common method was the benefit carveout approach, which extends to individuals age 65 and over the same benefits they formerly received but reduced by Medicare benefits.⁷ In 1971, two-thirds of the plans covering nonoffice employees and about one-half of those covering office employees used this method. Many of the remaining plans that did not provide benefits for employees age 65 and over had no such employees because they were automatically retired by that age. (Sixteen plans for office and 16 for nonoffice employees had no active employees over age 65.) In most of these cases, however, dependents over 65 continued to receive the same benefits but reduced by Medicare until the worker retired.

Retirees

In 1971 more than 70 percent of the plans covering both nonoffice and office employees provided retirees under age 65 with some form of health insurance.⁸ Slightly over 40 percent of these plans provide retirees under 65 with the same benefits as active employees under 65 receive. Most of the remaining plans also provide basically the same benefits, but with some variations, such as a moderate reduction in the duration of the hospital benefit or the maximum allowance for a surgical procedure. However, the entire hospital, surgical-medical, or major medical section was eliminated in a few plans.

Health insurance benefits took on a new dimension with the enactment of Medicare in 1965. Before Medicare, companies were concerned only with a worker's employment status. Since then, the worker's age became important as many companies sought to avoid duplication of benefits.

In 1971, about two-thirds of the plans covering both groups of employees provided some type of health insurance for retirees 65 years and over. Over half of these used the benefit carveout method. (See table 2.)

The "building block" approach was also widely used. Under this method plans cover expenses not covered by Medicare, such as the deductibles, prescription drugs, and other charges the retiree must pay.

The "major medical" approach, which provides retirees with the same or a slightly modified version of the regular major medical benefits, was another common method. A few plans offered a combination of two of these approaches. For example, the benefit carveout method may have been used for medical benefits and the building block for hospital benefits.

Financing

In addition to providing greater benefits in 1971 than in the 1960's fewer health insurance plans in 1971 required active employees to contribute toward their cost. For active employees, the companies paid the full cost of all health benefits in more than 80 percent of the plans covering nonoffice and 50 percent of the plans covering office employees in 1971. However, some of these plans required employees to pay at least part of the cost for their dependents.

More than 75 percent of the plans for nonoffice employees which provided retiree benefits required

Table 2. Plans with health benefits for retirees age 65 and over, by method of payment, 1971

Benefit	Office employees	Nonoffice employees
All plans with health benefits for retirees age 65 and over.....	32	172
Total benefit carveout method.....	17	40
Same benefits as for active workers under age 65, reduced by Medicare.....	3	18
Different benefits, reduced by Medicare ²	14	22
Total building block method.....	8	20
Benefits supplement Medicare.....	4	17
Benefits supplement only Part A of Medicare ³	4	3
Total major medical.....	6	4
Combination:		
Building block and major medical.....	1	0
Building block and benefit carveout.....	0	4
Other.....	0	4

¹ Includes 5 plans not included in 1966 Digest.

² These benefits differ in one respect or more from those provided active workers under age 65.

³ Part A of Medicare covers in-hospital and related care.

no contribution in 1971. Such plans for office retirees more frequently required such contributions—about 55 percent of the plans for retirees under age 65 and about 47 percent for those retirees 65 years and over. □

FOOTNOTES

¹ Cash allowances are specified amounts that are payable for covered health care. These amounts are generally provided on an "up to" basis, meaning the patient will be reimbursed for actual charges up to the allowance shown, but some plans pay the full allowance irrespective of the actual charge.

Service benefits fully pay for specific hospital or surgical-medical care services, generally on a prevailing fee basis or in the form of a "reasonable and customary charge."

² For previous analysis of health plans, see Dorothy R. Kittner, "Changes in health and insurance plans for salaried employees," *Monthly Labor Review*, February 1970, pp. 32-39; Donald M. Landay, "Trends in negotiated health

plans: broader coverage, higher quality care," *Monthly Labor Review*, May 1969, pp. 3-10; Dorothy R. Kittner, "Negotiated health benefits and medicare," *Monthly Labor Review*, September 1968, pp. 29-34; and Robert L. Joiner, "Changes in negotiated health and insurance plans, 1962-66," *Monthly Labor Review*, November 1966, pp. 1246-1249.

³ Description of the plans can be found in *Digest of 50 Health and Insurance Plans for Salaried Employees, Early 1969* (BLS Bulletin 1620), *Digest of 100 Selected Health and Insurance Plans Under Collective Bargaining, Early 1966* (BLS Bulletin 1502), *Benefits for Active and Retired Workers Age 65 and Over, Early 1968* (BLS Bulletin 1502-1), and *Digest of Health and Insurance Plans, 1971 Edition*. Eight plans for nonoffice and one plan for office workers were added to the 1971 Digest. Unless otherwise indicated, percentage figures or totals used in this report are calculated from the 96 plans covering nonoffice employees and the 50 plans covering office employees. Some plans allow employees a choice between two and sometimes three hospital, surgical-medical, or major medical programs. Excluded from this study are those parts of a plan for which there is a choice of benefits.

⁴ Since benefits for dependents identical to those provided active employees or retirees are almost always provided, no further mention will be made of them unless they differ.

⁵ In 1971, 50 percent of plans for nonoffice workers provided full benefits for 21 to 120 days compared to 65 percent in 1966. These percentages include some plans which provided partial benefits for days in excess of the 21 to 120 full benefit days; for example, most service benefit plans in firms located in New York City provide 120 full benefit days followed by an additional 180 days for which half benefits are provided.

⁶ Major medical plans have usually covered the expense of dental surgery, if it was attributable to an accident.

⁷ For details on the benefits provided under both parts of Medicare, see *Your Medicare Handbook: Health Insurance Under Social Security* (U.S. Social Security Administration, 1968).

⁸ Thirteen plans for office and 23 for nonoffice workers provided no health benefits to retirees under age 65. Sixteen plans for office and 25 for nonoffice workers provided no benefits for retirees age 65 and over. Plans providing no health benefits for retirees under 65 years are not in all cases plans providing no benefits to retirees age 65 and over.

Communications



WELFARE MOTHERS AND THE WORK ETHIC

LEONARD GOODWIN

COMMON ARGUMENTS for proposing a work requirement for welfare mothers are that work is psychologically valuable and provides a model for their children.

Data from a recent study¹ indicate that even long-term welfare mothers and their teen-age sons—though the sons have spent virtually their entire lives on welfare—continue to have a strong work ethic and do not need to be taught the importance of work. Poor people—males and females, blacks and whites, youths and adults—identify their self-esteem with work as strongly as do the nonpoor. They express as much willingness to take job training if unable to earn a living and to work even if they were to have an adequate income. They have, moreover, as high life aspirations as do the nonpoor and want the same things, among them a good education and a nice place to live.

Work orientation of mothers

The view of work held by any particular group is complex. To compare the views of different groups, the relationships among several work orientations must be examined. For example, all groups of women, ranging from long-term welfare to middle-class white, give equally high ratings to the work ethic, but show a wide difference in beliefs about the effectiveness of their own efforts to achieve job success. Long-term welfare women lack confidence in their ability while middle-class white women feel much more secure. Most striking, however, is the different relationship between these two orientations.

The white middle-class women do not link them at all. The positive association of the work ethic with lack of confidence seems to characterize those who have failed, or are risking failure, in the work world.

All women rejected quasi-illegal activities as a source of income, regarding these activities as violations of their life goals. Welfare women find welfare much more acceptable than do the other women, and do not see such acceptance as violating their identification with work. All women seem willing to get further training and to work if they are on welfare or if they have "adequate" incomes, but the welfare women feel more strongly that such activities contribute to their self-development.

The findings that welfare women have a positive view of work but are insecure about their ability to achieve job success and dependent on government support when their own efforts fail cannot be attributed to long-term receipt of welfare as such. One group of women in the study have been on welfare only 3 years, and short-term welfare women only 1 year. The pattern of responses is probably typical of mothers in general who are poor, heads of households, and marginal to the work force.

Influence on sons

Data from the study show that welfare mothers substantially influence the work orientations of their sons, including a high work ethic. On the other hand, middle-class white parents exert little influence on the work orientations of their sons, an outcome that may seem surprising. This may simply mean, however, that the white sons are gaining identification with work and strength in the other orientations outside the family: in schools, churches, and peer groups. It does not necessarily mean that white families have no influence on their sons' subsequent work activity. They are undoubtedly instrumental in their sons' adoption of the social manners and life styles conducive to obtaining and holding good jobs (welfare mothers may fare badly in this respect), but

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such variables were not measured in this study.

Hence, the results offered here cannot be used to judge the overall contribution of family life to sons' future job attainment. But they do indicate clearly that, for the work ethic, welfare mothers have *no less* influence on their sons than do white parents in more affluent circumstances; indeed, they probably have a greater influence, encouraging their sons to identify with work. Thus the theory that the welfare experience is depriving youths of the work ethic is not supported.

At the same time the significant relationship regarding the acceptability of welfare orientation is evidence that welfare mothers are transmitting to their sons a greater tolerance of government support than is found among white middle-class families. To the extent that acceptability of welfare discourages work activity, one could argue that the mothers are transmitting a negative attitude about work. This also applies to the lack of confidence orientation, to which both welfare mothers and sons give high ratings. The mother-son correlations are also significant, suggesting that mothers may be hindering their sons' entrance into the work force by transmitting their own uncertainty to them.

Data indicate that welfare and nonwelfare sons are more similar than dissimilar in their work orientations. Poor youths find quasi-illegal activities slightly more acceptable than do outer-city youths. The relatively low ratings given this activity by all groups, however, suggest that it is not a preferred means of income maintenance, and that many who participate in marginal enterprises would give them up if they could earn sufficient money in a job.

The most important conclusion to be drawn is that teenage males who have spent virtually their entire lives on welfare have certain positive orientations toward work. Having no working parent in the home—neither mother nor father—has made the sons' identification with work no weaker than that of sons from families with working fathers.

This is not to say that lack of a working father has no effect on a household. A father undoubtedly influences the character of family life, but the influence can be negative as well as positive—it depends on how the father relates to other family members.² The point in any case is that welfare youths from fatherless homes show a strong work ethic, a willingness to take training, and an interest in working even if it is not a financial necessity. Their mothers favorably influence these positive orienta-

tions. The welfare experience has not destroyed the sons' positive orientations toward work.

However, two significant differences between black welfare and white nonwelfare sons should be recognized. Welfare sons are much less confident about their efforts leading to job success and much more willing to accept welfare if unable to earn enough money.

Mothers who are unable to support themselves and their families can be supported at a decent level by public funds without fear of damage to their work ethic or that of their sons. If the support is given, as Gilbert Steiner has suggested, "in a framework of honorable dependency,"³ it will carry with it no social stigma, and the recipient mothers and children may be less likely to suffer from the feeling of inadequacy that inhibits subsequent work activity. But welfare payments, honorable or otherwise, are unlikely to be large enough to enable families to move up to middle-class circumstances—they serve only as a holding measure.

THE FOREGOING should provide a basis for moving beyond the often-expressed concern that transfer payments to the poor may take away their incentive to work.⁴ Excessive concern that a relatively low level of guaranteed income—around the poverty level—would cause people to drop out of the work force reflects a misunderstanding of the life and work orientations of the poor. They are no more likely to settle for this meager income and cease working than are middle-class people.

The plight of the poor cannot be blamed on their having deviant goals or a deviant psychology. The ways in which the poor do differ from the affluent can reasonably be attributed to their different experiences of success and failure in the world. There is ample evidence to suggest that children who are born poor face discriminatory barriers to advancement in the educational and occupational worlds,⁵ which thrust them into failure much more consistently than their middle-class counterparts. Appropriate policies would enable more poor people to experience success.

While success cannot be guaranteed, the probability of its attainment for larger numbers of the poor might be increased in two ways. The first is to lessen the risk of failure by removing discriminatory barriers so that, for example, more poor people become eligible for better jobs; the second, to reduce

the cost of failure, when it does occur, by providing a guaranteed income at least a small margin above the poverty level. Poor families should be given enough economic security and low-risk opportunity to rise in status, according to their desire and ability without being overwhelmed by failure induced by inequities in the social system. □

— FOOTNOTES —

¹ Leonard Goodwin, *Do the Poor Want to Work? A Social-Psychological Study of Work Orientation* (Washington, Brookings Institution, 1972).

² Elizabeth Herzog and Cecelia E. Sudia, "Boys in Fatherless Families" (Washington, U.S. Department of Health, Education, and Welfare, Office of Child Development, Children's Bureau, 1970), processed.

³ Gilbert Y. Steiner, *The State of Welfare* (Washington, Brookings Institution, 1971), p. 338.

⁴ Christopher Green, *Negative Taxes and the Poverty Problem* (Washington, Brookings, 1967). "The question of incentives inevitably arises when discussion turns to a proposal for a guaranteed minimum income. Would guaranteeing a minimum income and taxing it away at high rates

as before-allowance income rises reduce work effort?" (p. 113).

⁵ Peter M. Blau and Otis Dudley Duncan, *The American Occupational Structure* (New York, John Wiley & Sons, Inc., 1967), p. 405; Bradley R. Schiller, "Stratified Opportunities: The Essence of the 'Vicious Circle,'" *American Journal of Sociology*, November 1970, pp. 426-42; Robert H. Berls, "Higher Education Opportunity and Achievement in the United States," in *The Economics and Financing of Higher Education in the United States*, A Compendium of Papers Submitted to the Joint Economic Committee, 91st Cong. 1st sess., 1969, especially pp. 146, 172; and William H. Sewell, "Inequality of Opportunity for Higher Education," *American Sociological Review*, October 1971, pp. 793-809. Researchers such as Sewell who present statistical data showing that poor children of the same ability as middle-class children do not reach the same educational attainment tend to explain this on the grounds of psychological deficiency, the poor having lower aspirations. Researchers who have examined the daily classroom procedure point out that it is the student-teacher interactions themselves which tend to lessen the aspirations and initiatives of the lower-class student as compared with his middle-class counterpart; see Eleanor Burke Leacock, *Teaching and Learning in City Schools* (New York, Basic Books, 1969), chapter 6. Lower educational aspirations of poor children would not appear to be a psychological deficiency, but a normal response to an environment hostile to their high aspirations and initiatives.

A note on communications

The *Monthly Labor Review* welcomes communications that supplement, challenge, or expand on research published in its pages. To be considered for publication, communications should be factual and analytical, not polemical in tone.

Communications should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.

Union Conventions



STATE, COUNTY AND MUNICIPAL EMPLOYEES CONVENTION, 1972

JOHN H. CHASE

POLITICAL ACTION, jurisdictional disputes, and constitutional changes were among the key issues when the American Federation of State, County and Municipal Employees (AFL-CIO) held its 19th biennial convention in Houston, Tex., May 29 through June 2. The major emphasis, however, was on political action as a first step toward solving the problems of public sector workers.

International President Jerry Wurf reported that in a number of States, particularly Pennsylvania and Hawaii, new or revised laws are making it easier for public employee unions to operate. He added, however, that all State laws are still "repressive" and called for Federal legislation to provide a climate favorable to organization and operation of public sector unions. Mr. Wurf accused several unions representing public employees of covertly opposing national labor relations legislation for government employees.

Congressman Frank Thompson, Jr., chairman of a House subcommittee on labor, similarly charged the States with "fumbling the ball on this issue" and of "turning to repressive legislation." Summarizing the results of recent hearings, the New Jersey Democrat said a Federal Public Employees Relations Act would be the inevitable consequence.

Bargaining by State, county, and particularly municipal employees is undermined by the shortage of available revenue to support expanded (and often current) services, wages, and benefits, Mr. Wurf warned. "The cities are dying," he told the delegates, "for lack of money. The whole system of financing the governments we work for is in disrepair. This

union cannot responsibly sit down and negotiate with a city . . . unless there is a viable basis for financing the bargain that we make."

Three remedial measures were discussed, all requiring Federal action: revenue sharing, the release of frozen Federal funds for State and local projects, and immediate withdrawal of all military forces from Vietnam.

In the keynote address, President Wurf attacked the AFL-CIO's policy on jurisdictional disputes:

There is jurisdictional chaos in the labor movement. There is poaching and internecine warfare. We cannot be content with Article XX of the AFL-CIO Constitution. This limited, negative role of the AFL-CIO in providing rules of war between its affiliates is not, and should not be, what the American labor movement is all about. . . . We spend more resources fighting each other than fighting the bosses.

The representation struggle in Pennsylvania underscored Wurf's point. In May, AFSCME won the right to represent 75,000 Pennsylvania State employees only after a bitter and expensive struggle against a coalition of other unions.

Noting that only 25 percent of the American work force belong to unions, the convention passed a resolution calling on the American labor movement to stop fighting over the workers they already had and to concentrate resources on the unorganized.

Raising a related jurisdictional question, Mr. Wurf charged the Operating Engineers, Service Employees, Laborers, and others with "walking both sides of the street," by taking a per capita tax from public employees while working to promote the subcontracting of government services and the consequent loss of government jobs to employees in the private sector.

Delegates feared that private sector businesses with unorganized, inexpensive labor would underbid cities in providing a particular public service. A similar fear was expressed over the expanding activities of private nonprofit social service organizations. The convention, therefore, reaffirmed the union's policy

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of organizing employees of businesses and of non-profit social service agencies who now perform work previously done by government workers, and of raiding already organized units where the workers were not being "properly represented."

Constitutional changes sparked protracted debate. Delegates voted changes in the union's Judicial Panel, extending its jurisdiction and removing it further from union politics. Membership eligibility and local election protests, matters previously handled by the President and the Executive Board, were transferred to the Judicial Panel. All members would now be appointed by the President for staggered terms with the "advice and consent" of the Executive Board. (Panel members had formerly been elected by the Executive Board.) The terms of office were set at 5 years to make them longer than that of the appointing president. Rules were passed restricting union political activity of panel members and prohibiting international staff and Executive Board members from serving on the panel. The chairman of the Judicial Panel became a full-time official coequal with the Secretary-Treasurer, other panel members coequal to vice presidents.

Focusing on the presidential appointment of panel members, several delegates charged that this amendment would place the judiciary "under the thumb of the President."

Other constitutional changes transferred the authority to set executive and officer salaries from the delegates in convention to the International's Executive Board, and extended the terms of office of the President, Secretary-Treasurer, and International Vice-Presidents from 2 to 4 years. Many delegates saw in these amendments further restrictions on democratic processes, asserting that they might, over time, reduce executive accountability, remove the officers from close touch with the rank-and-file, and result in quadrennial conventions. Both amendments passed only after protracted debate.

President Wurf informed the 1,500 delegates that AFSCME membership, increasing at a rate of more than 1,000 new members a week, surpassed 550,000. Most of the membership gain is due to mergers. The most significant of these was the merger into

AFSCME of the Hawaiian United Public Workers and the Hawaiian Government Employees Association, both formerly independent unions. This merger, which brought more than 28,000 new members into AFSCME, prompted the convention to create a separate legislative district for Hawaii.

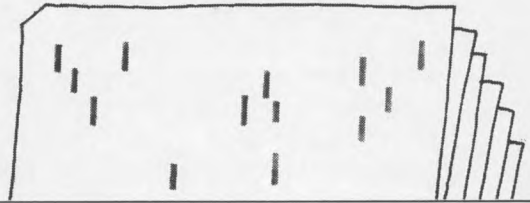
President Wurf attributed part of AFSCME's rapid growth to expansion of its services made possible by the increase in the per capita tax authorized at the 1970 convention. He reported that thirteen regional and a dozen subregional offices are now open and staffed with 800 full-time employees, that the national headquarters staff now number 120, that the educational department is the largest of any union in the AFL-CIO, and that wage data for 200 public employee job titles and occupations have been computerized.

Speaking for hospitalized Cesar Chavez, President of the United Farm Workers, Eliseo Medina described the problems faced by the farm workers and their current struggle with the lettuce growers. The union presented Mr. Medina with a check for \$5,000, pledged another \$45,000 to the farm workers, and promised publicity and picket support for the lettuce boycott.

A resolution calling for speedy ratification of the Equal Rights Amendment to the United States Constitution was amended from the floor to call for withholding support until special State laws protecting women were extended to cover all workers. Other proposals adopted included extension of the Federal Occupational Safety Act to cover employees of State and local governments and extension of social security coverage to all State, county, and municipal employees.

President Wurf delivered a tribute to Joseph Ames, who retired as Secretary-Treasurer to take up duties as chairman of the Judicial Panel. Replacing Ames as Secretary-Treasurer was William Lucy, a former executive assistant to President Wurf. Mr. Lucy is now one of the highest ranking black union officials in the country. His bid was unopposed. Jerry Wurf, president since 1964, was reelected without opposition, as were most of the International's vice presidents. □

Research Summaries



WAGES IN FERTILIZER PLANTS

DONALD S. RIDZON

EARNINGS OF PRODUCTION workers in fertilizer manufacturing plants vary considerably by type of operation, according to a study recently completed by the Bureau of Labor Statistics. The study shows wages higher in integrated plants manufacturing their own acids used in production than in superphosphate plants purchasing acids and mixing plants which purchase all ingredients. (See table 1.)

Workers averaged \$3.14 an hour in integrated plants, \$2.39 in mixing plants, and \$2.32 in superphosphate plants in March–April 1971. Differences in occupational staffing account for part of the variation in wage levels. Integrated plants employ most control-room men, who monitor the equipment producing granulated fertilizer, all contact-acid-plant operators, and a majority of the maintenance mechanics, the three jobs with the highest wage rates. (See table 2.) Material handling laborers, one of the lowest paid jobs studied, made up one-tenth of the work force in integrated plants, one-fifth in mixing plants, and one-fourth in superphosphate plants.

Wage levels in the industry are affected not only by the occupational composition of the work force, but also by other variables, such as location, size of establishment, and extent of unionization. About 80 percent of the 19,300 production workers in the industry were employed in the Border States, Southeast, Southwest, and Great Lakes regions. About 55 percent of the workers were in metropolitan areas, and a similar proportion in plants with collective bargaining agreements covering a majority of their workers. Most establishments in the industry are relatively small, employing fewer than 100 workers.

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Industrywide straight-time earnings of production workers averaged \$2.67 in March–April 1971—41 percent above the \$1.90 average recorded in a study made 5 years earlier.¹ This represents an annual average increase of 7 percent, somewhat higher than the annual average increase for all nondurable manufacturing production workers (6 percent).

Contributing to the large pay increase for fertilizer workers was the rise in the Federal minimum wage to \$1.60 in 1968. Nearly 40 percent of the 25,500 workers in mixed fertilizer plants during the earlier study were earning under \$1.60 an hour. Also, as production worker employment dropped by one-fourth, the proportion of seasonal workers in the industry slid from nearly two-fifths of the industry's work force in March–April 1966 to slightly more than one-fourth 5 years later. Because seasonal workers are usually less skilled and lower paid than year-round employees, their reduced proportion would have increased the industry's wage level even without a change in wage rates.

Paid holidays, most commonly 8 or 9 annually,

Table 1. Average hourly earnings¹ of production workers in fertilizer manufacturing,² by type of establishment, United States and major regions, March–April 1971

Region	All plants	Complete or integrated plants	Superphosphate plants	Mixing plants
United States.....	\$2.67	\$3.14	\$2.32	\$2.39
Middle Atlantic.....	2.81	-----	-----	2.80
Border States ³	2.34	2.60	-----	2.26
Southeast.....	2.43	2.83	2.10	2.06
Southwest.....	3.10	3.85	2.24	2.13
Great Lakes.....	2.76	-----	2.60	2.76
Middle West.....	2.83	3.28	-----	2.28
Pacific.....	3.41	3.77	-----	2.99

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

² The survey included establishments employing 8 workers or more and engaged primarily in (1) manufacturing mixed fertilizers from one or more fertilizer materials produced in the same establishment, or (2) mixing fertilizers from purchased fertilizer materials.

³ Border States include Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia. A complete definition of all regions will appear in the full report.

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

Table 2. Number and average hourly earnings¹ of workers in selected occupations, fertilizer manufacturing, March-April 1971

Occupation	Number	Earnings
Baggers.....	855	\$2.47
Bag sewers, machine.....	499	2.27
Batch weighers.....	492	2.35
Chambermen.....	85	2.60
Contact-acid-plant operators.....	211	3.48
Control-room men.....	381	3.81
Conveyor tenders.....	240	2.58
Granulator operators.....	323	3.04
Laborers, material handling.....	3,575	2.24
Mechanics, maintenance.....	1,151	3.55
Millers.....	101	3.04
Mixers, dry mixing.....	424	2.41
Mixers, superphosphate.....	191	2.52
Truckdrivers.....	1,075	2.14
Truckers, power (forklift).....	342	2.68
Truckers, power (other than forklift).....	1,333	2.36
Watchmen.....	141	2.14

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

and paid vacations after qualifying periods of service were available to nearly all year-round workers. Typical vacation provisions were 1 week's pay after 1 year service, 2 weeks after 2 years, 3 weeks or more after 10 years, and at least 4 weeks' pay after 25 years.

Four-fifths or more of the year-round employees were covered by life, hospitalization, surgical, and basic medical insurance, financed at least partly by employers. Three-fourths had private pension plans, and a majority accidental death and dismemberment, major medical, and sickness and accident insurance.

Smaller proportions of seasonal workers were covered by these benefits. For example, paid holiday provisions applied to one-fourth of the seasonal workers; paid vacation plans to one-tenth; and life, hospitalization, and surgical insurance to one-tenth.

Copies of separate releases for 12 States² with substantial industry employment are available upon request to the Bureau or any of its regional offices, listed on the inside front cover of this issue. A comprehensive report on the survey, providing national and regional information on earnings and supplementary benefits, will be published later this year. □

FOOTNOTES

¹ For an account of the earlier study, see "Wages in Fertilizer Plants, March-April 1966," *Monthly Labor Review*, March 1967, pp. 42-44.

² Includes Alabama, California, Florida, Georgia, Illinois, Indiana, Maryland, North Carolina, Ohio, South Carolina, Tennessee, and Virginia.

RAPID PRODUCTIVITY GAINS REPORTED FOR SELECTED INDUSTRIES FOR 1971

ARTHUR S. HERMAN

OUTPUT PER MAN-HOUR grew during 1971 in more than three-fourths of the 37 industries currently included in the Bureau's industry productivity measurement program. In most of these industries, it grew more in 1971 than it had in 1970. *Indexes of Output Per Man-Hour, Selected Industries, 1939 and 1947-71*¹ indicates that annual gains ranged from a high of 18.2 percent for manmade fibers to a low of 0.3 percent for flour. This improvement in productivity in the industries studied is consistent with the accelerated growth in output per man-hour which occurred in the entire private sector of the economy in 1971, as reported in the May issue of the *Monthly Labor Review*.² Productivity declined in six industries in 1971, compared with 13 in 1970.

Productivity growth was particularly pronounced in five industries: sugar, manmade fibers, aluminum rolling and drawing, radio and TV sets, and motor vehicles. The gain in output per man-hour in the motor vehicles industry (about 13 percent) reflected a large increase in output, as sales of motor vehicles rebounded sharply after a strike in the industry at the end of 1970. Output per man-hour also grew, although at a somewhat slower rate, in other large industries such as railroads, gas and electric utilities, paper, paperboard and pulp mills, and steel.

In many industries output slackened in 1971, but declines in man-hours exceeded the decline in output, resulting in productivity gains. For example, in steel where output fell off 4.9 percent and man-hours dropped 7.9 percent, productivity increased 3.3 percent.

The industries which experienced declines in output per man-hour in 1971 were footwear; hosiery; primary copper, lead, and zinc; bakery products; bituminous coal; and total coal mining.

Over the longer period, 1960-71, the average annual growth in output per man-hour ranged from 10.1 percent in petroleum pipelines to 0.3 percent for footwear. (See table 1.) About two-thirds of the industries had rates equal to or greater than the 3.0 percent increase for the total private economy during this period.

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Table 1. Output per man-hour in selected industries, 1967-71, and percent changes, 1970-71 and 1960-71

[Indexes, 1967 = 100]

SIC Code	Industry	1967	1968	1969	1970	1971 ¹	Percent change, 1970-71	Average annual percent change, 1960-71
MINING²								
101	Iron mining, crude ore.....	100.0	110.0	117.8	117.3	119.6	1.9	4.9
101	Iron mining, usable ore.....	100.0	105.1	109.6	108.0	108.9	0.8	2.8
102	Copper mining, crude ore.....	100.0	109.6	116.2	126.9	133.8	5.4	4.9
102	Copper mining, recoverable metal.....	100.0	103.4	106.9	112.8	114.9	1.9	2.4
11, 12	Coal mining.....	100.0	105.4	105.3	103.2	100.9	-2.2	4.0
12	Bituminous coal and lignite mining.....	100.0	105.1	105.4	103.8	102.5	-1.3	4.2
MANUFACTURING								
203	Canning and preserving.....	100.0	107.4	103.5	105.8	(³)	(³)	⁴ 2.3
2041	Flour and other grain mill products.....	100.0	106.7	106.1	108.4	108.7	0.3	4.1
205	Bakery products.....	100.0	102.2	104.0	104.3	104.1	-0.2	3.0
206	Sugar.....	100.0	104.3	102.0	111.8	123.4	10.4	4.2
2071	Candy and other confectionery products.....	100.0	101.6	99.5	98.9	108.4	9.5	3.0
2082	Malt liquors.....	100.0	106.4	113.7	119.2	127.8	7.3	6.4
2086	Bottled and canned soft drinks.....	100.0	109.1	113.6	121.5	129.4	6.6	5.1
211, 212, 213	Tobacco products—Total.....	100.0	103.0	101.0	102.9	111.7	8.5	2.2
211, 213	Cigarettes, chewing and smoking tobacco.....	100.0	102.6	97.7	98.2	108.0	9.9	1.3
212	Cigars.....	100.0	103.8	109.0	114.9	120.6	5.0	3.9
2251, 2252	Hosiery.....	100.0	92.9	106.0	126.7	118.9	-6.2	6.7
261, 262, 263, 266	Paper, paperboard and pulp mills.....	100.0	106.7	110.6	115.4	120.1	-4.1	4.2
2653	Corrugated and solid fiber boxes.....	100.0	102.7	104.1	109.2	115.1	-5.4	3.5
2823, 2824	Man-made fibers.....	100.0	115.6	116.7	119.2	140.9	18.2	5.5
291	Petroleum refining.....	100.0	103.0	107.0	108.3	113.0	4.3	5.5
301	Tires and inner tubes.....	100.0	106.8	102.6	104.7	109.9	-4.9	3.7
314	Footwear.....	100.0	103.5	96.7	103.5	101.3	-2.2	0.3
3221	Glass containers.....	100.0	105.1	108.5	104.6	105.2	-0.6	2.7
324	Hydraulic cement.....	100.0	110.7	112.6	110.6	120.3	8.8	4.4
3271, 3272,	Concrete products.....	100.0	109.3	110.5	107.9	(³)	(³)	⁴ 4.6
331	Steel.....	100.0	104.2	104.8	101.7	105.1	3.3	2.2
3321	Gray iron foundries.....	100.0	107.1	113.2	112.1	115.1	2.7	2.6
3331, 3332, 3333	Primary copper, lead, and zinc.....	100.0	118.3	120.9	117.0	115.9	-0.9	1.2
3334	Primary aluminum.....	100.0	94.9	105.1	108.9	112.0	2.9	2.5
3352	Aluminum rolling and drawing.....	100.0	104.7	107.2	109.5	123.9	13.2	5.1
341	Metal cans.....	100.0	104.3	107.2	105.1	110.2	4.9	2.0
3631, 3632, 3633, 3639	Major household appliances.....	100.0	105.1	108.6	107.1	113.6	6.1	4.7
3651	Radio and television receiving sets.....	100.0	116.1	125.1	128.1	151.0	17.9	6.9
371	Motor vehicles and equipment.....	100.0	108.5	106.8	101.8	114.8	12.7	3.0
OTHER								
401, Class I	Railroads, revenue traffic.....	100.0	104.3	109.2	110.1	112.3	2.0	5.6
401, Class I	Railroads, car-miles.....	100.0	101.8	103.8	103.6	106.7	3.0	3.3
451	Air transportation ⁵	100.0	104.3	107.2	109.7	116.5	6.1	8.0
4612, 4613	Petroleum pipelines.....	100.0	105.8	114.3	121.3	(³)	(³)	⁴ 10.1
491, 492, 493	Gas and electric utilities.....	100.0	107.0	113.8	116.6	120.8	3.6	5.9

¹ Preliminary.² Mining data refer to output per production worker man-hour.³ Not available.⁴ Average annual rate of change is for 1960-70.⁵ Output per employee.

Measures for the bakery products and metal cans industries are included for the first time this year. In the bakery products industry, productivity grew at an average rate of 3.0 percent a year from 1960 to 1971, reflecting a slow growth in output of 1.1 percent a year coupled with a decline in man-hours of 1.9 percent a year. Per capita consumption of bakery products declined slightly over this period while mechanization of product preparation and materials handling increased.³

In the metal cans industry, output per man-hour grew at a rate of 2.0 percent a year from 1960 to 1971, output at the high rate of 5.0 percent, and

man-hours at 2.9 percent.⁴ Productivity gains were aided by faster can making machinery and new can making materials. However, the growth of complicated products such as aerosol cans and tear tops for beverage cans as well as the highly specific requirements of can users in terms of inspection, labeling, packing, and shipping slowed the rate of productivity gain. □

—————FOOTNOTES—————

¹ BLS Bulletin 1758, 1972. This bulletin will be available later this year from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

² See Shelby W. Herman, "Productivity and cost movements in 1971," *Monthly Labor Review*, May 1972, pp. 12-16.

³ For further detail, see Clyde F. Huffstutler and Martha Farnsworth Riche, "Productivity in the bakery products industry," *Monthly Labor Review*, June 1972, pp. 25-28.

⁴ See also John L. Carey, "Productivity in the metal cans industry," *Monthly Labor Review*, July 1972, pp. 28-31.

WAGES RISE SHARPLY FOR TELEPHONE AND TELEGRAPH WORKERS

JOSEPH C. BUSH

Telephone workers. Wage levels in the Nation's interstate telephone companies rose 7.5 percent in 1970—nearly double the rate of increase in 1969 and one of the largest recorded by the Bureau's annual surveys of communication industry pay rates.¹

Total employment went up 5.2 percent. In Bell System companies, which comprised 95 percent of the work force, employment rose 5 percent.

Earnings of the 831,557 telephone carrier employees studied (excluding officials and managerial

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assistants) averaged \$3.89 an hour in December 1970. The dispersion of individual pay rates, as noted in previous surveys, largely reflects the wide range of worker skills required by the industry, differences in pay by carrier and locality, and the extensive use of rate-ranges for specific occupations; the middle half of the workers in the array earned between \$2.75 and \$4.50.

Women made up 55 percent of the workers covered by the survey, accounting for almost all of the telephone operators, slightly over nine-tenths of the clerical workers, and seven-tenths of business office and sales employees. Men, on the other hand, accounted for three-fourths of the professional and semiprofessional staff, and for nearly all construction, installation, and maintenance workers. Average hourly earnings for numerically important categories are presented in table 1.

Telegraph workers. Straight-time rates of pay averaged \$3.88 an hour in October 1970 for Western Union's 21,634 employees, other than messengers. The 1,339 motor messengers averaged \$2.75 and the 911 walking and bicycle messengers, \$1.79. Between October 1969 and October 1970, average rates of pay rose 7.8 percent for "nonmessenger" employees, 8.3 percent for motor messengers, and 7.2 percent for walking and bicycle messengers.

Table 1. Telephone carriers: number and average hourly earnings¹ of workers, by employment category

Item	October 1947			December 1969			December 1970		
	Employees	Percent of employees	Earnings	Employees	Percent of employees	Earnings	Employees	Percent of employees	Earnings
All employees ²	552,700	100	\$1.26	790,100	100	\$3.62	831,600	100	³ \$3.89
Men.....	179,700	33		348,300	44		374,400	45	
SELECTED EMPLOYMENT CATEGORIES									
Professional and semiprofessional.....	25,200	5	2.72	78,800	10	6.39	85,700	10	6.77
Business office and sales.....	28,500	5	1.45	62,800	8	3.84	66,000	8	4.11
Clerical employees.....	94,400	17	1.19	171,600	22	2.92	180,400	22	3.13
Nonsupervisory.....	88,300	16	1.13	158,600	20	2.79	166,500	20	2.99
Telephone operators.....	255,800	46	1.00	210,500	27	2.59	213,600	26	2.81
Chief operators, service assistants, and instructors.....	35,000	6	1.36	25,400	3	3.59	26,100	3	3.86
Experienced switchboard operators.....	165,500	30	.97	127,100	16	2.55	140,100	17	2.71
Construction, installation and maintenance employees.....	125,000	23	1.55	240,100	30	4.01	258,400	31	4.27
Cable splicers.....	8,600	2	1.61	21,900	3	3.77	25,300	3	3.93
Central office repairmen.....	20,600	4	1.63	58,200	7	3.77	63,500	8	4.00
Exchange repairmen.....	8,600	2	1.72	21,400	3	3.96	23,300	3	4.13
PBX and station installers.....	18,800	3	1.44	41,900	5	3.62	42,300	5	3.86

¹ Excludes premium pay for overtime and for work on weekends and holidays. Differentials for evening and night tours and certain prerequisites are included in averages.

² Excludes officials and managerial assistants. (Employment estimates

were rounded to the nearest hundreds.)

³ An estimated 49 cents of this average is due to changes in the industry's occupational mix such as illustrated in the table. Weighting occupational averages for 1970 by occupational employments in 1947 results in an average of \$3.40 an hour instead of \$3.89.

Total employment (excluding officials and managerial assistants) decreased by 3.6 percent during the year ending October 1970.

Rates of pay in October 1970 for jobs mostly staffed by men averaged \$3.86 for linemen and cablemen, \$4.07 for traffic testing and regulating employees, and \$4.26 for subscribers' equipment maintainers. Nonsupervisory clerical workers (73 percent women) averaged \$3.32 an hour; experienced non-Morse telegraph operators (78 percent women), \$2.89; and telephone operators (89 percent women), \$2.81. □

—FOOTNOTE—

¹ The annual BLS studies of occupational wages in the telephone and telegraph industries, conducted since 1947, are based on data submitted to the Federal Communications Commission by telephone carriers engaged in interstate or foreign communications service by means of their own facilities, with annual revenues exceeding \$1 million; the Western Union Co.; and international telegraph carriers with annual revenues exceeding \$50,000. The study covered almost 90 percent of the employees in the Nation's telephone communications industry and almost all of the employees in the telegraph communications industry in late 1970. The full report on this study will be available shortly.

U.S. AND U.S.S.R. CIVILIAN EMPLOYMENT IN GOVERNMENT

U.S. CIVILIAN GOVERNMENT employment rose from 6.4 million in 1950 to about 12.7 million in 1969, while U.S.S.R. civilian government employment remained virtually unchanged (1,831,000 in 1950 compared to 1,834,000 in 1969), according to official reports of each nation. (See table 1.) Given that the Soviet population was more than 18 percent larger than the U.S. population in both years and that the State plays a more extensive role in Soviet society than in U.S. society, these comparisons appear paradoxical. A recent study by the Department of Commerce (Foreign Demographic Analysis Division) has analyzed the official data and attempted to account for this paradox by adjusting the two employment series into "comparable classifications."

The study argues that the two series of figures represent different universes of employment. In the Soviet Union, most workers are employed by State organizations, but only those performing selected administrative functions are classified officially as

governmental employees. Such functions as education, health, library, municipal, and postal services are classified as nongovernmental activities and reported elsewhere. In the United States these activities comprise a large share of governmental employment; administration and law enforcement constitute only about 13 percent of the total. Thus the U.S. data covers a wider spectrum of employment than the Soviet data, and direct comparison of the two official series is invalid.

When the Commerce Department adjusted Soviet data to conform with U.S. definitions of civilian government employment, the number of Soviet employees rose to 11.5 million in 1952 and 19.5 million in 1969. U.S. data adjusted to conform with Soviet definitions yielded a U.S. civilian government employment of 900,000 in 1952 and 1,475,000 in 1969. Thus, while numbers of U.S. Government employees rose faster than comparable Soviet employees, overall Soviet employment under either classification system was considerably greater than U.S. employment.

Official data

Total civilian employment in government in the United States rose steadily between 1950 and 1969, except for 1953 when it decreased slightly due to the drop in Federal employment. The increase during the 1960's was greater, both numerically and proportionately. As a proportion of total government employment in 1950, Federal personnel accounted for 33.1 percent, State personnel 16.5 percent, and local personnel 50.4 percent. By 1969 the Federal share had dropped to 23.4 percent, and the State and local shares had increased (20.6 and 56.0 percent, respectively).

Federal civilian employment increased 41 percent during the period, although a number of temporary decreases occurred, largely due to explicit attempts to reduce the total. By contrast, civilian employment in State and local governments grew steadily from the early 1950's through 1969, increasing by 147 percent and 120 percent, respectively, during the two decades. Education was the largest function at both levels, accounting for one-third to two-fifths of State employment and 45 to 56 percent of local employment from 1952 to 1969. Other sizable functions are health services, police protection, and highway construction and maintenance.

Official Soviet statistics on civilian employment in government show that between 1950 and 1960, as a result of much-publicized efforts to reduce employ-

Table 1. Civilian employment in government, United States¹ and U.S.S.R.,² as reported, 1950 to 1969

[In thousands]

Year	United States	U.S.S.R.
1950.....	6,402	1,831
1951.....	6,802	1,808
1952.....	7,105	1,786
1953.....	7,048	1,726
1954.....	7,232	1,544
1955.....	7,432	1,361
1956.....	7,685	1,342
1957.....	8,047	1,294
1958.....	8,297	1,294
1959.....	8,487	1,273
1960.....	8,808	1,245
1961.....	9,100	1,295
1962.....	9,388	1,316
1963.....	9,736	1,308
1964.....	10,064	1,354
1965.....	10,589	1,460
1966.....	11,388	1,546
1967.....	11,867	1,651
1968.....	12,342	1,736
1969.....	12,691	1,834

¹ U.S. data include full-time and part-time employees, except those employed by the Central Intelligence Agency and the National Security Agency, as of April for 1957 and October for all other years.

² U.S.S.R. data are annual averages.

SOURCE: Comparison of U.S. and U.S.S.R. Civilian Employment in Government, 1950-1969, International Population Reports, Series P-95, No. 69 (U.S. Department of Commerce, Social and Economic Statistics Administration, 1972), table 1.

ment in administration, the number of persons employed by the government decreased about one-third. Since 1960 the total has risen nearly every year, and by 1969 it was more than 47 percent above the 1960 level, although the overall rise was only 3,000. The number of civilians officially reported as employed by the government declined significantly during the last two decades—from 4.5 percent of total state employment in 1950 to a low of 2.0 percent in 1960 (2.1 percent in 1969).

The distribution of civilian government employment in the U.S.S.R. was estimated from official reports to have been 11.4 percent at the central, 43.7 percent at the regional, and 44.9 percent at the local level in 1967, compared with 13.1, 33.5, and 53.4 percent, respectively, in 1950. The increase in personnel at the regional level and the significant decline at the local level is probably accounted for by the extensive program to enlarge local administrative districts and rural soviets during the 1950's and 1960's.

Adjusted data

To obtain a valid assessment of civilian government employment in the United States and U.S.S.R., the study adjusted both data series for greater com-

parability: U.S. data are adjusted to full-time equivalents to obtain a measure more equal to the Soviet concept of annual average employment; Soviet data are adjusted to include police and full-time party personnel who are not classified as government employees by Soviet standards but considered here to be utilized as such.

The comparison of adjusted data, as shown in table 2, indicates that government employment in the United States is less than that estimated for comparable activities in the U.S.S.R.—about 55 percent of the Soviet total in 1952 and about 57 percent in 1969. Growth of this employment, however, was slightly higher in the United States, but the amount of increase in the U.S.S.R. (8,039,000) was considerably higher than that in the United States (4,688,000). In both countries most of the growth occurred during the years 1962-69.

U.S. employment in general administration (which includes financial administration, police protection, correction, national defense, and international relations) rose steadily during the period shown but remained at 13-14 percent of the total. Nearly two-thirds of the increase took place after 1962; the largest share of the increase was in police protection, which more than doubled in size. Comparable Soviet employment is estimated to have decreased slightly during the period, dropping from 25 percent of total government employment in 1952 to 14 percent in 1962, where it has remained.

The largest share of government employment in both countries is in selected services. U.S. employment in this group was 53 percent of government employment in 1952 and 64 percent in 1969; similar Soviet employment increased from 51 to 63 percent of the total. The group more than doubled in both countries, with the U.S. total remaining about 58 percent of the U.S.S.R. total.

Within this group, education is the largest function in both countries—25 percent of total U.S. Government employment in 1952 and 37 percent in 1969, and 26 and 29 percent, respectively, in Soviet government employment. U.S. employment in education rose 154 percent during these years, while Soviet education personnel increased by slightly more than 93 percent. Health services, the next largest category in both countries, constituted approximately 8 to 10 percent of total government employment in the United States but 19 to 25 percent in the Soviet Union. The U.S. share is smaller primarily because U.S. nongovernment employment—an estimated two-

Table 2. Civilian employment in government, United States¹ and U.S.S.R.,² by function, according to U.S. classification, 1952 to 1969

[In thousands]

Function	1952		1957		1962		1967		1969	
	United States	U.S.S.R.	United States	U.S.S.R.	United States	U.S.S.R.	United States	U.S.S.R.	United States	U.S.S.R.
Total.....	6,370	11,478	7,166	12,289	8,425	14,828	10,363	17,988	11,058	19,517
General administration.....	860	2,876	939	2,158	1,071	2,109	1,317	2,563	1,421	2,829
Selected services.....	3,354	5,832	4,143	7,193	5,141	9,215	6,514	11,275	7,080	12,208
Education.....	1,598	2,956	2,094	3,463	2,730	4,276	3,666	5,288	4,065	5,722
Health services.....	513	2,193	729	2,849	875	3,761	1,031	4,477	1,097	4,853
Libraries, museums, zoos, and parks.....	39	(200)	33	(200)	45	(250)	54	(250)	60	(250)
Municipal services.....	511	221	560	332	647	484	705	584	750	642
Postal service ³	493	240	509	319	568	407	682	633	706	695
Public welfare.....	122	(*)	145	(*)	177	(*)	257	(*)	280	(*)
Social insurance and employment security administration.....	78	22	74	30	99	37	118	43	122	46
Other.....	2,156	2,770	2,085	2,938	2,212	3,504	2,531	4,150	2,556	4,480
Agricultural services and natural resources.....	205	643	214	578	256	690	284	778	285	835
Air transportation.....	25	(200)	27	200	53	(225)	54	(250)	60	(275)
Electric power.....	53	23	59	33	64	47	67	64	68	67
Gas supply.....	3	13	6	23	11	61	8	139	9	175
Highways (rural).....	253	17	314	22	381	33	409	47	406	51
Housing and urban renewal.....	19	278	26	322	34	377	42	465	51	496
Industrial, maintenance, supply, research, and other activities of Department of Defense.....	1,233	(824)	1,082	(812)	982	(760)	1,176	(805)	1,150	(825)
Printing.....	8	196	6	223	7	256	8	289	8	302
Research and technical services (nondefense).....	66	67	60	98	76	179	99	231	94	253
Transit (local).....	72	138	73	250	72	381	80	542	87	589
Water transport and terminals.....	26	26	24	42	23	49	27	50	30	62
Other and unallocable.....	193	345	193	335	254	446	279	490	308	550

¹ U.S. data are full-time equivalents as of April for 1957 and October for all other years, excluding employment in the Central Intelligence Agency and National Security Agency.

² U.S.S.R. data are annual averages. Figures in parenthesis are arbitrary estimates.

³ Soviet figures are reported as of various times during the different years and are not annual averages.

⁴ Not applicable.

SOURCE: Comparison of U.S. and U.S.S.R. Civilian Employment in Government, 1950-1969, International Population Reports, Series P-95, No. 69 (U.S. Department of Commerce, Social and Economic Statistics Administration, 1972, table 3).

thirds of the total employment in health services in 1967—is excluded. Employment in municipal services is a small portion of the total in both countries, particularly in the Soviet Union (2 to 3 percent).

The "Other" group in table 2 constituted more than one-third of total U.S. Government employment in 1952 but slightly less than one-quarter in 1969. Soviet employment in this group remained at about one-quarter during the period. The comparison of certain functions in this group is strongly affected by the sizable portion of total U.S. employment in air transportation, housing and urban renewal, and transit in the private sector. Highway employment in the United States, representing approximately 4 percent of the total, is considerably larger than in the Soviet Union and reflects the United States' larger highway network. The largest category in this group for the United States is "Industrial, maintenance, supply, research, and other activities of the Department of Defense," a catch-all group which consti-

tuted 19 percent of total government employment in 1952 and 10 percent in 1969. Despite a smaller armed force during most of the period, U.S. civilian employment in this function ranged from one-quarter to one-half larger than that estimated for the Soviet Union, perhaps because many functions performed by civilian personnel in the United States are performed by the military in the Soviet Union.

The study also provides a detailed comparison of U.S. and Soviet government employment adjusted to U.S.S.R. classifications, as well as additional statistical material and a detailed discussion of methodology. Recently published under the title, *Comparison of U.S. and U.S.S.R. Civilian Employment in Government: 1950-1969* (International Population Reports, Series P-95, No. 69), the study is available from the Department of Commerce, Social and Economic Statistics Administration, Washington, D.C. 20230. □

MEDICAL CARE SPENDING SINCE MEDICARE

PERSONAL HEALTH CARE spending¹ in the United States totaled over \$65 billion in 1971—up 11 percent from 1970 and almost 80 percent from 1966, the year before Medicare began operation. Increased use of services, improvements in the quality of medical care, intensified public spending, along with spiraling prices for medical care, are the major factors in the increase, according to Barbara S. Cooper and Nancy L. Worthington, writing in the *Social Security Bulletin*.²

The rate of increase in medical spending was approximately the same for three age groups in 1971—10.6 percent for those under 19 and those age 19 to 64, and 11.6 percent for those 65 and over—closing the gap that had occurred in the first 2 years of Medicare when spending increases for the aged were almost double those of the other age groups. Still, in 1971, one-quarter of medical expenditures went for the aged, who make up only one-tenth of the population.

Health care expenditures for the aged averaged \$861, over 6 times those for youth (\$140) and almost 3 times the average (\$323) for persons age 19 to 64. Hospital care was the largest expenditure for the two older groups; physicians' service charges predominated for the young. In whatever category, the amount was the highest for the aged.

Government, private health insurance, philanthropy, and industry (through in-plant services) paid a substantial part of the individual's medical bills—three-fifths for persons under age 65 and nearly three-fourths for the aged. This represents a sizable increase from 1966, when individuals paid about half their medical costs. Government's share of the cost has risen from 22 percent in 1966 to 36 percent in 1971 for all persons, and nearly triple the 1966 rate for the aged. Medicare payments totaled about a third of the health care bill for the aged in the program's first year, rose to 45 percent in 1969, but declined to 42 percent in 1971 because of tightened regulations for reimbursement of extended care, hospital, and physicians' services.

The aged person's average out-of-pocket payment dropped from more than one-half of his 1966 medical bill to about one-fourth in 1971, but because of the increased use of services and higher prices the amount he paid directly in 1971 (\$225) was only

slightly lower than the amount in the earlier year (\$234). For persons under age 65, the average out-of-pocket payment grew 31 percent, from \$79 in 1966 to \$104 in 1971.

After adjustment for population and price increases, the 1967–71 growth in expenditures attributable to increased use of medical and improved facilities and improved technology is estimated to be 17 percent for the youth, 10 percent for the intermediate ages, and more than 26 percent for the aged. □

—FOOTNOTES—

¹ Personal health care spending includes all expenditures for health and medical services received by individuals and excludes expenditures for medical facilities construction, medical research, and public health activities, such as disease prevention and control, which do not directly benefit individuals. Also excluded are the net cost of insurance (the difference between health insurance premiums and benefits paid), the administrative expenses of several public programs, and some expenses of philanthropic organizations.

² Barbara S. Cooper and Nancy L. Worthington, "Medical Care Spending for Three Age Groups," *Social Security Bulletin*, May 1972, pp. 3–16.

INPUT-OUTPUT TABLES UPDATED TO 1966

AS PART of its continuing program of input-output work, the Bureau of Economic Analysis of the U.S. Department of Commerce has updated the 1963 input-output tables to 1966. The 1966 tables measure interindustry transactions for 85 industries in three ways: what each industry sold to and bought from every other industry; what each industry required directly from every other industry to produce \$1 of gross output; and what each industry required directly and indirectly from every other industry for each dollar of deliveries to final demand.

Data for the total output and final market purchases of each industry are based directly on 1966 statistics. Intermediate input data are estimated from 1963 relationships, which have been modified to include changes from 1963 to 1966 in the relative prices of the inputs and in the average demand for a product due to changes in technology, scale, product mix, and other factors.

The 1966 updating has been published in Depart-

ment of Commerce BEA Staff Paper in Economics and Statistics, No. 19. The Staff Paper also contains two supplementary tables which measure the impact of each category of final demand (personal consumption expenditures, gross exports, Federal Government purchases, and others) on the output of every industry, and the change from 1963 to 1966 in industrial requirements for each industry's output. A summary of methodology is also included.

Copies of the Staff Paper (Accession Number 7210299) may be purchased for \$3 in print or 95 cents in microfiche from the National Technical Information Service, Springfield, Va. 22151. □

DAYS LOST FROM WORK BECAUSE OF ILLNESS OR INJURY

AN ESTIMATED 412.6 million workdays—5.4 per worker—were lost because of illness or injury, according to the Health Interview Survey conducted by the U.S. Department of Health, Education, and Welfare in 1968.

Women averaged more days lost than did men, particularly among workers age 25 to 44. Overall, women lost an average of 5.9 days in 1968, compared with 5.2 days for men. Workers of both sexes age 45 and over reported more days lost per person than did their younger counterparts.

As family income level rose, the number of work-loss days per person declined. Workers with a family income of less than \$3,000 lost an average of 7.0 days; those whose family income was \$15,000 or more, 4.4. Workdays lost were also inversely related to educational attainment, a pattern which held for each age and sex group. Overall, workers who completed less than 9 years of schooling lost more than twice as many days as those completing 16 years or more.

White workers experienced a lower average number of days lost from work than did members of

racial minority groups, 5.1 and 8.1 respectively. The disparity was largest for workers age 45 and over.

Employees of the Federal Government averaged 6.8 days lost per person; employees of other government and paid employees in the private sector, 5.4 days; self-employed persons, 5.0. Federal employees received an estimated 86.9 percent of earnings for the 19.9 million workdays lost; other government workers, 86.6 percent for the 44.5 million days; paid employees in the private sector, 45.1 percent for the 302.6 million days.

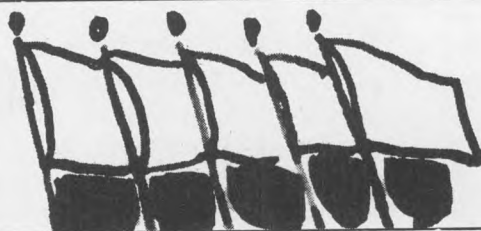
The survey sample included persons in the civilian noninstitutional population who had a job or business during the 2-week period prior to the survey week. *Time Lost From Work Among The Currently Employed Population, United States, 1968*, Vital and Health Statistics Series 10—No. 71, is available for 50 cents from the Superintendent of Documents, Washington, D.C. 20402. Technical notes on methods and definition of terms used in the report are included in the appendixes. □

DIRECTORY OF SPANISH SURNAMED COLLEGE GRADUATES, 1971–1972

IN AN EFFORT to assist firms and agencies striving to meet affirmative action goals of increasing minority employment, the Cabinet Committee on Opportunity for the Spanish Speaking has published a directory showing the names, addresses, and major fields of study of Spanish surnamed college graduates. The information was obtained by the Committee on a voluntary basis from colleges and universities throughout the United States in areas where there are significant numbers of this minority group.

Single copies of *Spanish Surnamed American College Graduates, 1971–1972* (878 pages, in 2 parts) are available from the committee, 1800 G Street, N.W., Washington, D.C. 20506. □

Foreign Labor Briefs



SOVIET TRADE UNION CONGRESS URGED TO INCREASE MEMBERS' PRODUCTIVITY

EDMUND NASH

REPRESENTATIVES OF THE 98 million Soviet trade union members and observers from over 100 foreign trade union organizations met in Moscow, March 20-24, for the 15th Congress of Soviet Trade Unions. Speeches of Party trade union leaders indicate that the main purpose of the Congress, as of previous Congresses, was to stimulate the trade unions to get their members (about 97 percent of all wage and salary earners) to increase and improve production.

Leonid Brezhnev, First Secretary of the Communist Party, called upon workers and management to increase their efforts to fulfill the ninth Five-Year Economic Plan (1971-75), decided upon by the Party and the Government. In this connection, he said, it would be necessary to have stricter enforcement of labor discipline, wider use of material and moral incentives to increase production, greater promotion by unions of "socialist competition in production" among workers, and faster introduction of new technology into the production process. He repeated the line stressed at the 24th Party Congress last year that the Party will continue to increase trade union responsibilities and see that the trade unions worthily perform their role as "schools of government, schools of management, and schools of communism." He announced that the Order of Lenin, the highest in the U.S.S.R., had been conferred on the trade unions in recognition of their "great services" in "the successful fulfillment" of the eighth Five-Year Economic Plan (1966-70).

Alexander Shelepin, chairman of the All-Union

Central Council of Trade Unions, which implements trade union policies between Congresses, prescribed what the trade unions should do to promote greater and more efficient production in all branches of the national economy. He indicated three major goals: (1) to promote the full use of labor, materials, and equipment, especially workers' experience and technological advances; (2) to inculcate in workers the "Communist attitude toward work," so as to increase labor productivity and to fulfill production plans; and (3) to improve the trade union organization (including the selection and training of personnel) to make union locals more effective in their ideological, educational, safety, and production-promoting activities.

As an indication of the trade unions' function in the U.S.S.R. to administer programs that further not only the workers' welfare but also the ideological and economic aims of the Party, Shelepin exhorted the unions "to continue to educate the trade union *aktiv* (unpaid volunteer workers) in a spirit of high responsibility for the implementation of party and government directives and the decisions of trade union organs." He urged trade unions to check more diligently on the enforcement of labor discipline in cases involving drunkenness, loafing on the job, and theft of government property, and to concern themselves more with the organization of cultural and physical activities for workers in their leisure time. He also called upon union locals to check on the implementation of work safety regulations, and on the availability and quality of consumer services.

Other business of the Congress included the report of the Central Auditing Commission, which oversees the expenditure of trade union and state social insurance funds, and the fiscal management of a wide network of trade union cultural institutions, sport facilities, sanatoriums, and other organized activities. It cited a more than 40-percent increase in trade union expenditures. Two-thirds of these expenditures were covered by union dues, and the remaining third by income derived from trade union

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activities, including the showing of motion pictures and sales of trade union publications. The Commission also noted that it was necessary to continue improving the work of auditing commissions that check on the financial activities of trade union bodies. These commissions have about 2 million elected members working without pay.

The Congress approved statements condemning the use of armed forces and the detention of "political prisoners" in Northern Ireland, and "the aggressive policy of the ruling circles in Israel against the people of Arab states with the direct support of U.S.A. imperialism and the international forces of Zionism." It unanimously adopted a resolution calling for an end of "the American war of aggression" in Indochina.

Amendments to the Constitution of Trade Unions passed by the Congress provided that the unions will establish and maintain contacts with trade unions in other countries, regardless of their social, ethnic, political, or religious character, and asserted the right of the All-Union Central Council of Trade Unions to issue instructions clarifying existing labor laws. Delegates are to meet every 5 years, rather than every 4 as in the past, to coincide with the period of the government's Five-Year Economic Plans.¹ □

—FOOTNOTE—

¹ The complete text of the decision on amendments to the trade union constitution appears in *Trud*, Mar. 25, 1972, p. 4. For the basic provisions of the constitution, see *Principal Current Soviet Labor Legislation* (BLS Report 210, 1962), pp. 112-119; also subsequent amendments (BLS Report 358, 1969), p. 22.

SOCIAL AND WELFARE PROGRAMS FOR THE HANDICAPPED ABROAD

THERESA F. BUCCHIERI

GOVERNMENT'S AWARENESS of the potential abilities of handicapped persons to develop skills, become gainfully employed, and earn regular wages has resulted in an upsurge of sheltered workshops in several European countries.¹ Through these work-

shops, the handicapped persons are rehabilitated and gainfully employed, either in the workshop or in industry, depending upon their emotional stability.

Methods of financing, operating, and supervising rehabilitation centers vary. In Croydon, England, a government-supported rehabilitation center enlists the support of industry to provide occupational re-adjustment and sheltered employment for most categories of disabled persons. A panel of industrialists provide advice on work opportunities and related matters. The assessment and rehabilitation section of the unit simulates realistic working conditions, measures productivity, and is concerned with the reaction of workers to stresses and industrial pressure. Length of stay here is normally restricted to 6 months. A 35-hour 5-day workweek is in force.

In the sheltered workshop section, the trainees, working a 40-hour week, have reached full wage earning status. The men earn a naverage of £ 14 (\$34) a week, and the women about £ 11 (\$26.50). Transportation costs to and from the establishment (up to 50 cents daily) are reimbursed and mid-day meals in the cafeteria are supplied free of charge. Trainees are eligible to receive 2 weeks of paid vacation annually.

The Croydon center can accommodate 150 trainees. A review panel meets weekly to consider requests for admission. An applicant is eligible if he is medically approved as suitable; is over 16 years of age; has a good industrial therapy record or reasonable outside employment background; is of socially accepted disposition; is able to travel independently; is residentially qualified as a Croydon responsibility; and is considered unemployable in open industry at time of referral.

In Norway, workers who are unable to enter regular industry because of physical or mental disability are offered employment in the "social" workshops administered by local authorities. As stipulated in social and labor laws, the workshop employment must correspond as closely as possible to normal outside employment. After 1 year of training, about 30 percent of the workers are placed in private industry, with a 2-year followup, and the rest remain gainfully employed in the workshop.

All wages are based on individual productivity and are geared to union wages for nonhandicapped workers performing similar work. There are three categories of hourly earnings: Low, 5 kroner (\$0.70); average, 10 kroner (\$1.40); and top, 15 kroner

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(\$2.10). When a workshop worker receives 15 kroner per hour, he is ready for outside industrial employment.

Care for the handicapped in Denmark falls under the aegis of the State. The Ministry of Social Affairs administers the Rehabilitation Act providing for vocational instruction and training of the disabled. It supervises recognized training institutions for the care of the handicapped, such as the Society and Home for Cripples in Copenhagen. The society operates or assists in the management of rehabilitation establishments, including hospitals and hospital departments for orthopedic treatment and physical medicine, schools for disabled children, and education and training institutions for young handicapped persons. The vocational schools run by the society train physically handicapped persons in a trade or in officework, which will make it possible for them to compete on equal terms with nondisabled workers. They complete their 4-year apprenticeship with a journeyman's probation. If apprenticeship training cannot be completed because of the severity of the disability, the school tries to develop the trainee's skill in a special trade so he can be placed as a semiskilled worker in an industrial enterprise or, in the case of the most seriously disabled, in a sheltered workshop.

Wage payments in the sheltered workshops are based on union standards and are geared to the local prevailing rates for comparable work.

The National Foundation for the Rehabilitation of the Handicapped operates about 150 sheltered workshops in Belgium. The Ligue Braille, a vocational center and workshop for the blind, employs some 80 blind persons who are engaged in assembling operations, printing, and chair caning.

These employed persons receive a monthly pension of 5,000 francs (\$100) in addition to wages earned per week. The law provides certain minimum hourly rates for five categories according to the degree of handicaps, as follows:

	<i>In francs</i>	<i>In U.S. dollars</i>
1.....	20	0.40
2.....	25	.50
3.....	30	.60
4.....	35	.70
5.....	40	.80

The employed blind person normally earns from 55 to 75 francs (\$1 to \$1.50) an hour. □

NEW MANPOWER PROGRAM IN NORWAY

A NUMBER of measures are being undertaken in Norway to reorient its manpower policy toward current economic and social conditions. The broad lines of reform, set forth in a White Paper of 1969 and approved by the Parliament, are intended to implement recommendations of the ILO (International Labor Office) on full employment and of the OECD (Organization for Economic Cooperation and Development) on an active manpower policy.¹

Many of the measures, although originally designed to cope with the tight labor market of the 1960's, are also relevant to periods of greater unemployment. The *OECD Observer* reported recently that

great weight is given to removing obstacles to the employment of people who could be considered as additions to the labor force but against whom there is, everywhere and always, discrimination—older workers and the handicapped. Facilitating the entry of women into the labor force is considered another important means of supplementing manpower resources.²

The new programs relating to employment include provisions to extend sheltered workshops and develop a rehabilitation center at Tromsø for handicapped workers, to create language and orientation courses for foreign workers, and to establish day nurseries and an equal opportunity committee for women wishing to enter the labor force. Protection against unemployment is provided for older workers under new measures which entitle them to longer notice before separation and longer unemployment benefits, up to 52 weeks a year until the worker reaches pensionable age. Other employment measures expand unemployment benefits for younger workers as well (increasing coverage from 20 to 21 weeks) and bolster placement services by expanding their professional staff and by initiating an "open reception" policy to make information more accessible to job-seekers.

Norway's already extensive program for stabilization of employment during the winter months has been enlarged by a winter building scheme which subsidizes private housing construction between November and May or June where climatic conditions are extreme, at a rate of 3,000 to 4,000 Norwegian kroner (approximately \$450-600) per house

or apartment. In addition, the Government will launch public works projects and grant subsidies to municipalities to stabilize seasonal fluctuations in employment.

Other measures in the manpower program attempt to even out regional differences in Norway, which are more marked than in most other countries because of the inaccessibility of the Northern regions and the division of the country into vertical mountain ranges and valleys. Transport subsidies and investment grants have been introduced to encourage industry to move to "development centers;" Government committees have been established which must be informed of all plans to invest in overcrowded areas such as Oslo and may recommend alternative locations in zones with less pressure on economic

resources. Also, the Ministry of Labor has been authorized to compensate (ordinarily up to 50,000 kroners or about \$7,460) persons or families who leave a "difficult area" where they are unlikely to be able to earn an adequate income.

Norway's new manpower program also provides for a sample survey of labor market conditions at regular intervals. □

— FOOTNOTES —

¹ The report of the OECD examiners, together with the conclusions of its Manpower and Social Affairs Committee, are being published under the title, *Manpower Policies in Norway*.

² "Norway's Manpower Policies," *OECD Observer*, April 1972, pp. 3-5.

High-level student migration

Although he is often treated with other high-level migrants in general statistics and in discussions, the student migrant is different. He is usually younger and less experienced in an occupational role than other high-level migrants. His decision to migrate for study is probably less related to ultimate occupational objectives than the decision of an older, more mature professional person, and his decision to migrate following study, although linked to work goals, is made with less hindsight than that of the previously employed. His niche in the economic structure at home or "abroad" is not carved out and presumably his migration does not disturb a functioning economic system in the same way the migration of an established professional might. He is human capital in

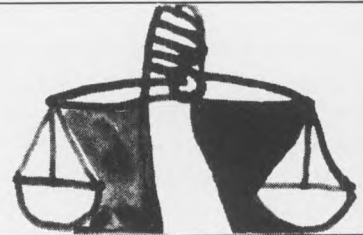
formation; he has more of his economically productive life ahead of him than most other high-level migrants. . . .

Student migrants have already made at least one migration decision, to study abroad. But they must face a second decision—to remigrate following study or to remain abroad, becoming a "permanent" rather than a "temporary" migrant. If a student remains abroad, he enters the brain drain statistics, but until the decision is made, he represents a potential gain to his area of origin.

—ROBERT G. MYERS,

Education and Emigration
(New York, David McKay Co., Inc., 1972).

Significant Decisions in Labor Cases



The power to arbitrate

AN ARBITRATOR has no greater freedom in providing make-whole remedies in refusal-to-bargain situations than does the National Labor Relations Board. His authority does not reach beyond the stipulation of the contractual arbitration clause.

In the case discussed here (*Steelworkers v. U.S. Gypsum Co.*¹), a successor employer refused to honor his predecessor's collective bargaining agreement and the union demanded that the dispute be arbitrated as the agreement provided. Since the new employer declined to deal with the union, the arbitration was ordered by a Federal court of appeals at the union's request.

One of the issues submitted to the arbitrator was that of the contract's provision for a wage reopener. The new owner contended that, like the rest of the contract, the reopener clause did not concern him and refused to bargain.

Inasmuch as the appellate court's arbitration order, in effect, declared the successor company bound by the existing agreement, the arbitrator found that the new owner had violated that agreement by its conduct. But the finding came almost 6 years after the violation and more than 4 years after decertification of the union in question. Under these circumstances, ordering a negotiation would have been impractical.

The arbitrator decided to award a wage increase to the aggrieved employees on the basis of his own judgment. He ordered the successor employer to pay the employees an hourly wage increase of 10 cents, an amount upon which, he assumed, the parties would have agreed had they engaged in bargaining. The award was retroactive to the date of the reopener and carried a 6-percent interest com-

pounded quarterly. The total amount was to be paid to the decertified union for distribution among the employees. (Since subsequent to the reopener date the company unilaterally granted an hourly 6-cent raise, the arbitrator's award for the period of that increase was to be only 4 cents an hour.)

On appeal by the successor, a Federal district court held the award invalid. It was contrary to the *H. K. Porter Co.*² principle that the terms of a collective bargaining agreement cannot be determined by any authority but must be agreed upon by the parties themselves. In *Porter*, the U.S. Supreme Court had said that the NLRB "is without power to compel a company or a union to agree to any substantive contractual provision of a collective bargaining agreement." Here the district court ruled that the arbitrator's "recourse . . . (of, in effect, determining what the parties would have agreed to had negotiations been conducted) [was not] sustainable and indeed must be set aside as beyond his jurisdiction."

It was not impossible, said the district court, for the parties to have written an arbitration clause giving an arbitrator the authority to make a contract for them if that were necessary. But they did not do so. Their clause read as follows: "The arbitrator shall only have jurisdiction and authority to interpret, apply, or determine compliance with the provisions of this agreement. The arbitrator shall not have jurisdiction or authority to add to, detract from, or alter in any way the provisions of this contract. The decision of the arbitrator shall be final and binding on both parties." The court concluded, "Arbitration here has had the result of the arbitrator's making a new contract" for the purpose of a wage scale, a function for which the clause did not provide.

(The decision also dealt with the problems—not included in this report—of an apparent inconsistency between the *Wiley*³ and *Porter* decisions in their application to situations of employer successorship, and of dues checkoff and attorney's fee awarded by the arbitrator.)

¹"Significant Decisions in Labor Cases" is written by Eugene Skotzko, Office of Publications, Bureau of Labor Statistics.

Picketing foreign-flag ships

Interference with foreign trade and commerce is not a sufficient cause for exempting a labor dispute from the Norris-LaGuardia Act's ban on antilabor injunctions. Recently, a Federal court of appeals refused to create such an exemption because the Supreme Court had already ruled "squarely to the contrary" in a situation virtually identical with that in the present case (*Port Authority v. Masters, Mates & Pilots*⁴).

The Port of Houston Authority sought to enjoin a peaceful picketing of several ships flying foreign flags. The picketing was intended to inform the public about the decline of job opportunities to U.S. seamen because of the use of foreign-registry vessels, and about the substandard wages and working conditions on such ships. Other workers refused to cross the picket lines, and the boats could not be unloaded.

The Authority maintained that, since the foreign ships were in international commerce and entered the U.S. ports under the protection of international treaties, the picketing not only interfered with this country's commerce with friendly nations but also violated the treaties in question—the laws of the land. Such labor activity should be among the exemptions from the ban of the Norris-LaGuardia Act so that it could be enjoined.

Upholding a district court's refusal to enjoin the picketing for lack of jurisdiction, the appellate court listed eight categories of exemption,⁵ some expressly statutory, others court-created, but not including interference with foreign trade and commerce in violation of underlying international treaties. Furthermore, the court pointed out, in 1960 the Supreme Court decided a very similar case, involving a picketing "of the same type, for the same purpose, and in much the same style" (*Marine Cooks & Stewards v. Panamanian Steamship Co.*⁶). There the High Court "specifically rejected the idea that the Norris-LaGuardia Act contained an exception for interference with foreign trade or commerce."

In conclusion the appellate court observed, "The Norris-LaGuardia Act restriction on the power of Federal courts to issue injunctions in labor disputes is virtually intact after 40 years. The exception to it, whether statutory or court-fashioned, are narrow indeed. The exception sought by the Port Authority here is not within any existing exception and is beyond our authority."

(In *Marine Cooks*, the Supreme Court did not

say why interference with commerce in violation of international treaties does not merit exemption from the Norris-LaGuardia Act's ban on antilabor injunctions, as do, for instance, the situation involving fraud or secondary boycotts. The High Court merely stated, "Though the employer here was foreign, the dispute was domestic." (Footnote 12.) And it explained: "Congress passed the Norris-LaGuardia Act to curtail and regulate the jurisdiction of courts, not . . . of people engaged in labor disputes. As we pointed out in the *Benz* case [353 U.S. 138], a ship that voluntarily enters the territorial limits of this country subjects itself to our laws and jurisdiction as they exist. The fact that a foreign ship enters a U.S. court as a plaintiff cannot enlarge the jurisdiction of that court. . . ." (At p. 372). For a discussion of the effect of U.S. labor laws on the flag-of-convenience fleet, the Court referred to 69 *Yale Law Journal*, pp. 498 and 516-525.)

Unlawful dues checkoff

An employee quit her job because of ill health, but failed to revoke her authorization for union dues checkoff. About 3 years later the company recalled her to a different kind of job. This time she was not required to file an application, received a higher than the beginning rate of pay, and was not asked to pay an initiation fee as a union member; but she did lose the seniority she had acquired during the time of her previous employment.

The union did not consider her to be a "new employee." It asked the company to deduct union dues from her pay under the old authorization, and the company complied. There was no union-security agreement, but automatic dues deductions from the wages of the recalled employees who had not revoked previous authorizations was a regular practice.

Was the deduction of dues under these circumstances lawful? No, said the NLRB: ". . . It is clear from the record that when [the employee] left the employ of the . . . company she had no intention of returning and had no reasonable expectancy of reemployment. . . . In short, [her] employer-employee relationship was completely severed." She returned to the company as a new employee. (*Cavalier Industries, Inc.*⁷)

But what about the unrevoked dues-checkoff authorization? The Board said: it is now well settled that dues deduction after a valid revocation of the

authorization is illegal (a violation of section 8(a)(2) of the LMRA). "Certainly the same result is justified where, as here, the checkoff authorization has been extinguished by the employee's cessation of employment."⁸ What's more, "checkoff of dues, under these circumstances, would encourage membership in the union in violation of section 8(a)(3) and . . . the union's causation of such a deduction . . . is accordingly violative of section 8(b)(2) of the act." The employee was not obligated to join the

union and pay dues. Deductions could be made only if she signed a new authorization, that is, if she rejoin the union as a new member.

Both the union and the employer were found to have violated the LMRA and ordered to discontinue the practice of checking off union dues from wages "pursuant to checkoff authorizations which are no longer valid because of break in employment." Both were ordered to reimburse the employee, jointly and severally, for the deductions already made. □

———— FOOTNOTES ————

¹ D.C.-N.D. Ala., No. 71-248, Feb. 24, 1972.

² 397 U.S. 99 (1970); see *Monthly Labor Review*, May 1970, pp. 71-72.

³ *John Wiley & Sons, Inc. v. Livingston*, 376 U.S. 543 (1964); see *Monthly Labor Review*, May 1964, p. 564.

⁴ *Port of Houston Authority v. Masters, Mates and Pilots* (C.A. 5, No. 72-1010, Mar. 2, 1972).

⁵ The court listed the following situations exempted from application of the Norris-LaGuardia Act's ban on antilabor injunctions: fraud; violence; the 80-day prestrike cooling-

off period under the LMRA, if the strike threatens national health or safety; a temporary relief requested by the NLRB in instances of unfair labor practices or secondary boycotts; enforcement of NLRB orders; express exception in equal employment opportunity provisions of Title VII of the Civil Rights Act of 1964; minor railroad disputes; and strikes called in violation of no-strike agreements with provisions for a binding arbitration.

⁶ 362 U.S. 365 (1960); see *Monthly Labor Review*, June 1960, pp. 625-626.

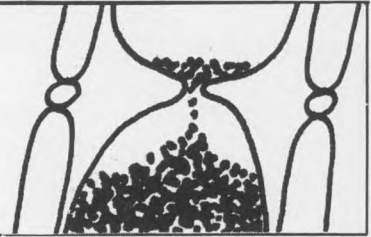
The welfare morass

With welfare, what you're dealing with are people who have simply fallen out of the employment market. No one really needs them. No one wants them. The question then is, Do you slow down the production machine and put them to work, even though it would be inefficient? Do you do what we're doing at the moment, which is just paying people to stay away? Or do you do the third choice, which is taxing the private economy to put these people to work in the public area?

—GEORGE STERNLIEB,

quoted in Bruce Porter,
"Welfare Won't Work, But What Will?"
Saturday Review, June 3, 1972.

Major Agreements Expiring Next Month



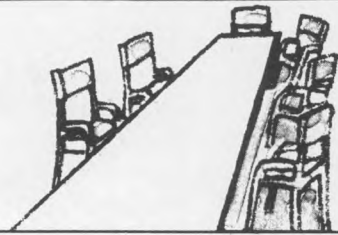
This list of collective bargaining agreements expiring in September is based on contracts on file in the Bureau's Office of Wages and Industrial Relations. The list includes agreements covering 1,000 workers or more in all industries except government.

Company and location	Industry	Union ¹	Number of workers
A. E. Staley Manufacturing Co. (Decatur, Ill.)	Food products	Allied Industrial Workers	1,850
Acme Markets, Inc., Division No. 7 (New Jersey)	Retail trade	Retail Clerks	2,200
Admiral Corp. (Chicago, Ill.)	Electrical products	Electrical Workers (IBEW)	3,000
Alatex, Inc. (Alabama and Florida)	Apparel	Clothing Workers	3,100
Associated Men's Wear Retailers of New York, Inc. (New York, N.Y.)	Retail trade	Retail, Wholesale, and Department Store Union	2,000
Avco Corp., Avco Ordnance Division (Richmond, Ind.)	Ordnance	Electrical Workers (IBEW)	1,000
Buffalo Forge Co. (Buffalo, N.Y.)	Machinery	Steelworkers	1,150
California Bakery Employers Association (California)	Food products	Teamsters (Ind.)	4,000
Campbell Soup Co. (Fayetteville, Ark.)	do	Meat Cutters	1,100
Columbia Broadcasting System, Inc. (Interstate)	Communication	Electrical Workers (IBEW)	1,300
Consolidated Gas Supply Corp. (Interstate)	Utilities	Allegheny Mountain Gas Workers' Union (Ind.)	1,700
Eaton Corp., Fuller Transmission Division (Kalamazoo, Mich.)	Transportation equipment	Allied Industrial Workers	1,150
Electrical Contractors Association of The City of Chicago (Chicago and Cook County, Ill.)	Construction	Electrical Workers (IBEW)	7,000
First National Stores, Inc. (Massachusetts)	Retail trade	Meat Cutters	2,000
Frank G. Shattuck Co. (New York and New Jersey)	Retail trade	Hotel and Restaurant Employees	2,300
FWD Corp. (Clintonville, Wis.)	Transportation equipment	Allied Industrial Workers	1,100
General Contractors Labor Association (Honolulu, Hawaii)	Construction	Carpenters	1,000
General Dynamics Corp. (Fort Worth, Tex.)	Transportation equipment	Office and Professional Employees	2,200
General Fireproofing Co. (Youngstown, Ohio)	Furniture	Steelworkers	1,250
General Foods Corp., Jell-O/Dover Operations (Dover, Del.)	Food products	Meat Cutters	1,300
Hooker Chemical Corp. (Niagara Falls, N.Y.)	Chemicals	Niagara Hooker Employees Union (Ind.)	1,250
Hotels and Motels Agreement (Washington, D.C.) ²	Hotels	Hotel and Restaurant Employees	6,000
Kaiser Steel Corp. Eagle Mountain Mine (Eagle Mountain, Calif.)	Mining	Building and Construction Trades Council; and Teamsters (Ind.)	1,000
Kellogg Co. (Interstate)	Food products	Grain Millers	5,150
Levi Strauss & Co. (Arkansas and Tennessee)	Apparel	Clothing Workers	2,000
Maremont Corp., New England Division (Saco, Maine)	Machinery	Textile Workers Union	3,000
Mason & Hanger—Silas Mason Co., Inc., (Burlington, Iowa)	Ordnance	Machinists	3,400
Morse Chain Co. (Ithaca, N.Y.)	Machinery	do	1,050
National Electrical Contractors Association, Inc. South Florida Chapter (Wiremen's Agreement) (Florida)	Construction	Electrical Workers (IBEW)	1,600
New York Movie Theatres Agreement (New York, N. Y.) ²	Services	Service Employees	1,200
Painting and Decorating Contractors of America, Tri-County Chapter (Florida)	Construction	Painters	2,500
Pet, Inc., Dairy Division (Interstate)	Food products	Teamsters (Ind.)	1,700
Philadelphia Hotel-Motor Inn Association (Philadelphia, Pa.)	Hotels	Hotel and Restaurant Employees	2,500
Prestige Structures, Inc. (Charlotte, Mich.)	Lumber	Carpenters; Plumbers; and Electrical Workers (IBEW)	1,000
Prudential Insurance Co. of America (Interstate)	Insurance	Insurance Workers	17,500
Retail Apparel Merchants Association, Inc., 2 agreements	Retail trade	Clothing Workers	5,500
Retail Meat Cutters Contract, 2 agreements (Chicago, Ill.) ²	Retail trade	Meat Cutters	5,450
Roper Corp., Kanakee Division (Kanakee, Ill.)	Electrical products	Metal Trades Department; and Teamsters (Ind.)	1,050
San Joaquin Valley Hotel Restaurant and Tavern Association, Inc. (California)	Restaurants	Hotel and Restaurant Employees	1,700
Shipyard Agreement (San Diego, Calif.) ²	Transportation equipment	Machinists, Carpenters, and Painters	1,000
St. Paul On-Sale Liquor Dealers Association (St. Paul, Minn.)	Restaurants	Hotel and Restaurant Employees	1,300
Tennessee Corp., U.S. Phosphoric Products Division (Tampa, Fla.)	Chemicals	Chemical Workers	1,050
Washington, D.C. Food Employers Labor Relations Association (District of Columbia, Maryland, and Virginia)	Retail trade	Meat Cutters	3,800
Washington Publishers Association, Newspaper Agreement (Washington, D.C.)	Printing and publishing	Typographical Union	1,000

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

² Industry area (group of companies signing same contract).

Developments in Industrial Relations



Deferred pay rise cut

On June 7, the Pay Board pared to about 7 percent a deferred wage and fringe increase of 11 percent provided by a 1971 settlement between three food chains and 4,000 Meat Cutters in Philadelphia. This was the first time the panel had cut a deferred increase provided by a contract negotiated prior to the August 15 wage-price-rent freeze. According to the Board's calculation, the scheduled increases were 10.9 percent at Acme Markets Inc., 11.6 percent at the Great Atlantic and Pacific Tea Co., and 11 percent at Food Fair Stores, Inc. Meat Cutters' Vice President Leon Schachter said the cutback was improper because the Board failed to take into account productivity increases achieved under the agreement. Reportedly, more than 200 other deferred raises had been challenged by Board members or "parties of interest" and were awaiting Board rulings.

In a related move, the panel increased from 60 days to 90 the advance notice required of employers before they may implement deferred increases exceeding 7 percent a year. The Board further specified that when an employer is late providing the information, he must wait an additional 90 days before implementing the increase. Further, if the report is incomplete, the increase may not be put into effect until 60 days after "adequate and complete" information is submitted. The Meat Cutters' case reportedly triggered the Board's crackdown, because the workers had been receiving the deferred increase for 2 months before the reduction was ordered.

Beginning July 1, the Pay Board began limiting eligibility for "catch-up" pay increases to units of workers with straight-time average hourly earnings of less than \$3 an hour. Under the catch-up provision,

"Developments in Industrial Relations" is prepared by Leon Bornstein 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.

effective until November 13, workers are permitted first-year raises of up to 7 percent, if they can prove the additional amount (in excess of the Board's 5.5-percent general limit) is justified because increases under the prior contract were less than 7 percent. Employees earning \$3 or more were to be held to 5.5 percent unless they could qualify for one of the other exceptions to the general limit.

Restitution of raise sought

The Cost of Living Council filed its first suit seeking restitution of a wage increase it claimed was paid in violation of Economic Stabilization Act regulations. Previously, the Council had sued to prevent the payment of wage increases exceeding Phase 2 guidelines under a settlement between the Great Atlantic and Pacific Tea Co. and a Meat Cutters local in Baltimore (*Monthly Labor Review*, June 1972, p. 60).

The later suit involved a West Haven, Conn., branch of the Meredith Corp. of Des Moines, Iowa. The suit charged that the printing company and Local 47 of the International Typographical Union had negotiated a 7.45-percent pay increase in December 1971 for 39 workers, and the increases were put into effect without Pay Board approval. It also alleged that Local 47 had authorized a strike to compel immediate payment of the wage increase "in excess" of the Pay Board's 5.5-percent standard without the panel's approval, while encouraging its members to accept the increase.

In the suit, filed in U.S. District Court in New Haven, Conn., the Council asked that the company and Local 47 be enjoined from paying or receiving any wage increase exceeding Pay Board guidelines and that members of Local 47 be ordered to make full restitution to the company of all wages exceeding the standards. In addition, the suit asked that civil penalties of \$2,500 be assessed against the company and the local.

A boost in the District of Columbia minimum

wage for 41,500 restaurant and hotel workers was suspended by the Cost of Living Council. The increase, slated to go into effect June 13, would have brought the minimum to \$2.25 an hour, from \$1.60. The Council said it would allow \$1.90 an hour, consistent with its prior decision to exempt pay adjustments up to that rate (*Monthly Labor Review*, April 1972, p. 58). The Council noted that about half the employees work for about 200 companies subject to controls, while the others work for 2,800 concerns with 60 or fewer employees. As a result, the increase "would have forced the smaller, exempt companies to pay the \$2.25-an-hour minimum wage, while the controlled companies could maintain lower wage levels."

Maryland trims pay increase

In late May, Maryland officials complied with a Pay Board decision reducing a salary increase for 42,000 State employees from an average of 7.8 percent to 7 percent. The ruling, in effect, disallowed about \$800,000 of the \$24-million value of the raises due for an 18-month period ending June 30, 1973. The raises, ranging from 4.7 to 13.2 percent, went into effect May 3 but did not include retro-

activity to January 1, 1972, as originally scheduled. The ruling provided for retroactivity to January 19. The boosts resulted from replacement of a 19-grade salary schedule with a 23-grade schedule, which raised the minimum pay from \$3,864 to \$4,200 and top pay from \$26,423 to \$30,025.

In Massachusetts, the Legislature overrode Governor Francis W. Sargent's veto of a 4.3-percent pay raise for 60,000 State employees. The Governor wanted to delay the raises until January 1, 1973, but the Legislature's action provided for retroactivity to January 1, 1972.

Lumbermen settle

About 53,000 lumber workers in the Pacific Northwest were covered by tentative 3-year settlements negotiated by the International Woodworkers and the Lumber, Production and Industrial Workers Unions.¹ On June 1, the unions settled with Northwest Forest Products Association, which consists of the "Big 5" firms—ITT Rayonier, Simpson Timber Co., Weyerhaeuser Co., Crown Zellerbach Corp., and International Paper Co. The package consisted of a 32-cent-an-hour wage increase on June 1, 1972, and 6 percent on June 1 of 1973 and 1974; a 16-cent increase in employer health and welfare financing; an additional paid holiday; an increase in pension financing; and a relaxation of service requirements for paid vacations. On June 9, the unions agreed to similar terms for 32,000 employees of the 120 smaller firms that comprise the Timber Operators Council.

Negotiations were continuing for 17,000 workers employed by Georgia Pacific Corp., Champion International (formerly U.S. Plywood Champion Papers), St. Regis Paper Co., and the "Big 3" of Central California—American Forest Products, Pickering Lumber Co., and Michigan-California Lumber Co.

Construction contracts extended

Faced with the highest unemployment in the last 10 years, members of Sheet Metal Workers Local 98 in the Columbus, Ohio, area agreed to extend their current agreement by 1 year, to April 30, 1974. The move, which affected 850 members engaged in commercial and industrial jobs, was requested by the 50-firm Sheet Metal Contractors Association of Central Ohio to "stabilize" the industry. As a result, the workers will continue to receive their current

Hourly Earnings Index

The Hourly Earnings Index rose 0.2 in June to 137.0. The Index measures earnings of production or nonsupervisory workers in the private nonfarm economy. It is adjusted to exclude (1) the effects of inter-industry employment shifts, (2) overtime premium pay in manufacturing, and (3) seasonal variations. Data for periods prior to June 1972 are also shown in the accompanying tabulation (1967=100).

	1969	1970	1971	1972
January	110.0	117.4	126.0	134.5
February	110.8	118.0	126.7	134.7
March	111.4	118.8	127.3	135.5
April	112.0	119.3	128.1	136.6
May	112.7	120.0	129.1	¹ 136.8
June	113.3	120.6	129.3	¹ 137.0
July	113.9	121.4	130.0	....
August	114.4	122.5	130.9	....
September	115.1	123.2	131.3	....
October	115.8	123.4	131.4	....
November	116.5	124.1	131.6	....
December	117.0	125.0	133.5	....

¹ Preliminary.

\$9.58 an hour in wages and benefits until the extension expires on April 30, 1974. The \$9.58 includes a 75-cent deferred increase effective May 1, 1972.

In a similar move in the Mobile, Ala., area, Local 505 of the Electrical Workers (IBEW) and the Gulf Coast Chapters of the National Electrical Contractors Association agreed to a 1-year extension of their agreement, which had been scheduled to expire August 31. The parties said the decision "represents an effort to help the electrical contracting industry, the electrical workers, and the economy of the entire area." Frank M. Hawkins, manager of the Chapter, said area electrical contracting work had dropped 13 percent during the past year and that nonunion firms were making inroads. The decision, which affected 400 workers in six counties, kept the hourly wage scale at \$7.90 plus 42 cents in benefits.

Chicago dock accord

The Marine Association of Chicago and the International Longshoremen's Association agreed to a 3-year package valued at \$2.15 an hour—73 cents in the first year, 72 cents in the second, and 70 cents in the final year. The previous base was reportedly \$4.37 an hour in wages and benefits. About 1,000 full-time and 1,000 part-time workers were covered by the contract, which was subject to worker ratification and Pay Board approval. A union official said locals in other Great Lakes ports were expected to gain similar contracts for 9,000 workers.

Truckers' raises pegged to index

Members of the Chicago Truck Drivers Union, an independent union not affiliated with the Teamsters, signed two agreements that provide for cost-of-living increases but no other specified wage or fringe benefit boosts. The escalator clause provides for increases of 1.5 cents an hour for every tenth of a percentage point increase in the Consumer Price Index. This would amount to 45 cents if the index rises 3 percentage points during a year. Any benefit improvements negotiated later will count against the escalator increases. The contracts, covering 150 employees of Eisner Foods Division of Jewel Cos. and 130 employees of Canteen Corp. of America, were subject to Pay Board approval and would run for 1 year and 18 months, respectively.

Edward Fenner, executive director of the union, said that if results are satisfactory the union may seek similar terms when contracts with for-hire truck-

ing firms expire March 31, 1973. In 1967 and 1970, the Chicago Truck Drivers Union and local Teamsters agreements set the pattern for the Teamsters' national accord. The current national agreement expires June 30, 1973.

Penn Central manning dispute

After a Presidential factfinding panel recommended that the Penn Central Transportation Co. delay its planned reduction in train crew size (*Monthly Labor Review*, July 1972, p. 50), trustees of the bankrupt railroad petitioned Federal District Judge John P. Fullam of Philadelphia, overseer of the reorganization, for a hearing to report on their collective bargaining efforts with the United Transportation Union. The trustees asserted that the union "hasn't responded with a single meaningful settlement proposal but has sought to avoid any resolution of this dispute."

Meanwhile, the union petitioned the Federal District Court in Washington, D.C., to protect its manning contract with Penn Central and to prevent the carrier from taking any "unilateral action" designed to reduce crew size. It accused the company of not bargaining in good faith.

Mine worker election ordered

On June 16, Federal District Court Judge William B. Bryant ordered a new election for the leadership of the United Mine Workers' Union. In May, Judge Bryant had agreed with the Department of Labor that Mine Workers' President W. A. (Tony) Boyle's 1969 reelection campaign had violated union election laws. (*Monthly Labor Review*, July 1972, pp. 49-50). In addition to ordering a new election, the judge set strict procedures to govern the union's activities, authorizing the Secretary of Labor to put representatives in union offices with "specific authority to disapprove any financial transaction" until the new election is held in December. The directive was assailed by a union spokesman as "dictatorial." The judge also ordered the union journal to give equal space to all candidates; required the filing of monthly expenditure statements by candidates and nominees; limited the union's authority to make loans and hire employees; and required each employee of the union to file bimonthly reports with the Labor Department detailing his activities and accounting for his time and expenses. The order also enjoined the union from repeating court-found vio-

lations of election procedures and allowed union dissidents to place observers "wherever the Secretary of Labor has authority to place a representative."

In a related action, coal miners opposed to President Boyle convened in West Virginia over the Memorial Day weekend. The 460 delegates of Miners for Democracy selected Arnold Miller, a 49-year-old victim of black lung disease, to run for the presidency of the union. Mr. Miller is a former mine repairman and electrician who currently heads the Black Lung Association.

Charges against Seafarers dismissed

New York Federal District Judge Mark A. Costantino dismissed U.S. charges of making illegal political contributions brought against President Paul Hall and seven other leaders of the Seafarers. In approving the union's dismissal motion, Judge Costantino said the Justice Department had ignored repeated court orders to specify its charges against the officers and union, thus dragging out the case 23 months and violating their right to a speedy trial. He also held that the Department had withheld pretrial information on the charges and had impeded efforts to prepare a defense.

The indictment had been filed on June 30, 1970, with the Seafarers accused of having contributed campaign funds to both major political parties through the Seafarers Political Action Donation Committee. (This was allegedly a violation of the Federal Corrupt Practices Act, which prohibits unions and corporations from donating to candidates for Federal office.) The union was charged with making illegal contributions of \$40,000 in 1968 and with conspiring to spend \$750,000 for political purposes between 1964 and 1968. The union maintained that its donations were legal and that "all of the contributions cited in the indictment had been reported to the Department of Labor and the clerks of the House of Representatives and the Senate, as required by law."

Potofsky successor nominated

Murray H. Finley was nominated to succeed Jacob S. Potofsky as president of the Clothing Workers at the union's 28th biennial convention in Miami Beach. The 1,500 delegates also nominated Jacob Sheinkman to succeed Frank Rosenblum as secretary-treasurer. The former union chiefs had indicated their retirement (*Monthly Labor Review*, July

1972, p. 51) prior to the beginning of the June convention. Mr. Finley and Mr. Sheinkman were unopposed; a mail vote by the union's 185,000 members was slated, with the results to be announced in September.

Mr. Finley, 50, became an attorney for the union in 1954 and was elected a vice president in 1962. Mr. Sheinkman, 45, was named a general counsel in 1958 and became a vice president 10 years later.

District 50 votes for merger

District 50, Allied and Technical Workers Union voted to merge with the 1.1-million-member Steelworkers Union. With 165,000 members, the vote was 37,289 for the merger and 26,733 against it. The mail referendum was supervised by the Department of Labor. The result was subject to approval by Federal District Judge Barrington Parker, who in August 1971 had barred a District 50 convention from voting on the merger proposal (*Monthly Labor Review*, October 1971, p. 74). The Judge's ruling was in response to a motion by Angelo Cefalo (a former vice president of District 50) that union members had not been given a "democratic voice" in selecting delegates to the convention. Judge Parker held that the union had not given its members adequate notice of the merger proposal before the selection of delegates.

On June 12, Mr. Cefalo, an unsuccessful candidate for the District 50 presidency in 1970, said he would protest the conduct of the referendum to the Labor Department and would ask the judge to set aside the election results on the grounds that a mailing list of members' names, rather than a certified membership list, was used. A Department spokesman defended the vote procedures but said the complaint would be investigated.

Communications Workers seek merger

In another merger development, delegates to the Communications Workers of America's annual convention authorized a committee to begin merger negotiations with the 300,000-member American Postal Workers Union. (The latter was formed in 1971 by a consolidation of five postal unions.) Joseph A. Bierne, president of the 550,000 Communications Workers, said a merger would greatly increase the bargaining power of employees in the two fields. In an address to the convention, Francis Filbey, president of the Postal Workers, said, "We will make

every effort to have a similar resolution adopted at our own convention in August."

Wurf hits jurisdictional disputes

In keynoting the biennial convention of the State, County and Municipal Employees, President Jerry Wurf scored jurisdictional disputes among unions as impeding "the important business of organizing the unorganized." Declaring that only about 25 percent of the Nation's work force belongs to unions, he said, "The ability of the trade union movement to meet its responsibilities in the future will depend heavily on its ability to organize the remaining 75 percent of the work force."

Delegates to the Houston convention elected Mr. Wurf to his fifth consecutive term as head of the 550,000-member union, immediately after they approved a resolution extending international officers' terms of office from 2 to 4 years. William Lucy, executive assistant to Mr. Wurf since 1970, was elected secretary-treasurer. Mr. Lucy, a 38-year-old black who joined the union in 1966, succeeded Joseph L. Ames, who was elected to the new post of full-time chairman of the union's judicial panel. (See pp. 38-39 for further convention details.)

Service Employees convene

In San Francisco, delegates to the Service Employees' 15th convention heard President George Hardy outline a plan to increase the union's membership by "at least one-half million more members." The program called for expansion of the executive board and union staff, the creation of a strike fund, and increased activities in political education, legislative action, and bargaining research. The delegates approved a 50-cent increase in the monthly per capita payment, to \$1.30, to help finance the program. The executive board issued a report showing membership had grown by 128,000, to 500,000 in the 4 years since the last convention. President Hardy, who entered office when David Sullivan retired in 1971, was elected to his first full 4-year term.

Asbestos Workers president dies

Albert E. Hutchinson, president of the Asbestos Workers, died of lung cancer at the age of 61. Mr. Hutchinson was a pioneer in the fight against job related diseases, particularly lung cancer, which re-

portedly kills one of every five long-term asbestos workers, and asbestosis, a scarring of the lungs. Both diseases have been attributed to inhalation of asbestos dust. Mr. Hutchinson was credited with a key role in the Department of Labor's issuance of an "emergency temporary standard" in December 1971, under which asbestos workers' exposure must be cut to no more than an average of two fibers per cubic centimeter of air by 1976.

Arizona curbs farm strikes

Arizona Governor Jack Williams signed a measure outlawing secondary boycotts and strikes by farm workers at harvest time. He said the new law "will help all of Arizona just as the right-to-work law did. That law has made Arizona one of the most successful States in terms of economic growth in the Nation and the same attacks were made upon it."

Meanwhile, the United Farm Workers instituted a campaign to recall the Governor, and Cesar Chavez, union president, fasted for 24 days. The union claimed it had about one-quarter of the 103,000 signatures required to place the issue on the ballot. After 5 years of organizing, the union reportedly represents 3,500 of the 35,000 to 40,000 field workers in Arizona.

Besides outlawing all secondary boycotts, the law limits primary boycott activity to naming the specific grower of the produce. Strikes are illegal unless approved by a secret ballot of employees supervised and certified by a seven-man State board appointed by the Governor. A grower facing the threat of a strike at harvest time may seek a 10-day restraining order. The dispute would then be settled by binding arbitration. Unions also are forbidden from contacting workers on growers' property.

Bias charged in construction

Job discrimination was charged against two New York construction unions and 10 employer² groups in a civil action filed by the Justice Department in Federal District Court in New York City. The Department claimed that Locals 14 and 15 of the Operating Engineers violated the 1964 Civil Rights Act by assertedly refusing to admit blacks on the same basis as whites and by using job referral standards that ensure priority to union members, most of whom are white. The suit asserted that Local 14 has "few" blacks among its 1,600 members and

that Local 15 has 768 among its 5,650 members. The Department asked for an injunction barring the alleged discrimination and that locals be ordered to carry out job-training programs for minority-group members and inform them of opportunities.

Pilots strike against hijackings

An international work stoppage by airline pilots to dramatize the need for anti-hijacking measures affected about 10 percent of domestic flights on June 19. Of 35,000 domestic pilots, 4,100 at Eastern and Northeastern defied a Federal Court injunction and struck for the full 24 hours, while 300 at Southern stayed out for 8 hours. Overseas air travel was virtually halted in more than 30 countries.

Wage 'moratorium' extended

Members of Rubber Workers Local 45 at Uniroyal's Footwear Division in Naugatuck, Conn., approved an extension to July 20, 1976 of the 3-year "economic moratorium" negotiated in 1970 (*Monthly Labor Review*, September 1970, p. 59). The company, citing declining profits and higher pay levels at Naugatuck than at its other shoe operations, had warned that production would be phased out by 1974 if the union rejected the extension. In response to the concession, the company guaranteed it would keep the plant operating until at least 1977. The president of the local union estimated the workers averaged \$5.35 an hour in wages and benefits.

The contract does provide for negotiations in 1974, 1975, and 1976 on pay bonuses "based on the financial position of the company." There are 2,400 workers in the bargaining unit, compared with 2,700 in 1971 and 4,000 in 1970.

Employees buy railroad

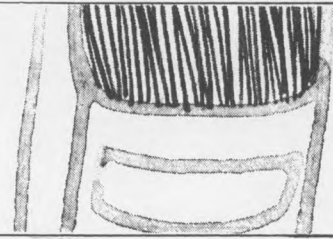
The first employee-owned railroad in the United States came into existence in June, when the new Chicago and North Western Transportation Co. purchased the transportation assets of the Chicago and North Western Railway. The cost was assumption of the road's \$400-million debt burden. All of 13,500 railroad workers and officers of the unions that represent them were offered shares in the new company, and 1,000 purchased about 70,000 shares at \$50. The parent firm of the railroad was Northwest Industries, Inc., a conglomerate, which initiated the sale because of low earnings. □

—FOOTNOTES—

¹ The Lumber, Production and Industrial Workers Union (formerly the Lumber and Sawmill Workers Union) is affiliated with the Carpenters.

² The Iron League of New York City, Inc.; the Construction Equipment Rental Association; the General Contractors Association of New York City; the Building Contractors and Mason Builders Association; Allied Building Metal Industries; the Rigging Contractors Association; the Contracting Plasterers Association; the Equipment Shop Employers; the Stone Setting Contractors' Association; and the Cement League.

Book Reviews and Notes



The exercise of judgment

The Analysis and Forecasting of the British Economy. By M. J. C. Surrey. London, Cambridge University Press, 1971. 107 pp. \$3.95.

This volume explains how the National Institute of Economic and Social Research prepares the quarterly forecasts of British economic activity that are published in its *Economic Review*. It is not intended as a contribution to original research; its purpose is pedagogical.

There is no analogue to the Institute in the United States. It has no similarity with its near-namesake, the National Bureau of Economic Research, which is characterized by diffusion of purpose and detachment from policy-oriented analysis. To compare it to the Brookings Institution, which is policy-oriented, would be equally misleading because the Institute maintains an interchange of personnel with the government that is not dependent on changes in administrations. Unlike Brookings, it has none of the attributes of a government in exile. In the absence of viable analogies, it is best to quote from the volume itself:

"...the idea that the National Institute should undertake economic forecasting originated with Treasury economists. . . . Some members of the original Institute team had had previous Treasury experience. . . . The author of the present book, Mr. Surrey, had himself worked in the Treasury. . . . There has also been movement the other way. . . . But although there have been, and we hope there will continue to be, links . . . , they have been on a personal and informal basis. Both the Institute itself and the economic analysis and forecasting conducted by it are wholly independent. . . . Some . . . find it hard to believe that the *Economic Review* is not in some way under the influence of the Treasury, if for no other purpose than to fly kites. But there is no substance in this. The *Economic Review* is published, so naturally the Treasury economists know what the Institute is up to, and from time to time there are discussions of technical questions in meetings and seminars, but the staff of the *Review* do not know any more about

the Treasury's thinking and estimating at a particular moment than appears in official publications, in Hansard and in newspapers. Not only do they not know, but they would not wish to know. . . . the Institute's own methods might well be improved if more were known about what the Treasury actually does. But against this must be set the serious risk of unconscious collusion, which could easily jeopardize one of the main purposes of the exercise, namely the

Books reviewed in this issue

- M. J. C. Surrey, *The Analysis and Forecasting of the British Economy*. Reviewed by George Jaszi.
- Gary MacEoin, *Revolution Next Door: Latin America in the 1970's*. Reviewed by Joseph Collins.
- Jan Pen, *Income Distribution: Facts, Theories, Policies*. Reviewed by H. M. Douty.
- Gerald Somers and associates, *The Effectiveness of Vocational and Technical Programs: A National Follow-up Survey*. Reviewed by Harrison M. Trice.
- Barry Commoner, *The Closing Circle: Nature, Man, and Technology*; Edwin G. Dolan, *TANSTAFL: The Economic Strategy for Environmental Crisis*; Oliver G. Wood, Jr., editor, *The BASF Controversy: Employment vs. Environment*; and Kenneth E. Boulding et al, *Economics of Pollution*. Reviewed by John W. Hambleton.
- John Herling, *Right to Challenge: People and Power in the Steelworkers Union*. Reviewed by Jack Stieber.
- Richard Kunnes, *Your Money or Your Life: Rx for the Medical Market Place*. Reviewed by David S. Salkever.
- J. Harvey Bolton, *Flexible Working Hours*. Reviewed by Janice N. Hedges.
- Richard C. Edwards, Michael Reich, Thomas E. Weisskopf, *The Capitalist System: A Radical Analysis of American Society*; and Howard Sherman, *Radical Political Economy; Capitalism and Socialism from a Marxist-Humanist Perspective*. Reviewed by Allan G. Gruchy.
- David S. Walls and John B. Stephenson, *Appalachia in the Sixties: Decade of Reawakening*. Reviewed by Bill Peterson.
- Arthur Pearl, *The Atrocity of Education*. Reviewed by August C. Bolino.

giving of a wholly independent opinion on the state of the economy.

As a statement of principle, this account of the relations between the National Institute and the Treasury is impeccable. But I would hope that in practice they are not quite so Simon-pure. It would seem to me that Institute staff might contact their once and future colleagues to obtain some interpretation of published government statistics and plans, or perhaps even some unpublished detail, in a manner that would help both parties without impairing the separation of powers.

The volume opens with an introduction by G. D. N. Worswick, Director of the National Institute. The rest was written by Surrey. Chapter 1 presents an informal outline of the economy as seen through the NIESR model. Subsequent chapters take up the various segments of the model: The Public Sector; Investment; Foreign Trade; The Personal Sector; and Employment, Unemployment and Productive Potential. Next, the complete model is presented again in a more formal way. A concluding chapter describes the process of economic forecasting step-by-step.

Worswick's introduction touches upon such important topics as the relative role of econometric models and judgment in forecasting, the feedback of forecasts on the economy, conditional and unconditional forecasts, the testing of econometric models, the usefulness of forecasting, and small versus large models. His comments are sensible and perceptive, and characterized by a modesty which seems to be a British trait that, at best, is recessive in the United States.

Many of his comments I would want to copy into a forecasting scrapbook—if I maintained one. "There can be no doubt that the methods currently in use are distinctly more sophisticated than those of 10 years ago. There is nevertheless room for debate on whether they have resulted in any significant improvement in predictive performance." "There are, it is true, dangers that the ability to make almost limitless regressions can sometimes drive out careful thought and commonsense." He also quotes with approval the headnote that appears on some National Institute tables: "The forecast figures are . . . not intended to be more precise than the general statements in the text."

Nevertheless, I have some reservations. Given Worswick's emphasis on the role of judgment, it would have been worthwhile to explore the nature

of the judgment that is being invoked. Surely we do not want to be put in a position of appealing to irrational intuition; we must try to establish that the judgment on which we propose to rely represents a rational form of inference. But Worswick should not be faulted severely on this score. To the best of my knowledge, there has to date been little if any progress in analyzing the nature of "judgment."

More disturbing is a certain weakness in sorting things out. For example, in his discussion of the problems involved in testing econometric forecasts, Worswick muddles the issues by not distinguishing between testing forecasts, on the one hand, and testing whether forecasts have improved historically, on the other. Occasionally this weakness results in lapses of a jarring kind, as, for instance, when Milton Friedman is cited as a champion of auto-regressive forecasting techniques.

Surrey's writing also is characterized by simple explanation, and a winning absence of intellectual pretense. One of the main advantages of his approach is that he does not treat the model in a vacuum, but instead describes step-by-step the process that takes place when the Institute prepares its quarterly forecasts, including the blending of econometric results and judgment.

The model as a whole is explained in chapters 1, 8, and 9, and also in appendixes II and III. It is a small neo-Keynesian model. It neglects money, makes the usual distinctions between exogenous and endogenous factors, and embodies endogenous relationships that hold no major surprise. The way in which prices, wage rates, and earnings are determined is somewhat unusual.

The forecasting process resembles more what we, in this country, call judgmental forecasting than what we call econometric forecasting. However, the judgmental forecasting of the National Institute does differ significantly from judgmental forecasting in the United States. In the United States, judgmental forecasts are often the result of personal idiosyncrasies that are converted into dollars on the back of an envelope. It would appear that as a rule the judgmental elements in the Institute forecast are based upon thorough studies of various segments of the economy which are produced as part of its regular work program. Is this a correct impression or is it just that the grass across the ocean looks greener?

The explanation of the model as a whole is quite successful, but two aspects of it gave me trouble. First, I did not find an explanation of how, if at all, the expenditure side of the gross product account

is reconciled with its income side: The volume does not contain a discussion of the method of estimating corporate profits, which are the missing element. Second, nowhere in the volume is it demonstrated clearly how the model works as a mechanism—how the several exogenous and endogenous elements interact. Part of the difficulty may be due to the fact that more than one model is being discussed. I regard a demonstration of this kind as a test of pedagogical success which has not been passed in this volume.

As to the segments of the model, I found of greatest interest the work on wage rates, earnings, and prices. I was also struck by the statement that government incentives to investment had no significant effects. If valid, this is an extremely interesting conclusion, coming from a country in which such incentives have been used intensively.

I was disappointed by the treatment of foreign trade. I expected in-depth treatment of this subject in a country in which foreign trade is dominant. I did derive some comfort from the observation that National Institute techniques are as inadequate for coping with the analysis of devaluation as are the improvisations that have recently been made in this country.

What is the interest of this publication to the U.S. reader, if he is not a student of the British economy? The informed U.S. reader will not learn much in the way of econometric techniques, with the possible exception of the estimation of wage rates, earnings, and prices mentioned earlier. However, the volume may be useful to him in other ways.

After several years of widespread expectation in the United States that econometrics would bury judgment, there has recently been a decided swing away from this position. In the light of this development, the National Institute procedure, which never abandoned judgment, may be a useful object of study for U.S. practitioners.

U.S. practitioners also might emulate the simplicity of expression of their British counterparts instead of settling for a secret language whose sole object is communication among econometricians—the public be damned. The elephantine U.S. textbooks are not adequate to fill this communications gap.

Finally, this publication should have a sobering influence on U.S. practitioners. It may help them to look behind the camouflage of sophisticated U.S. forecasting techniques, and reveal to them that the basic problems of forecasting with which their

British counterparts are struggling remain unresolved also in the United States.

—GEORGE JASZI

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The fire next time

Revolution Next Door: Latin America in the 1970's.

By Gary MacEoin. New York, Holt, Rinehart and Winston, 1971. 243 pp., selected annotated bibliography, \$6.95, cloth.

In 1961 Gary MacEoin, in *Latin America: The Eleventh Hour*, wrote optimistically of the future of Latin America. A decade later, this long-time observer of Latin America offers us very different conclusions: the Alliance for Progress proved to be “something of a hoax”; the heralded “Decade of Development” turned out to be, in his words, “the most disastrous decade in the entire history of Latin America”—a decade of an increasing gap between the rich and the poor nations, between the owner and worker classes, between the stuffed and the starving.

Through a readable bringing together of hundreds of interviews of his latest 20,000-mile, 13-nation trip, MacEoin allows us to see the crisis as it is seen by Latin Americans. Typical of the attitudes MacEoin found is this excerpt from an interview:

The rich countries, both of the so-called free world and of the Soviet bloc, claim that they are trying to help us catch up with them, but their actions belie their words. We know that our underdevelopment is an integral factor in their progress. They moved ahead in the first instance at our expense, and the continuance of their growth requires the maintenance of our backwardness.

MacEoin uses interviews to give us his view of how imperialism does its job: Foreign aid is used for the economic and political needs of U.S. corporations; generating capital, strapping down governments with foreign debt which only furthers their dependency (repayments already exceed new loans), creating the “proper political climate” (through massive counterinsurgency and police programs), dumping U.S. products in Latin America, building the airports, roads, and pipelines needed by foreign corporations, doing limited welfare-type reforms as “safety valves” or for “public relations.” The Cen-

tral Intelligence Agency (CIA), he charges, infiltrates political parties, universities, churches, and labor groups. (MacEoin points out that Latin American labor unions have traditionally realized that organizing for political change is their only hope, since corporations can draw scabs from the millions of unemployed. Latin American labor organizers, according to the author, believe that "The AFL-CIO functions as an instrument of the State Department and the CIA to divide and control our trade union movement," and that U.S. corporations in Latin America wanted that brand of trade unionism: cold war-myth—"the bosses are the good guys making the world safe for democracy"; limited to wage issues—subject, of course, to "productivity"; and hands off political action.) Further, MacEoin charges, foreign corporations demand outrageous sums for patents and trademarks and gain control of local economies, forcing out some local businesses, ironically by raising most of their capital locally. And these corporations, through monopoly control of the mass media, push not only their products but materialistic notions of human needs.

MacEoin finds that those who would reverse the deteriorating condition seek some form of nationalist socialism which excludes servitude to either the United States or the U.S.S.R. MacEoin, reluctantly, places some hope in the "new military" (such as in Peru), perhaps in union with the "new" Catholic priests and laymen who seek, through an increasingly Marxist analysis, social, economic, and political change as a fulfillment of the command to love one's neighbor.

Revolution Next Door is not opposed to revolution. MacEoin writes out of love for both Latin America and the United States. He has come to believe that what is really in the interests of the *people* next door—and not against the true interests of the *people* in the United States—is revolution.

—JOSEPH COLLINS

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Norms and policies in incomes theory

Income Distribution: Facts, Theories, Policies. By Jan Pen. Translated from the Dutch by Trevor S. Preston. New York, Praeger Publishers, 1971. 424 pp. \$12.

There has been a marked resurgence of interest in recent years in national income distribution in terms both of factor shares and of personal (or

family) distribution. The publication of Martin Bronfenbrenner's *Income Distribution Theory*, a major work, coincided roughly with the appearance of Pen's study. Harold Lydall's *The Structure of Earnings* was issued in 1968 and, in the same year, a collection of papers edited by Jean Marchal and Bernard Ducros appeared under the title of *The Distribution of National Income*. The numerous contributors to the latter volume examined trends in income distribution in advanced market, centrally planned, and underdeveloped economies, distribution theories, and some aspects of governmental policies in relation to income distribution. The work of the U.S. Bureau of the Census generally, and of Herman P. Miller in particular, is well known.

The reasons for this rise in interest are various. They include the postwar preoccupation with economic growth in both developed and developing economies; analysis of the impact of trade unionism and other institutional factors on income distribution; the distributional aspects of national wage-price (or incomes) policies; investment in human capital in relation to labor supply and income differentials; and the rediscovery of the problem of poverty.

Jan Pen, who holds the chair of economics at Groningen University, is a *rara avis*; he has written a sophisticated analysis of distributional theory and policy which is eminently readable. The use of jargon and of econometric constructions is held to a minimum. His style is lively and does not appear to have suffered in translation. The book can be read with profit by the general reader as well as by university students in the social sciences and members of the economists' guild.

Income distribution is the outcome of an exceedingly complex economic process. Pen's approach to distribution theory exhibits a certain eclecticism, but with the central view that the marginal productivity theory of factor pricing is the pivot on which distribution theory turns. He makes considerable allowance, however, for institutional rather than purely market forces, particularly with reference to wage determination. And he attempts at many points to reconcile micro- with macro-economic analysis as applied to distribution theory.

After three essentially introductory chapters, Pen devotes a chapter each to factor pricing (which he labels, somewhat misleadingly, functional distribution); to distributive shares (wages, rent, interest, and profit as components of national income); and to personal distribution. These chapters, which cannot possibly be summarized in a brief review, are

full of insight and, no doubt to some extent, of controversy. The really savage attack on Kaldor's aggregative approach to the determination of factor shares is perhaps illustrative of the latter point.

Fully one-fourth of the book is devoted to discussion of norms and policies in income distribution. Pen clearly favors a more egalitarian distribution on moral and social grounds, but he has no simple prescription for achieving this end. He outlines no fewer than 21 norms for income distribution. These norms are not discrete, and Pen selects a number which he believes can be combined into a practical policy. For example, he suggests the "harmonizing" of national wage and salary structures through job evaluation, in the sense of the use of this device to obtain "rational [pay] scales reflecting social conventions of society *as a whole*." There probably is a certain utopianism in contemplating, for a market economy, the use of job evaluation beyond the confines of the firm or, at most, the industry. Pen sees a role for incomes policy in improving distribution. Other elements of strategy in his longrun approach to greater income equality involve consideration of monopoly gains, profit and capital sharing, the power structure within firms, transfer payments, taxation, and education.

The long section on income distribution policy, in combination with the earlier chapters on theory, yields a book of significant power that deserves a wide readership.

—H. M. DOUTY

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A valuable first effort

The Effectiveness of Vocational and Technical Programs: A National Follow-up Survey. By Gerald Somers and associates. Washington, U.S. Department of Health, Education, and Welfare, 1971. 263 pp. \$5.

This report of a mail questionnaire follow-up of vocational students who graduated in 1966 from high school, post-secondary, and junior college vocational programs throughout the United States has general appeal for specialists in vocational education and manpower studies. More specifically, however, it should be read by evaluative research specialists, if for no other reason than to observe the many frustrations, pitfalls, and errors that can creep into

follow-up studies. Somers and his associates reveal these problems candidly along with their research data and their interpretations. Even though they are describing a detailed research effort, the authors write succinctly, even interestingly. Obviously they firmly believe in quality reporting even if it at times puts them in a bad light. Beyond doubt they report on an important topic—as any casual perusal of the monies invested to date in vocational training will indicate.

Mild melancholia creeps into this reviewer's reactions, however, when the study falls into many of the booby traps that have snared other follow-ups: abandonment of "controls" and a fallback on simple comparisons between types of training programs, rationalization of low response rates, questionable use of a complicated statistic, and an inability to control intervening variables during the follow-up period.

It seems painfully obvious that high school students in academic programs could not act as a control group, as Somers and his colleagues discovered with much discomfort. Also, comparisons between the three programs suffer from the understandable impossibility of randomization of students into these three programs. Quite predictably, under these conditions, junior college graduates typically enjoy superior outcomes. Further, although response rates hovered around a median of 40 to 45 percent, this leaves the age-old problem of nonrespondents. A small sample of these nonrespondents compared with respondents does not seem adequate as a base for frequent references to "the sample"—despite traditional research folkways supporting such practices.

Additionally, the study uses multiple regression analyses on the data. Clearly, any analyses should deal simultaneously with those independent variables which appear to be conceptually relevant. This strongly indicates regression analysis. Unfortunately, however, the use of this sensitive statistical instrument is not guided in this study by behavioral science concept; rather, one gets a feeling that independent variables are either the traditional demographic ones or they are "fishing expeditions." Furthermore, the likelihood that there may be high correlations between two or three (even more) independent variables, producing "redundancy," is a real one, to say nothing of the possibility that there may be a relationship between the independent variables and the dependent variable which distorts regression results. When combined with the questionable quan-

tification of some of the dependent variables, there emerges considerable reason to believe that the statistic is, at least partially, misused. Compounding these problems is the inability of the follow-up to systematically include such intervening variables as favorable, or less favorable, labor markets that may develop during the follow-up period and account for the relatively successful or unsuccessful outcomes. To ask the researcher to control for these intruding forces is to ask for the Herculean effort. Nonetheless, conclusions and interpretations are often influenced by these factors even though they may escape the control of the evaluative researcher.

Having said these things, some positive comments are in order. Before reaching them, however, one final shot: the reader could be more adequately warned about some of these problems and over-generalization reduced. There are not enough caveats. But as a first nationwide evaluative effort of vocational education the research is truly pioneering. Finally, someone of stature is saying, "So what?" At long last a precedent for evaluation has been set. It can be hoped that refinements will follow. After all, science is a series of "successive approximations" in which later efforts improve on the earlier ones. Looked at from this perspective, Somers and his associates have given us a valuable and provocative legacy.

—HARRISON M. TRICE

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. . . and pay for it

The Closing Circle: Nature, Man, and Technology.
By Barry Commoner. New York, Alfred A. Knopf, 1971. 326 pp. \$6.95.

TANSTAAFL: The Economic Strategy for Environmental Crisis. By Edwin G. Dolan. New York, Holt, Rinehart and Winston, 1971. 115 pp. \$3.

The BASF Controversy: Employment vs. Environment. Edited by Oliver G. Wood, Jr. In the series *Essays in Economics*, No. 25. Columbia, Bureau of Business and Economic Research, University of South Carolina, 1971. 75 pp. \$2.50.

Economics of Pollution. By Kenneth E. Boulding et al. New York, New York University Press, 1971. 158 pp. \$5.95.

which examine the relationships between our economy, our environment, and our welfare as producers, workers, and consumers. *The Closing Circle* by Commoner and *TANSTAAFL* by Dolan are popular but scholarly works. In contrast, *The BASF Controversy*, a joint research project edited by Wood, and the New York University Moskowitz lectures on the *Economics of Pollution* are directed more to professionals and policymakers. One idea they have in common is that pollution imposes hidden costs equal to or greater than the costs of its limitation, but they differ radically in their proposed solutions.

Commoner brings to the subject a blend of ecology and economics in an amply illustrated but somewhat lengthy exposition on the evils of modern technology unchecked by the capitalist system and the scientific community. His main thesis is that the technology which yields profits today in the free enterprise economy extracts wealth from the ecosystem, using up irreplaceable energy in the process but at the same time feeding population, affluence, narrow-minded scientific pursuit, and ultimately greater extraction of nature's wealth. The circle is closing on us because the products of nature, which is not inexhaustible, cannot be recycled without a further loss of energy.

Case studies provide the empirical evidence to support Commoner's argument, which he develops quite effectively by successively discounting the other alleged causes of the ecological crisis—population, production, and profits. Yet he returns to attack the profit motive in his call for an economy governed by social objectives, not by the obsessive need to increase labor productivity by environmentally destructive technology. Such an economy would be characterized by less profitable but more labor-intensive industries, satisfying our needs as well as synthetic products do now, and simultaneously relieving the problem of unemployment. How society will choose this ecologically sound economy is not spelled out, though Commoner hints that it will result more from removal of artificially created wants than from centralized decree.

As tightly knit an argument is developed by Dolan, who nevertheless employs a more deductive, theoretical approach to reach opposite conclusions. He agrees with Commoner on a fundamental law of ecology and economics: "There ain't no such thing as a free lunch" (that is, a gain somewhere is a loss somewhere else). Nevertheless, his solution is to have private parties who have suffered losses from pollution calculate these losses and make the polluters

The problems of pollution and exploitation of our environment are highlighted in four recent books

realize by legal action that they are not exploiting common sources in nature or dumping wastes in common sinks but rather are violating property rights in the spaceship earth. By means of simplified hypothetical examples, he presents his main argument that pollution cannot be limited efficiently by social compulsion (even if democratic) but only by a completely free market. Here, preferably, all resources, like national parks, and sinks, like inland waterways, are owned privately, so that all parties will correctly count pollution and exploitation as a cost in equating their marginal costs and benefits.

Dolan's methodology, which is grounded in a simple economic model with two factors, differs radically from that of Commoner who preaches the necessity for a general or ecological outlook on science. While the reader is left suspended by Commoner's failure to take him step by step through the operations of his proposed social economy, he is also uneasy about the realism of the perfectly competitive market which has made Dolan's proof so evidently simple.

Quite realistic, of course, is Dolan's view that people will freely choose some pollution over the production only of natural goods. Reviewers of the BASF controversy and participants at New York University echo this position and conclude that the proper measurement and control of pollution should be the focus of research and, more significantly, that modern technology, the villain in *The Closing Circle*, is necessary for pollution control. These authors agree with Commoner, however, that the public must calculate environmental damage and make private industry eliminate pollution.

This concern for immediate solutions to pollution rather than for overhaul of the economic system is revealed by the well-integrated analysis of the potential impact of the Badische-Analin and Soda Fabrik Co. (BASF) plant on the Beaufort Economic Area of South Carolina. The conclusion is that an enlightened business could have, by emphasizing its adherence to consistent government antipollution requirements, headed off an environmentalist offensive which resulted in the denial of base industry jobs to a region characterized by poverty for most and uncertain recreational, fishing, and public employment for some. This chemical plant would have had a significant occupational and industrial impact, even with a sizable leakage of income from the region, if it were not for opposition from local recreational developers. Unfortunately, the effects of pollution have been excluded from the formal calculations in

In his lecture at New York University, Boulding suggests a modified construction of GNP, called Gross Capacity Product, which may be expanded to include the disproducts of pollution once research shows how pollution is counted in social welfare functions. Solomon Fabricant, in commenting, also cites the need to revise income accounts to reflect environmental burdens, but his main focus is on the regulations needed to control pollution. Both Fabricant and Elvis Stahr opt for waste or user charges, imposed according to the public's calculation of damage, which force producers to find the least cost antipollution investment and to raise prices to discourage consumption. In contrast, Martin Gainsbrugh calls for public subsidy of this investment because industrial profits are already so low. In evaluating each position, the reader only wishes that the lecturers had complemented each other's arguments.

Despite the considerable divergences in the books reviewed here, all of the authors agree on the need for pollution control as well as for information about the present costs of environmental destruction (though Dolan believes that pollution can be checked by the competitive market). However, all but Commoner have refused to abandon modern technology and instead rely on it to solve pollution!

Where there have been differences, though, there have been surprising similarities. Probably the most notable is the agreement between Dolan and Commoner on the issue of population. Both contend that there is no necessary connection between population and pollution and that birth rates will eventually align themselves with lower death rates as affluence spreads, so that compulsory birth control is unwarranted. To Commoner, population pressures the world's resources only because of our methods of production. Change these methods, and the ecosphere will support more people.

Similarly, in the BASF Report and the New York University lectures, proponents of pollution control via modern technology agree with Commoner that a cleaner environment may have greater employment opportunities, even though Commoner has attacked that very technology for destroying jobs. But, then, it is easier to relate the symptoms than to diagnose the causes of the environmental crisis despite the best efforts of recent literature in this area.

—JOHN W. HAMBLETON

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Rise and fall

Right To Challenge: People and Power in the Steelworkers Union. By John Herling. New York, Harper and Row, 1972, 386 pp., appendixes. \$12.50.

The past decade has seen the defeat of incumbent union presidents running for reelection in several major unions. This is the story of one such union, the United Steelworkers of America, and one such president, David J. McDonald. John Herling, who has been reporting what goes on inside American unions for more than 25 years, has chronicled the rise and fall of McDonald in almost excruciating detail by drawing heavily on interviews with hundreds of national and local union officers, staff members, and rank and file steelworkers. He has produced a highly illuminating and valuable account of "how union leaders are chosen" in one union. One can only hope that the Steelworkers' experience is not typical while fearing that it is.

The book starts in 1952 with the sudden death of Philip Murray, the venerated first president of the Steelworkers, and the succession of Secretary-Treasurer David J. McDonald to the union's top office. According to Herling, McDonald, whom Murray had brought with him from the United Mine Workers where he had been his personal secretary, had lost his sponsor's support and was on his way out. Given the picture that emerges in this book, one can only marvel that a man like McDonald could ever have had Murray's confidence and wonder why it took some 20 years for Murray to see the light, too late as it turned out.

More than half of the book is devoted to a blow-by-blow description of the 1965 election in which I. W. Abel, the union's secretary-treasurer, and his running mates defeated McDonald and his slate for the three highest offices in the Steelworkers' Union. Herling takes us behind the scenes to see the political intrigues and wheeling and dealing in the securing of local union nominations, wooing district directors for support, and lining up staff members behind the candidates. He gives both a chronological and geographical account of the campaign, which lasted over 3 months, in steel centers in the United States and Canada. The vignettes drawn of district directors, staff representatives, and local union leaders are sharp and memorable. They do credit to the author's talents as a journalist and interviewer.

Abel's victory over McDonald by some 10,000 votes out of over 600,000 cast appears to have been due to a combination of factors: exploitation of the

charge that McDonald, through creation of the Human Relations Committee with the steel industry, had taken collective bargaining out of the hands of the elected leadership; dissatisfaction over the many local issues which remained unresolved during the course of several contract agreements; support of Abel by almost half of the union's 29 district directors, including several with the largest membership; and opposition to McDonald *per se*. Given the narrow margin of victory, any one of these factors may have been responsible for McDonald's defeat. But the one that comes through strongest to the reader is the last. Herling depicts McDonald as arrogant, vain, corny, not overly intelligent, a heavy drinker, a publicity chaser, a lover of the good life, and consorter with shady characters. If McDonald possessed any redeeming features, they are not readily apparent in this book. One comes away with the distinct impression that AFL-CIO Vice President George Harrison summed the man up very well when he said: "That guy is two ounces lighter than a cork."

In addition to the "main event," Herling also describes three other elections in the union: the 1955 special election for vice president in which Joseph Molony, district director in upstate New York, ran unsuccessfully against Howard Hague, McDonald's office manager and hand-picked choice for vice president; the 1957 challenge to McDonald's leadership by a local union leader named Donald Rarick; and the 1969 defeat by Abel of an unknown staff lawyer, Emil Narick. The 1955 race is notable as the first challenge to McDonald's leadership. It showed that a man "who never saw the inside of a steel plant," but had the support of the president and the power of office as an incumbent appointed vice president, could easily defeat one of the most able and popular district directors. The Rarick election demonstrated that a nonentity with no power base or top level union support but with a real issue—in this case opposition to a dues increase—could get more than one-third of the votes against an incumbent president. The Abel-Narick contest, in which the loser received 42 percent of the total vote, showed that it was possible to mount a challenge against a relatively popular president by exploiting feelings of alienation, discontent, and rank and file dissatisfaction with recent contract settlements. All three elections, as well as the McDonald-Abel contest, showed glaring defects in the union's election procedures both before and after the passage of the Landrum-Griffin Act.

Herling's book should be fascinating reading for

insiders: officers, staff members, local union leaders, and rank and file steelworkers; and interesting and useful to students of union government. However, for the general reader, it is too long and overly detailed; it tells him much more than he wants to know about the Steelworkers' Union.

—JACK STIEBER

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More heat than light

Your Money or Your Life: Rx For the Medical Market Place. by Richard Kunnes, M.D. New York, Dodd, Mead & Co. 1971. 214 pp. \$5.95.

This is a confused and misleading harangue against the archvillains of the "Medical-Industrial Complex" who have brought the American medical system to its current sorry state. It is liberally sprinkled with misinformation, nonsequiturs, and quotations and attributions not supported by a single reference. In short, the book should probably be read only by individuals who share the author's biases and opinions, and thus gain some enjoyment from knowing that they are not alone.

To the reader who does not share these biases and opinions, what is most disturbing is that the book offers virtually nothing in the way of new or surprising information. The author holds forth at length about major problems which are commonly acknowledged to be major problems—the inadequacy of medical services to rural areas and to low-income groups, the lack of emphasis on preventive services, the need for reorientation in medical school curricula, and so on. The "documentation" of these problems, moreover, consists primarily of anecdotes and innuendos.

There are really only two general points on which the author appears to have unconventional views. The first is that "making profit from people's health needs" is a "contradiction." While this statement taken literally is meaningless, it is, I think, really a short-hand for the general proposition that we would have a better health care system if the people providing services were completely committed to improving the general welfare of society and completely abandoned the pursuit of their own personal goals. The validity of this proposition, however, is irrelevant since the possibility of establishing such a system is zero.

This is a fact admitted by the author in his exposi-

tion of the second unconventional point, namely, his proposed solution to the health care crisis. This solution is community and consumer control of health services provided free and equally to all. As the author points out, consumers will be only too happy to "demand" incredible amounts of free care since it is in their own individual interest to do so. The problem of obtaining resources to meet these demands is not discussed.

In summary, it is too bad that the author has chosen to address himself so ineptly to such serious and important problems as the maldistribution and misallocation of health resources and the need for more consumer responsiveness and involvement in the health system. Deterioration in the quality of debate over these problems, as represented by this book, can only serve to postpone their solution.

—DAVID S. SALKEVER

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'Gleitzeit'

Flexible Working Hours. By J. Harvey Bolton. London, Anbar Publications, Ltd., 1971. 54 pp. £2.

In the United States, where workers put a high premium on long weekends, "rearranged workweeks" generally refer to 4-day weeks that compress the same number of working hours, or almost as many, into fewer working days. But in Continental Europe, a different rearrangement—"flexible working hours" that provide workers with a substantial measure of control over their daily schedules—is arousing interest.

Flexible hours and 4-day workweeks have similar objectives; namely, increasing worker satisfaction in order to improve morale, reduce absenteeism and turnover, and in turn increase productivity. Both schedules represent management initiatives. But the flexible workweek has been, and may continue to be, limited largely to professional, managerial, and clerical workers, while the 4-day week has been concentrated, though by no means confined, to factory production workers.

The essentials of the flexible workweek as described by Mr. Bolton, a management consultant in England, are these: In place of a uniform schedule for all employees in a firm, such as 8:30 a.m. to 5 p.m., each employee is allowed to start

his workday at any time within a "band" of time that might extend, for example, from 7:30 to 9:30 a.m., and to finish in the evening at any time from 4 p.m. to 6 p.m. Starting time for a particular day does not establish quitting time for that day, nor is starting or quitting time necessarily the same from day to day.

The worker's obligations are twofold. He must work the "core time" (which in the example above would be 9:30 a.m. to 4 p.m.). And he must work the required total hours over a given period of time. Within limits, however, he may run a deficit in worktime and repay it in a later period, or accumulate extra hours and collect them later. (Employers report that to date surplus hours have been far more common than deficits.)

Most of Mr. Bolton's examples are from Germany. It was there that 'Gleitzeit' was introduced in 1967 at Messerschmidt-Bölkow-Blohm GmbH (MBB), an engineering, aviation, and aerospace establishment. The aim was to develop a work schedule that would give the 4,000 administrative, engineering, research, and clerical employees in the headquarters office enough flexibility in working hours to permit them to finish a job or at least continue it to a natural break.

The book provides a detailed account of flexible working hours at MBB, followed by descriptions of "variations on a theme," some of them illustrated by examples drawn from other European firms.

Mr. Bolton looks at the pros and cons of the flexible workweek for management and labor. Among the advantages for the employer, he cites greater productivity (attributed in part to the fact that the early morning and late afternoon bands are used as "quiet time," when communication is discouraged) and lower overtime costs. ("When no work is available or the load is light, conscientious staff are quite happy to take time off. . . . They are prepared to work longer when the demand is there. . . .") The disadvantages are increased administrative work and higher lighting and heating costs.

The list of advantages for the employee include freedom from rigid work schedules, the right to time-off for extra hours worked (generally unrecognized for highly paid administrative and professional personnel), and easier commuting. Mr. Bolton discounts the resistance that white-collar workers might have to the "little box" that records working time, by emphasizing that it differs from the ordinary time clock in that no one, including top management, is excluded, and that it does not record

"tardiness"—an outmoded concept under a system of flexible hours.

It comes as no surprise that after weighing the pros and cons the writer comes down hard on the side of flexible hours, for his book is a frank effort to foster the introduction of these schedules. In fact, it is basically a "how-to" book, replete with detailed instructions and illustrated forms for implementing flexible working hours. Considerable attention is given to ways to encourage workers' acceptance of the "little box."

As Mr. Bolton sees the flexible workweek: "Getting the job done is now more important than time-keeping. People are . . . responsible for their own work and the rhythm of their work. There is no longer any sitting around watching the clock for the time to go home. When in order to get his work done, an employee works longer, he knows that the time will be taken into account."

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The 'New Left' in economics

The Capitalist System, A Radical Analysis of American Society. Edited by Richard C. Edwards, Michael Reich, Thomas E. Weisskopf. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1972. 543 pp. \$6.50.

Radical Political Economy, Capitalism and Socialism from a Marxist-Humanist Perspective. By Howard Sherman. New York, Basic Books, Inc., Publishers, 1972. 431 pp. \$12.50.

These two books occupy widely different positions on the broad spectrum of radical New Left thought. *The Capitalist System* presents a large number of readings for an undergraduate course on the radical political movement, while *Radical Political Economy* tackles the difficult problem of unifying the contributions to radical political economy of various members of the radical New Left.

The Capitalist System originated as the collective effort of a group of graduate students and junior faculty to provide a radical alternative to the standard principles of economics course given at Harvard University. The three author-editors point out that in their undergraduate work they had found that standard economics not only ignored major social and political issues, but also justified the *status quo*

by defending the capitalist system. Their book includes 69 different readings, divided into four parts, the first of which analyzes the problems of capitalism by calling attention to the inequality, alienation, racism, sexism, irrationality, and imperialism which are claimed to be major features of the capitalist system. Part II investigates the nature of the capitalist mode of production, the emergence of capitalism, and the evolution of the American capitalist system. Part III concentrates on the functioning of capitalism in the United States, and goes into a more detailed study of the six major deficiencies of capitalism referred to in Part I. Part IV deals with a communal socialist alternative to capitalism.

The Capitalist System professes to speak for what the author-editors call the "radical political movement" which established the Union for Radical Political Economics in 1968. Their framework of interpretation, which provides a unity for the 69 readings, is a Marxist framework that has been updated to meet the requirements of economic analysis in the second half of the twentieth century. The author-editors accept the traditional Marxist interpretation which uncovers a logic in capitalism leading to the eventual demise of private enterprise.

Part III is the most effective part of what is presented as a "radical analysis of American society." It is a good introduction to a study of major problems such as alienation, racism, sexism, and irrationality. The least effective part of this book is the concluding Part IV on alternatives to the capitalist system. Only one of its eight readings actually discusses such an alternative, which calls for the establishment of a "pluralistic commonwealth" composed of socialist cooperative communes of from 30,000 to 100,000 people. "Communal socialism" is offered as an alternative to both the "state capitalism" of the United States and the "state socialism" of the Soviet Union.

A considerable literature on the radical political and economic movement has appeared since 1965. The major defect of this literature is that it is without focus and does not explain the unity that some radical social scientists think they see in their movement. *The Capitalist System* remedies this defect only to the extent that it points out that the radical members of the New Left movement have a unifying neo-Marxist orientation. These members have frequently been able to provide a good statement of what is wrong with capitalism, but they are at their weakest in their views of what would be a viable alternative to capitalism. The three author-editors

are quick to admit that the "proletariat" in the advanced industrialized nations of the West is now "highly divided" and without much socialist consciousness. Yet the author-editors remain optimistic about achieving a cooperative socialist commonwealth that to most nonradical economists would appear to be a very remote, if not entirely utopian, alternative to capitalism.

The author of *Radical Political Economy* explains that his book is the first systematic attempt to present as a unified whole all the contributions to political economy of New Left radical and non-dogmatic Marxist thought. The title of his book is somewhat misleading because it is not concerned with a critique of the science of economics but instead with a critique of the development, current status, and future prospects of the various capitalist and communist (socialist) economies. This book falls more properly in the area of comparative economic systems than in the area dealing with the nature and scope of political economy.

Professor Sherman explains in Part I that his method of analysis is radical or nondogmatic Marxist in nature. What this means is that he has the basic Marxist approach, but it is presented within the humanistic framework now associated with the younger Marx. In Part II on an analysis of the capitalist system, the conclusion is reached that the major evils of capitalism can be removed only by abolishing the private profit system. In Part III the limitations of Soviet, Chinese, and Yugoslavian socialism are analyzed with the observation that, while the authoritarian socialism of Eastern Europe and Mainland China is an advance over capitalism, much remains to be done to secure a genuine political democracy and a humane society in those communist countries. The author explains in the concluding Part IV on the political economy of communism that all the major evils such as environmental deterioration, racism, sexism, and alienation will not be eliminated until a "worldwide democratic, socialist, or communist human society" is achieved.

Professor Sherman, like other members of the radical New Left, is very interested in trying to establish a definite image for the radical New Left movement. He distinguishes the radical New Left from the radical Old Left by describing the latter as "dogmatic Stalinist Marxism" and the former as "nondogmatic humanist Marxism." It should be pointed out, however, that nondogmatic humanist Marxism did not originate with the radical New Left. Ever since Stalin subjected the Soviet Union to

a ruthless forced-draft industrialization in 1928, his western socialist critics have pointed to the non-humanist basis of Stalinist Marxism. What is new about the radical New Left is not its humanistic outlook, but rather the fact that it is looking at the problems of capitalism and socialism from a fourth quarter, twentieth-century point of view. Also the radical New Left is of interest to the nonworker youthful intelligentsia rather than to the blue-collar workers.

Many readers will doubtless be disturbed by the fact that Professor Sherman completely ignores the Scandinavian-British socialist movement. Since he professes to be both pragmatic and humanistic, it is difficult to understand why he pays no attention to the kind of socialist movement that might some day have some chance of appealing to the American public. Professor Sherman is a very competent student of Marxist economics, and his study of the capitalism and authoritarian socialism from what he describes as the "progressive Marxist" approach is a very good statement of the views of the part of the New Left movement that has the radical Marxist-humanist perspective. For the non-Marxist members of the New Left, however, who have been seeking to establish an image or focus for their movement, this book will not prove to be very helpful.

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Promise and performance

Appalachia in the Sixties: Decade of Reawakening.
Edited by David S. Walls and John B. Stephenson. Lexington, Ky., University Press of Kentucky, 1972. 261 pp. \$8.50.

Every generation since the Civil War has "rediscovered" Appalachia and sent its social reformers, missionaries, writers, industrial barons and con men into the hills and hollows to save, civilize, and exploit mountaineers in the name of Christianity, social justice, and the almighty buck. No decade, however, held out more promise for the nation's poorest region than the 1960's with its New Frontier and Great Society.

This book is a collection of articles, reprinted from county weeklies and national magazines, about what happened during the "decade of reawakening"—a time of excitement, hope, curiosity, and eventual dis-

illusionment. The collection is an excellent one, recommended reading for anyone seriously concerned about Appalachia. Represented are works of almost every major regional critic ranging from Whitesburg, Ky., attorney Harry M. Caudill to Harvard child psychologist Dr. Robert Coles. John Stephenson is a University of Kentucky sociologist and dean and David Walls is former executive director of the Appalachian Volunteers.

The bloody "roving picket" union movement of 1963, Robert Kennedy's tour of East Kentucky in 1968, the pillage of strip mining, vote fraud in Mingo County, W. Va., a few War on Poverty victories, and the problems of regional migration all receive compassionate treatment.

The great tragedy of the decade is, of course, that the Great Society legislation failed to change Appalachia. "Our impression is that the quantity of human suffering, privation, degradation and confusion, and the extent of environment rape and devastation in Appalachia have not decreased significantly," write editors Stephenson and Walls in a brief foreword.

Their collection offers no simple reason why.

Perhaps, as one chapter on "A People's Appalachian Regional Commission (ARC)" indicates, some efforts were doomed from the start. For example, the act creating the ARC, the article states, was essentially a governors' highway and public works bill when it emerged from Congress in 1965, offering little for the region's poor. It prohibited the commission from using public funds to support public power projects and largely ignored natural resource management, although the region's coal, water, and timber are among its greatest assets. Hopes for commission success were further crippled by adding New York, Ohio, South Carolina, and Mississippi to the list of "Appalachian" States and adopting a policy to concentrate expenditures on perimeter "growth centers," thus ignoring much of hardcore, rural central Appalachia.

Perhaps, as other chapters suggest, the programs which offered promise were sabotaged by local politicians and outside do-gooders who didn't understand the mountain people. Many efforts, writes social critic Peter Schrage, became mired "in the sump of old political styles" as courthouse politicians put their wives, brothers, and cousins in charge of local poverty and education programs, making the "circle of futility renew itself year after year."

Perhaps the problems were so complex that solutions to the region's problems are four decades away. Or perhaps the region can't expect to climb out of

its doldrums until the coal industry begins to pay for the destruction it has caused.

A major section of the book on the "politics of coal" implies as much. In one article, James C. Millstone, of the St. Louis Post-Dispatch, documents how coal and land companies have become some of the most profitable firms in America by taking the region's coal and leaving so little tax money behind that Pike County, Ky., one of the nation's richest coal counties, can pay only 18 percent of the cost needed to run its schools.

What should be done in Appalachia during the 1970's? This book sees the solutions, not in the bandage and mercurochrome programs of the 1960's, but in terms of nationalizing natural resources, setting up public utility districts, grassroots political action, broadscale social reconstruction, and revamping the Appalachian Regional Commission.

If these recommendations are ignored, we may be "rediscovering" an again forgotten Appalachia a decade from now.

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What is wrong, and why?

The Atrocity of Education. By Arthur Pearl. St. Louis, Mo., New Critics Press, 1972, 365 pp. \$9.95, E. P. Dutton, New York.

This is a product of the uncertainty of our times on how to educate the American masses. Professor Pearl has excellent credentials and is known especially as one of the authors of the "New Careers" program.

The opening paragraph sets the stage: "The mess in education is attributable to a failure to identify goals that are relevant to the last third of the 20th Century." Pearl claims that all the criticisms of education are "as irrelevant as the education they criticize." They tell it like it is, not "as it should be."

The volume attempts to answer three basic questions: What is education all about? What is it trying to accomplish? What are its goals? Pearl answers the last question first. A good education provides an opportunity to compete for employment; it makes possible intelligent choices in a democracy; it enhances the enjoyment of culture;

and it teaches how to live harmoniously with one's neighbors.

Pearl knocks over quite a few educational giants (and some pigmies). He rejects the "efficient schools" and open schools (advocated by Charles Silberman), and he blames education for the presence of white racists. Then he socks it to the Kerner Report—he says it didn't make a "whit of difference." And Upward Bound he calls a charity case. Pearl even complains that the universities do not serve "soul" food! He is much better at telling us about educational bureaucracy. As he says so well: "Discretion gives way to ritual, justice to consistency, passion to ruthlessness, and wisdom to habit."

Pearl is good (very good) in many other places. He censures educators for failing to provide enough choices for making a living. He says we have no alternative now but to think big (right on). Also, "A good portion of the atrocity of education is attributable to the education prospective teachers receive." I say cheers to Pearl's statement that "The beginning of training for democratic citizenship" is respect for a student's rights. He shows the many ways that adults overact to student proposals. Much of what Pearl states has been said before by Silberman and others, but these educational atrocities need repeating.

I come to bury Pearl too, not just to praise him. He emphasizes that we live in a credential society and those without papers are confined to the most menial of employments. He uses the same old tired phrases of a decade ago. He calls vocational education the dumping grounds. But 1972 is not 1961. He ignores the good employment record of vocational graduates and he ignores the hundreds of good jobs that do not require credentials (the dry-wall construction laborers who earn \$7.50 per hour and all the overtime they want). My judgment is that the fault of vocational courses is not their quality, but insufficient supply.

In chapter III, Pearl really hits us economists:

Economists as a group would have you believe that, through skill training, the structurally unemployed could effectively be integrated into the labor force. . . . That an increase in the growth rate of the economy (5% of GNP yearly) would lead to more purchases of goods and services (aggregate consumer demand) which, in turn, would lead to creation of jobs. . . . that a level of unemployment is necessary to avoid runaway inflation . . . that subsidy of business to train "hardcore" unemployables will increase employment . . . they only muddy the waters.

Perhaps. But what's Pearl's answer? It's his own old "New Careers" program. He calls for a full employment *plus* (I repeat plus) economy. It's comical to quote him now: "The need for more persons in teaching roles will become increasingly clear." He wants to use blacks, Spanish speaking, poor whites, and Indians in the classrooms. Marvelous. But what are they to do there and who will pay for them?

These examples suffice to tell us that this is a provocative and controversial book. You may not agree with Pearl (I didn't often), but you'll have a better understanding of the educational problems for having read him.

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Other publications

Economic growth and development

- Bird, Caroline, *The Crowding Syndrome: Learning to Live With Too Much and Too Many*. New York. David McKay Co., Inc., 1972, 337 pp. \$7.95.
- Caldwell, Lynton K., *In Defense of Earth: International Protection of the Biosphere*. Bloomington, Indiana University Press, 1972, 295 pp. \$8.50.
- Carnoy, Martin and Hans Thias, "Educational Planning with Flexible Wages: A Kenyan Example," *Economic Development and Cultural Change*, April 1972, pp. 438-473.
- Davis, E. G. and J. A. Swanson, "On the Distribution of City Growth Rates in a Theory of Regional Economic Growth," *Economic Development and Cultural Change*, April 1972, pp. 495-503.
- Emmerij, Louis, "Research Priorities of the World Employment Program," *International Labor Review*, May 1972, pp. 411-423.
- Halacy, D. S., Jr., *The Geometry of Hunger*. New York, Harper & Row, Publishers, 1972, 280 pp. \$7.95.
- Harris, Donald J., "Feasible Growth with Specificity of Capital and Surplus Labor," *Western Economic Journal*, March 1972, pp. 65-75.
- Huizer, Gerrit, *The Revolutionary Potential of Peasants in Latin America*. Lexington, Mass., D. C. Heath & Co., 1972, 237 pp. \$12.50.
- Institute of Ecology, *Man in the Living Environment*. (Report of the Workshop on Global Ecological Problems, 1971.) Madison, University of Wisconsin Press, 1972, 288 pp. \$12.50, cloth; \$2.50, paper.
- Kahn, Herman and B. Bruce-Briggs, *Things to Come: Thinking About the Seventies and Eighties*. New York, Macmillan Co., 1972, 262 pp. \$6.95.
- Kay, David A. and Eugene B. Skolnikoff, editors, *World Eco-Crisis: International Organizations in Response*. Madison, University of Wisconsin Press, 1972, 324 pp. (Spring 1972 issue of *International Organization*.) \$12.50, cloth; \$2.50, paper.
- Kneese, Allen V. and Blair T. Bower, editors, *Environmental Quality Analysis: Theory and Method in the Social Sciences*. Baltimore, Md., Johns Hopkins Press, 1972, 408 pp. (Papers from a Resources for the Future conference.) \$12.
- Kravis, Irving B., "The Role of Exports in Nineteenth-Century United States Growth," *Economic Development and Cultural Change*, April 1972, pp. 387-405.
- Leff, Nathaniel H., "Economic Development and Regional Inequality: Origins of the Brazilian Case," *Quarterly Journal of Economics*, May 1972, pp. 243-262.
- Lind, Truls, and Jan Serck-Hanssen, "Regional Subsidies on Labor and Capital," *Swedish Journal of Economics*, March 1972, pp. 68-83.
- Maddison, Angus, *Class Structure and Economic Growth: India and Pakistan since the Moghuls*. New York, W. W. Norton and Co., Inc., 1972, 181 pp., \$7.95.
- O'Malley, Patrick, *Irish Industry: Structure and Performance*. New York, Barnes & Noble, Publishers, 1972, 141 pp.
- Ranis, Gustav, editor, *The Gap Between Rich and Poor Nations. Proceedings of a Conference held by the International Economic Association at Bled, Yugoslavia*. London, International Economic Association, 1972, 439 pp. \$24.95, St. Martin's Press, New York.
- Rinehart, James R. and William E. Laird, "Community Inducements to Industry and the Zero-Sum Game," *Scottish Journal of Political Economy*, February 1972, pp. 73-90.
- Schultz, Theodore W., "The Ecosystem Doom," *Bulletin of the Atomic Scientists*, April 1972, pp. 12-17.
- Tait, A. A. and J. A. Bristow, editors, *Ireland: Some Problems of a Developing Economy*. New York, Barnes and Noble, Publishers, 1972, 239 pp. \$16.25.
- Teubal, Morris, "Development Strategy for a Medium-Sized Economy," *Econometrica*, September 1971, pp. 773-795.

U.S. Bureau of Labor Statistics, *Projections of the Post-Vietnam Economy, 1975*. Washington, 1972, 34 pp. (Bulletin 1733.) 45 cents, Superintendent of Documents, Washington.

Villaverde, Juan, "Green Revolution," *Américas*, March 1972, pp. 11-17.

Watanabe, Susumu, "International Subcontracting, Employment, and Skill Promotion," *International Labor Review*, May 1972, pp. 425-449.

Whitcomb, David K., *Externalities and Welfare*. New York, Columbia University Press, 1972, 158 pp. \$8.

Economic statistics

Campbell, Angus and Philip E. Converse, editors, *The Human Meaning of Social Change*. New York, Russell Sage Foundation, 1972, 547 pp. \$15.

Fels, Rendigs, editor, "Papers and Proceedings of the 84th Annual Meeting of the American Economic Association, New Orleans, La., December 27-29, 1971," *American Economic Review*, May 1972, pp. 1-520. \$8, American Economic Association, 1313-21st Avenue South, Nashville, Tenn. 37212.

Goldsmith, Seth B., "The Status of Health Status Indicators," *Health Services Reports*, March 1972, pp. 212-220.

Lamberton, D. M., editor, *Economics of Information and Knowledge: Selected Readings*. Baltimore, Md., Penguin Books, Inc., 1971, 384 pp. \$3.25.

Moser, C. A., "Revised Figures," *Statistical Reporter*, U.S. Office of Management and Budget, May 1972, pp. 193-195.

Murray, James R., *Systems Research for Social Intervention: A Framework for the Empirical Evaluation of Social and Psychological Change Programs*. Chicago, Industrial Relations Center, University of Chicago, 1972, 36 pp. (Occasional Paper 134.)

U.S. Bureau of the Census, *Pretests and Dress Rehearsals of the 1970 Census of Population and Housing: A Procedural History*. Washington, 1972, 24 pp. (Working Paper 32.) 50 cents, Bureau of the Census, Washington 20233.

U.S. Office of Management and Budget, *Standard Industrial Classification Manual, 1972*. Washington, 1972, 649 pp. \$6.75, Superintendent of Documents, Washington.

U.S. Public Health Service, *Annotated Bibliography on Robustness Studies of Statistical Procedures*. Rockville, Md., National Center for Health Statistics, 1972, 51 pp. (DHEW Publication (HSM) 72-1051.) 60 cents, Superintendent of Documents, Washington.

U.S. Public Health Service, *Reporting Health Events in Household Interviews: Effects of Reinforcements, Question Length, and Reinterviews—A Methodological Study*. Rockville, Md., National Center for Health Statistics, 1972, 70 pp. (DHEW Publication (HSM) 72-1028.)

Weintraub, E. Roy and Sidney Weintraub, "The Full Employment Model: A Critique," *Kyklos*, 1972, pp. 83-100.

Zarnowitz, Victor, *The Business Cycle Today*. New York, National Bureau of Economic Research, 1972, 338 pp. (Economic Research: Retrospect and Prospect—Fiftieth Anniversary Colloquium of the National Bureau of Economic Research, I.) Distributed by Columbia University Press, New York. \$10, cloth; \$3.50, paper.

Education

Bowles, Samuel, "Getting Nowhere: Programmed Class Stagnation," *Society*, June 1972, pp. 42-49.

Carnoy, Martin, editor, *Schooling in a Corporate Society: The Political Economy of Education in America*. New York, David McKay Co., Inc., 1972, 303 pp. \$3.95, paper.

Cohn, Eichanan, *The Economics of Education*. Lexington, Mass., D. C. Heath and Co., 1972, 392 pp. \$12.50.

Fersh, George L., editor, *Economics in the Business Curriculum*. New York, Joint Council on Economic Education, 1972, 94 pp.

Fox, Karl A., editor, *Economic Analysis for Educational Planning: Resource Allocation in Nonmarket Systems*. Baltimore, Md., Johns Hopkins Press, 1972, 376 pp. \$15.

Garb, Gerald, "The Economics of a University System Without Degrees," *Western Economic Journal*, March 1972, pp. 57-64.

Gisser, Micha, "Education and Economic Welfare: A Cross-Sectional Study of the U.S.," *Social Science Quarterly*, March 1972, pp. 976-983.

Hubert, Dick, "Class . . . and the Classroom: The Duluth Experience," *Saturday Review*, May 27, 1972, pp. 55-58.

Johnstone, D. Bruce and others, "American School Finance: A History," *Current History*, June 1972, pp. 273-311. (First in a 3-part symposium on American school financing.)

Milner, Murray, Jr., *The Illusion of Equality*. San Francisco, Jossey-Bass Inc., Publishers, 1972, 172 pp. \$8.50.

Smith, Robert G., Jr., *The Engineering of Educational and Training Systems*. Lexington, Mass., D. C. Heath and Co., 1971, 241 pp.

Industrial health and safety

- Asper, David W., "Planning for Occupational Safety and Health," *Health Services Report*, April 1972, pp. 311-317.
- Atherley, G. R. C., "Action on Occupational Deafness in the United Kingdom," *International Labor Review*, May 1972, pp. 463-474.
- Berman, Daniel M., "Job health and safety on a limited budget," *Focus*, June 5, 1972, pp. 3-6.
- Longaker, William D., "The Full-Time Psychiatrist in Industry," *Journal of Occupational Medicine*, March 1972, pp. 216-219.
- Schulz, Gunter, "Occupational Noise and Vibration Protection in the Federal Republic of Germany," *International Labor Review*, May 1972, pp. 451-462.
- U.S. Bureau of Labor Statistics, *Injury Rates by Industry, 1970*. Washington, 1972, 26 pp. (Report 406.)
- U.S. Public Health Service, *Work Injuries Among Blue-Collar Workers and Disability Days, United States, July 1966-June 1967*. Rockville, Md., National Center for Health Statistics, 1972, 44 pp. (DHEW Publication (HSM) 72-1035.) 50 cents, Superintendent of Documents, Washington.

Industrial relations

- Adell, B. L. and D. D. Carter, *Collective Bargaining for University Faculty in Canada*. Kingston, Ontario, Industrial Relations Center, Queen's University, 1972, 95 pp. \$3.50, paper.
- Baer, Walter E., *Practice and Precedent in Labor Relations*. Lexington, Mass., D. C. Heath and Co., 1972, 112 pp. \$10.
- Boivin, Robert J., "Labor Law: Duty to Bargain Over Decision to Mechanize Operations," *Marquette Law Review*, Winter 1972, pp. 179-184.
- Bradfield, Stillman, "Mutual Obligations Between Management and Workers in Peru," *AIFLD Review*, American Institute for Free Labor Development, Vol. III, No. 4, 1971, pp. 73-92.
- Carpenter, Jesse Thomas, *Competition and Collective Bargaining in the Needle Trades, 1910-1967*. Ithaca, New York State School of Industrial and Labor Relations, Cornell University, 1972, 910 pp. \$17.50.
- De Maria, Alfred T., Dale Tarnowieski, Richard Gurman, *Manager Unions?* New York, American Management Association, Inc., 1972, 31 pp. (An AMA Research Report.) \$5, AMA members; \$7.50, nonmembers.
- Foegen, J. H., "An Ombudsman as Complement to the Grievance Procedure," *Labor Law Journal*, May 1972, pp. 289-294.
- International Labor Office, *Collective Bargaining and the Challenge of New Technology*. Geneva, 1972, 71 pp. \$2. Distributed in the United States by Washington Branch of ILO.
- Kassalow, Everett, *New Directions in European Unionism, with Some Implications for American Unions*. Chicago, Roosevelt University, 1971, 31 pp. Single copies free, Labor Education Division, Roosevelt University.
- Koshiro, Kazutoshi, "Prospects for Collective Bargaining in the 1970's: Part I," *Japan Labor Bulletin*, April 1972, pp. 13-16.
- Meltzer, Bernard D., "Labor arbitration and overlapping and conflicting remedies for employment discrimination," *University of Chicago Law Review*, Fall 1971, pp. 30-50.
- Nigro, Felix A., editor, "Collective bargaining in the public service: a reappraisal," *Public Administration Review*, March-April 1972, pp. 97-126.
- Rains, Harry H., "Collective Bargaining in the Public Sector and the Need for Exclusion of Supervisory Personnel," *Labor Law Journal*, May 1972, pp. 275-288.
- Ross, Jeffrey K., "Collective Bargaining in the Prison Sector," *Industrial and Labor Relations Forum*, March 1972, pp. 1-30.
- Schiefen, Michael W., "Industrial Union Alliances for Collective Bargaining," *Industrial and Labor Relations Forum*, March 1972, pp. 66-81.
- Schlossberg, Stephen I. and Frederick E. Sherman, *Organizing and the Law*. Washington, Bureau of National Affairs, Inc., 1971, 304 pp. \$10.
- Simkin, William E., *Mediation and the Dynamics of Collective Bargaining*. Washington, Bureau of National Affairs, Inc., 1971, 410 pp. \$12.50.
- U.S. Bureau of Labor Statistics, *Layoff, Recall, and Work-sharing Procedures [in] Major Collective Bargaining Agreements*. Washington, 1972, 84 pp. (Bulletin 1425-13.) \$1., Superintendent of Documents, Washington.

Industry and government organization

- Brown, Keith C., editor, *Regulation of the Natural Gas Producing Industry*. Washington, Resources for the Future, Inc., 1972, 260 pp. (Papers presented at a seminar conducted by Resources for the Future in Washington, D.C., October 15-17, 1970.) \$8.50, paper, Johns Hopkins Press, Baltimore, Md.

George, Kenneth D. and others, "Symposium on the Large Firm in Modern Society," *Journal of Industrial Economics*, April 1972, pp. 105-192.

Moroney, J. R., *The Structure of Production in American Manufacturing*. Chapel Hill, University of North Carolina Press, 1972, 174 pp. \$10.

Plumb, William T., Jr., "The Relative Priority of Claims of Workingmen and of the Federal Government in Insolvency," *Labor Law Journal*, May 1972, pp. 259-274.

Pryke, Richard, *Public Enterprise in Practice* [The British Experience of Nationalization Over Two Decades]. New York, St. Martin's Press, 1972, 530 pp. \$19.95.

Pryor, Frederic L., "An International Comparison of Concentration Ratios," *Review of Economics and Statistics*, May 1972, pp. 130-140.

International economics

Kapoor, A. and Phillip D. Grub, *The Multinational Enterprise in Transition: Selected Readings and Essays*. Princeton, N.J., Darwin Press, 1972, 505 pp. \$14.95.

Owens, Edgar and Robert Shaw, *Development Reconsidered: Bridging the Gap Between Government and People*. Lexington, Mass., D. C. Heath & Co., 1972, 190 pp. \$7.95.

Schydrowsky, Daniel M., "Latin American Trade Policies in the 1970's: A Prospective Appraisal," *Quarterly Journal of Economics*, May 1972, pp. 263-289.

van Goethem, Pierre, *The Americanization of World Business: Wall Street and the Superiority of American Enterprise*. New York, Herder and Herder, Inc., 1972, 166 pp. \$7.95.

Labor and economic history and thought

Brecher, Jeremy, *Strike! The True History of Mass Insurgency in America from 1877 to the Present*. San Francisco, Straight Arrow Books, 1972, 329 pp. \$10, cloth; \$3.95, paper.

Douglas, Paul H., *In the Fullness of Time*. New York, Harcourt Brace Jovanovich, Inc., 1972, 642 pp. \$13.50.

Freeman, Richard B., *Labor Economics*. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1972, 136 pp. \$5.95.

Gould, Jean and Lorena Hickok, *Walter Reuther: Labor's Rugged Individualist*. New York, Dodd, Mead & Co., 1972, 399 pp. \$8.95.

Harrington, Michael, *Socialism*. New York, Saturday Review Press, 1972, 436 pp. \$12.50.

Jacobs, Wilbur R., *Dispossessing the American Indian: Indians and Whites on the Colonial Frontier*. New York, Charles Scribner's Sons, 1972, 240 pp. \$7.95.

Jasny, Naum, *Soviet Economists of the Twenties: Names to be Remembered*. London, Cambridge University Press, 1972, 218 pp. \$12.50.

MacDonald, Wendell D., "The Early History of Labor Statistics in the United States," *Labor History*, Spring 1972, pp. 267-278.

Marshall, Ray and Richard Perlman, *An Anthology of Labor Economics: Readings and Commentary*. New York, John Wiley & Sons, Inc., 1972, 965 pp. \$13.95.

McGovern, George S. and Leonard F. Guttridge, *The Great Coalfield War*. Boston, Houghton Mifflin Co., 1972, 383 pp. \$8.95.

Mohl, Raymond A., "Poverty, Pauperism, and Social Order in the Preindustrial American City, 1780-1840," *Social Science Quarterly*, March 1972, pp. 934-948.

Spengler, Joseph J., "Veblen on Population and Resources," *Social Science Quarterly*, March 1972, pp. 861-878.

Ward, Benjamin, *What's Wrong with Economics?* New York, Basic Books, Inc., 1972, 273 pp. \$6.95.

Zieger, Robert H., "Workers and Scholars: Recent Trends in American Labor Historiography," *Labor History*, Spring 1972, pp. 245-266.

Labor force

Bureau of Business Practice, "Today's Working Woman—Special Report," *Employee Relations Bulletin*, Bureau of Business Practice, 681 Fifth Avenue, New York 10022, May 21, 1972, pp. 1-32.

Clark, F. Le Gros and Jeanne M. Fisher, "The Middle-Aged Woman in the Employment Market: A British Contribution," *Industrial Gerontology*, Autumn 1971, pp. 10-19.

Cook, Alvin A., Jr., "Quality Adjustment and the Excess Supply of Air Force Volunteers," *Review of Economics and Statistics*, May 1972, pp. 166-171.

Davis, C. Howard, "Influence of Selected Community Characteristics on Mobility of College Educated Persons, 1955-1960," *Social Science Quarterly*, March 1972, pp. 963-975.

Durand, Claude et Michelle, *De l'O.S. à l'Ingénieur: Carrière ou Classe Sociale*. Paris, Les Editions Ouvrières, 1971, 320 pp., bibliography. 42 Fr.

Engineering Manpower Commission, "Women in Engineering," *Engineering Manpower Bulletin*, May 1972, pp. 1-6. (No. 21.) \$1.50, Engineering Manpower Commission of Engineers Joint Council, 345 East 47th Street, New York 10017.

Good, Paul, "The Bricks and Mortars of Racism," *New York Times Magazine*, May 21, 1972, pp. 24-25, 57 et seq.

- Hill, Herbert, "The New Judicial Perception of Employment Discrimination—Litigation Under Title VII of the Civil Rights Act of 1964," *University of Colorado Law Review*, March 1972, pp. 243–268. Reprints available from NAACP, 1790 Broadway, New York 10019.
- Hodgson, J. D. and others, "The Emergency Employment Act: An Action Research," *New Generation*, National Committee on Employment of Youth, Winter 1972, pp. 1–28.
- Hood, Ernie, "Profiling Alaska's Native Manpower," *Manpower*, May 1972, pp. 14–20.
- Janjic, Marion, "Part-Time Work in the Public Service," *International Labor Review*, April 1972, pp. 335–349.
- National Planning Association, "Woman in the Labor Force," *Projection Highlights*, May 1972, pp. 1–4.
- Northrup, Herbert R. and others, *Negro Employment in Land and Air Transport—A Study of Racial Policies in the Railroad, Airline, Trucking, and Urban Transit Industries*. Philadelphia, Pa., Industrial Research Unit, Wharton School of Finance and Commerce, University of Pennsylvania, 1971, 631 pp. (Studies of Negro Employment, V.) \$13.50.
- Ozanne, Robert, *The Negro in the Farm Equipment and Construction Machinery Industries*. Philadelphia, Industrial Research Unit, Wharton School of Finance and Commerce, University of Pennsylvania, 1972, 115 pp. (Racial Policies of American Industry, 26.) \$5.95.
- Raymond, Richard D., *The Myth of the Appalachian Brain Drain: A Case Study of West Virginia*. Morgantown, West Virginia University Library, 1972, 78 pp. \$3.
- Ross, M. H., "Life Style of the Coal Miner: America's Original Hard Hat," *Appalachia Medicine*, March 1971.
- Sawyers, Larry, "Urban Poverty and Labor Force Participation: Note," *American Economic Review*, June 1972, pp. 414–421.
- Snelling, W. Rodman and Robert F. Boruch, *Science in Liberal Arts Colleges: A Longitudinal Study of 49 Selective Colleges*. New York, Research Corporation, 1972, 285 pp. \$8.50, Columbia University Press, New York.
- Thorbecke, Erik, "What is Unemployment?," *AIFLD Review*, American Institute for Free Labor Development, Vol. III, No. 4, 1971, pp. 11–19.
- U.S. Cabinet Committee on Opportunity for the Spanish Speaking, *Spanish Surnamed American College Graduates, 1971–1972*. Washington, 1971, Vol. I, 570 pp., Vol. II, 208 pp. Single copies free from the Committee, 1800 G St., N.W., Washington 20506.
- U.S. Manpower Administration, *Review of the Rural Manpower Service*. Washington, 1972, 152 pp.
- U.S. Manpower Administration, *Rural Manpower Developments* [formerly published as Farm Labor Developments]. First issue, March 1972, includes James C. Nix, "A Review of Rural Manpower Research"; Cora S. Cronemeyer, "New Ways of Helping Migrants"; Mildred G. Wilson, "Trends in Farm Wage Rates"; "Occupational Trends in Nonmetropolitan Employment, 1960 to 1970"; and employment and wage tables.
- U.S. National Science Foundation, *National Patterns of R&D Resources, 1953–72—Funds and Manpower in the United States*. Washington, 1972. (NSF 72–300.) 50 cents, Superintendent of Documents, Washington.
- Vedder, Richard K. and Lowell E. Gallaway, "The Geographical Distribution of British and Irish Emigrants to the United States After 1800," *Scottish Journal of Political Economy*, February 1972, pp. 19–35.
- Wachter, Michael L., "A Labor Supply Model for Secondary Workers," *Review of Economics and Statistics*, May 1972, pp. 141–151.
- Weiss, Leonard and Jeffrey G. Williamson, "Black Education, Earnings, and Interregional Migration: Some New Evidence," *American Economic Review*, June 1972, pp. 372–383.

Labor organizations

- American Federation of Labor and Congress of Industrial Organizations, *The AFL-CIO Platform Proposals Presented to the Democratic and Republican National Conventions, 1972*. Washington, 1972, 45 pp.
- Braun, Robert J., *Teachers and Power: The Story of the American Federation of Teachers*. New York, Simon and Schuster, 1972, 287 pp. \$7.95.

Management and organization theory

- Baehr, Melany E. and Frances E. Burns, *The Use of Validated Personal Background Data in Selection and Placement Interviews*. Chicago, Industrial Relations Center, University of Chicago, 1972, 14 pp. (Occasional Paper 131.)
- Block, Gerd E. and Renate C. Block, "Office Landscaping," *Personnel Practice Bulletin*, Australian Commonwealth Department of Labor and National Service, March 1972, pp. 45–57.
- Boehm, Virginia R., "Negro-white differences in validity of employment and training selection procedures: summary of research evidence," *Journal of Applied Psychology*, February 1972, pp. 33–39.
- Dascher, Paul E., "Motivation behavior and the reward system," *Economic and Business Bulletin*, Temple University, Spring–Summer 1972, pp. 35–39.

- Dyer, William G., editor, *Modern Theory and Method in Group Training*. New York, Van Nostrand Reinhold Co., 1972, 251 pp. \$12.50.

- Harris, Philip R. and Dorothy L. Harris, "Training for Cultural Understanding," *Training and Development Journal*, May 1972, pp. 8-10.
- Holmen, Milton G. and Richard Docter, *Educational and Psychological Testing: A Study of the Industry and its Practices*. New York, Russell Sage Foundation, 1972, 218 pp. \$7.95.
- Lawless, David J., *Effective Management: Social Psychological Approach*. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1972, 422 pp. \$10.95.
- Organization for Economic Cooperation and Development, *Enterprise Manpower Planning for Change*. International Management Seminar, Lisbon, January 13-16, 1970, Final Report. Paris, OECD, 1972, 216 pp. (International Seminars 1970-1.)
- Orpen, Christopher, "Peer ratings as predictors of white-collar performance," *Personnel*, May-June 1972, pp. 45-48.
- Pritchard, Robert D., Marvin D. Dunnette, Dale O. Jorgenson, "Effects of Perceptions of Equity and Inequity on Worker Performance and Satisfaction," *Journal of Applied Psychology*, February 1972, pp. 75-94.
- Sirota, David and Alan D. Wolfson, "Job enrichment: What are the obstacles?" *Personnel*, May-June 1972, pp. 8-17.
- Slocum, John W., Jr., and Robert H. Strawser, "Racial differences in job attitudes," *Journal of Applied Psychology*, February 1972, pp. 28-32.
- Trice, Harrison M. and Paul M. Roman, *Spirits and Demons at Work: Alcohol and Other Drugs on the Job*. Ithaca, New York State School of Industrial and Labor Relations, Cornell University, 1972, 268 pp. (ILR Paperback 11.) \$6.50, cloth (special order); \$4.75, paper.
- Manpower training and development**
- Barsby, Steve L., *Cost-Benefit Analysis and Manpower Programs*. Lexington, Mass., D. C. Heath and Co., 1972, 180 pp. \$15.
- Bartholemew, D. J. and A. R. Smith, editors, *Manpower and Management Science*. Lexington, Mass., D. C. Heath and Co., 1972, 341 pp. \$15.
- Burack, Elmer H. and James W. Walker, editors, *Manpower Planning and Programming*. Boston, Allyn and Bacon, Inc., 1972, 452 pp. \$11.95.
- Gilpatrick, Eleanor, *Health Services Mobility Study: Final Report for the Period October 1967 through March 1972*. New York, The Research Foundation, City University of New York, 1972, 137 pp. (Technical Report 11.)
- Hamermesh, Daniel S., "The secondary effects of manpower programs," *Economic and Business Bulletin*, Temple University, Spring-Summer 1972, pp. 18-26.
- Holley, William H., Jr., "Employer Preferences for Programs to Train and Employ the Hard-Core Jobless," *Training and Development Journal*, June 1972, pp. 8-12.
- Jakubauskas, Edward B., editor, *Proceedings of the Governor's Conference on Comprehensive Manpower Planning*. Ames, Iowa State University, Industrial Relations Center, 1972, 157 pp.
- Kirchner, Wayne K., "The Hard-Core in Training—Who Makes It?" *Training and Development Journal*, May 1972, pp. 34-37.
- Pavalko, Ronald M., *Sociology of Occupations and Professions*. Itasca, Ill., F. E. Peacock Publishers, Inc., 1971, 234 pp. \$6.50, cloth: \$3.95, paper.
- Roberts, Markley, "A Cost-Benefit Report on Training Disadvantaged Youths for Apprenticeship," *Training and Development Journal*, June 1972, pp. 32-35.
- Style, G. W., "Training Disabled Workers for the 70's," *United Kingdom Department of Employment Gazette*, March 1972, pp. 243-246.
- Prices and living conditions**
- Boyd, J. Hayden and Gary M. Walton, "The Social Savings From Nineteenth-Century Rail Passenger Services," *Explorations in Economic History*, Spring 1972, pp. 233-254.
- Cooper, Barbara S. and Nancy L. Worthington, "Medical Care Spending for Three Age Groups," *Social Security Bulletin*, May 1972, pp. 3-16.
- Davis, Karen and Louise B. Russell, "The Substitution of Hospital Outpatient Care for Inpatient Care," *Review of Economics and Statistics*, May 1972, pp. 109-120.
- Dean, Michael L. and William B. Wagner, "Labor's hedge against inflation—the CPI," *Personnel*, May-June 1972, pp. 23-28.
- Eckstein, Otto and Roger Brinner, *The Inflation Process in the United States*. Washington, U.S. Congress, Joint Economic Committee, 92d Cong., 2d sess., 1972. 46 pp. (Joint Committee Print.) 25 cents, Superintendent of Documents, Washington.
- Edwards, Marvin Henry, *Hazardous to Your Health: A New Look at the "Health Care Crisis" in America*. New Rochelle, N.Y., Arlington House, 1972, 318 pp. \$9.95.
- Feldstein, Martin S., "Equity and Efficiency in Public Sector Pricing: The Optimal Two-Part Tariff," *Quarterly Journal of Economics*, May 1972, pp. 175-187.
- Iklé, Doris M., "A New Approach to the Index Number Problem," *Quarterly Journal of Economics*, May 1972, pp. 188-211.

- Kain, John F. and John M. Quigley, "Housing Market Discrimination, Homeownership, and Savings Behavior," *American Economic Review*, June 1972, pp. 263-277.
- Kennedy, Edward M., *In Critical Condition: The Crisis in America's Health Care*. New York, Simon and Schuster, 1972, 252 pp. \$6.95.
- Lazer, William, John E. Smallwood, and others, "Consumer Environments and Life Styles of the Seventies," *MSU Business Topics*, Michigan State University, Spring 1972, pp. 5-17.
- McCracken, Paul W., "Fighting Inflation After Phase Two," *Fortune*, June 1972, pp. 84-85, 157-158.
- Mercer, Lloyd J. and W. Douglas Morgan, "Alternative Interpretations of Market Saturation: Evaluation for the Automobile Market in the Late Twenties," *Explorations in Economic History*, Spring 1972, pp. 269-290.
- Schnabel, Morton, "The Subsidy Problem in Hospital Insurance: A Comment," *Journal of Business*, University of Chicago, April 1972, pp. 302-304.
- Schrag, Philip G., *Counsel for the Deceived: Case Studies in Consumer Fraud*. New York, Random House, 1972, 200 pp. \$5.95.
- National Science Board, *The Role of Engineers and Scientists in a National Policy for Technology*. Washington, National Science Foundation, 1972, 48 pp. 45 cents, Superintendent of Documents, Washington.
- Sampson, Gary P., "Salter, Solow and SMAC," *Australian Economic Papers*, December 1971, pp. 114-121.
- U.S. Bureau of Labor Statistics, *Railroad Technology and Manpower in the 1970's*. Washington, 1972, 90 pp. (Bulletin 1717.) \$1, Superintendent of Documents, Washington.
- Uselding, Paul J., "Technical Progress at the Springfield Armory, 1820-1850," *Explorations in Economic History*, Spring 1972, pp. 291-316.

Social institutions and social change

- Etzioni, Amitai, "Human Beings Are Not Very Easy to Change After All," *Saturday Review*, June 3, 1972, pp. 45-47.
- Etzioni, Amitai, "The Women's Movement—Tokens vs. Objectives," *Saturday Review*, May 20, 1972, pp. 31-35.

Lopreato, Joseph and Lawrence E. Hazelrigg, *Class, Conflict, and Mobility: Theories and Studies of Class Structure*. San Francisco, Chandler Publishing Co., 1972, 576 pp. \$12.50.

Peachey, Paul and Sister Rita Mudd, editors, *Evolving Patterns of Ethnicity in American Life*. Washington, National Center for Urban Ethnic Affairs, 1971, 60 pp.

Urban affairs

Banfield, Edward C., "The Urban Crisis: Reality or Myth?," *Manpower*, May 1972, pp. 9-13.

Bigler, Harold and Eugene Keith, "Transporting the Poor to Work," *Manpower*, May 1972, pp. 2-8.

Erie, Steven P. and others, *Reform of Metropolitan Governments*. Washington, Resources for the Future, Inc., 1972, 88 pp. (Governance of Metropolitan Regions, Lowden Wingo, editor, 1.) \$2.25, Johns Hopkins Press, Baltimore, Md.

Ford Foundation, "Special Report: A Wider Bargaining Table" [Activities of the National Center for Dispute Settlement and the Center for Mediation and Conflict Resolution], *Ford Foundation Letter*, March 1, 1972, pp. 1-2.

Gans, Herbert J., "The New Egalitarianism," *Saturday Review*, May 6, 1972, pp. 43-46.

Groh, George W., *The Black Migration: The Journey to Urban America*. New York, Weybright and Talley, 1972, 301 pp. \$8.95.

Haar, Charles M. and others, *Metropolitanization and Public Services*. Washington, Resources for the Future, Inc., 1972, 69 pp. (Governance of Metropolitan Regions,

Productivity and technological change

Behman, Sara and others, *Productivity Change for Carpenters and Other Occupations in the Building of Single-Family Dwellings and Related Policy Issues*. Berkeley, Institute of Industrial Relations, University of California, 1971, 199 pp. \$1.

Bloom, Gordon F., *Productivity in the Food Industry: Problems and Potential*. Cambridge, Mass., MIT Press, 314 pp. \$10.

Clayton, Eric S., "Mechanization and Employment in East African Agriculture," *International Labor Review*, April 1972, pp. 309-334.

Computer Science and Engineering Board, *Libraries and Information Technology: A National System Challenge*. Washington, National Academy of Sciences, 1972, 84 pp. (A Report to The Council on Library Resources Inc., by The Information Systems Panel, Computer Science and Engineering Board.) \$3.25, paper.

Flueckiger, Gerald E., "Observation and Measurement of Technological Change," *Explorations in Economic History*, Kent State University Press, Winter 1971-72, pp. 145-177.

International Labor Office, *Labor and Social Implications of Automation and Other Technological Developments*. (Report VI, International Labor Conference, 57th Session, Geneva 1972.) Geneva, ILO, 1972, 75 pp.

Moore, Wilbert E., *Technology and Social Change*. Chicago, Quadrangle Books, 1972, 236 pp. (A New York Times Book.) \$2.45, paper.

- Lowden Wingo, editor, 3.) \$2.25, Johns Hopkins Press, Baltimore, Md.
- Henderson, William L. and Larry C. Ledebur, *Urban Economics: Processes and Problems*. New York, John Wiley & Sons, Inc., 1972, 216 pp. \$7.50.
- Kendrick, David, "Numerical Models for Urban Planning," *Swedish Journal of Economics*, March 1972, pp. 45-67.
- Marshall, Dale Rogers and others, *Minority Perspectives*. Washington, Resources for the Future, Inc., 1972, 68 pp. (Governance of Metropolitan Regions, Lowden Wingo, editor, 2.) \$2.25, Johns Hopkins Press, Baltimore, Md.
- National Center for Urban Ethnic Affairs, *Working Class and Ethnic Priorities*. Washington, National Center for Urban Ethnic Affairs, 1972, 25 pp.
- New York City Commission on Human Rights, *Women's Role in Contemporary Society*. New York, Avon Books, 1972, 800 pp. (Report of the Commission, September 21-25, 1970.) \$2.45, paper.
- Novak, Michael, *The Rise of the Unmeltable Ethnic: Politics and Culture in the Seventies*. New York, Macmillan Co., 321 pp. \$7.95.
- O'Neill, William L., editor, *Women at Work: Including "The Long Day—The Story of a New York Working Girl [1905]" by Dorothy Richardson and "Inside the New York Telephone Company [1970]" by Elinor Langer*. Chicago, Quadrangle Books, 1972, 360 pp. \$2.95, paper.
- Seda Bonilla, Eduardo, "The Identity of the 'Niuyorricáns,'" *New Generation*, Fall 1971, pp. 6-11.
- Tokyo Municipal Government, *Tokyo for the People: Concepts for Urban Renewal*. Tokyo, 1972, 144 pp.
- Tokyo Municipal Government, *Tokyo's Housing Problem*. (Translated by Tokutaro Nakagawa.) Tokyo, 1972, 228 pp.
- Winslow, Robert W., editor, *The Emergence of Deviant Minorities: Social Problems and Social Change*. New Brunswick, N.J., Transaction Books, 1972, 378 pp. \$9.75.
- Mills, Edwin S., *Studies in the Structure of the Urban Economy*. Baltimore, Md., Johns Hopkins Press, 1972, 151 pp. (Published for Resources for the Future, Inc.) \$7.
- Owen, Wilfred, *The Accessible City*. Washington, Brookings Institution, 1972, 150 pp. \$6.50.
- Wood, Robert C., *The Necessary Majority: Middle America and the Urban Crisis*. New York, Columbia University Press, 1972, 95 pp. \$5.95.
- FRASER, William L., "Going Down Home: Family Structure and the Urban Trap," *Social Science Quarterly*, March 1972, pp. 893-906.
- Wages and compensation**
- Ashenfelter, Orley, *Some Evidence of the Effect of Unionism on the Average Wage of Black Workers Relative to White Workers, 1900-1967*. Princeton, N.J., Princeton University, Industrial Relations Section, 1971, 11 pp. (Working paper 33.)
- Baird, Robert N. and John H. Landon, "The Effects of Collective Bargaining on Public School Teachers' Salaries," Communication with reply by Hirschel Kasper, *Industrial and Labor Relations Review*, April 1972, pp. 410-423.
- Boskin, Michael J., "Unions and Relative Real Wages," *American Economic Review*, June 1972, pp. 466-472.
- Bressler, Barry, "The salaries of union officials with specific reference to the construction industry," *Economic and Business Bulletin*, Temple University, Spring-Summer 1972, pp. 46-50.
- Engineering Manpower Commission, *Salaries of Engineering Technicians, 1971*. New York, Engineers Joint Council, 1972, 80 pp. \$5.
- Evans, Alan W., "On the Theory of the Valuation and Allocation of Time," *Scottish Journal of Political Economy*, February 1972, pp. 1-17.
- Foegen, J. H., "Is it time to clip the fringes?," *Personnel*, March-April 1972, pp. 36-42.
- Freund, James L., "Wage Pressures on City Hall: Philadelphia's Experience in Perspective," *Business Review*, Federal Reserve Bank of Philadelphia, March 1972, pp. 3-17.
- Hellriegel, Don, "The Four-Day Workweek: A Review and Assessment," *MSU Business Topics*, Michigan State University, Spring 1972, pp. 39-48.
- Husband, T. M., "Developing a General Model of Executive Pay," *Compensation Review*, Second Quarter 1972, pp. 8-14.
- Kirsch, Leonard Joel, *Soviet Wages: Changes in Structure and Administration Since 1956*. Cambridge, Mass., MIT Press, 1972, 237 pp. \$12.50.
- Kolodrubetz, Walter W., "Two Decades of Employee-Benefit Plans, 1950-70: A Review," *Social Security Bulletin*, April 1972, pp. 10-22.
- Kosters, Marvin and Finish Welch, "The Effects of Minimum Wages on the Distribution of Changes in Aggregate Employment," *American Economic Review*, June 1972, pp. 323-332.
- Lane, Irving M. and Lawrence A. Messe, "Distribution of Insufficient, Sufficient, and Oversufficient Rewards: A Clarification of Equity Theory," *Journal of Personality and Social Psychology*, February 1972, pp. 228-233.
- Mitchell, Daniel J. B., "Incomes Policy and the Labor Market in France," *Industrial and Labor Relations Review*, April 1972, pp. 315-335.

- Moore, Thomas G., *U.S. Incomes Policy, Its Rationale and Development*. Washington, American Enterprise Institute for Public Policy Research, 1971, 32 pp. (Special analysis, 18.)
- Prideaux, G. J., "Employee Benefits and Services," *Personnel Practice Bulletin*, Australian Commonwealth Department of Labor and National Service, March 1972, pp. 19-45.
- Sherman, Roger and Thomas D. Willett, "The Standardized Work Week and the Allocation of Time," *Kyklos*, 1972, pp. 65-82.
- Sparks, Gordon R. and David A. Wilton, "Determinants of Negotiated Wage Increases: An Empirical Analysis," *Econometrica*, September 1971, pp. 739-750.
- Swidinsky, Robert, "Trade Unions and the Rate of Change of Money Wages in Canada, 1953-1970," *Industrial and Labor Relations Review*, April 1972, pp. 363-375.
- U.S. Bureau of Labor Statistics, *Area Wage Surveys: Metropolitan Areas, United States and Regional Summaries, 1969-70*. Washington, 1972, 108 pp. (Bulletin 1660-92.) \$1, Superintendent of Documents, Washington.
- U.S. Bureau of Labor Statistics, *Area Wage Survey: The Memphis, Tenn.-Ark. Metropolitan Area, November 1971*. Washington, 1972, 29 pp. (Bulletin 1725-40.) 35 cents, Superintendent of Documents, Washington.
- Other recent bulletins in this series include the metropolitan areas of San Bernardino-Riverside-Ontario, Calif., Denver, Colo., Minneapolis-St. Paul, Minn., Pittsburg, Pa., Seattle-Everett, Wash., Charlotte, N.C., Albany-Schenectady-Troy, N.Y., and Waterbury, Conn. (Bulletins 1725-43 through -49, -53.) Various pagings and prices.
- U.S. Bureau of Labor Statistics, *Employment and Earnings, United States, 1909-71*. Washington, 1972, 688 pp. (Bulletin 1312-8.) \$5, Superintendent of Documents, Washington. Microfiche available from National Technical Information Service, Springfield, Va. 22151, 95 cents (Stock No. 2901-0720).
- U.S. Bureau of Labor Statistics, *Industry Wage Survey: Cigarette Manufacturing, May-June 1971*. Washington, 1972, 15 pp. (Bulletin 1748.) 50 cents, Superintendent of Documents, Washington.
- U.S. Bureau of Labor Statistics, *Industry Wage Survey: Hosiery, September 1970*. Washington, 1972, 73 pp. (Bulletin 1743.) 75 cents, Superintendent of Documents, Washington.
- U.S. Bureau of Labor Statistics, *Industry Wage Survey: Paints and Varnishes, November 1970*. Washington, 1972, 56 pp. (Bulletin 1739.) 60 cents, Superintendent of Documents, Washington.
- U.S. Bureau of Labor Statistics, *Union Wages and Hours: Local-Transit Operating Employees, July 1, 1971*. Washington, 1972, 12 pp. (Bulletin 1745.) 25 cents, Superintendent of Documents, Washington.
- U.S. Railroad Retirement Board, "Service and Compensation of Railroad Employees in 1970, Part II," *RRB Quarterly Review*, January-March 1972, pp. 19-23.
- Wachtel, Howard M. and Charles Betsey, "Employment at Low Wages," *Review of Economics and Statistics*, May 1972, pp. 121-129.
- Wilson, Francis, *Labor in the South African Gold Mines, 1911-1969*. London, Cambridge University Press, 1972, 218 pp. \$14.95.
- Yuki, Gary, Kenneth N. Wexley, James D. Seymore, "Effectiveness of Pay Incentives Under Variable Ratio and Continuous Reinforcement Schedules," *Journal of Applied Psychology*, February 1972, pp. 19-23.

Welfare programs and social insurance

- Appel, Gary Louis, *Effects of a Financial Incentive on AFDC Employment: Michigan's Experience Between July 1969 and July 1970*. Minneapolis, Minn., Institute for Interdisciplinary Studies, 1972, 112 pp.
- Arndt, Sven W., "Poverty in a Dichotomized Economy," *American Journal of Economics and Sociology*, April 1972, pp. 165-171.
- Bridges, Benjamin, Jr., *Redistributive Effects of Transfer Payments Among Age and Economic Status Groups*. Washington, 1971, 33 pp. (Social Security Administration, Office of Research and Statistics, Staff Paper 10.)
- Clague, Ewan, "The Private Pension Dilemma," *Industrial Gerontology*, Autumn 1971, pp. 1-9.
- Cohen, Wilbur J. and Milton Friedman, *Social Security: Universal or Selective?* Washington, American Enterprise Institute for Public Policy Research, 1972, 114 pp. (National Debate Seminars.) \$5.75.

- Fine, Max W., "Catastrophic Insurance: The Wrong Way to Health Care," *American Federationist*, April 1972, pp. 4-7.
- Friedman, Milton, "The Poor Man's Welfare Payment to the Middle Class," *Washington Monthly*, May 1972, pp. 11-16.
- Haanes-Olsen, Leif, "Children's Allowances: Their Size and Structure in Five Countries," *Social Security Bulletin*, May 1972, pp. 17-28.
- Hanrahan, George D., "Why social programs fail," *Economic and Business Bulletin*, Temple University, Spring-Summer 1972, pp. 51-59.
- Kane, Robert L. and Rosalie A. Kane, *Federal Health Care (With Reservations!)*. New York, Springer Publishing Co., Inc., 1972, 180 pp. \$6.95.
- Kirkpatrick, Elizabeth Kreidler, "Switzerland Changes Social Insurance Philosophy," *Social Security Bulletin*, April 1972, pp. 24-26.
- Kolodrubetz, Walter W. and Alfred M. Skolnik, *Pension Benefit Levels: A Methodological Analysis*. Washington, 1971. (Social Security Administration, Office of Research and Statistics, Staff Paper.)
- Levitan, Sar A., Martin Rein, David Marwick, *Work and Welfare Go Together*. Baltimore, Md., Johns Hopkins Press, 1972, 137 pp. \$6, cloth; \$2.50, paper.
- Marmor, Theodore R. and Martin Rein, "Flimflam Flop in Welfare," *Society*, June 1972, pp. 38-41.
- Murray, Merrill G., *The Treatment of Seasonal Unemployment Under Unemployment Insurance*. Kalamazoo, Mich., W. E. Upjohn Institute for Employment Research, 1972, 84 pp. \$1.25.
- National Research Council, *Policy and Program Research in a University Setting: A Case Study*. Washington, National Academy of Sciences, 1971, 55 pp. (Report of the Advisory Committee for Assessment of University-Based Institutes for Research on Poverty, Division of Behavioral Sciences, National Research Council.) \$2.75, paper.
- Podell, Lawrence, *The Attitudes Towards Social Services of Mothers on Welfare*, New York, Human Resources Administration, 1972, 38 pp. Single copies, Director, Office of Research and Evaluation, Human Resources Administration of the City of New York, 250 Church Street, New York, N.Y. 10013.
- Porter, Bruce, "Welfare Won't Work, But What Will?," *Saturday Review*, June 3, 1972, pp. 48-52.
- Rose, Stephen M., *The Betrayal of the Poor: The Transformation of Community Action*. Cambridge, Mass., Schenkman Publishing Co., 1972, 199 pp. \$2.95, paper, General Learning Press, Morristown, N.J.
- Thurow, Lester C., *The Economics of Poverty and Racial Discrimination: The Allocation of Economic Resources; Poverty; Racial Discrimination*. New York, Joint Council on Economic Education, 1972, 19 pp. (Economic Topic series.)
- U.S. Social Security Administration, "Liberalization of Veterans' Income-Maintenance Programs," *Social Security Bulletin*, April 1972, pp. 22-24.
- U.S. Railroad Retirement Board, "Characteristics of RRA Annuities," *RRB Quarterly Review*, January-March 1972, pp. 4-8.
- U.S. Railroad Retirement Board, *Railroad Retirement Disability Program, 1937-71*. Chicago, 1972, 42 pp. (RRB Actuarial Study, 10.)
- U.S. Railroad Retirement Board, "Sickness Beneficiaries Under the RUIA [Railroad Unemployment Insurance Act]," *RRB Quarterly Review*, January-March 1972, pp. 9-15.

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Schedule of release dates for major BLS statistical series, September 1972

Title	Date of release	Period covered	MLR table number
Employment situation	September 1	August	1-14
Wholesale Price Index	September 8	August	27-31
Consumer Price Index	September 22	August	25-26
Work stoppages	September 29	August	32

1. Employment status of the noninstitutional population, 16 years and over, 1947-71

[In thousands]

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	
1947	103,418	60,941	58.9	59,350	57,039	7,891	49,148	2,311	3.9	42,477
1948	104,527	62,080	59.4	60,621	58,344	7,629	50,713	2,276	3.8	42,447
1949	105,611	62,903	59.6	61,286	57,649	7,656	49,990	3,637	5.9	42,708
1950	106,645	63,858	59.9	62,208	58,920	7,160	51,760	3,288	5.3	42,787
1951	107,721	65,117	60.4	62,017	59,962	6,726	53,239	2,055	3.3	42,604
1952	108,823	65,730	60.4	62,138	60,254	6,501	53,753	1,883	3.0	43,093
1953	110,601	66,560	60.2	63,015	61,181	6,261	54,922	1,834	2.9	44,041
1954	111,671	66,993	60.0	63,643	60,110	6,206	53,903	3,532	5.5	44,678
1955	112,732	68,072	60.4	65,023	62,171	6,449	55,724	2,852	4.4	44,660
1956	113,811	69,409	61.0	66,552	63,802	6,283	57,517	2,750	4.1	44,402
1957	115,065	69,729	60.6	66,929	64,071	5,947	58,123	2,859	4.3	45,336
1958	116,363	70,275	60.4	67,639	63,036	5,586	57,450	4,602	6.8	46,088
1959	117,881	70,921	60.2	68,369	64,630	5,565	59,065	3,740	5.5	46,960
1960	119,759	72,142	60.2	69,628	65,778	5,458	60,318	3,852	5.5	47,617
1961	121,343	73,031	60.2	70,459	65,746	5,200	60,546	4,714	6.7	48,312
1962	122,981	73,424	59.7	70,614	66,702	4,944	61,759	3,911	5.5	49,539
1963	125,154	74,571	59.6	71,833	67,762	4,687	63,076	4,070	5.7	50,583
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	84,239	61.1	80,733	77,902	3,606	74,296	2,831	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

2. Employment status, by color, sex and age, seasonally adjusted,¹ quarterly averages

[In thousands]

Characteristic	Annual average		1969			1970				1971				1972	
	1970	1971	2d	3d	4th	1st	2d	3d	4th	1st	2d	3d	4th	1st	2d
WHITE															
Civilian labor force.....	73,518	74,790	71,508	72,019	72,417	73,174	73,324	73,604	74,210	74,317	74,422	74,843	75,673	76,417	76,768
Men, 20 years and over....	42,464	43,088	41,646	41,863	41,936	42,267	42,473	42,514	42,712	42,709	43,050	43,250	43,362	43,618	43,891
Women, 20 years and over..	24,616	25,030	23,737	23,970	24,121	24,450	24,459	24,687	24,916	24,930	24,777	24,980	25,434	25,584	25,697
Both sexes, 16-19 years....	6,440	6,672	6,125	6,186	6,360	6,457	6,392	6,403	6,582	6,678	6,595	6,613	6,877	7,215	7,180
Employed.....	70,182	70,716	69,307	69,667	70,052	70,389	70,134	70,070	70,220	70,237	70,328	70,762	71,572	72,402	72,733
Men, 20 years and over....	41,093	41,347	40,884	41,023	41,078	41,180	41,158	41,013	41,035	40,983	41,268	41,484	41,665	41,959	42,183
Women, 20 years and over..	23,512	23,707	22,945	23,144	23,289	23,524	23,425	23,536	23,622	23,617	23,458	23,662	24,081	24,370	24,371
Both sexes, 16-19 years....	5,569	5,662	5,478	5,500	5,685	5,685	5,551	5,521	5,563	5,637	5,602	5,616	5,826	6,073	6,179
Unemployed.....	3,337	4,074	2,201	2,352	2,365	2,785	3,190	3,534	3,990	4,080	4,094	4,081	4,101	4,014	4,035
Men, 20 years and over....	1,371	1,741	762	840	858	1,087	1,315	1,501	1,677	1,726	1,782	1,766	1,697	1,659	1,708
Women, 20 years and over..	1,095	1,324	792	826	832	926	1,034	1,151	1,294	1,313	1,319	1,318	1,353	1,214	1,326
Both sexes, 16-19 years....	871	1,010	647	686	675	772	841	882	1,019	1,041	993	997	1,051	1,141	1,001
Unemployment rate.....	4.5	5.4	3.1	3.3	3.3	3.8	4.4	4.8	5.4	5.5	5.5	5.5	5.4	5.3	5.3
Men, 20 years and over....	3.2	4.0	1.8	2.0	2.0	2.6	3.1	3.5	3.9	4.0	4.1	4.1	3.9	3.8	3.9
Women, 20 years and over..	4.4	5.3	3.3	3.4	3.4	3.8	4.2	4.7	5.2	5.3	5.3	5.3	5.3	4.7	5.2
Both sexes, 16-19 years....	13.5	15.1	10.6	11.1	10.6	12.0	13.2	13.8	15.5	15.6	15.1	15.1	15.3	15.8	13.9
NEGRO AND OTHER															
Civilian labor force.....	9,197	9,322	8,870	8,978	9,073	9,188	9,225	9,208	9,188	9,270	9,272	9,388	9,372	9,506	9,577
Men, 20 years and over....	4,461	4,773	4,550	4,583	4,631	4,697	4,703	4,765	4,755	4,748	4,752	4,792	4,805	4,767	4,842
Women, 20 years and over..	4,726	3,769	3,539	3,597	3,620	3,656	3,695	3,656	3,649	3,741	3,748	3,797	3,791	3,897	3,878
Both sexes, 16-19 years....	808	781	781	798	822	835	827	787	784	781	772	799	776	842	857
Employed.....	8,445	8,403	8,286	8,395	8,510	8,552	8,466	8,429	8,342	8,386	8,351	8,442	8,427	8,503	8,631
Men, 20 years and over....	4,461	4,428	4,385	4,409	4,454	4,490	4,436	4,478	4,437	4,426	4,424	4,431	4,427	4,435	4,500
Women, 20 years and over..	3,412	3,442	3,320	3,375	3,428	3,439	3,434	3,399	3,375	3,428	3,405	3,461	3,473	3,545	3,546
Both sexes, 16-19 years....	573	533	518	611	628	623	596	552	530	532	522	550	527	523	585
Unemployed.....	752	919	584	583	563	636	759	779	846	884	921	946	945	1,003	946
Men, 20 years and over....	265	345	165	174	177	207	267	287	318	322	328	361	378	332	342
Women, 20 years and over..	252	326	219	222	192	217	261	257	274	313	343	336	318	352	332
Both sexes, 16-19 years....	235	248	200	187	194	212	231	235	254	249	250	249	249	319	272
Unemployment rate.....	8.2	9.9	6.6	6.5	6.2	6.9	8.2	8.5	9.2	9.5	9.9	10.1	10.1	10.6	9.9
Men, 20 years and over....	5.9	7.2	3.6	3.8	3.8	4.4	5.7	6.0	6.7	6.8	6.9	7.5	7.9	7.0	7.1
Women, 20 years and over..	5.3	8.7	6.2	6.2	5.3	5.9	7.1	7.0	7.5	8.4	9.2	8.8	8.4	9.0	8.6
Both sexes, 16-19 years....	29.1	31.7	25.6	23.4	23.6	25.4	27.9	29.9	32.4	31.9	32.4	31.2	32.1	37.9	31.7

¹ These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the

historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

3. Full-time and part-time status¹ of the civilian labor force, seasonally adjusted²

[Numbers in thousands]

Employment status	1971								1972					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ³	Feb.	Mar.	Apr.	May	June	
FULL TIME														
Total, 16 years and over:														
Civilian labor force.....	71,427	71,995	72,218	72,341	72,550	73,021	73,169	73,261	72,997	73,714	73,691	74,032	74,333	
Employed.....	67,616	68,128	68,209	68,284	68,643	68,890	69,022	69,279	69,123	69,734	69,725	69,918	70,643	
Unemployed.....	3,811	3,867	4,009	4,057	3,907	4,131	4,147	3,982	3,874	3,980	3,966	4,114	3,690	
Unemployment rate.....	5.3	5.4	5.6	5.6	5.4	5.7	5.7	5.4	5.3	5.4	5.4	5.6	5.0	
PART TIME														
Total, 16 years and over:														
Civilian labor force.....	12,064	11,954	12,211	12,293	12,190	12,125	12,083	12,595	12,540	12,596	12,466	12,406	11,867	
Employed.....	11,100	10,918	11,086	11,280	11,158	11,094	11,072	11,476	11,482	11,497	11,369	11,403	10,825	
Unemployed.....	964	1,036	1,125	1,013	1,032	1,031	1,011	1,119	1,058	1,099	1,097	1,003	1,042	
Unemployment rate.....	8.0	8.7	9.2	8.2	8.5	8.5	8.4	8.9	8.4	8.7	8.8	8.1	8.8	

¹ Persons on part-time schedules for economic reasons are included in the full-time employed category; unemployed persons are allocated by whether seeking full-time or part-time work.

² These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

³ Figures for periods prior to January 1972 in the tables are not strictly comparable with current data because of the introduction of 1970 Census data into the estimation procedures. For example, the civilian labor force and employment totals for January 1972 were raised by more than 300,000 in the census adjustment. An explanation of the changes and an indication of the differences appears in "Revisions in the Current Population Survey" in the February 1972 issue of *Employment and Earnings*.

4. Employment and unemployment, by age and sex, seasonally adjusted ¹

[In thousands]

Employment status	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ²	Feb.	Mar.	Apr.	May	June
TOTAL															
Total labor force.....	85,903	86,929	86,217	86,727	87,088	87,240	87,467	87,812	87,883	88,301	88,075	88,817	88,747	88,905	88,788
Civilian labor force.....	82,715	84,113	83,401	83,930	84,313	84,491	84,750	85,116	85,225	85,707	85,535	86,313	86,284	86,486	86,395
Employed.....	78,627	79,120	78,600	79,014	79,199	79,451	79,832	80,020	80,098	80,636	80,623	81,241	81,205	81,394	81,667
Agriculture.....	3,462	3,387	3,301	3,374	3,407	3,363	3,416	3,419	3,400	3,393	3,357	3,482	3,324	3,353	3,337
Nonagriculture.....	75,165	75,732	75,299	75,640	75,792	76,088	76,416	76,601	76,698	77,243	77,266	77,759	77,781	78,041	78,330
Unemployed.....	4,088	4,993	4,801	4,916	5,114	5,040	4,918	5,096	5,127	5,071	4,912	5,072	5,079	5,092	4,728
MEN, 20 YEARS AND OVER															
Total labor force.....	49,948	50,308	50,256	50,369	50,458	50,492	50,530	50,527	50,463	50,498	50,373	50,714	50,711	50,760	50,904
Civilian labor force.....	47,189	47,861	47,820	47,949	48,057	48,113	48,179	48,200	48,169	48,259	48,181	48,582	48,614	48,700	48,882
Employed.....	45,553	45,775	45,762	45,879	45,893	45,969	46,124	46,066	46,080	46,247	46,255	46,569	46,541	46,628	46,919
Agriculture.....	2,527	2,446	2,423	2,449	2,462	2,435	2,494	2,503	2,439	2,442	2,394	2,400	2,370	2,404	2,437
Nonagriculture.....	43,026	43,329	43,339	43,430	43,431	43,534	43,630	43,563	43,641	43,805	43,861	44,169	44,171	44,224	44,482
Unemployed.....	1,636	2,086	2,058	2,070	2,164	2,144	2,055	2,134	2,089	2,012	1,926	2,013	2,073	2,072	1,963
WOMEN, 20 YEARS AND OVER															
Civilian labor force.....	28,279	28,799	28,531	28,594	28,826	28,960	29,082	29,254	29,284	29,424	29,358	29,574	29,508	29,625	29,657
Employed.....	26,932	27,149	26,928	26,964	27,144	27,319	27,471	27,571	27,592	27,794	27,878	27,972	27,913	27,883	28,029
Agriculture.....	549	537	513	529	543	548	530	528	547	564	575	620	563	551	496
Nonagriculture.....	26,384	26,612	26,415	26,435	26,601	26,771	26,941	27,043	27,045	27,230	27,303	27,352	27,350	27,332	27,533
Unemployed.....	1,347	1,650	1,603	1,630	1,682	1,641	1,611	1,683	1,692	1,630	1,480	1,602	1,595	1,742	1,628
BOTH SEXES, 16-19 YEARS															
Civilian labor force.....	7,246	7,453	7,050	7,387	7,430	7,418	7,489	7,662	7,772	8,024	7,996	8,157	8,162	8,161	7,856
Employed.....	6,141	6,195	5,910	6,171	6,162	6,163	6,237	6,383	6,426	6,595	6,490	6,700	6,751	6,883	6,719
Agriculture.....	386	404	365	396	402	380	392	388	414	387	388	462	391	398	404
Nonagriculture.....	5,755	5,791	5,545	5,775	5,760	5,783	5,845	5,995	6,012	6,208	6,102	6,238	6,360	6,485	6,315
Unemployed.....	1,105	1,257	1,140	1,216	1,268	1,255	1,252	1,279	1,346	1,429	1,506	1,457	1,411	1,278	1,137

¹ These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

² See footnote 3, table 3, regarding the introduction of 1970 census population controls.

5. Employment totals, by occupation, with unemployment rates, seasonally adjusted,¹ quarterly averages

Characteristic	Annual average		1969			1970				1971				1972	
	1970	1971	2d	3d	4th	1st	2d	3d	4th	1st	2d	3d	4th	1st	2d
EMPLOYMENT (in thousands)	78,627	79,120	77,575	78,126	78,577	78,875	78,610	78,531	78,550	78,546	78,723	79,221	79,984	80,833	81,422
White-collar workers	37,997	38,252	36,699	36,961	37,445	37,940	38,004	37,970	38,074	37,938	38,004	38,456	38,612	38,710	38,788
Professional and technical	11,140	11,070	10,750	10,742	10,918	11,055	11,139	11,226	11,143	10,872	11,081	11,139	11,192	11,232	11,387
Managers and administrators, except farm	8,289	8,765	7,998	7,983	8,122	8,220	8,295	8,259	8,381	8,646	8,642	8,799	8,612	7,988	7,860
Sales workers	4,854	5,066	4,660	4,714	4,777	4,787	4,813	4,934	5,074	5,074	5,018	5,037	5,133	5,300	5,360
Clerical workers	13,714	13,440	13,291	13,522	13,628	13,878	13,757	13,608	13,616	13,346	13,263	13,481	13,675	14,190	14,181
Blue-collar workers	27,791	27,184	28,006	28,428	28,332	28,203	27,768	27,653	27,566	27,071	27,051	27,090	27,524	28,295	28,595
Craftsmen and kindred workers	10,158	10,178	10,054	10,200	10,235	10,235	10,135	10,124	10,149	10,106	10,119	10,111	10,373	10,910	10,833
Operatives	13,909	12,983	14,260	14,570	14,369	14,196	13,957	13,793	13,696	12,912	12,958	12,946	13,116	13,346	13,557
Nonfarm laborers	3,724	4,022	3,692	3,658	3,728	3,772	3,676	3,736	3,721	4,053	3,974	4,033	4,035	4,039	4,205
Service workers	9,712	10,676	9,494	9,509	9,594	9,610	9,620	9,814	9,804	10,627	10,607	10,715	10,751	10,852	11,078
Farm workers	3,126	3,008	3,393	3,229	3,121	3,141	3,206	3,108	3,033	2,988	3,033	2,992	3,023	3,030	2,928
UNEMPLOYMENT RATE	4.9	5.9	3.5	3.6	3.6	4.2	4.8	5.2	5.8	6.0	6.0	6.0	5.9	5.8	5.7
White-collar workers	2.8	3.5	2.0	2.2	2.1	2.4	2.7	2.9	3.4	3.6	3.5	3.5	3.5	3.5	3.4
Professional and technical	2.0	2.9	1.3	1.4	1.5	1.8	1.9	2.0	2.4	3.2	2.9	2.9	3.0	2.7	2.2
Managers and administrators, except farm	1.3	1.6	.9	.9	1.0	1.1	1.3	1.4	1.6	1.6	1.6	1.5	1.8	1.8	1.6
Sales workers	3.9	4.3	2.9	3.0	2.8	3.3	3.9	3.9	4.6	4.2	4.5	4.4	3.9	4.2	4.1
Clerical workers	4.0	4.8	2.8	3.2	3.1	3.4	3.9	4.1	4.8	4.9	4.8	4.9	4.8	4.8	5.0
Blue-collar workers	6.2	7.4	3.8	3.9	4.3	5.0	6.0	6.8	7.5	7.5	7.4	7.5	7.4	7.0	6.6
Craftsmen and kindred workers	3.8	4.7	2.1	2.1	2.3	2.7	3.9	4.5	4.6	4.7	4.3	5.3	4.7	4.2	4.5
Operatives	7.1	8.3	4.3	4.4	4.9	5.8	6.6	7.5	8.6	8.5	8.5	8.2	8.1	7.7	7.1
Nonfarm laborers	9.5	10.8	6.4	7.0	7.1	7.9	9.2	10.3	10.8	10.6	10.9	10.3	11.4	11.7	10.4
Service workers	5.3	6.3	4.4	4.5	4.0	4.7	5.0	5.5	6.0	6.1	6.3	6.5	6.4	6.2	6.0
Farm workers	2.6	2.6	1.9	2.1	1.9	2.1	2.6	2.9	3.0	2.8	2.1	2.7	2.8	2.4	2.6

¹ These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

NOTE: Comparisons with data prior to 1971 are affected by the reclassification of census occupations, introduced in January 1971. For an explanation of the changes, see "Revisions in Occupational Classifications for 1971" in the February 1971 issue of *Employment and Earnings*.

6. Unemployed persons by reason for unemployment, seasonally adjusted ¹

[Numbers in thousands]

Reason for unemployment	1971							1972					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
NUMBER OF UNEMPLOYED													
Lost last job.....	2,342	2,280	2,460	2,369	2,206	2,360	2,365	2,169	2,077	2,118	2,040	2,199	2,210
Left last job.....	501	510	572	583	541	629	666	564	603	674	611	649	624
Reentered labor force.....	1,371	1,534	1,509	1,536	1,486	1,493	1,432	1,652	1,503	1,542	1,557	1,460	1,238
Never worked before.....	558	570	651	603	663	651	736	742	713	737	917	802	621
PERCENT DISTRIBUTION													
Total unemployed.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lost last job.....	49.1	46.6	47.4	46.5	45.1	46.0	45.5	42.3	42.4	41.8	39.8	43.0	47.1
Left last job.....	10.5	10.4	11.0	11.5	11.0	12.3	12.8	11.0	12.3	13.3	11.9	12.7	13.3
Reentered labor force.....	28.7	31.3	29.1	30.2	30.4	29.1	27.5	32.2	30.7	30.4	30.4	28.6	26.4
Never worked before.....	11.7	11.6	12.5	11.8	13.5	12.7	14.2	14.5	14.6	14.5	17.9	15.7	13.2
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Lost last job.....	2.8	2.7	2.9	2.8	2.6	2.8	2.8	2.5	2.4	2.5	2.4	2.5	2.6
Left last job.....	.6	.6	.7	.7	.6	.7	.8	.7	.7	.8	.7	.8	.7
Reentered labor force.....	1.6	1.8	1.8	1.8	1.8	1.8	1.7	1.9	1.8	1.8	1.8	1.7	1.4
Never worked before.....	.7	.7	.8	.7	.8	.8	.9	.9	.8	.9	1.1	.9	.7

NOTE: For additional detail or for data unadjusted for seasonal factors (formerly carried in this space), see *Employment and Earnings*.

7. Unemployment rates, by age and sex, seasonally adjusted ¹

Age and sex	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Total, 16 years and over.....	4.9	5.9	5.8	5.9	6.1	6.0	5.8	6.0	6.0	5.9	5.7	5.9	5.9	5.9	5.5
16 to 19 years.....	15.3	16.9	16.2	16.5	17.1	16.9	16.7	16.7	17.3	17.8	18.8	17.9	17.3	15.7	14.5
16 and 17 years.....	17.1	18.7	18.7	18.3	19.5	18.4	19.9	18.3	18.8	19.1	22.0	20.7	19.1	16.6	16.5
18 and 19 years.....	13.8	15.5	14.3	15.0	15.0	15.8	14.5	15.4	16.3	16.8	16.7	15.8	13.5	15.8	12.9
20 to 24 years.....	8.2	10.0	10.1	9.8	10.0	9.6	9.2	10.4	10.1	10.1	8.8	9.9	10.0	9.9	8.7
25 years and over.....	3.3	4.0	3.9	4.0	4.1	4.0	4.0	4.0	4.1	3.7	3.6	3.7	3.8	3.9	3.9
25 to 54 years.....	3.4	4.2	4.1	4.2	4.2	4.3	4.3	4.2	4.3	3.9	3.7	3.9	3.8	4.0	4.0
55 years and over.....	2.8	3.4	3.3	3.2	3.5	3.2	3.0	3.4	3.4	3.1	3.1	3.3	3.6	3.6	3.6
Male, 16 years and over.....	4.4	5.3	5.2	5.2	5.5	5.4	5.3	5.4	5.4	5.3	5.3	5.3	5.3	5.3	4.8
16 to 19 years.....	15.0	16.6	16.1	15.8	17.2	16.3	16.5	16.2	17.3	17.3	19.6	17.8	16.7	16.6	13.8
16 and 17 years.....	16.9	18.6	18.4	18.4	19.4	18.6	20.3	18.1	19.0	18.7	21.8	21.4	19.3	18.0	15.4
18 and 19 years.....	13.4	15.0	14.3	13.7	15.0	14.6	13.7	14.7	16.0	16.1	17.6	15.1	14.8	16.2	12.4
20 to 24 years.....	8.4	10.3	10.1	10.2	10.5	10.2	9.7	10.7	10.5	10.4	9.2	10.4	10.7	9.4	8.3
25 years and over.....	2.8	3.5	3.4	3.4	3.6	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.3	3.4	3.3
25 to 54 years.....	2.6	3.5	3.5	3.5	3.6	3.7	3.7	3.7	3.6	3.3	3.2	3.1	3.2	3.4	3.3
55 years and over.....	2.9	3.4	3.3	3.1	3.3	3.0	2.9	3.2	3.0	3.0	3.2	3.4	3.5	3.5	3.5
Female, 16 years and over.....	5.9	6.9	6.7	6.9	7.0	6.9	6.7	6.9	7.0	6.9	6.4	6.8	6.8	6.8	6.5
16 to 19 years.....	15.6	17.2	16.3	17.2	16.9	17.6	17.0	17.3	17.3	18.4	17.9	17.9	18.0	14.6	15.4
16 and 17 years.....	17.4	18.7	19.3	18.3	19.5	18.0	19.2	18.7	18.5	19.6	22.3	19.8	19.0	14.8	18.1
18 and 19 years.....	14.4	16.2	14.4	16.4	15.1	17.3	15.6	16.2	16.7	17.7	15.6	16.8	16.4	15.3	13.5
20 to 24 years.....	7.9	9.6	10.1	9.4	9.4	8.9	8.6	10.0	9.6	9.6	8.4	9.2	9.0	10.6	9.2
25 years and over.....	4.1	4.9	4.7	4.9	5.0	4.9	4.9	4.8	5.0	4.6	4.3	4.7	4.6	4.8	4.8
25 to 54 years.....	4.5	5.3	5.2	5.4	5.4	5.3	5.3	5.2	5.4	4.9	4.7	5.1	4.9	5.0	5.1
55 years and over.....	2.8	3.4	3.5	3.3	3.8	3.4	3.0	3.7	3.9	3.3	2.9	3.1	3.6	3.8	3.8

¹ These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

8. Unemployment indicators, seasonally adjusted ¹

[In percent]

Selected categories	Annual average		1971								1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
Total (all civilian workers)	4.9	5.9	5.8	5.9	6.1	6.0	5.8	6.0	6.0	5.9	5.7	5.9	5.9	5.9	5.5	
Men, 20 years and over.....	3.5	4.4	4.3	4.3	4.5	4.5	4.3	4.4	4.3	4.2	4.0	4.1	4.3	4.3	4.0	
Women, 20 years and over.....	4.8	5.7	5.6	5.7	5.8	5.7	5.5	5.8	5.8	5.5	5.0	5.4	5.4	5.9	5.5	
Both sexes 16-19 years.....	15.3	16.9	16.2	16.5	17.1	16.9	16.7	16.7	17.3	17.8	18.8	17.9	17.3	15.7	14.5	
White.....	4.5	5.4	5.3	5.4	5.6	5.4	5.3	5.6	5.4	5.3	5.1	5.3	5.4	5.3	5.0	
Negro and other.....	8.2	9.9	9.4	10.0	9.9	10.4	10.4	9.4	10.4	10.6	10.5	10.5	9.6	10.7	9.4	
Married men.....	2.6	3.2	3.1	3.1	3.2	3.3	3.0	3.3	3.2	3.0	2.8	2.8	2.9	2.9	2.9	
Vietnam Era veterans, ² men:																
20 to 29 years.....	6.9	8.8	8.9	8.6	9.3	9.8	8.0	8.5	8.4	8.5	7.4	8.6	8.6	8.1	7.2	
20 to 24 years.....	9.3	12.2	13.5	11.2	13.4	12.3	9.7	12.0	12.6	12.3	9.7	12.3	12.7	10.3	9.9	
25 to 29 years.....	4.3	5.7	4.7	6.3	5.7	7.6	6.5	5.6	5.1	5.6	5.4	5.6	5.4	6.4	5.3	
Nonveterans, men:																
20 to 29 years.....	6.0	7.3	6.9	7.2	8.0	6.7	7.3	8.1	7.7	7.5	7.0	7.5	7.6	7.1	6.5	
20 to 24 years.....	8.0	9.5	9.3	9.2	10.5	8.6	9.3	10.3	9.6	9.8	9.0	10.1	10.0	9.1	8.0	
25 to 29 years.....	3.8	4.7	4.1	4.7	4.9	4.4	4.9	5.5	5.2	4.5	4.4	4.1	4.6	4.5	4.6	
Full-time workers.....	4.5	5.5	5.3	5.4	5.6	5.6	5.4	5.7	5.7	5.4	5.3	5.4	5.4	5.6	5.0	
Unemployed:																
15 weeks and over ³.....	.8	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.3	1.4	1.3
State insured ⁴	3.6	4.4	4.2	4.0	4.2	4.3	4.4	4.1	4.1	3.4	3.5	3.5	3.6	3.7	3.6	
Labor force time lost ⁵	5.4	6.4	5.6	6.3	6.5	6.3	6.5	6.4	6.4	6.4	6.1	6.3	6.3	6.3	5.5	
OCCUPATION																
White-collar workers.....	2.8	3.5	3.2	3.5	3.5	3.4	3.4	3.4	3.6	3.6	3.3	3.5	3.4	3.6	3.1	
Professional and managerial.....	1.7	2.9	2.0	2.3	2.3	2.2	2.4	2.5	2.5	2.6	2.2	2.3	2.1	2.0	1.7	
Sales workers.....	3.9	4.3	4.1	4.6	4.4	4.1	3.9	3.9	4.0	4.4	4.0	4.1	3.7	4.5	4.0	
Clerical workers.....	4.0	4.8	4.7	4.9	4.9	4.8	4.7	4.6	4.9	4.7	4.7	4.9	4.9	5.3	4.8	
Blue-collar workers.....	6.2	7.4	7.1	7.2	7.5	7.7	7.1	7.5	7.5	7.1	7.0	6.9	6.8	6.8	6.4	
Craftsmen and kindred workers.....	3.8	4.7	4.1	5.1	5.3	5.3	4.7	4.6	4.8	4.3	4.4	4.0	4.4	4.7	4.5	
Operatives.....	7.1	8.3	8.2	8.1	8.3	8.3	7.8	8.2	8.2	7.9	7.5	7.7	7.4	7.1	6.8	
Nonfarm laborers.....	9.5	10.8	11.1	9.2	10.6	11.2	10.6	11.8	11.9	11.6	11.8	11.7	10.7	10.9	9.5	
Service workers.....	5.3	6.3	6.3	6.5	6.5	6.5	6.0	6.6	6.4	6.1	5.9	6.6	6.3	6.1	5.7	
INDUSTRY																
Nonagricultural private wage and salary workers ⁶	5.2	6.2	6.1	6.1	6.2	6.2	5.9	6.2	6.3	6.1	5.9	6.1	5.9	6.0	5.5	
Construction.....	9.7	10.4	10.3	9.8	9.9	9.7	10.2	9.7	11.2	9.8	10.3	9.8	10.6	12.5	9.5	
Manufacturing.....	5.6	6.8	6.7	6.7	6.8	6.9	6.2	6.6	6.9	6.4	6.0	6.2	5.8	6.0	5.6	
Durable goods.....	5.7	7.0	7.0	6.8	6.9	7.0	6.4	6.7	6.7	6.7	6.1	6.3	5.8	6.3	5.7	
Nondurable goods.....	5.4	6.5	6.2	6.5	6.8	6.8	5.8	6.3	7.1	6.0	6.0	6.1	5.9	5.7	5.5	
Transportation and public utilities.....	3.2	3.8	3.4	3.1	3.3	3.6	4.3	4.4	4.1	4.1	3.9	4.0	3.7	3.5	3.1	
Wholesale and retail trade.....	5.3	6.4	6.5	6.4	6.3	6.3	6.1	6.6	6.5	6.3	6.2	6.7	6.2	6.3	6.5	
Finance and service industries.....	4.2	5.1	4.8	5.2	5.3	5.1	4.9	5.1	4.9	5.3	4.9	5.3	5.1	5.0	4.2	
Government wage and salary workers.....	2.2	2.9	2.6	2.9	3.1	3.0	3.2	3.2	3.2	3.0	2.8	2.8	2.9	2.9	2.5	
Agricultural wage and salary workers.....	7.5	7.9	6.3	7.8	.8	8.5	7.0	9.6	7.5	8.6	8.3	6.0	6.0	8.8	7.5	

¹ These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

² Vietnam Era veterans are those who served after August 4, 1964; they are all classified as war veterans. Over 80 percent of Vietnam Era veterans of all ages are 20 to 29 years old. Not included in these figures are post-Korean peacetime veterans in ages 20 to 29.

³ Unemployment rate calculated as a percent of civilian labor force.

⁴ Insured unemployment under State programs as a percent of average covered employment.

⁵ Man-hours lost by the unemployed and persons on part time for economic reasons (that is, those persons who worked less than 35 hours during the survey week because of slack work, job changing during the week, material shortages, inability to find full-time work, and so on) as a percent of potentially available labor force man-hours.

⁶ Includes mining, not shown separately.

9. Duration of unemployment, seasonally adjusted ¹

[In thousands]

Period	Annual average		1971								1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
Less than 5 weeks.....	2,137	2,234	2,118	2,150	2,320	2,317	2,140	2,290	2,410	2,358	2,142	2,311	2,169	2,223	2,175	
5 to 14 weeks.....	1,289	1,578	1,572	1,532	1,553	1,567	1,529	1,650	1,502	1,502	1,454	1,412	1,521	1,514	1,437	
15 weeks and over.....	662	1,181	1,175	1,255	1,291	1,250	1,253	1,311	1,273	1,198	1,294	1,224	1,137	1,180	1,148	
15 to 26 weeks.....	427	665	630	704	735	683	628	741	724	636	634	591	482	587	594	
27 weeks and over.....	235	517	545	551	556	567	625	570	549	562	660	633	655	593	554	
15 weeks and over as a percent of civilian labor force.....	.8	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.3	1.4	1.3	
Average (mean duration, in weeks).....	8.8	11.4	12.6	11.5	11.6	12.0	12.5	11.8	11.4	11.8	12.5	12.4	12.4	12.5	13.5	

These data have been adjusted to reflect seasonal experience through December 1971. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1972 issue of *Employment and Earnings*.

adjusted series, see the February 1972 issue of *Employment and Earnings*.

10. Unemployment insurance and employment service operations ¹

[All items except average benefits amounts are in thousands]

Item	1971								1972				
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Employment service:²													
New applications for work.....	777	1,005	815	779	767	663	763	679					
Nonfarm placements.....	308	365	315	366	353	288	317	266					
State unemployment insurance program:													
Initial claims ^{3,4}	964	1,152	1,468	1,277	1,043	1,048	1,336	1,623	1,643	1,241	1,029	947	(p)
Insured unemployment ⁵ (average weekly volume) ⁶	2,001	1,893	1,993	1,912	1,739	1,716	1,879	2,221	2,524	2,492	2,279	2,005	1,740
Rate of insured unemployment ⁷	3.8	3.6	3.8	3.6	3.3	3.2	3.5	4.2	4.8	4.7	4.3	3.8	3.3
Weeks of unemployment compensated.....	7,431	7,542	6,740	6,503	5,923	5,561	6,177	7,546	8,972	8,871	9,372	7,082	
Average weekly benefit amount for total unemployment.....	\$52.32	\$52.09	\$55.23	\$56.08	\$56.25	\$53.46	\$53.96	\$54.58	\$55.35	\$56.34	\$56.63	\$56.54	
Total benefits paid.....	\$434,463	\$446,691	\$428,002	\$433,636	\$400,329	\$367,169	\$406,905	\$489,566	\$550,902	\$565,343	\$609,850	\$452,507	
Unemployment compensation for ex-service-men:^{8,9}													
Initial claims ^{3,6}	45	54	53	54	48	43	51	59	68	57	49	48	
Insured unemployment ⁶ (average weekly volume).....	113	114	120	120	106	97	105	118	133	140	136	127	119
Weeks of unemployment compensated.....	462	506	494	525	478	409	426	498	530	550	623	500	
Total benefits paid.....	\$27,010	\$30,117	\$30,449	\$31,552	\$29,650	\$25,012	\$26,089	\$29,180	\$29,998	\$32,986	\$37,620	\$32,223	
Unemployment compensation for Federal civilian employees:^{9,10}													
Initial claims ³	10	20	15	12	12	13	14	13	16	12	10	11	
Insured unemployment ⁵ (average weekly volume).....	29	31	36	35	33	35	35	35	37	36	34	30	28
Weeks of unemployment compensated.....	119	126	142	157	148	135	144	156	147	146	157	120	
Total benefits paid.....	\$7,459	\$7,843	\$8,605	\$9,261	\$9,026	\$8,224	\$8,960	\$9,811	\$8,755	\$8,918	\$9,509	\$7,606	
Railroad unemployment insurance:													
Applications ¹¹	36	45	89	98	100	48	19	7	8	4	4	2	2
Insured unemployment (average weekly volume).....	18	13	15	32	33	27	48	33	36	27	26	23	15
Number of payments ¹²	63	68	99	105	163	124	106	857	87	63	64	48	40
Average amount of benefit payment ¹³	\$55.53	\$58.97	\$46.07	\$83.28	\$69.35	\$61.95	\$100.32	\$101.32	\$97.79	\$99.11	\$98.70	\$88.74	\$91.27
Total benefits paid ¹⁴	\$3,522	\$4,159	\$3,800	\$8,698	\$11,134	\$7,616	\$9,930	\$8,891	\$8,007	\$6,212	\$5,983	\$4,113	\$3,462
All programs:¹⁵													
Insured unemployment ⁶	2,443	2,332	2,431	2,349	2,174	2,129	2,311	2,666	3,097	3,123	2,923	2,430	2,105

¹ Includes data for Puerto Rico.² Includes Guam and the Virgin Islands.³ Initial claims are notices filed by workers to indicate they are starting periods of unemployment. Excludes transition claims under State programs.⁴ Includes interstate claims for the Virgin Islands.⁵ Number of workers reporting the completion of at least 1 week of unemployment.⁶ Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.⁷ The rate is the number of insured unemployed expressed as a percent of the average covered employment in a 12-month period.⁸ Excludes data on claims and payments made jointly with other programs.⁹ Includes the Virgin Islands.¹⁰ Excludes data on claims and payments made jointly with State programs.¹¹ An application for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent

periods in the same year.

¹² Payments are for unemployment in 14-day registration periods.¹³ The average amount is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments.¹⁴ Adjusted for recovery of overpayments and settlement of underpayments.¹⁵ Represents an unduplicated count of insured unemployment under the State, Ex-servicemen and UCFE programs and the Railroad Unemployment Insurance Act. Includes claims filed under Extended Duration (ED) provisions of regular State laws.

NOTE: Dashes indicate data not available.

SOURCE: U.S. Department of Labor, Office of Financial and Management Information Systems for all items except railroad unemployment insurance which is prepared by the U.S. Railroad Retirement Board.

p = preliminary.

r = revised.

c = corrected.

11. Employees on nonagricultural payrolls, by industry division, 1947-71¹

[In thousands]

Year	TOTAL	Mining	Contract construction	Manufacturing	Transportation and public utilities	Wholesale and retail trade			Finance, insurance, and real estate	Services	Government		
						Total	Wholesale trade	Retail trade			Total	Federal	State and local
1947	43,881	955	1,982	15,545	4,166	8,955	2,361	6,595	1,754	5,050	5,474	1,892	3,582
1948	44,891	994	2,169	15,582	4,189	9,272	2,489	6,783	1,829	5,206	5,650	1,863	3,787
1949	43,778	930	2,165	14,441	4,001	9,264	2,487	6,778	1,857	5,264	5,856	1,908	3,948
1950	45,222	901	2,333	15,241	4,034	9,386	2,518	6,868	1,919	5,382	6,026	1,928	4,098
1951	47,849	929	2,603	16,393	4,226	9,742	2,606	7,136	1,991	5,576	6,389	2,302	4,087
1952	48,825	898	2,634	16,632	4,248	10,004	2,687	7,317	2,069	5,730	6,609	2,420	4,188
1953	50,232	866	2,623	17,549	4,290	10,247	2,727	7,520	2,146	5,867	6,645	2,305	4,340
1954	49,022	791	2,612	16,314	4,084	10,235	2,739	7,496	2,234	6,002	6,751	2,188	4,563
1955	50,675	792	2,802	16,882	4,141	10,535	2,796	7,740	2,335	6,274	6,914	2,187	4,727
1956	52,408	822	2,999	17,243	4,244	10,858	2,884	7,974	2,429	6,536	7,277	2,209	5,069
1957	52,894	828	2,923	17,174	4,241	10,886	2,893	7,992	2,477	6,749	7,616	2,217	5,399
1958	51,363	751	2,778	15,945	3,976	10,750	2,848	7,902	2,519	6,806	7,839	2,191	5,648
1959 ²	53,313	732	2,960	16,675	4,011	11,127	2,946	8,182	2,594	7,130	8,083	2,233	5,850
1960	54,234	712	2,885	16,796	4,004	11,391	3,004	8,388	2,669	7,423	8,353	2,270	6,083
1961	54,042	672	2,816	16,326	3,903	11,337	2,993	8,344	2,731	7,623	8,594	2,279	6,315
1962	55,596	650	2,902	16,853	3,906	11,566	3,056	8,511	2,800	8,028	8,890	2,340	6,550
1963	56,702	635	2,963	16,995	3,903	11,778	3,104	8,675	2,877	8,325	9,225	2,358	6,868
1964	58,331	634	3,050	17,274	3,951	12,160	3,189	8,971	2,957	8,709	9,596	2,348	7,248
1965	60,815	632	3,186	18,062	4,036	12,716	3,312	9,404	3,023	9,087	10,074	2,378	7,696
1966	63,955	627	3,275	19,214	4,151	13,245	3,437	9,808	3,100	9,551	10,792	2,564	8,227
1967	65,857	613	3,208	19,447	4,261	13,606	3,525	10,081	3,225	10,099	11,398	2,719	8,679
1968	67,915	606	3,285	19,781	4,310	14,084	3,611	10,473	3,382	10,623	11,845	2,737	9,109
1969	70,284	619	3,435	20,167	4,429	14,639	3,733	10,906	3,564	11,229	12,202	2,758	9,444
1970	70,616	622	3,345	19,369	4,504	14,922	3,824	11,098	3,690	11,630	12,535	2,705	9,830
1971	70,699	601	3,259	18,610	4,481	15,174	3,855	11,319	3,800	11,917	12,858	2,664	10,194

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8). These series are based upon establishment reports which cover all full-time and part-time employees in nonagricultural establishments who worked during, or receive pay for any part of the pay period which includes the 12th of the month. Therefore, persons

who worked in more than one establishment during the reporting period are counted more than once. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded.

² Data include Alaska and Hawaii beginning 1959. This inclusion has resulted in an increase of 212,000 (0.4 percent) in the nonagricultural total for the March 1959 benchmark month.

12. Employees on nonagricultural payrolls, by State

[In thousands]

State	May 1971	Apr. 1972	May 1972 ^p	State	May 1971	Apr. 1972	May 1972 ^p
Alabama	1,019.4	1,028.0	1,035.8	Montana	203.9	205.0	208.0
Alaska	95.1	94.0	99.8	Nebraska	488.6	496.9	501.2
Arizona	575.1	618.4	620.4	Nevada	207.8	212.1	214.8
Arkansas	541.9	550.5	554.0	New Hampshire	255.5	257.8	262.1
California	6,878.7	7,029.1	7,064.6	New Jersey	2,602.6	2,589.4	2,610.6
Colorado	764.6	796.1	796.6	New Mexico	299.8	313.2	316.8
Connecticut	1,171.9	1,173.9	1,180.1	New York	7,055.4	6,919.6	6,968.4
Delaware	213.5	215.5	216.2	North Carolina	1,786.8	1,831.4	1,835.3
District of Columbia	681.6	684.0	683.0	North Dakota	166.7	165.2	169.1
Florida	2,203.5	2,302.6	2,282.9	Ohio	3,864.9	3,849.0	3,878.3
Georgia	1,569.8	1,600.1	1,602.0	Oklahoma	780.0	801.2	804.5
Hawaii	301.0	302.5	303.0	Oregon	720.1	744.6	755.2
Idaho	210.8	216.4	219.9	Pennsylvania	4,297.9	4,294.3	4,325.8
Illinois	4,275.7	4,264.1	4,291.9	Rhode Island	338.0	336.8	339.3
Indiana	1,837.5	1,851.6	1,875.1	South Carolina	857.8	889.4	895.4
Iowa	886.6	906.9	911.3	South Dakota	180.5	179.3	181.4
Kansas	672.2	681.2	685.9	Tennessee	1,347.5	1,399.2	1,400.1
Kentucky	933.4	943.1	952.2	Texas	3,668.5	3,752.0	3,763.7
Louisiana	1,044.8	1,072.1	1,074.6	Utah	372.0	383.7	388.7
Maine	328.5	326.4	333.6	Vermont	146.4	147.7	149.1
Maryland	1,317.9	1,340.0	1,351.3	Virginia	1,488.8	1,536.8	1,543.5
Massachusetts	2,265.7	2,261.6	2,273.8	Washington	1,051.3	1,065.5	1,079.5
Michigan ¹	2,994.3	3,000.2	3,039.6	West Virginia	529.9	528.4	530.3
Minnesota	1,305.9	1,309.2	1,330.0	Wisconsin	1,523.2	1,530.5	1,550.3
Mississippi	589.9	606.3	609.3	Wyoming	110.2	111.3	114.0
Missouri	1,641.2	1,632.5	1,641.8				

¹ Revised series; not strictly comparable with previously published data.
NOTE: Current State employment data by major industry division are published in *Employment and Earnings*, table B-7. For historical data in available industry detail, see the annual compendium, *Employment and Earnings, States and Areas, 1939-70* (BLS Bulletin 1370-8).

SOURCE: State agencies in cooperation with U.S. Department of Labor, Bureau of Labor Statistics. More detailed industry data are available from the State agencies. For addresses see inside back cover of *Employment and Earnings*.
^p = preliminary.

13. Employees on nonagricultural payrolls, by industry division and major manufacturing group ¹

[In thousands]

Industry division and group	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p	June ^p
TOTAL	70,616	70,699	71,355	70,452	70,542	71,184	71,379	71,638	72,034	70,643	70,776	71,374	71,928	72,516	73,274
MINING	622	601	634	613	625	623	522	524	605	602	596	599	597	602	615
CONTRACT CONSTRUCTION	3,345	3,259	3,414	3,480	3,509	3,471	3,478	3,410	3,177	2,965	2,880	2,974	3,117	3,245	3,404
MANUFACTURING	19,369	18,610	18,746	18,448	18,651	18,840	18,709	18,693	18,595	18,440	18,537	18,653	18,713	18,813	19,054
Production workers ²	14,033	13,487	13,611	13,315	13,524	13,738	13,616	13,605	13,514	13,373	13,465	13,572	13,626	13,721	13,918
Durable goods	11,198	10,590	10,694	10,487	10,485	10,657	10,605	10,612	10,575	10,522	10,590	10,671	10,732	10,810	10,920
Production workers ²	8,043	7,612	7,713	7,512	7,514	7,695	7,650	7,660	7,629	7,581	7,648	7,723	7,781	7,853	7,940
Ordnance and accessories.....	242.1	193.0	192.7	189.9	189.9	190.2	188.3	187.3	185.5	184.2	183.0	182.9	183.9	186.3	192.0
Lumber and wood products.....	572.5	579.8	593.3	596.4	602.3	601.5	601.8	598.1	591.8	584.5	587.3	591.8	596.0	604.2	623.1
Furniture and fixtures.....	459.9	459.1	459.3	452.1	459.1	468.3	472.8	475.8	478.3	477.8	479.3	481.2	482.0	481.9	488.9
Stone, clay, and glass products.....	638.5	628.5	641.7	638.6	643.8	644.0	637.7	636.3	627.3	620.5	621.7	631.3	641.1	653.6	667.7
Primary metal industries.....	1,314.8	1,224.6	1,283.1	1,238.9	1,164.1	1,176.0	1,165.4	1,165.2	1,168.6	1,180.5	1,186.7	1,214.0	1,223.1	1,231.5	1,227.8
Fabricated metal products.....	1,379.9	1,331.9	1,343.6	1,319.4	1,332.4	1,354.1	1,349.2	1,350.7	1,343.4	1,333.1	1,338.7	1,349.0	1,355.5	1,366.1	1,386.2
Machinery, except electrical.....	1,976.9	1,791.0	1,784.6	1,772.4	1,767.6	1,788.4	1,774.4	1,778.9	1,786.2	1,782.1	1,806.6	1,808.2	1,814.2	1,827.7	1,838.8
Electrical equipment.....	1,922.9	1,787.8	1,780.6	1,758.7	1,777.2	1,803.2	1,800.2	1,806.7	1,805.8	1,793.6	1,800.8	1,806.9	1,811.3	1,820.7	1,838.6
Transportation equipment.....	1,806.8	1,751.4	1,770.7	1,688.7	1,694.6	1,768.7	1,749.4	1,750.6	1,743.3	1,730.1	1,741.5	1,754.8	1,767.6	1,775.0	1,774.7
Instruments and related products.....	458.6	432.0	430.9	430.2	432.4	434.8	436.2	436.7	435.3	435.1	436.8	438.1	440.6	444.0	451.6
Miscellaneous manufacturing.....	425.7	410.6	413.3	402.1	421.4	428.1	429.6	425.8	409.8	400.2	407.3	412.7	416.7	419.0	450.1
Nondurable goods	8,171	8,020	8,052	7,961	8,166	8,183	8,104	8,081	8,020	7,918	7,947	7,982	7,981	8,003	8,134
Production workers ²	5,990	5,875	5,898	5,803	6,010	6,043	5,966	5,945	5,885	5,792	5,817	5,849	5,845	5,868	5,978
Food and kindred products.....	1,781.7	1,753.5	1,749.3	1,797.0	1,882.8	1,879.3	1,803.8	1,770.8	1,734.0	1,688.2	1,668.9	1,676.1	1,672.0	1,679.6	1,732.4
Tobacco manufactures.....	81.7	73.6	67.9	61.9	77.7	84.2	80.0	76.5	73.4	70.2	68.4	67.2	66.0	64.7	65.0
Textile mill products.....	977.6	961.7	968.2	948.6	964.7	964.5	965.5	973.7	976.3	972.3	976.6	985.0	985.6	990.2	1,008.6
Apparel and other textile products.....	1,372.2	1,361.5	1,372.3	1,304.1	1,366.1	1,374.2	1,379.0	1,380.6	1,355.6	1,335.7	1,365.9	1,371.5	1,365.1	1,359.3	1,369.8
Paper and allied products.....	706.5	687.5	690.2	677.7	688.1	696.7	691.9	693.5	693.5	684.3	683.9	687.1	690.7	696.1	709.1
Printing and publishing.....	1,106.8	1,087.7	1,088.6	1,082.2	1,080.6	1,081.4	1,087.4	1,087.9	1,091.4	1,085.5	1,087.6	1,091.5	1,091.9	1,091.7	1,095.2
Chemicals and allied products.....	1,051.3	1,014.8	1,222.9	1,018.2	1,015.4	1,009.4	1,004.7	1,003.6	1,001.0	995.3	996.6	999.6	1,001.2	1,000.0	1,007.1
Petroleum and coal products.....	190.4	189.8	192.6	193.7	193.2	191.9	190.4	189.1	188.6	183.2	186.8	186.8	187.8	189.1	192.6
Rubber and plastics products, nec.....	580.4	582.0	585.0	577.4	584.5	595.9	597.4	597.0	597.8	597.5	603.0	608.8	612.8	619.2	633.5
Leather and leather products.....	322.2	307.9	314.9	300.0	313.2	305.5	304.1	308.6	308.0	306.1	309.5	308.2	307.7	313.3	320.3
TRANSPORTATION AND PUBLIC UTILITIES	4,504	4,481	4,549	4,534	4,486	4,509	4,455	4,447	4,469	4,430	4,407	4,482	4,486	4,527	4,601
WHOLESALE AND RETAIL TRADE	14,922	15,174	15,192	15,132	15,151	15,242	15,327	15,537	16,089	15,266	15,147	15,274	15,460	15,571	15,710
Wholesale trade.....	3,824	3,855	3,860	3,877	3,886	3,880	3,896	3,905	3,915	3,871	3,866	3,894	3,902	3,917	3,989
Retail trade.....	11,098	11,319	11,332	11,255	11,265	11,362	11,431	11,632	12,174	11,395	11,281	11,380	11,558	11,654	11,721
FINANCE, INSURANCE, AND REAL ESTATE	3,690	3,800	3,837	3,867	3,865	3,829	3,826	3,836	3,841	3,833	3,844	3,867	3,885	3,912	3,954
SERVICES	11,630	11,917	12,050	12,040	11,994	11,986	12,020	12,032	12,029	11,926	12,031	12,131	12,279	12,404	12,520
Hotels and other lodging places.....	761.9	774.2	810.7	878.1	882.9	812.1	759.0	736.0	746.8	750.3	760.6	771.4	784.5	809.0	-----
Personal services.....	992.3	946.1	958.4	939.6	932.2	933.3	939.9	946.4	935.3	919.6	921.4	925.9	929.3	-----	-----
Medical and other health services.....	3,052.4	3,239.6	3,254.0	3,270.4	3,273.3	3,279.8	3,294.2	3,305.7	3,312.8	3,326.3	3,345.2	3,361.9	3,374.9	3,395.1	-----
Educational services.....	1,136.2	1,158.6	1,109.4	998.3	973.5	1,109.3	1,210.3	1,230.2	1,220.5	1,193.5	1,230.9	1,245.4	1,238.9	1,227.0	-----
GOVERNMENT	12,535	12,858	12,933	12,338	12,261	12,684	13,042	13,159	13,229	13,181	13,334	13,394	13,391	13,442	13,416
Federal.....	2,705	2,664	2,674	2,688	2,690	2,666	2,659	2,655	2,684	2,654	2,656	2,656	2,664	2,662	2,666
State and local.....	9,830	10,194	10,259	9,650	9,571	10,018	10,383	10,504	10,545	10,527	10,678	10,738	10,727	10,780	10,750

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

² Production workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling,

inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations.

NOTE: For additional detail, see *Employment and Earnings*, table B-2.

p=preliminary.
 =corrected.

14. Employees on nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted ¹

[In thousands]

Industry division and group	1971							1972					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p	June ^p
TOTAL	70,657	70,531	70,529	70,853	70,848	71,042	71,185	71,584	71,729	72,030	72,263	72,540	72,556
MINING	619	597	609	616	521	525	607	616	612	613	603	602	601
CONTRACT CONSTRUCTION	3,255	3,228	3,219	3,250	3,290	3,320	3,245	3,320	3,236	3,272	3,233	3,255	3,245
MANUFACTURING	18,608	18,533	18,457	18,616	18,560	18,603	18,566	18,609	18,690	18,777	18,870	18,961	18,908
Production workers ²	13,496	13,440	13,371	13,515	13,462	13,505	13,474	13,527	13,597	13,677	13,770	13,851	13,798
Durable goods.....	10,598	10,552	10,485	10,597	10,561	10,572	10,548	10,574	10,637	10,696	10,770	10,855	10,819
Production workers ²	7,627	7,594	7,534	7,630	7,600	7,614	7,594	7,629	7,685	7,741	7,815	7,889	7,852
Ordnance and accessories.....	193	191	191	190	189	186	184	183	182	183	185	188	192
Lumber and wood products.....	574	579	583	591	597	601	600	604	603	604	608	607	603
Furniture and fixtures.....	458	461	456	465	467	470	474	478	481	484	486	488	488
Stone, clay, and glass products.....	629	625	627	633	631	634	632	640	641	645	646	656	654
Primary metal industries.....	1,259	1,226	1,156	1,182	1,187	1,178	1,176	1,186	1,187	1,213	1,219	1,225	1,205
Fabricated metal products.....	1,333	1,335	1,331	1,346	1,341	1,339	1,331	1,336	1,345	1,356	1,365	1,377	1,375
Machinery, except electrical.....	1,769	1,770	1,775	1,794	1,791	1,797	1,793	1,784	1,798	1,792	1,802	1,826	1,822
Electrical equipment.....	1,783	1,773	1,772	1,791	1,793	1,791	1,793	1,792	1,803	1,812	1,828	1,839	1,840
Transportation equipment.....	1,759	1,751	1,754	1,758	1,720	1,732	1,719	1,716	1,736	1,743	1,764	1,779	1,762
Instruments and related products.....	430	431	430	435	437	436	434	436	438	439	441	446	450
Miscellaneous manufacturing.....	411	410	410	412	408	408	412	419	423	425	426	424	428
Nondurable goods.....	8,010	7,981	7,972	8,019	7,999	8,031	8,018	8,035	8,053	8,081	8,100	8,106	8,089
Production workers ²	5,869	5,846	5,837	5,885	5,862	5,891	5,880	5,880	5,912	5,936	5,955	5,962	5,946
Food and kindred products.....	1,751	1,762	1,748	1,755	1,728	1,750	1,748	1,757	1,749	1,757	1,751	1,744	1,734
Tobacco manufactures.....	77	69	70	72	69	69	71	69	71	73	75	74	73
Textile mill products.....	956	959	959	960	963	970	974	979	981	988	989	995	996
Apparel and other textile products.....	1,357	1,349	1,351	1,361	1,365	1,370	1,357	1,353	1,365	1,365	1,376	1,362	1,355
Paper and allied products.....	682	676	681	694	693	691	690	688	689	692	697	702	701
Printing and publishing.....	1,088	1,083	1,080	1,082	1,085	1,084	1,084	1,090	1,090	1,092	1,093	1,097	1,094
Chemicals and allied products.....	1,016	1,008	1,004	1,008	1,008	1,008	1,005	1,003	1,003	1,002	1,000	1,003	1,000
Petroleum and coal products.....	189	188	188	190	189	189	191	188	192	191	190	189	188
Rubber and plastics, products, nec.....	583	584	582	591	594	592	594	600	604	612	617	624	632
Leather and leather products.....	311	303	309	306	305	306	306	306	309	309	312	316	316
TRANSPORTATION AND PUBLIC UTILITIES	4,500	4,476	4,428	4,460	4,442	4,434	4,465	4,502	4,479	4,536	4,522	4,545	4,551
WHOLESALE AND RETAIL TRADE	15,135	15,158	15,223	15,273	15,270	15,278	15,315	15,447	15,495	15,518	15,647	15,650	15,651
Wholesale trade.....	3,837	3,835	3,844	3,865	3,873	3,874	3,884	3,902	3,913	3,941	3,949	3,961	3,965
Retail trade.....	11,298	11,323	11,379	11,408	11,397	11,404	11,431	11,545	11,582	11,577	11,698	11,689	11,686
FINANCE, INSURANCE, AND REAL ESTATE	3,807	3,806	3,804	3,821	3,834	3,851	3,860	3,872	3,879	3,890	3,897	3,920	3,923
SERVICES	11,895	11,921	11,946	11,962	11,996	12,044	12,089	12,120	12,177	12,217	12,254	12,306	12,359
Hotels and other lodging places.....	775	755	760	796	784	785	801	813	813	814	806	813	-----
Personal services.....	943	933	935	938	937	941	932	929	933	929	927	925	-----
Medical and other health services.....	3,231	3,241	3,260	3,283	3,297	3,306	3,323	3,336	3,252	3,369	3,385	3,412	-----
Educational services.....	1,155	1,142	1,139	1,160	1,165	1,168	1,165	1,160	1,171	1,185	1,187	1,180	-----
GOVERNMENT	12,838	12,812	12,843	12,855	12,935	12,987	13,038	13,098	13,161	13,207	13,237	13,301	13,318
Federal.....	2,640	2,643	2,650	2,674	2,675	2,669	2,669	2,675	2,672	2,669	2,669	2,670	2,632
State and local.....	10,198	10,169	10,193	10,181	10,260	10,318	10,369	10,423	10,489	10,538	10,568	10,631	10,686

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

² Production workers include working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance,

repair, janitorial, and watchman services, product development, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations.

NOTE: These data have been seasonally adjusted to reflect experience through May 1971. For additional detail, see September 1971 issue of *Employment and Earnings*.

^p = preliminary.

15. Labor turnover rates in manufacturing, 1962 to date ¹

[Per 100 employees]

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accessions													
1962	4.1	4.1	3.6	3.8	4.0	4.3	5.0	4.6	5.1	4.9	3.9	3.0	2.4
1963	3.9	3.6	3.3	3.5	3.9	3.9	4.8	4.3	4.8	4.8	3.9	2.9	2.5
1964	4.0	3.6	3.4	3.7	3.8	3.9	5.1	4.4	5.1	4.8	4.0	3.2	2.6
1965	4.3	3.8	3.5	4.0	3.8	4.1	5.6	4.5	5.4	5.5	4.5	3.9	3.1
1966	5.0	4.6	4.2	4.9	4.6	5.1	6.7	5.1	6.4	6.1	5.1	3.9	2.9
1967	4.4	4.3	3.6	3.9	3.9	4.6	5.9	4.7	5.5	5.3	4.7	3.7	2.8
1968	4.6	4.2	3.8	4.0	4.3	4.7	5.9	5.0	5.8	5.7	5.1	3.9	3.1
1969	4.7	4.6	3.9	4.4	4.5	4.8	6.6	5.1	5.6	5.9	4.9	3.6	2.9
1970	4.0	4.0	3.6	3.7	3.7	4.2	5.4	4.4	5.1	4.7	3.8	3.0	2.4
1971	3.9	3.5	3.1	3.5	3.7	3.9	4.9	4.0	5.3	4.8	3.8	3.3	2.5
1972		4.1	3.7	4.0	P4.0	P4.9							
New hires													
1962	2.5	2.2	2.1	2.2	2.4	2.8	3.5	2.9	3.2	3.1	2.5	1.8	1.2
1963	2.4	1.9	1.8	2.0	2.3	2.5	3.3	2.7	3.2	3.2	2.6	1.8	1.4
1964	2.6	2.0	2.0	2.2	2.4	2.5	3.6	2.9	3.4	3.5	2.8	2.2	1.6
1965	3.1	2.4	2.4	2.8	2.6	3.0	4.3	3.2	3.9	4.0	3.5	2.9	2.2
1966	3.8	3.2	3.1	3.7	3.6	4.1	5.6	3.9	4.8	4.7	4.2	3.1	2.1
1967	3.3	3.0	2.7	2.8	2.8	3.3	4.6	3.3	4.0	4.1	3.7	2.8	2.0
1968	3.5	3.0	2.7	2.9	3.2	3.6	4.7	3.7	4.3	4.6	4.0	2.9	2.2
1969	3.7	3.3	3.0	3.4	3.5	3.8	5.4	3.9	4.3	4.8	4.0	2.8	2.1
1970	2.8	2.9	2.5	2.6	2.6	2.8	3.9	3.0	3.5	3.4	2.7	1.9	1.4
1971	2.5	2.0	1.9	2.2	2.3	2.6	3.5	2.7	3.4	3.3	2.7	2.2	1.6
1972		2.5	2.4	2.7	2.8	P3.6							
Total separations													
1962	4.1	3.9	3.4	3.6	3.6	3.8	3.8	4.4	5.1	5.0	4.4	4.0	3.8
1963	3.9	4.0	3.2	3.5	3.6	3.6	3.4	4.1	4.8	4.9	4.1	3.9	3.7
1964	3.9	4.0	3.3	3.5	3.5	3.6	3.5	4.4	4.3	5.1	4.2	3.6	3.7
1965	4.1	3.7	3.1	3.4	3.7	3.6	3.6	4.3	5.1	5.6	4.5	3.9	4.1
1966	4.6	4.0	3.6	4.1	4.3	4.3	4.4	5.3	5.8	6.6	4.8	4.3	4.2
1967	4.6	4.5	4.0	4.6	4.3	4.2	4.3	4.8	5.3	6.2	4.7	4.0	3.9
1968	4.6	4.4	3.9	4.1	4.1	4.3	4.1	5.0	6.0	6.3	5.0	4.1	3.8
1969	4.9	4.5	4.0	4.4	4.5	4.6	4.6	5.3	6.2	6.6	5.4	4.3	4.2
1970	4.8	4.8	4.3	4.4	4.8	4.6	4.4	5.3	5.6	6.0	5.3	4.3	4.1
1971	4.2	4.2	3.5	3.7	4.0	3.7	3.8	4.8	5.5	5.3	4.3	3.7	3.8
1972		4.0	3.5	3.8	3.7	P3.9							
Quits													
1962	1.4	1.1	1.1	1.2	1.3	1.5	1.5	1.4	2.1	2.4	1.5	1.1	.8
1963	1.4	1.1	1.0	1.2	1.3	1.4	1.4	1.4	2.1	2.4	1.5	1.1	.8
1964	1.5	1.2	1.1	1.2	1.3	1.5	1.4	1.5	2.1	2.7	1.7	1.2	1.0
1965	1.9	1.4	1.3	1.5	1.7	1.7	1.7	1.8	2.6	3.5	2.2	1.7	1.4
1966	2.6	1.9	1.8	2.3	2.5	2.5	2.5	2.5	3.6	4.5	2.8	2.1	1.7
1967	2.3	2.1	1.9	2.1	2.2	2.2	2.3	2.1	3.2	4.0	2.5	1.9	1.5
1968	2.5	2.0	1.9	2.1	2.2	2.4	2.3	2.4	3.8	4.2	2.8	2.1	1.6
1969	2.7	2.3	2.1	2.4	2.6	2.7	2.6	2.7	4.0	4.4	3.0	2.1	1.6
1970	2.1	2.1	1.9	2.0	2.1	2.1	2.1	2.1	3.0	3.3	2.1	1.4	1.2
1971	1.8	1.5	1.3	1.5	1.6	1.7	1.8	1.8	2.8	2.9	1.9	1.5	1.2
1972		1.7	1.6	1.9	2.0	P2.2							
Layoffs													
1962	2.0	2.1	1.7	1.6	1.6	1.6	1.6	2.2	2.2	1.9	2.2	2.3	2.5
1963	1.8	2.2	1.6	1.7	1.6	1.5	1.4	2.0	1.9	1.8	1.9	2.1	2.3
1964	1.7	2.0	1.6	1.6	1.4	1.4	1.3	2.1	1.4	1.5	1.8	1.7	2.1
1965	1.4	1.6	1.2	1.2	1.3	1.1	1.1	1.8	1.6	1.3	1.4	1.5	1.9
1966	1.2	1.3	1.0	1.0	1.0	.9	1.0	2.0	1.1	1.0	1.1	1.3	1.7
1967	1.4	1.5	1.3	1.5	1.3	1.1	1.1	1.9	1.2	1.2	1.3	1.3	1.6
1968	1.2	1.5	1.2	1.1	1.0	1.0	.9	1.8	1.3	1.1	1.2	1.2	1.4
1969	1.2	1.2	1.0	1.0	.9	.9	1.0	1.6	1.1	1.1	1.3	1.3	1.8
1970	1.8	1.7	1.5	1.6	1.7	1.5	1.5	2.3	1.7	1.7	2.2	2.1	2.2
1971	1.6	1.9	1.4	1.4	1.4	1.2	1.2	2.1	1.8	1.5	1.5	1.5	1.8
1972		1.4	1.1	1.1	1.0	P.9							

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

shown by the Bureau's employment series because (1) the labor turnover series measures changes during the calendar month, while the employment series measures changes from midmonth to midmonth, and (2) the turnover series excludes personnel changes caused by strikes, but the employment series reflects the influence of such stoppages.

P=preliminary.

16. Labor turnover rates in manufacturing, by major industry group ¹

[Per 100 employees]

Major industry group	Accession rates						Separation rates								
	Total			New hires			Total			Quits			Layoffs		
	May 1971	Apr. 1972	May 1972 ^p	May 1971	Apr. 1972	May 1972 ^p	May 1971	Apr. 1972	May 1972 ^p	May 1971	Apr. 1972	May 1972 ^p	May 1971	Apr. 1972	May 1972 ^p
MANUFACTURING	3.9	4.0	4.9	2.6	2.8	3.6	3.7	3.7	3.9	1.7	2.0	2.2	1.2	1.0	0.9
Seasonally adjusted ²	3.8	4.4	4.8	2.5	3.1	3.5	4.0	4.0	4.2	1.8	2.1	2.3	1.5	1.2	1.1
Durable goods	3.7	3.8	4.6	2.3	2.6	3.4	3.3	3.3	3.4	1.4	1.7	1.8	1.1	.8	.7
Ordnance and accessories.....	1.7	2.7	.....	.7	1.5	.....	2.5	1.9	.....	.7	.7	.....	1.4	.5	.....
Lumber and wood products.....	6.7	6.3	7.5	5.3	5.1	6.4	4.7	5.5	5.6	3.0	3.7	4.0	.8	.8	.5
Furniture and fixtures.....	5.5	5.9	7.0	4.3	5.1	6.2	4.8	5.7	5.9	3.0	3.9	4.0	.8	.6	.5
Stone, clay, and glass products.....	4.7	5.2	5.8	3.3	3.5	4.4	3.7	3.5	3.7	1.9	1.9	2.2	1.0	.8	.6
Primary metal industries.....	3.0	3.2	3.9	2.0	1.7	2.3	2.7	2.4	2.6	1.0	.9	1.0	.8	.5	.6
Fabricated metal products.....	4.1	4.3	.....	2.7	3.0	.....	3.8	3.7	.....	1.6	1.9	.....	1.4	1.1	.....
Machinery, except electrical.....	2.5	2.8	3.5	1.5	2.0	2.6	3.1	2.6	2.7	.9	1.2	1.3	1.4	.6	.6
Electrical equipment.....	2.9	3.2	.....	1.5	2.1	.....	2.8	3.0	.....	1.1	1.4	.....	.9	.6	.....
Transportation equipment.....	3.8	3.6	.....	2.1	2.3	.....	3.2	3.2	.....	1.1	1.3	.....	1.3	1.0	.....
Instruments and related products.....	2.8	2.8	3.5	1.9	2.2	2.8	2.6	2.3	2.5	1.1	1.3	1.4	.8	.4	.4
Miscellaneous manufacturing.....	5.7	5.4	6.5	4.3	4.1	5.1	4.5	4.7	5.1	2.4	2.6	3.1	1.2	1.1	1.0
Nondurable goods	4.3	4.2	5.3	3.0	3.1	3.9	4.1	4.4	4.6	2.1	2.4	2.7	1.3	1.2	1.1
Food and kindred products.....	5.9	5.0	6.7	3.9	3.3	4.5	5.4	5.3	5.8	2.4	2.4	2.8	2.3	2.2	2.2
Tobacco manufactures.....	2.7	2.1	2.9	1.8	1.1	1.9	2.3	5.7	2.6	1.1	1.3	1.3	.5	3.6	.6
Textile mill products.....	5.3	5.8	6.8	4.1	4.7	5.7	5.2	5.8	6.1	3.4	4.1	4.4	.8	.6	.5
Apparel and other textile products.....	5.4	5.4	6.4	3.5	3.8	4.6	5.2	5.9	6.0	2.6	3.2	3.6	1.9	1.9	1.5
Paper and allied products.....	3.0	2.8	3.8	2.1	2.1	3.0	2.6	2.7	2.7	1.3	1.4	1.5	.6	.6	.5
Printing and publishing.....	2.6	2.9	3.0	2.0	2.2	2.5	2.7	2.9	3.0	1.5	1.6	1.7	.7	.7	.7
Chemicals and allied products.....	2.0	2.0	2.6	1.4	1.5	2.0	2.2	2.0	2.3	.9	1.0	1.1	.7	.4	.5
Petroleum and coal products.....	2.2	2.0	2.3	1.7	1.6	1.8	1.7	1.5	1.4	.7	.6	.6	.5	.3	.1
Rubber and plastics products, nec.....	4.4	4.5	5.7	3.2	3.5	4.6	3.9	4.1	4.6	2.0	2.4	2.7	1.0	.7	.8
Leather and leather products.....	6.2	6.5	8.1	4.3	4.9	6.2	5.9	6.3	6.4	3.2	3.8	4.3	1.6	1.4	1.0

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data, are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

Month-to-month changes in total employment in manufacturing and nonmanufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment series because (1) the labor turnover series measures changes during the calendar month, while the employment series measures

changes from midmonth to midmonth, and (2) the turnover series excludes personnel changes caused by strikes, but the employment series reflects the influence of such stoppages.

² These data have been seasonally adjusted to reflect experience through May 1971. For additional detail, see September 1971 issue of *Employment and Earnings*.

NOTE: For additional detail, see *Employment and Earnings*, table D-2.

P=preliminary.

17. Job vacancies in manufacturing ¹

Industry	Annual average		1971								1972				
	1970	1971	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p
Job vacancies in manufacturing (number in thousands).....	132	88	94	90	90	106	98	90	79	78	90	97	111	124	125
JOB VACANCY RATES ²															
Manufacturing.....	0.7	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.6	0.7	0.7
Durable goods industries.....	.6	.4	.4	.4	.4	.5	.5	.4	.4	.4	.5	.5	.5	.6	.6
Nondurable goods industries.....	.7	.6	.6	.6	.6	.6	.6	.5	.5	.5	.5	.6	.6	.7	.7
Selected durable goods industries:															
Primary metal industries.....	.5	.2	.3	.2	.2	.2	.2	.2	.1	.1	.2	.2	.2	.3	.3
Machinery, except electrical.....	.7	.4	.4	.4	.4	.4	.5	.4	.4	.4	.5	.5	.6	.7	.6
Electrical equipment and supplies.....	.7	.5	.5	.5	.5	.6	.5	.6	.5	.5	.6	.7	.7	.8	.7
Transportation equipment.....	.5	.4	.4	.4	.5	.6	.5	.4	.4	.3	.4	.5	.5	.7	.7
Instruments and related products.....	1.0	.7	.7	.9	.8	.8	.8	.7	.6	.6	.7	.7	.9	1.1	1.1
Selected nondurable goods industries:															
Textile mill products.....	.9	.8	.9	.9	.8	1.0	.9	.9	.8	.8	.8	.9	1.1	1.2	1.2
Apparel and other textile products.....	1.4	1.2	1.3	1.3	1.3	1.4	1.2	1.2	1.0	1.1	1.2	1.2	1.4	1.3	1.4
Printing and publishing.....	.6	.4	.3	.3	.3	.4	.3	.4	.3	.3	.3	.3	.4	.4	.4
Chemicals and allied products.....	.7	.4	.5	.4	.4	.4	.4	.4	.3	.3	.4	.4	.5	.6	.5

¹ Data have been adjusted to March 1970 benchmarks (comprehensive counts of employment). For months prior to July 1971, data are not comparable to those published in the February 1972 and earlier issues of the *Monthly Labor Review*.

² Computed by dividing the total number of job vacancies by the sum of employ-

ment plus the total number of job vacancies and multiplying the quotient of 100.

NOTE: For additional detail on this series, see *Employment and Earnings*, tables E-1, E-2, and E-3.

P=preliminary.

18. Gross average hours and earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, 1947-71

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			Contract construction			Manufacturing		
1947	\$45.58	40.3	\$1.131	\$59.94	40.8	\$1.469	\$58.87	38.2	\$1.541	\$49.17	40.4	\$1.217
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	67.16	40.7	1.65
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	75.70	40.7	1.86
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	98.65	40.1	2.46	100.27	37.0	2.71	81.59	39.8	2.05
1958	75.08	38.5	1.95	96.08	38.9	2.47	103.78	36.8	2.82	82.71	39.2	2.11
1959 ²	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	105.44	40.4	2.61	113.04	36.7	3.08	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	110.43	40.9	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	99.63	40.5	2.46
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	95.06	38.8	2.45	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	112.34	41.3	2.72
1967	101.84	38.0	2.68	135.89	42.6	3.19	154.95	37.7	4.11	114.90	40.6	2.83
1968	107.73	37.8	2.85	142.71	42.6	3.35	164.93	37.4	4.41	122.51	40.7	3.01
1969	114.61	37.7	3.04	155.23	43.0	3.61	181.54	37.9	4.79	129.51	40.6	3.19
1970	119.46	37.1	3.22	163.97	42.7	3.84	196.35	37.4	5.25	133.73	39.8	3.36
1971	126.91	37.0	3.43	171.72	42.4	4.05	213.36	37.3	5.72	142.44	39.9	3.57
	Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services		
1947				\$38.07	40.5	\$0.940	\$43.21	37.9	\$1.140			
1948				40.80	40.4	1.010	45.48	37.9	1.200			
1949				42.93	40.5	1.060	47.63	37.8	1.250			
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 ²				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				74.28	37.9	1.96	85.79	37.3	2.30	\$69.84	36.0	\$1.94
1965	\$118.37	41.1	\$2.88	76.53	37.7	2.03	88.91	37.2	2.39	73.60	35.9	2.05
1966	128.13	41.2	3.11	79.02	37.1	2.13	92.13	37.3	2.47	77.04	35.5	2.17
1967	131.22	40.5	3.24	81.76	36.5	2.24	95.46	37.0	2.58	80.38	35.1	2.29
1968	138.85	40.6	3.42	86.40	36.0	2.40	101.75	37.0	2.75	84.32	34.7	2.43
1969	148.15	40.7	3.64	91.14	35.6	2.56	108.70	37.1	2.93	90.57	34.7	2.61
1970	155.93	40.5	3.85	95.66	35.3	2.71	113.34	36.8	3.08	96.66	34.4	2.81
1971	169.24	40.2	4.21	100.74	35.1	2.87	121.36	37.0	3.28	102.26	34.2	2.99

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States 1909-71* (BLS Bulletin 1312-8).

Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and

public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls.

² Data include Alaska and Hawaii beginning 1959.

NOTE: For additional detail, see *Employment and Earnings*, table C-1.

19. Gross average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group

Industry division and group	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p	June ^p
	TOTAL PRIVATE	37.1	37.0	37.3	37.3	37.4	37.0	37.0	37.0	37.3	36.7	36.8	36.9	37.0	36.9	37.4
MINING	42.7	42.4	42.6	42.6	42.3	42.1	42.8	42.3	42.8	42.5	42.0	42.2	42.4	42.4	43.2
CONTRACT CONSTRUCTION	37.4	37.3	38.0	38.1	38.3	36.9	38.2	37.9	36.5	35.8	36.0	36.8	36.6	36.9	37.6
MANUFACTURING	39.8	39.9	40.2	39.8	39.8	39.8	40.0	40.2	40.7	39.8	40.1	40.3	40.5	40.5	40.8
Overtime hours.....	3.0	2.9	3.0	2.9	3.0	3.1	3.1	3.1	3.2	2.8	3.0	3.1	3.3	3.3	3.4
Durable goods	40.3	40.4	40.8	40.1	40.0	40.0	40.5	40.7	41.4	40.4	40.7	41.0	41.2	41.2	41.5
Overtime hours.....	2.9	2.9	3.0	2.7	2.8	3.0	3.0	3.0	3.2	2.8	3.0	3.2	3.4	3.4	3.6
Ordnance and accessories.....	40.6	41.7	41.8	41.3	41.7	41.9	41.8	42.0	42.4	41.7	42.2	42.2	42.2	42.2	42.2
Lumber and wood products.....	39.7	40.3	40.9	40.4	40.5	40.4	41.0	40.6	40.8	40.0	40.4	40.9	41.1	41.2	41.7
Furniture and fixtures.....	39.2	39.8	40.1	39.7	40.4	40.0	40.4	40.4	40.9	39.7	39.8	40.2	40.2	40.2	41.0
Stone, clay, and glass products.....	41.2	41.6	42.3	42.0	42.3	41.9	42.1	41.9	41.6	40.9	41.2	41.8	41.9	41.9	42.7
Primary metal industries.....	40.5	40.4	41.3	40.7	38.8	39.5	39.7	39.9	41.0	40.7	41.0	41.3	41.5	41.6	41.7
Fabricated metal products.....	40.7	40.3	40.9	40.3	40.3	39.9	40.3	40.6	41.3	40.1	40.4	40.6	40.9	41.1	41.4
Machinery, except electrical.....	41.1	40.6	40.7	40.3	40.3	40.6	40.8	41.1	41.9	41.0	41.4	41.7	41.8	41.7	42.0
Electrical equipment.....	39.9	39.9	40.1	39.6	40.0	40.0	40.1	40.4	40.9	40.0	40.2	40.3	40.4	40.3	40.6
Transportation equipment.....	40.3	40.7	41.5	39.4	39.3	39.1	41.0	41.1	42.5	40.6	41.2	41.7	42.0	42.0	42.2
Instruments and related products.....	40.1	39.8	39.8	39.5	39.6	40.0	40.1	40.5	40.8	40.1	40.4	40.3	40.5	40.5	41.1
Miscellaneous manufacturing.....	38.7	38.9	38.8	38.6	39.2	38.9	39.3	39.5	39.5	38.7	39.2	39.3	39.5	39.2	39.4
Nondurable goods	39.1	39.3	39.4	39.4	39.5	39.5	39.4	39.6	39.8	39.1	39.2	39.4	39.5	39.5	39.8
Overtime hours.....	3.0	3.0	3.1	3.0	3.2	3.4	3.2	3.1	3.1	2.9	3.0	3.1	3.1	3.1	3.3
Food and kindred products.....	40.5	40.3	40.5	40.6	40.7	40.9	40.1	40.1	40.6	39.8	39.6	40.0	40.0	40.3	40.7
Tobacco manufactures.....	37.8	37.0	36.8	39.3	37.4	37.8	36.0	35.7	36.0	34.1	33.1	33.3	33.1	33.6	34.8
Textile mill products.....	39.9	40.6	41.0	40.1	40.8	40.6	41.0	41.4	41.5	40.8	41.0	41.3	41.3	41.0	41.4
Apparel and other textile products.....	35.3	35.5	35.5	35.8	36.0	35.5	35.9	36.3	35.9	35.3	35.9	36.0	35.9	35.6	35.9
Paper and allied products.....	41.9	42.1	42.3	42.4	42.5	42.2	42.3	42.4	42.8	41.9	42.2	42.4	42.6	42.6	43.1
Printing and publishing.....	37.7	37.6	37.7	37.6	37.7	37.7	37.6	37.6	38.0	37.1	37.2	37.6	37.8	37.6	37.8
Chemicals and allied products.....	41.6	41.6	41.7	41.3	41.3	42.1	41.5	41.6	41.9	41.6	41.6	41.8	41.9	41.6	41.6
Petroleum and coal products.....	42.7	42.4	42.6	43.0	42.6	42.8	42.6	42.1	42.3	41.7	41.4	41.6	42.5	42.1	41.4
Rubber and plastics products, nec.....	40.3	40.3	40.7	40.1	40.3	40.5	40.6	40.8	41.2	40.6	40.7	40.8	41.1	41.1	41.7
Leather and leather products.....	37.2	37.7	38.1	38.2	37.6	36.9	37.7	38.4	38.7	38.2	38.5	37.9	38.0	38.7	39.4
TRANSPORTATION AND PUBLIC UTILITIES	40.5	40.2	40.8	38.4	40.7	40.8	40.5	40.6	40.6	39.8	40.2	40.2	39.9	40.0	40.8
WHOLESALE AND RETAIL TRADE	35.3	35.1	35.4	36.1	36.0	35.2	35.0	34.9	35.5	34.7	34.6	34.8	34.8	34.8	35.6
Wholesale trade.....	40.0	39.8	40.0	39.9	39.9	39.7	39.8	39.8	40.3	39.6	39.7	39.8	39.8	39.8	40.0
Retail trade.....	33.8	33.7	34.0	34.8	34.7	33.7	33.5	33.4	34.1	33.2	33.0	33.2	33.3	33.3	33.2
FINANCE, INSURANCE, AND REAL ESTATE	36.8	37.0	37.0	37.1	37.3	36.9	37.0	37.0	37.0	37.3	37.1	37.1	37.3	37.0	37.1
SERVICES	34.4	34.2	34.2	34.8	34.7	34.1	34.1	34.0	34.2	33.9	34.0	34.0	34.0	33.8	34.3

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and

public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls.

NOTE: For additional detail, see *Employment and Earnings*, table C-2.

^p=preliminary.

20. Gross average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted

Industry division and group	1971							1972					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p	June ^p
TOTAL PRIVATE	37.1	36.9	36.9	36.7	37.0	37.1	37.2	37.0	37.2	37.1	37.3	37.0	37.2
MINING	42.3	42.2	42.0	41.9	42.5	42.3	42.6	43.0	42.5	42.9	42.3	42.4	42.9
CONTRACT CONSTRUCTION	37.2	37.1	37.1	35.7	37.6	39.0	36.8	37.4	37.3	37.5	36.7	36.7	36.8
MANUFACTURING	40.0	40.0	39.8	39.5	39.8	40.1	40.3	40.0	40.5	40.4	40.8	40.5	40.6
Overtime hours.....	2.9	3.0	2.9	2.8	3.0	3.0	3.1	2.9	3.2	3.3	3.6	3.4	3.3
Durable goods	40.6	40.4	40.0	39.7	40.3	40.6	40.9	40.6	41.1	41.0	41.5	41.2	41.3
Overtime hours.....	2.9	2.8	2.8	2.7	2.8	2.9	3.0	2.9	3.2	3.3	3.7	3.5	3.5
Ordnance and accessories.....	41.6	41.9	41.9	41.7	41.8	41.9	42.0	41.2	42.4	42.3	42.4	42.2	42.0
Lumber and wood products.....	40.4	40.5	40.2	40.1	40.7	40.8	40.8	40.9	40.9	40.9	41.1	40.8	41.2
Furniture and fixtures.....	39.9	40.1	39.9	39.4	39.7	40.0	39.9	40.3	40.7	40.5	40.8	40.6	40.8
Stone, clay, and glass products.....	42.0	41.8	41.8	41.4	41.8	41.9	41.6	41.8	42.0	42.2	41.9	41.7	42.4
Primary metal industries.....	41.0	40.6	38.8	39.5	40.1	40.1	41.0	40.6	41.1	41.3	41.4	41.5	41.4
Fabricated metal products.....	40.6	40.7	40.2	39.3	40.1	40.4	40.9	40.4	41.0	40.8	41.2	41.1	41.1
Machinery, except electrical.....	40.7	40.7	40.8	40.5	40.8	41.1	41.3	41.0	41.4	41.4	41.8	41.7	42.0
Electrical equipment.....	39.9	40.1	40.0	39.6	39.9	40.1	40.3	40.1	40.7	40.3	40.8	40.4	40.4
Transportation equipment.....	41.4	39.5	39.9	38.5	40.5	40.5	41.7	40.7	41.9	42.1	42.9	41.9	42.1
Instruments and related products.....	39.7	39.8	39.8	39.7	39.9	40.2	40.4	40.3	40.8	40.3	40.7	40.7	41.0
Miscellaneous manufacturing.....	38.7	39.2	39.2	38.7	38.9	39.1	39.2	39.0	39.6	39.3	39.6	39.3	39.3
Nondurable goods	39.3	39.3	39.3	39.1	39.3	39.5	39.5	39.4	39.6	39.6	39.8	39.7	39.7
Overtime hours.....	3.1	3.0	3.1	3.1	3.0	3.0	3.0	3.1	3.2	3.3	3.3	3.2	3.3
Food and kindred products.....	40.4	40.2	40.1	40.1	40.0	39.9	40.4	40.1	40.2	40.6	40.7	40.5	40.6
Tobacco manufactures.....	36.2	39.6	37.1	36.6	34.7	35.6	35.6	34.8	33.6	34.4	33.8	34.0	34.3
Textile mill products.....	40.8	40.3	40.7	40.4	40.8	41.1	41.0	41.3	41.2	41.4	41.7	41.2	41.2
Apparel and other textile products.....	35.4	35.8	35.7	35.4	36.0	36.2	35.9	35.7	36.2	35.8	36.0	35.6	35.8
Paper and allied products.....	42.3	42.4	42.4	41.9	42.0	42.3	42.3	42.1	42.6	42.7	43.0	42.7	43.1
Printing and publishing.....	37.7	37.6	37.5	37.4	37.5	37.6	37.5	37.5	37.5	37.6	38.0	37.7	37.8
Chemicals and allied products.....	41.7	41.4	41.5	42.1	41.5	41.4	41.7	41.8	41.8	41.8	41.7	41.6	41.6
Petroleum and coal products.....	42.3	42.6	43.4	42.9	42.4	41.8	42.7	42.2	42.0	41.7	41.9	41.4	41.2
Rubber and plastics products, nec.....	40.7	40.3	40.1	40.0	40.3	40.6	40.9	40.8	41.0	41.2	41.5	41.2	41.7
Leather and leather products.....	37.5	37.7	37.6	37.3	37.9	38.3	37.9	38.0	38.5	38.2	39.1	38.7	38.8
TRANSPORTATION AND PUBLIC UTILITIES ...	40.7	38.0	40.5	40.6	40.3	40.4	40.5	40.0	40.4	40.6	40.3	40.2	40.7
WHOLESALE AND RETAIL TRADE	35.2	35.3	35.1	35.1	35.2	35.2	35.3	35.1	35.1	35.1	35.2	35.1	35.4
Wholesale trade.....	39.9	39.6	39.7	39.7	39.8	39.9	40.0	39.7	40.0	39.9	40.0	40.0	39.9
Retail trade.....	33.7	33.8	33.6	33.6	33.8	33.7	33.9	33.7	33.5	33.6	33.7	33.7	33.9
FINANCE, INSURANCE, AND REAL ESTATE ...	37.0	37.1	37.3	37.0	36.9	36.9	37.0	37.3	37.1	37.1	37.3	37.1	37.1
SERVICES	34.1	34.4	34.3	34.2	34.2	34.1	34.2	34.1	34.2	34.0	34.1	34.0	34.2

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and

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

NOTE: These data have been seasonally adjusted to reflect experience through May 1971. For additional detail, see September 1971 issue of *Employment and Earnings*.

^p=preliminary.

21. Gross average hourly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group

Industry division and group	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^P	June ^P
TOTAL PRIVATE	\$3.22	\$3.43	\$3.42	\$3.43	\$3.45	\$3.49	\$3.49	\$3.48	\$3.51	\$3.54	\$3.55	\$3.57	\$3.60	\$3.61	\$3.62
MINING	3.84	4.05	4.04	4.05	4.10	4.15	3.92	3.92	4.27	4.32	4.31	4.30	4.35	4.33	4.34
CONTRACT CONSTRUCTION	5.25	5.72	5.63	5.68	5.75	5.86	5.90	5.90	5.93	5.99	5.98	5.97	5.99	6.03	5.96
MANUFACTURING	3.36	3.57	3.57	3.57	3.56	3.60	3.60	3.60	3.69	3.71	3.72	3.74	3.77	3.78	3.79
Durable goods	3.56	3.80	3.80	3.79	3.79	3.83	3.82	3.83	3.93	3.95	3.96	3.99	4.02	4.03	4.04
Ordnance and accessories.....	3.61	3.85	3.85	3.89	3.88	3.90	3.91	3.88	3.98	3.98	4.04	4.02	4.06	4.08	4.08
Lumber and wood products.....	2.96	3.14	3.17	3.19	3.19	3.21	3.21	3.20	3.19	3.21	3.21	3.22	3.25	3.29	3.32
Furniture and fixtures.....	2.77	2.90	2.90	2.91	2.94	2.95	2.93	2.93	2.98	2.98	2.99	3.01	3.03	3.03	3.05
Stone, clay, and glass products.....	3.40	3.66	3.67	3.70	3.73	3.75	3.73	3.71	3.74	3.76	3.78	3.82	3.84	3.87	3.90
Primary metal industries	3.93	4.23	4.21	4.19	4.29	4.35	4.35	4.36	4.50	4.54	4.55	4.57	4.60	4.62	4.64
Fabricated metal products.....	3.53	3.74	3.75	3.74	3.75	3.77	3.77	3.78	3.87	3.88	3.89	3.92	3.95	3.96	3.97
Machinery, except electrical.....	3.77	3.99	3.99	4.00	4.02	4.04	4.04	4.04	4.16	4.16	4.19	4.21	4.23	4.24	4.25
Electrical equipment.....	3.28	3.50	3.49	3.51	3.50	3.52	3.51	3.52	3.60	3.60	3.62	3.63	3.64	3.65	3.66
Transportation equipment.....	4.06	4.44	4.43	4.39	4.37	4.42	4.44	4.44	4.62	4.60	4.65	4.67	4.72	4.74	4.75
Instruments and related products.....	3.35	3.53	3.52	3.55	3.55	3.57	3.55	3.56	3.62	3.67	3.69	3.70	3.71	3.72	3.76
Miscellaneous manufacturing.....	2.82	2.96	2.95	2.94	2.95	2.96	2.96	2.97	3.05	3.07	3.06	3.06	3.08	3.08	3.09
Nondurable goods	3.08	3.26	3.26	3.29	3.27	3.31	3.29	3.29	3.36	3.38	3.40	3.41	3.43	3.44	3.45
Food and kindred products.....	3.16	3.38	3.38	3.39	3.34	3.38	3.38	3.40	3.51	3.52	3.53	3.56	3.59	3.60	3.60
Tobacco manufactures.....	2.92	3.15	3.30	3.33	3.19	3.03	3.02	3.08	3.29	3.32	3.37	3.39	3.45	3.47	3.51
Textile mill products.....	2.45	2.57	2.56	2.56	2.57	2.58	2.59	2.59	2.62	2.69	2.71	2.71	2.72	2.72	2.72
Apparel and other textile products.....	2.39	2.49	2.47	2.47	2.50	2.53	2.52	2.52	2.55	2.56	2.58	2.57	2.58	2.58	2.59
Paper and allied products	3.44	3.68	3.67	3.71	3.73	3.77	3.73	3.73	3.80	3.81	3.83	3.84	3.86	3.88	3.92
Printing and publishing.....	3.92	4.20	4.20	4.21	4.23	4.28	4.27	4.27	4.36	4.35	4.36	4.39	4.43	4.46	4.47
Chemicals and allied products.....	3.69	3.94	3.94	3.99	3.99	4.03	4.00	4.00	4.06	4.10	4.12	4.11	4.13	4.15	4.19
Petroleum and coal products.....	4.28	4.58	4.58	4.60	4.59	4.66	4.65	4.65	4.65	4.84	4.88	4.88	4.94	4.93	4.87
Rubber and plastics products, nec.....	3.20	3.41	3.38	3.44	3.45	3.48	3.46	3.46	3.53	3.54	3.54	3.54	3.56	3.57	3.58
Leather and leather products.....	2.49	2.59	2.58	2.58	2.59	2.62	2.63	2.61	2.65	2.67	2.70	2.70	2.69	2.70	2.70
TRANSPORTATION AND PUBLIC UTILITIES	3.85	4.21	4.15	4.23	4.25	4.33	4.31	4.33	4.41	4.46	4.48	4.50	4.56	4.58	4.59
WHOLESALE AND RETAIL TRADE	2.71	2.87	2.87	2.87	2.88	2.90	2.91	2.91	2.91	2.97	2.98	2.99	3.00	3.00	3.00
Wholesale trade.....	3.44	3.67	3.66	3.67	3.70	3.72	3.72	3.74	3.79	3.82	3.82	3.83	3.86	3.85	3.85
Retail trade.....	2.44	2.57	2.58	2.58	2.57	2.60	2.60	2.60	2.61	2.66	2.66	2.67	2.68	2.68	2.69
FINANCE, INSURANCE, AND REAL ESTATE	3.08	3.28	3.28	3.29	3.30	3.30	3.31	3.30	3.34	3.40	3.40	3.41	3.45	3.44	3.42
SERVICES	2.81	2.99	2.97	2.98	2.99	3.04	3.03	3.04	3.06	3.09	3.11	3.11	3.13	3.13	3.12

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and

public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls.

NOTE: For additional detail, see *Employment and Earnings*, table C-2.
P=preliminary.

22. Gross average weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division and major manufacturing group

Industry division and group	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^p	June ^p
TOTAL PRIVATE	\$119.46	\$126.91	\$127.57	127.94	\$129.03	\$129.13	\$129.13	\$128.76	\$130.92	\$129.92	\$130.64	\$131.73	\$133.20	\$133.21	\$135.39
MINING	163.97	171.72	172.10	172.53	173.43	174.72	167.78	165.82	182.76	183.60	181.02	181.46	184.44	183.59	187.49
CONTRACT CONSTRUCTION	196.35	213.36	213.94	216.41	220.23	216.23	225.38	223.61	216.45	214.44	215.28	219.70	219.23	222.51	224.10
MANUFACTURING	133.73	142.44	143.51	142.09	141.69	143.28	144.00	144.72	150.18	147.66	149.17	150.72	152.69	153.09	154.63
Durable goods	143.47	153.52	155.04	151.98	151.60	153.20	154.71	155.88	162.70	159.58	161.17	163.59	165.62	166.04	167.66
Ordnance and accessories.....	146.57	160.55	160.93	160.66	161.80	163.41	163.44	162.96	168.75	165.97	170.49	169.64	171.33	172.18	172.18
Lumber and wood products.....	117.51	126.54	129.65	128.88	129.20	129.68	131.61	129.92	130.15	128.40	129.68	131.70	133.58	135.55	138.44
Furniture and fixtures.....	108.58	115.42	116.29	115.53	118.78	118.00	118.37	118.37	121.88	118.31	119.00	121.00	121.81	121.81	125.05
Stone, clay, and glass products.....	140.08	152.26	155.24	155.40	157.78	157.13	157.03	155.45	155.58	153.78	155.74	159.68	160.90	162.15	166.53
Primary metal industries.....	159.17	170.89	173.87	170.53	166.45	171.83	172.70	173.96	184.50	184.78	186.55	188.74	190.90	192.19	193.49
Fabricated metal products.....	143.67	150.72	153.38	150.72	151.13	150.42	151.93	153.47	159.83	155.59	157.16	159.15	161.56	162.76	164.36
Machinery, except electrical.....	154.95	161.99	162.39	161.20	162.01	164.02	164.83	166.04	174.30	170.56	173.47	175.56	176.81	176.81	178.50
Electrical equipment.....	130.87	139.65	139.95	139.00	140.00	140.80	140.75	142.21	147.24	144.00	145.52	146.29	147.06	147.10	148.60
Transportation equipment.....	163.62	180.71	183.85	172.97	171.74	172.82	182.04	182.48	196.35	186.76	191.58	194.74	198.24	199.08	200.45
Instruments and related products.....	134.34	140.49	140.10	140.23	140.58	142.80	142.36	144.18	147.70	147.17	149.08	149.11	150.26	150.66	154.54
Miscellaneous manufacturing.....	109.13	115.14	114.46	113.48	115.64	115.14	116.33	117.32	120.48	118.81	119.95	120.26	121.66	120.74	121.75
Nondurable goods	120.43	128.12	128.44	129.63	129.17	130.75	129.63	130.28	133.73	132.16	133.28	134.35	135.49	135.88	137.31
Food and kindred products.....	127.98	136.21	136.89	137.63	135.94	138.24	135.54	136.34	142.51	140.10	139.79	142.40	143.60	145.08	146.52
Tobacco manufactures.....	110.38	116.55	121.44	130.87	119.31	114.53	108.72	109.96	118.44	113.21	111.55	112.89	114.20	116.59	122.15
Textile mill products.....	97.76	104.34	104.96	102.66	104.86	104.75	106.19	107.23	108.73	109.75	111.11	111.92	112.34	111.52	112.61
Apparel and other textile products.....	84.37	88.40	87.69	88.43	90.00	89.82	90.47	91.48	91.55	90.37	92.62	92.52	92.62	91.85	92.98
Paper and allied products.....	144.14	154.93	155.24	157.30	158.53	159.08	157.78	158.15	162.64	159.64	161.63	162.82	164.44	165.29	168.95
Printing and publishing.....	147.78	157.92	158.34	158.30	159.47	161.36	160.55	160.55	165.68	161.39	162.19	165.06	167.45	167.70	168.97
Chemicals and allied products.....	153.50	163.90	164.30	164.79	164.79	169.66	166.00	166.40	170.11	170.56	171.39	171.80	173.05	172.64	174.30
Petroleum and coal products.....	182.76	194.19	195.11	197.80	195.53	199.45	198.09	195.77	196.70	201.83	202.03	203.01	209.95	207.55	201.62
Rubber and plastics products, nec.....	128.96	137.42	137.57	137.94	139.04	140.94	140.48	141.17	145.44	143.72	144.08	144.43	146.32	146.73	149.29
Leather and leather products.....	92.63	97.64	98.30	98.56	97.38	96.68	99.15	100.22	102.56	101.99	103.95	102.33	102.22	104.49	106.38
TRANSPORTATION AND PUBLIC UTILITIES	155.93	169.24	169.32	162.43	172.98	176.66	174.56	175.80	179.05	177.51	180.10	180.90	181.94	183.20	187.27
WHOLESALE AND RETAIL TRADE	95.66	100.74	101.60	103.61	103.68	102.08	101.85	101.56	103.31	103.06	103.11	104.05	104.40	104.40	106.80
Wholesale trade.....	137.60	146.07	146.40	146.43	147.63	147.68	148.06	148.85	152.74	151.27	151.65	152.43	153.63	153.23	154.00
Retail trade.....	82.47	86.61	87.72	89.78	89.18	87.62	87.10	86.84	89.00	88.31	87.78	88.64	89.24	89.24	92.00
FINANCE, INSURANCE, AND REAL ESTATE	113.34	121.36	121.36	122.06	123.09	121.77	122.47	122.10	123.58	126.82	126.14	126.51	128.69	127.28	126.88
SERVICES	96.66	102.26	101.57	103.70	103.75	103.66	103.32	103.36	104.65	104.75	105.74	105.74	106.42	105.79	107.02

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to October 1971. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and

public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls.

NOTE: For additional detail, see *Employment and Earnings*, table C-2.

^p = preliminary.

* = corrected.

23. Gross and spendable average weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, in current and 1967 dollars, 1960 to date

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		Worker with 3 dependents				Worker with no dependents		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	99.63	108.65	79.82	87.04	87.58	95.51
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.....	95.06	100.59	78.99	83.59	86.30	91.32	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	112.34	115.58	91.57	94.21	99.45	102.31
1967.....	101.84	101.84	83.38	83.38	90.86	90.86	114.90	114.90	93.28	93.28	101.26	101.26
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.....	119.46	102.72	95.94	82.49	104.61	89.95	133.73	114.99	106.62	91.68	115.90	99.66
1971.....	126.91	104.62	103.51	85.33	112.12	92.43	142.44	117.43	114.97	94.78	124.24	102.42
1971:												
June.....	127.57	105.00	104.00	85.60	112.64	92.71	143.51	118.12	115.76	95.28	125.07	102.94
July.....	127.94	105.04	104.27	85.61	112.93	92.72	142.09	116.66	114.71	94.18	123.97	101.78
August.....	129.03	105.68	105.07	86.05	113.79	93.19	141.69	116.04	114.42	93.71	123.65	101.27
September.....	129.13	105.67	105.15	86.05	113.86	93.18	143.28	117.25	115.59	94.59	124.89	102.20
October.....	129.13	105.50	105.15	85.91	113.86	93.02	144.00	117.65	116.12	94.87	125.45	102.49
November.....	128.76	105.02	104.87	85.54	113.57	92.63	144.72	118.04	116.65	95.15	126.01	102.78
December.....	130.92	106.35	106.47	86.49	115.28	93.65	150.18	122.00	120.64	98.00	130.25	105.81
1972:												
January.....	129.92	105.45	107.04	86.88	116.18	94.30	147.66	119.85	120.13	97.51	130.09	105.59
February.....	130.64	105.53	107.57	86.89	116.74	94.30	149.17	120.49	121.25	97.94	131.26	106.03
March.....	131.73	106.23	108.38	87.40	117.60	94.84	150.72	121.55	122.39	98.70	132.47	106.83
April.....	133.20	107.16	109.46	88.06	118.76	95.54	152.69	122.84	123.85	99.64	134.00	107.80
May ^p	133.21	106.82	109.47	87.79	118.77	95.24	153.09	122.77	124.14	99.55	134.31	107.71
June ^p	135.39	108.31	111.08	88.86	120.49	96.39	154.63	123.70	125.28	100.22	135.51	108.41

¹ The industry series have been adjusted to March 1970 benchmarks (comprehensive counts of employment). To reflect the retroactive tax exemption provisions of the Tax Reform Act of 1971, the spendable earnings series has been revised back to January 1971. Moreover, the Consumer Price Index has been revised back to August 1971, to reflect the retroactive repeal of the automobile excise tax. Because of these revisions, monthly data published in this table beginning with the January 1972 issue of the *Monthly Labor Review* are not comparable with such data in earlier issues. Comparable back data are published in *Employment and Earnings, United States, 1909-71* (BLS Bulletin 1312-8).

Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls.

Spendable average weekly earnings are based on gross average weekly earnings as published in table 22 less the estimated amount of the worker's Federal social security and income tax liability. Since the amount of tax liability depends on the number of dependents supported by the worker as well as on the level of his gross income, spendable earnings have been computed for 2 types of income receivers: (1) a worker with no dependents and (2) a married worker with 3 dependents.

The earnings expressed in 1967 dollars have been adjusted for changes in purchasing power as measured by the Bureau's Consumer Price Index.

These series are described in "The Spendable Earnings Series: A Technical Note on its Calculation," in *Employment and Earnings and Monthly Report on the Labor Force*, February 1969, pp. 6-13.

NOTE: For additional detail, see *Employment and Earnings*, table C-5.

P=preliminary.

24. Consumer and Wholesale Price Indexes, annual averages and changes, 1949-71¹

[Indexes: 1967 = 100]

Year	Consumer prices						Wholesale prices					
	All items		Commodities		Services		All commodities		Farm products, processed foods and feeds		Industrial commodities	
	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change
1949	71.4	-1.0	78.3	-2.6	56.9	4.8	78.7	-5.0	89.6	-11.7	75.3	-2.1
1950	72.1	1.0	78.8	.6	58.7	3.2	81.8	3.9	93.9	4.8	78.0	3.6
1951	77.8	7.9	85.9	9.0	61.8	5.3	91.9	11.4	106.9	13.8	86.1	10.4
1952	79.5	2.2	87.0	1.3	64.5	4.4	88.6	-2.7	102.7	-3.9	84.1	-2.3
1953	80.1	.8	86.7	-.3	67.3	4.3	87.4	-1.4	96.0	-6.5	84.8	.8
1954	80.5	.5	85.9	-.9	69.5	3.3	87.6	.2	95.7	-.3	85.0	.2
1955	80.2	-.4	85.1	-.9	70.9	2.0	87.8	.2	91.2	-4.7	86.9	2.2
1956	81.4	1.5	85.9	.9	72.7	2.5	90.7	3.3	90.6	-.7	90.8	4.5
1957	84.3	3.6	88.6	3.1	75.6	4.0	93.3	2.9	93.7	3.4	93.3	2.8
1958	86.6	2.7	90.6	2.3	78.5	3.8	94.6	1.4	98.1	4.7	93.6	.3
1959	87.3	.8	90.7	.1	80.8	2.9	94.8	.2	93.5	-4.7	95.3	1.8
1960	88.7	1.6	91.5	.9	83.5	3.3	94.9	.1	93.7	.2	95.3	.0
1961	89.6	1.0	92.0	.5	85.2	2.0	94.5	-.4	93.7	.0	94.8	-.5
1962	90.6	1.1	92.8	.9	86.8	1.9	94.8	.3	94.7	1.1	94.8	.0
1963	91.7	1.2	93.6	.9	88.5	2.0	94.5	-.3	93.8	-1.0	94.7	-.1
1964	92.9	1.3	94.6	1.1	90.2	1.9	94.7	.2	93.2	-.6	95.2	.5
1965	94.5	1.7	95.7	1.2	92.2	2.2	96.6	2.0	97.1	4.2	96.4	1.3
1966	97.2	2.9	98.2	2.6	95.8	3.9	99.8	3.3	103.5	6.6	98.5	2.2
1967	100.0	2.9	100.0	1.8	100.0	4.4	100.0	.2	100.0	-3.4	100.0	1.5
1968	104.2	4.2	103.7	3.7	105.2	5.2	102.5	2.5	102.4	2.4	102.5	2.5
1969	109.8	5.4	108.4	4.5	112.5	6.9	106.5	3.9	108.0	5.5	106.0	3.4
1970	116.3	5.9	113.5	4.7	121.6	8.1	110.4	3.7	111.6	5.3	110.0	3.8
1971	121.3	4.3	117.4	3.4	128.4	5.6	113.9	3.2	113.8	2.0	114.0	3.6

¹ Historical price changes are shown in greater detail and for earlier years in the Bureau's Handbook of Labor Statistics, 1971 (BLS Bulletin 1705).

25. Consumer Price Index—U.S. average—general summary and groups, subgroups, and selected items

[1967 = 100 unless otherwise specified]

General summary	Annual average 1971	1971							1972					
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
All items	121.3	121.5	121.8	122.1	122.2	122.4	122.6	123.1	123.2	123.8	124.0	124.3	124.7	125.0
All items (1957-59=100)	141.0	141.3	141.7	142.0	142.1	142.4	142.6	143.1	143.3	143.9	144.3	144.6	145.0	145.4
Food	118.4	119.2	119.8	120.0	119.1	118.9	119.0	120.3	120.3	122.2	122.4	122.4	122.3	123.0
Food at home	116.4	117.4	118.1	118.1	116.9	116.6	116.7	118.2	118.2	120.5	120.6	120.4	120.2	120.9
Food away from home	126.1	125.9	126.5	127.1	127.6	128.0	128.2	128.3	128.6	128.9	129.4	130.0	130.4	130.9
Housing	124.3	124.0	124.5	125.1	125.5	125.9	126.4	126.8	127.3	127.6	127.9	128.2	128.5	129.0
Rent	115.2	115.2	115.4	115.8	116.1	116.4	116.6	116.9	117.1	117.5	117.7	118.1	118.3	118.8
Homeownership	133.7	133.0	133.5	134.4	135.1	135.7	136.7	137.0	137.8	138.0	138.2	138.5	138.9	139.6
Apparel and upkeep	119.8	120.1	119.3	119.0	120.6	121.6	121.9	121.8	120.2	120.7	121.3	121.8	122.5	122.1
Transportation	118.6	119.6	119.5	119.3	118.6	119.3	118.8	118.6	119.0	118.3	118.4	118.6	119.5	120.0
Health and recreation	122.2	122.1	122.6	123.1	123.6	123.5	123.7	123.9	124.3	124.7	125.0	125.5	125.8	126.1
Medical care	128.4	128.6	129.3	130.0	130.4	129.6	129.7	130.1	130.5	131.0	131.4	131.7	132.0	132.4
Special groups														
All items less shelter	119.3	119.8	120.0	120.2	120.2	120.3	120.4	120.9	120.9	121.5	121.8	122.1	122.4	122.7
All items less food	122.1	122.2	122.4	122.7	123.1	123.5	123.7	123.9	124.0	124.2	124.5	124.9	125.4	125.7
All items less medical care	120.9	121.1	121.4	121.6	121.7	122.1	122.3	122.7	122.8	123.4	123.6	123.9	124.3	124.6
Commodities	117.4	117.9	118.1	118.2	118.1	118.4	118.5	118.9	118.7	119.4	119.7	119.9	120.3	120.7
Nondurables	117.7	118.1	118.3	118.6	118.7	118.8	118.9	119.5	119.2	120.3	120.6	120.7	121.0	121.2
Durables	116.5	117.4	117.5	116.9	116.4	117.1	117.4	117.2	117.3	117.1	117.3	117.7	118.4	119.2
Services	128.4	128.2	128.8	129.4	129.8	130.0	130.4	130.8	131.5	131.8	132.0	132.4	132.7	133.1
Commodities less food	116.8	117.1	117.0	117.1	117.4	118.0	118.1	118.1	117.7	117.8	118.2	118.5	119.2	119.4
Nondurables less food	117.0	116.9	116.7	117.2	118.2	118.7	118.7	118.8	118.1	118.4	118.9	119.1	119.7	119.5
Apparel commodities	120.1	120.4	119.5	119.1	120.9	122.0	122.4	122.2	120.3	120.9	121.6	121.2	122.9	122.4
Apparel commodities less footwear	119.9	120.1	119.3	118.6	120.7	121.9	122.3	122.1	119.9	120.6	121.3	121.8	122.6	122.0
Nondurables less food and apparel	115.2	114.9	115.1	116.2	116.6	116.8	116.5	116.8	116.8	117.0	117.3	117.4	117.9	117.9
Household durables	112.9	113.1	113.2	113.4	113.5	113.6	113.6	113.7	113.7	113.6	114.1	114.4	114.8	115.1
Housefurnishings	114.3	114.7	114.7	114.8	114.9	115.1	115.1	115.3	114.9	115.0	115.6	115.9	116.2	116.4
Services less rent	130.9	130.6	131.2	131.9	132.3	132.5	132.9	133.3	134.1	134.4	134.7	135.0	135.3	135.7
Household services less rent	132.6	131.6	132.5	133.6	134.2	134.7	135.4	136.1	137.0	137.4	137.7	138.1	138.5	138.9
Transportation services	133.1	134.1	134.3	134.1	133.8	133.9	134.0	134.2	135.6	135.7	135.5	135.6	135.8	136.0
Medical care services	133.3	133.5	134.4	135.1	135.6	134.6	134.8	135.3	135.8	136.4	136.9	137.3	137.6	138.0
Other services	122.5	122.5	122.6	122.8	123.7	123.8	124.0	124.1	124.3	124.5	124.7	125.1	125.3	125.6

26. Consumer Price Index¹—U.S. city average, and selected areas

[1967 = 100 unless otherwise specified]

Area ²	Annual average 1971	1971						1972						
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
All items														
U.S. city average³	121.3	121.5	121.8	*122.1	*122.2	*122.4	122.6	123.1	123.2	123.8	124.0	124.3	124.7	125.0
Atlanta, Ga.	121.7	122.3	(4)	(4)	*122.0	(4)	(4)	123.5	(4)	(4)	132.8	(4)	(4)	124.8
Baltimore, Md.	123.4	123.5	(4)	(4)	*124.4	(4)	(4)	125.1	(4)	(4)	124.9	(4)	(4)	125.5
Boston, Mass.	122.8	(4)	122.9	(4)	(4)	*124.5	(4)	124.9	(4)	(4)	(4)	126.2	(4)	(4)
Buffalo, N.Y.	121.8	(4)	(4)	(4)	(4)	(4)	(4)	123.1	(4)	(4)	124.9	(4)	(4)	126.1
Chicago, Ill.-Northwestern Ind.	120.8	120.9	120.9	*121.5	*121.7	*121.7	121.8	122.3	122.1	123.0	123.2	123.3	123.7	124.2
Cincinnati, Ohio-Kentucky	120.7	(4)	(4)	(4)	*121.4	(4)	(4)	121.9	(4)	(4)	123.0	(4)	(4)	124.6
Cleveland, Ohio	122.8	(4)	(4)	*123.2	(4)	(4)	124.4	(4)	(4)	125.9	(4)	(4)	126.1	(4)
Dallas, Tex.	121.3	(4)	(4)	*122.7	(4)	(4)	122.4	(4)	(4)	123.7	(4)	(4)	124.6	(4)
Detroit, Mich.	121.7	121.9	121.8	*122.8	*122.8	*122.8	123.4	123.7	124.2	124.9	125.0	125.0	125.5	126.0
Honolulu, Hawaii	118.9	118.5	(4)	(4)	*121.2	(4)	(4)	121.1	(4)	(4)	122.4	(4)	(4)	122.2
Houston, Tex.	120.9	(4)	121.3	(4)	(4)	*122.4	(4)	(4)	123.2	(4)	(4)	124.8	(4)	(4)
Kansas City, Mo.-Kansas	120.5	120.6	(4)	(4)	*121.5	(4)	(4)	121.4	(4)	(4)	122.4	(4)	(4)	123.9
Los Angeles-Long Beach, Calif.	118.5	118.7	119.1	*119.5	*120.0	*120.3	120.1	120.2	120.4	121.2	121.3	121.4	121.7	
Milwaukee, Wis.	120.1	(4)	(4)	*121.4	(4)	(4)	120.9	(4)	(4)	122.2	(4)	(4)	122.8	(4)
Minneapolis-St. Paul, Minn.	121.7	(4)	121.9	(4)	(4)	*123.4	(4)	(4)	123.8	(4)	(4)	124.2	(4)	(4)
New York, N.Y.-Northeastern N.J.	125.9	126.1	126.8	*126.9	*127.3	*127.5	127.6	128.0	128.4	129.5	130.0	130.3	130.5	130.9
Philadelphia, Pa.-N.J.	123.5	124.1	123.7	*123.6	*124.6	*125.0	124.7	125.0	124.7	125.2	125.8	126.0	126.1	126.5
Pittsburgh, Pa.	121.5	(4)	121.8	(4)	(4)	*122.9	(4)	(4)	123.2	(4)	(4)	124.7	(4)	(4)
Portland, Oreg.-Wash. ⁵	116.1	(4)	116.2	(4)	(4)	*117.4	(4)	(4)	118.1	(4)	(4)	118.4	(4)	(4)
St. Louis, Mo.-Ill.	119.6	119.9	(4)	(4)	*120.5	(4)	(4)	120.9	(4)	(4)	120.8	(4)	(4)	121.9
San Diego, Calif.	119.9	(4)	(4)	*120.7	(4)	(4)	120.9	(4)	(4)	122.3	(4)	(4)	123.8	(4)
San Francisco-Oakland, Calif.	120.2	119.9	(4)	(4)	*120.9	(4)	(4)	121.8	(4)	(4)	122.9	(4)	(4)	124.3
Scranton, Pa. ⁶	121.4	(4)	(4)	*123.2	(4)	(4)	122.6	(4)	(4)	123.6	(4)	(4)	125.1	(4)
Seattle, Wash.	116.4	(4)	(4)	*117.6	(4)	(4)	117.6	(4)	(4)	119.0	(4)	(4)	118.8	(4)
Washington, D.C.-Md.-Va.	122.7	(4)	(4)	*123.5	(4)	(4)	124.2	(4)	(4)	124.7	(4)	(4)	125.6	(4)
Food														
U.S. city average	118.4	119.2	119.8	120.0	119.1	118.9	119.0	120.3	120.3	122.2	122.4	122.4	122.3	123.0
Atlanta, Ga.	118.1	118.8	119.1	119.3	119.0	118.4	118.7	119.6	120.6	122.1	122.6	123.7	123.3	123.6
Baltimore, Md.	121.0	121.5	122.0	122.6	122.2	121.8	121.7	123.2	121.9	123.2	123.9	122.7	122.7	123.2
Boston, Mass.	118.5	118.6	119.0	119.2	118.5	118.4	118.8	119.9	119.5	121.2	122.3	122.5	122.8	122.9
Buffalo, N.Y.	119.7	121.0	121.4	122.0	119.6	119.8	119.8	120.9	121.1	122.9	122.8	122.5	122.5	123.2
Chicago, Ill.-Northwestern Ind.	118.5	119.8	120.5	120.7	119.4	118.9	119.2	119.6	119.8	122.8	122.7	122.3	122.3	123.9
Cincinnati, Ohio-Kentucky	118.4	119.3	119.2	119.7	118.7	118.9	118.9	120.7	120.5	123.6	123.6	123.2	123.5	124.4
Cleveland, Ohio	118.9	119.4	120.3	119.0	118.2	118.1	118.4	119.2	118.9	121.7	122.1	121.7	121.6	122.9
Dallas, Tex.	117.8	117.9	118.8	119.5	118.6	118.7	118.5	120.6	120.8	122.5	122.1	121.4	121.6	122.1
Detroit, Mich.	117.3	118.6	118.9	119.4	118.4	117.8	117.8	119.2	119.7	122.1	122.0	121.3	121.1	122.4
Honolulu, Hawaii	118.1	116.6	116.5	119.6	121.4	121.8	120.4	120.9	120.7	123.7	123.2	122.8	122.3	121.3
Houston, Tex.	118.8	118.7	120.1	120.5	120.1	120.2	120.0	121.5	121.9	123.2	124.0	123.6	123.2	123.6
Kansas City, Mo.-Kansas	118.6	118.8	119.6	120.3	120.0	119.5	119.8	120.8	120.9	122.8	122.8	122.5	122.0	123.2
Los Angeles-Long Beach, Calif.	114.9	115.2	115.8	115.8	115.1	115.3	115.8	116.6	117.5	118.9	118.8	119.2	119.0	120.0
Milwaukee, Wis.	115.7	116.7	117.6	117.6	116.8	116.3	116.3	117.2	117.0	119.4	119.4	119.1	119.4	120.1
Minneapolis-St. Paul, Minn.	119.2	120.2	121.6	122.1	119.5	119.1	119.2	120.6	120.5	122.0	122.8	122.9	123.3	124.1
New York, N.Y.-Northeastern N.J.	123.1	123.9	124.8	124.9	124.2	124.3	124.3	125.2	125.2	126.9	127.4	127.4	127.3	128.1
Philadelphia, Pa.-N.J.	120.1	120.8	121.4	121.8	121.4	121.0	120.6	122.0	122.2	123.8	124.3	124.2	123.0	123.0
Pittsburgh, Pa.	118.9	119.9	120.3	120.1	119.4	119.0	119.4	120.9	120.9	122.6	123.1	122.4	121.5	121.5
Portland, Oreg.-Wash. ⁵	113.4		114.6			112.5				114.9		116.4		
St. Louis, Mo.-Ill.	118.0	118.3	119.6	120.0	118.8	118.3	118.5	119.4	119.7	120.9	120.8	121.0	121.4	122.0
San Diego, Calif.	117.3	117.9	118.3	118.2	117.8	117.7	118.6	119.5	120.0	121.8	121.8	122.0	122.3	123.4
San Francisco-Oakland, Calif.	116.1	116.7	117.2	116.6	115.5	116.3	116.9	118.9	119.1	120.2	119.8	119.7	120.9	121.2
Scranton, Pa. ⁶	120.1			122.8			119.6			123.6			121.7	
Seattle, Wash.	115.9	116.5	116.7	117.0	116.8	116.3	116.5	118.2	118.4	119.6	119.0	119.1	119.3	120.4
Washington, D.C.-Md.-Va.	120.2	121.4	121.4	122.2	121.3	121.4	121.2	122.0	120.9	123.7	124.0	123.8	122.9	124.8

¹ See table 25. Indexes measure time-to-time changes in prices. They do not indicate whether it costs more to live in one area than in another.

² The areas listed include not only the central city but the entire urban portion of the Standard Metropolitan Statistical Area, as defined for the 1960 Census of Population; except that the Standard Consolidated Area is used for New York and Chicago.

³ Average of 56 "cities" (metropolitan areas and nonmetropolitan urban places beginning January 1966).

⁴ All items indexes are computed monthly for 5 areas and once every 3 months on a rotating cycle for other areas.

⁵ Old series (old market basket components).

⁶ In the March and April 1971 Monthly Labor Review, these indexes were on a 1957-59=100 base. Indexes are now on a 1967=100 base.

⁷ revised. These figures have been recalculated to reflect the retroactive repeal of the automobile excise tax. Indexes for August recalculated to reflect adjustments for refunds on new cars in the August 15-31 period.

27. Wholesale Price Index,¹ by group and subgroup of commodities[1967 = 100 unless otherwise specified]²

Code	Commodity group	Annual average 1971	1971								1972					
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
	All commodities.....	113.9	114.3	114.6	114.9	114.5	114.4	114.5	115.4	116.3	117.3	117.4	117.5	118.2	118.8	
	All commodities (1957-59=100).....	120.9	121.3	121.6	121.9	121.5	121.4	121.5	122.4	123.4	124.5	124.6	124.7	125.4	126.0	
	Farm products and processed foods and feeds.....	113.8	115.4	115.0	114.6	113.0	113.0	113.6	115.9	117.4	119.6	119.1	118.3	120.0	121.3	
	Industrial commodities.....	114.0	113.9	114.5	115.1	115.0	115.0	114.9	115.3	115.9	116.5	116.8	117.3	117.6	117.9	
	FARM PRODUCTS AND PROCESSED FOODS AND FEEDS															
	Farm products.....	112.9	116.0	113.4	113.2	110.5	111.3	112.2	115.8	117.8	120.7	119.7	119.1	122.2	124.0	
01-1	Fresh and dried fruits and vegetables.....	120.1	136.1	109.3	115.9	103.6	115.8	127.1	126.3	124.9	127.5	112.8	117.6	120.6	121.7	
01-2	Grains.....	100.9	109.4	102.5	92.8	89.0	88.3	87.8	95.3	94.1	93.0	93.8	96.0	97.5	94.5	
01-3	Livestock.....	118.3	118.9	121.3	121.3	119.1	120.9	121.0	124.7	132.2	139.6	136.7	133.8	139.8	146.4	
01-4	Live poultry.....	100.3	108.1	121.1	100.8	102.8	102.9	92.3	87.2	94.3	105.4	107.6	94.1	96.3	102.9	
01-5	Plant and animal fibers.....	92.8	92.3	92.6	93.4	95.2	93.5	97.3	102.5	109.5	113.2	114.3	122.1	130.1	127.3	
01-6	Fluid milk.....	118.8	119.1	119.5	119.3	119.2	119.2	118.8	119.0	120.5	120.5	121.8	122.1	122.5	121.7	
01-7	Eggs.....	100.8	98.0	89.4	110.1	107.8	108.8	88.5	114.4	92.6	91.9	107.7	87.2	90.6	91.9	
01-8	Hay, hayseeds, and oilseeds.....	109.2	109.9	114.4	114.3	108.9	107.9	109.0	109.2	108.7	110.2	114.4	118.5	116.9	116.9	
01-9	Other farm products.....	115.4	113.7	113.3	113.9	115.6	115.4	111.8	117.3	118.0	116.8	117.5	118.0	119.5	119.9	
	Processed foods and feeds.....	114.3	114.9	116.0	115.4	114.6	114.1	114.4	115.9	117.2	118.8	118.6	117.7	118.6	119.6	
02-1	Cereal and bakery products.....	111.4	111.5	111.5	111.4	111.3	111.3	111.5	111.6	112.2	112.4	112.6	112.8	113.3	113.3	
02-2	Meats, poultry, and fish.....	116.0	116.7	119.6	117.7	117.5	116.9	117.1	120.4	125.4	130.5	127.3	123.6	126.8	131.4	
02-3	Dairy products.....	115.4	116.1	116.2	115.4	115.4	116.4	116.3	117.4	117.3	117.5	118.0	117.5	117.4	115.3	
02-4	Processed fruits and vegetables.....	114.3	115.4	115.9	116.2	115.8	115.3	115.4	115.8	116.0	116.1	116.7	118.3	119.0	119.5	
02-5	Sugar and confectionery.....	119.2	119.0	119.4	120.5	119.7	118.7	119.1	120.2	120.1	121.1	121.9	121.1	120.8	121.3	
02-6	Beverages and beverage materials.....	115.8	115.7	115.9	116.1	116.0	116.4	116.6	116.4	116.4	116.8	116.7	117.2	117.2	117.8	
02-71	Animal fats and oils.....	130.9	123.9	135.7	144.0	136.5	132.1	130.1	122.3	121.4	133.5	130.4	127.8	127.3	125.8	
02-72	Crude vegetable oils.....	128.8	127.2	136.7	147.5	135.6	128.9	128.6	118.2	114.2	116.8	115.6	118.9	112.8	112.0	
02-73	Refined vegetable oils.....	134.8	131.6	135.5	140.7	133.6	127.9	130.4	122.7	121.0	120.1	120.6	120.9	119.6	119.1	
02-74	Vegetable oil end products.....	121.1	118.5	122.8	124.6	123.3	122.8	122.8	122.0	121.7	121.1	120.8	120.7	120.7	121.5	
02-8	Miscellaneous processed foods.....	113.2	113.9	113.8	113.8	113.0	112.7	113.0	113.1	113.6	113.8	113.7	113.8	115.0	114.4	
02-9	Manufactured animal feeds.....	104.4	107.4	106.9	104.7	101.3	98.7	100.3	104.5	103.8	103.7	108.5	108.5	108.4	107.7	
	INDUSTRIAL COMMODITIES															
	Textile products and apparel.....	108.6	108.5	109.2	109.7	109.7	109.6	109.8	110.6	111.3	112.0	112.1	112.6	113.3	113.6	
03-1	Cotton products.....	110.6	110.9	111.9	112.5	112.2	112.2	112.5	113.6	116.7	118.0	119.6	120.5	121.5	122.6	
03-2	Wool products.....	93.5	93.4	92.6	92.7	92.5	92.4	92.3	91.5	92.0	92.2	92.0	93.0	98.3	99.2	
03-3	Manmade fiber textile products.....	100.8	101.4	101.9	103.1	103.1	102.5	103.2	104.3	105.4	105.9	106.1	107.2	108.0	108.6	
03-5	Apparel.....	112.9	112.3	113.3	113.6	113.8	113.8	113.8	113.8	113.8	114.0	114.1	114.1	114.3	114.4	
03-6	Textile housefurnishings.....	104.2	104.5	104.8	104.8	104.1	104.1	104.1	106.1	106.2	108.5	108.7	108.7	109.3	109.5	
03-7	Miscellaneous textile products.....	117.2	118.7	119.9	117.2	119.8	120.8	121.2	136.2	137.4	141.6	130.9	131.1	129.8	125.8	
	Hides, skins, leather, and related products.....	114.0	114.2	114.2	114.4	114.7	114.7	115.1	116.2	117.8	119.1	123.0	127.2	129.5	130.9	
04-1	Hides and skins.....	115.1	114.0	114.0	114.6	117.7	117.2	123.1	128.6	136.0	148.9	173.8	188.6	200.3	204.1	
04-2	Leather.....	112.5	114.4	114.4	114.4	113.4	113.4	113.5	117.0	120.0	120.6	128.4	138.1	137.8	138.6	
04-3	Footwear.....	116.8	116.8	116.8	117.1	117.1	117.1	117.1	118.1	118.1	118.5	120.1	122.4	124.6	125.8	
04-4	Other leather and related products.....	108.3	108.2	108.2	108.2	109.0	109.0	109.1	109.8	110.6	111.2	111.9	113.7	115.3	116.7	
	Fuels and related products and power.....	114.2	114.4	114.4	114.8	115.3	114.8	114.7	115.0	116.0	116.1	116.5	116.9	117.5	118.2	
05-1	Coal.....	181.8	182.5	182.9	182.9	182.9	182.9	182.9	190.2	192.7	192.6	196.2	191.2	191.2	191.2	
05-2	Coke.....	148.7	150.5	150.5	150.5	150.5	150.5	150.5	150.5	155.0	155.0	155.0	155.3	155.3		
05-3	Gas fuels.....	108.0	107.5	107.7	107.2	108.4	108.8	108.8	107.9	110.0	110.2	110.9	112.5	113.0	112.9	
05-4	Electric power.....	113.6	113.0	113.5	115.3	116.4	116.3	116.2	116.3	118.9	120.0	120.0	120.5	121.2	121.5	
05-61	Crude petroleum.....	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	
05-7	Petroleum products, refined.....	106.8	107.4	107.2	107.3	107.3	106.3	106.2	106.1	106.1	105.5	106.3	106.6	107.3	108.5	
	Chemicals and allied products.....	104.2	104.4	104.4	104.3	104.3	104.2	103.8	103.4	103.4	103.5	103.4	104.1	104.4	104.3	
06-1	Industrial chemicals.....	102.0	102.2	102.4	102.4	102.4	102.4	101.7	101.1	101.4	101.4	101.0	101.5	101.4	101.4	
06-21	Prepared paint.....	115.6	115.9	115.9	115.9	115.9	115.9	115.9	115.9	116.2	117.3	117.9	118.3	118.3	118.3	
06-22	Paint materials.....	101.5	99.4	99.8	99.8	99.7	99.7	99.7	101.9	102.7	102.7	102.7	103.0	103.5		
06-3	Drugs and pharmaceuticals.....	102.4	102.3	102.6	102.7	102.6	102.6	102.4	102.5	102.3	102.2	102.5	102.4	102.8		
06-4	Fats and oils, inedible.....	133.5	132.0	130.8	134.2	132.9	129.0	125.3	115.9	113.3	110.7	103.5	112.2	116.0		
06-5	Agricultural chemicals and chemical products.....	92.2	94.1	93.4	91.0	91.0	90.4	90.3	90.3	90.3	90.2	90.6	92.2	92.1	92.3	
06-6	Plastic resins and materials.....	88.9	88.1	88.6	89.0	89.5	89.9	89.2	89.0	88.6	89.3	88.9	88.3	88.6	87.9	
06-7	Other chemicals and allied products.....	112.1	112.5	112.5	112.4	112.4	112.5	112.5	112.4	112.4	112.5	112.7	113.5	114.1	113.8	
	Rubber and plastic products.....	109.2	108.7	109.7	109.8	109.7	109.5	109.5	109.4	109.5	109.2	108.9	108.7	108.8	108.9	
07-1	Rubber and rubber products.....	112.2	111.1	113.2	113.7	113.3	113.3	113.3	113.4	113.0	112.9	112.9	112.9	113.0	113.3	
07-11	Crude rubber.....	99.3	99.4	98.8	99.6	99.3	99.0	98.5	98.5	99.2	98.8	98.5	98.2	98.6	98.6	
07-12	Tires and tubes.....	109.2	107.5	111.2	111.4	110.8	110.8	110.8	110.3	108.4	108.4	108.4	108.4	108.4	108.7	
07-13	Miscellaneous rubber products.....	118.0	110.7	118.7	119.3	119.8	119.2	119.2	119.2	119.7	120.4	120.4	120.4	120.4	120.8	
07-21	Plastic construction products.....	94.7	93.6	94.0	94.1	94.7	94.6	94.1	93.8	93.7	93.8	93.6	93.6	93.3	93.5	
07-22	Unsupported plastic film and sheeting.....	101.1	101.9	100.6	100.1	100.0	100.0	100.1	100.0	100.0	99.9	98.9	98.4	98.5	98.1	
07-23	Laminated plastic sheets, high pressure.....	99.2	99.2	99.7	98.6	98.6	98.2	98.0	97.9	98.2	98.6	98.1	98.4	98.4	97.9	
	Lumber and wood products.....	127.0	126.1	130.6	134.6	134.3	131.8	131.3	132.7	134.9	137.7	139.5	141.1	142.7	144.2	
08-1	Lumber.....	135.5	134.4	142.5	146.7	146.8	142.7	141.9	143.8	146.9	150.4	152.4	155.1	157.0	159.0	
08-2	Millwork.....	120.7	122.2	122.8	123.8	123.7	123.7	123.7	124.3	124.9	125.5	125.8	126.6	127.6	128.4	

27. Continued—Wholesale Price Index,¹ by group and subgroup of commodities

[1967 = 100 unless otherwise specified]²

Code	Commodity group	Annual average 1971	1971						1972						
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
INDUSTRIAL COMMODITIES—Continued															
09	Pulp, paper, and allied products	110.1	110.2	110.5	110.6	110.6	110.6	110.6	110.7	110.8	111.6	112.3	112.8	113.2	113.5
09-1	Pulp, paper, and products, excluding building paper and board.....	110.4	110.5	110.8	110.8	110.8	110.9	110.9	111.0	111.1	111.9	112.5	113.1	113.4	113.8
09-11	Woodpulp.....	112.0	112.4	112.4	112.4	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
09-12	Wastepaper.....	111.9	112.3	111.8	112.8	114.5	117.2	117.2	124.6	124.9	126.6	129.3	131.0	130.5	137.7
09-13	Paper.....	114.1	114.3	114.6	114.7	114.7	114.7	114.7	114.7	114.7	115.3	115.7	115.9	115.9	116.2
09-14	Paperboard.....	102.4	102.8	102.8	102.8	102.8	102.9	102.9	102.7	102.7	103.5	103.6	105.6	105.8	106.0
09-15	Converted paper and paperboard products.....	109.7	109.8	110.1	110.1	110.2	110.1	110.1	110.1	110.3	111.4	112.2	112.7	113.3	113.5
09-2	Building paper and board.....	103.0	103.2	103.6	104.3	104.5	104.6	104.7	104.6	104.7	104.7	105.6	106.1	106.5	106.6
10	Metals and metal products	119.0	118.5	119.4	121.1	121.1	121.0	120.9	120.8	121.4	122.6	123.4	123.5	123.6	123.6
10-1	Iron and steel.....	121.8	120.3	121.9	125.3	125.6	125.5	125.3	125.3	126.8	128.2	128.3	128.3	128.3	128.1
10-13	Steel mill products.....	123.0	121.1	123.4	128.1	128.2	128.1	128.2	128.2	129.6	131.0	130.9	130.9	130.7	130.4
10-2	Nonferrous metals.....	116.0	116.4	116.9	117.1	116.5	116.3	116.0	114.9	114.4	115.0	117.2	117.6	117.8	117.6
10-3	Metal containers.....	121.7	123.0	123.0	124.2	124.2	124.2	124.2	124.2	124.2	127.1	127.1	127.3	127.3	128.8
10-4	Hardware.....	116.5	115.8	116.7	117.7	117.7	117.7	117.7	117.7	117.7	118.4	119.0	119.2	119.6	120.2
10-5	Plumbing fixtures and brass fittings.....	116.4	116.8	117.9	118.3	118.3	118.3	118.3	118.4	118.2	118.6	118.9	119.0	119.0	119.7
10-6	Heating equipment.....	115.5	115.2	115.9	116.8	116.7	116.3	116.5	116.3	115.9	116.2	117.0	117.9	118.1	118.6
10-7	Fabricated structural metal products.....	118.2	117.9	118.2	119.6	120.3	120.3	120.3	120.4	121.6	122.0	122.1	122.1	122.0	122.2
10-8	Miscellaneous metal products.....	119.0	118.7	119.3	119.8	119.9	119.7	119.7	120.9	121.3	123.2	124.1	124.3	124.4	124.4
11	Machinery and equipment	115.5	115.5	115.7	116.1	116.0	116.0	115.9	116.2	116.5	117.1	117.3	117.6	117.9	118.1
11-1	Agricultural machinery and equipment.....	117.2	116.9	117.4	117.5	117.5	117.5	117.5	118.6	119.9	121.5	122.0	122.1	122.3	122.7
11-2	Construction machinery and equipment.....	121.4	121.2	121.6	121.9	121.8	121.8	122.0	123.2	124.3	124.7	125.0	125.7	125.6	125.9
11-3	Metalworking machinery and equipment.....	117.3	117.9	117.7	118.1	118.0	118.1	118.2	118.4	118.5	118.9	119.4	119.7	120.0	120.2
11-4	General purpose machinery and equipment.....	119.1	119.3	119.8	120.3	120.2	120.2	120.2	120.5	120.8	121.2	121.5	121.9	122.2	122.7
11-6	Special industry machinery and equipment.....	120.9	120.9	121.6	121.6	121.7	122.0	122.0	122.1	122.6	123.1	123.0	123.4	123.5	123.7
11-7	Electrical machinery and equipment.....	109.5	109.4	109.5	109.9	109.7	109.6	109.3	109.3	109.3	109.5	110.0	110.2	110.5	110.6
11-9	Miscellaneous machinery.....	117.2	117.2	117.3	118.0	117.8	117.8	117.8	117.9	118.3	118.8	119.0	119.6	120.3	120.7
12	Furniture and household durables	109.9	109.8	110.0	110.2	110.2	110.2	110.2	110.2	110.2	110.8	110.9	111.0	111.1	111.2
12-1	Household furniture.....	114.8	115.2	115.3	115.5	115.6	115.6	115.4	115.5	116.0	116.7	116.8	116.9	117.1	117.2
12-2	Commercial furniture.....	118.1	118.1	118.1	118.2	118.2	118.2	118.2	118.2	118.3	118.3	118.7	119.2	119.4	119.5
12-3	Floor coverings.....	98.8	98.4	98.2	97.6	97.6	97.6	97.6	97.9	98.1	98.2	98.2	98.2	98.2	98.6
12-4	Household appliances.....	107.2	107.1	107.0	107.4	107.6	107.5	107.6	107.4	106.9	107.5	107.4	107.5	107.2	107.1
12-5	Home electronic equipment.....	93.8	93.6	93.9	94.0	93.8	93.8	93.4	93.4	93.3	92.9	93.0	92.8	92.9	92.6
12-6	Other household durable goods.....	120.9	120.1	121.6	122.1	122.1	121.9	122.0	122.1	122.3	124.1	124.5	124.5	125.0	125.4
13	Nonmetallic mineral products	122.4	122.2	123.3	124.2	124.2	124.1	124.0	124.2	124.3	124.6	124.8	125.6	125.9	125.8
13-11	Flat glass.....	123.9	122.5	122.5	124.3	124.3	124.3	123.1	123.6	123.6	123.6	122.4	121.1	121.5	121.1
13-2	Concrete ingredients.....	121.9	121.5	123.3	124.0	124.1	124.1	124.3	124.2	124.4	124.6	124.6	126.4	126.7	126.8
13-3	Concrete products.....	120.6	120.1	121.5	122.8	122.6	122.6	122.6	122.9	123.4	123.8	124.5	125.1	125.1	125.3
13-4	Structural clay products excluding refrac- tories.....	114.2	114.5	114.5	114.9	114.9	114.9	114.9	114.9	114.8	116.1	116.2	117.2	117.2	117.4
13-5	Refractories.....	126.9	126.9	126.9	126.9	126.9	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1
13-6	Asphalt roofing.....	125.5	130.7	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2	131.2
13-7	Gypsum products.....	106.8	104.0	112.7	114.3	114.5	113.6	112.1	114.1	113.4	112.8	115.3	114.9	113.4	113.9
13-8	Glass containers.....	131.6	131.5	131.5	131.5	131.5	131.5	131.5	131.5	131.5	131.5	131.5	136.2	136.2	136.2
13-9	Other nonmetallic minerals.....	124.1	124.8	125.6	125.7	125.7	125.7	125.6	125.6	125.7	125.9	126.4	126.4	128.4	127.4
14	Transportation equipment ⁵	110.3	110.0	110.3	110.5	109.6	110.7	110.8	112.9	113.4	113.6	113.6	113.7	113.8	114.2
14-1	Motor vehicles and equipment.....	114.7	114.4	114.7	114.9	113.8	115.2	115.3	117.5	117.9	118.0	118.0	118.0	118.1	118.5
14-4	Railroad equipment.....	121.1	120.8	121.5	122.5	122.5	122.5	122.5	122.6	123.7	123.7	127.3	128.4	129.6	129.6
15	Miscellaneous products	112.8	112.6	112.8	113.0	113.0	113.0	113.1	113.2	113.7	114.0	114.2	114.1	114.1	114.2
15-1	Toys, sporting goods, small arms, ammuni- tion.....	112.6	112.6	112.6	112.6	112.6	112.6	112.8	113.1	113.5	114.0	114.5	114.0	114.1	114.4
15-2	Tobacco products.....	116.7	116.5	116.6	116.8	116.8	116.8	116.8	116.7	117.4	117.4	117.4	117.4	117.5	117.5
15-3	Notions.....	111.6	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7	111.7
15-4	Photographic equipment and supplies.....	106.1	106.0	106.2	106.3	106.3	106.3	106.3	106.5	106.6	106.7	106.9	106.2	106.2	106.2
15-9	Other miscellaneous products.....	112.3	111.9	112.4	112.9	112.9	112.9	112.9	113.0	113.9	114.4	114.5	115.0	114.9	115.2

¹ As of January 1967, the index incorporated a revised weighting structure reflecting 1963 values of shipments. Changes also were made in the classification structure, and titles and composition of some indexes were changed. Titles and indexes in this table conform with the revised classification structure, and may differ from data previously published. See Wholesale Prices and Price Indexes, January 1967 (final) and February 1967 (final) for a description of the changes.

² As of January 1971 the indexes were converted from the former base of 1957-59 = 100 to the new base of 1967 = 100. Technical details and earlier data on the 1967 base furnished upon request to the Bureau.

³ December 1969 = 100.

⁴ December 1970 = 100.

⁵ December 1968 = 100.

NOTE: For a description of the general method of computing the monthly Wholesale Price Index, see BLS Handbook of Methods (BLS Bulletin 1711, 1971), Chapter 11.

28. Wholesale Price Index for special commodity groupings¹[1967 = 100 unless otherwise specified]²

Commodity group	Annual average 1971	1971								1972					
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
All commodities—less farm products.....	114.0	114.0	114.7	115.1	114.9	114.8	114.8	115.4	116.1	116.9	117.1	117.3	117.8	118.2	
All foods.....	115.5	117.0	115.8	116.6	115.1	115.3	116.3	118.1	118.9	120.8	119.3	118.0	119.4	120.7	
Processed foods.....	115.6	116.0	117.3	116.9	116.4	116.1	116.2	117.5	119.2	121.2	120.3	119.1	120.2	121.5	
Textile products, excluding hard and bast fiber products.....	103.7	104.1	104.6	105.2	105.0	104.7	105.1	106.1	107.6	108.7	109.1	110.0	111.4	112.2	
Hosiery.....	95.6	95.5	95.5	95.5	95.5	95.5	95.5	96.0	96.0	96.0	96.0	96.0	96.0	96.4	
Underwear and nightwear.....	108.1	108.1	108.3	108.6	108.4	108.4	108.4	108.4	108.7	109.6	109.6	109.6	109.8	110.0	
Refined petroleum products.....	106.8	107.4	107.2	107.3	107.3	106.3	106.2	106.1	106.1	105.5	106.3	106.6	107.3	108.5	
East Coast.....	120.0	121.8	121.8	120.8	120.8	120.4	119.2	119.2	119.2	119.9	119.9	119.9	119.9	119.9	
Mid-Continent.....	103.3	103.1	103.1	103.1	103.1	101.6	101.6	101.6	101.6	100.2	100.2	103.1	103.1	103.1	
Gulf Coast.....	100.0	100.7	100.7	100.7	100.7	98.4	98.4	98.4	98.4	96.9	99.2	99.2	99.2	102.3	
Pacific Coast.....	112.7	113.8	112.4	113.0	113.3	113.8	113.8	112.7	113.3	114.1	113.3	113.3	113.3	113.3	
Midwest.....	112.5	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	113.1	112.8	112.8	112.8	113.0	
Chemicals and allied products, including synthetic rubber and manmade fibers and yarns ³	103.2	103.4	103.5	103.3	103.3	103.3	103.0	102.9	103.0	103.2	103.2	103.7	103.9	103.8	
Pharmaceutical preparations.....	102.2	102.1	102.4	102.5	102.5	102.5	102.3	102.4	102.2	102.1	102.5	102.4	102.8	103.1	
Lumber and wood products, excluding millwork and other wood products ⁴	130.1	128.2	134.7	140.0	139.7	135.9	135.3	137.2	140.1	143.9	146.4	148.4	150.2	152.1	
Special metals and metal products ⁵	117.6	117.2	117.9	119.0	118.7	119.0	119.0	119.7	120.3	121.1	121.6	121.7	121.8	121.9	
Copper and copper products ⁶	116.6	117.7	118.4	117.8	117.0	116.7	116.0	114.0	115.0	116.3	120.1	119.9	119.4	118.8	
Machinery and motive products.....	115.3	115.2	115.5	115.8	115.3	115.8	115.8	116.7	117.2	117.6	117.7	117.9	118.2	118.5	
Machinery and equipment, except electrical.....	118.9	118.9	119.3	119.6	119.6	119.6	119.7	120.1	120.6	121.1	121.4	121.8	122.1	122.4	
Agricultural machinery, including tractors.....	117.3	117.0	117.6	117.7	117.7	117.7	117.7	118.9	120.4	122.1	122.6	122.7	122.8	123.2	
Metalworking machinery.....	118.6	119.1	119.2	119.4	119.2	119.3	119.5	119.8	119.9	120.3	120.6	121.2	121.5	121.6	
Numerically controlled machine tools (Dec. 1971 = 100).....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.5	100.6	101.5	102.3	102.3	
Total tractors.....	120.7	120.8	120.8	120.8	120.8	120.8	120.8	122.5	124.1	124.6	125.0	125.4	125.6	125.7	
Industrial valves.....	116.3	117.7	118.1	118.6	118.6	118.6	119.1	119.1	119.1	120.2	120.2	120.2	120.5	121.3	
Industrial fittings.....	122.4	122.2	122.6	122.6	122.6	122.6	122.6	123.0	123.8	123.1	124.2	124.2	121.9	121.9	
Abrasive grinding wheels.....	122.1	123.7	123.7	123.5	123.5	123.5	123.5	123.5	123.5	123.8	126.5	126.8	126.8	126.8	
Construction materials.....	119.5	119.0	120.9	122.9	123.0	122.2	122.0	122.4	123.2	124.2	124.9	125.7	126.2	126.6	

¹ As of January 1967, the index incorporated a revised weighting structure reflecting 1963 values of shipments. Changes were also made in the classification structure, and titles and composition of some indexes were changed. Titles and indexes in this table conform with the revised classification structure, and may differ from data previously published. See Wholesale Prices and Price Indexes, January 1967 (final) and February 1967 (final) for a description of the changes.

² As of January 1971 the indexes were converted from the former base of 1957-59

= 100 to the new base of 1967 = 100. Technical details and earlier data on the 1967 base furnished upon request to the Bureau.

³ Introduced in February 1971.

⁴ Formerly titled "Lumber and wood products, excluding millwork."

⁵ Metals and metal products, agricultural machinery and equipment, and motor vehicles and equipment.

⁶ Formerly titled "Copper and copper base metals."

29. Wholesale Price Index,¹ by durability of product[1967 = 100]²

Commodity group	Annual average 1971	1971								1972					
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
All commodities.....	113.9	114.3	114.6	114.9	114.5	114.4	114.5	115.4	116.3	117.3	117.4	117.5	118.2	118.8	
Total durable goods.....	117.0	116.7	117.5	118.4	118.2	118.2	118.1	118.6	119.2	120.0	120.4	120.7	121.0	121.2	
Total nondurable goods.....	111.7	112.5	112.4	112.4	111.7	111.6	111.8	113.0	114.1	115.3	115.2	115.1	116.2	117.0	
Total manufactures.....	113.8	113.8	114.5	114.9	114.7	114.5	114.5	115.1	115.7	116.5	116.7	116.9	117.4	117.8	
Durable.....	117.0	116.7	117.5	118.5	118.3	118.3	118.3	118.8	119.3	120.0	120.4	120.8	121.0	121.3	
Nondurable.....	110.5	110.8	111.4	111.2	111.0	110.6	110.7	111.3	112.0	112.8	112.9	112.9	113.6	114.3	
Total raw or slightly processed goods.....	114.4	116.3	114.7	114.8	113.2	113.8	114.3	116.8	118.9	120.9	120.7	120.4	122.4	123.3	
Durable.....	112.2	111.5	111.4	110.4	111.1	110.4	108.9	107.4	110.3	113.1	116.2	115.0	115.0	114.1	
Nondurable.....	114.6	116.6	115.0	115.1	113.4	114.0	114.6	117.3	119.3	121.3	121.0	120.7	122.7	123.8	

¹ As of January 1967, the index incorporated a revised weighting structure reflecting 1963 values of shipments. Changes were also made in the classification structure, and titles and composition of some indexes were changed. Titles and indexes in this table conform with the revised classification structure and may differ from data previously published. See Wholesale Prices and Price Indexes, January 1967 (final) and February 1967 (final) for a description of the changes.

² As of January 1971 the indexes were converted from the former base of 1957-59 = 100 to the new base of 1967 = 100. Technical details and earlier data on the 1967 base furnished upon request to the Bureau.

NOTE: For a description of the series by durability of product and data beginning with 1947, see Wholesale Prices and Price Indexes, 1957 (BLS Bulletin 1235, 1958).

30. Wholesale Price Index,¹ by stage of processing[1967 = 100]²

Commodity group	Annual average 1971	1971						1972						
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
All commodities.....	113.9	114.3	114.6	114.9	114.5	114.4	114.5	115.4	116.3	117.3	117.4	117.5	118.2	118.8
Crude materials for further processing.....	115.0	116.9	116.6	115.2	113.9	114.3	114.3	117.0	120.2	123.1	123.1	123.0	125.5	127.2
RAW MATERIALS														
Foodstuffs and feedstuffs.....	114.2	117.1	116.6	114.5	112.1	112.6	112.7	115.8	119.3	122.9	122.0	121.0	124.0	126.7
Nonfood materials except fuel.....	110.5	110.1	110.4	110.2	111.1	111.1	111.1	112.8	115.4	117.3	119.5	121.3	123.2	122.7
Manufacturing.....	109.7	109.3	109.5	109.3	110.3	110.3	110.2	112.2	115.1	117.1	119.5	121.5	123.5	123.0
Construction.....	119.1	119.3	119.6	120.1	120.3	120.3	120.5	120.4	120.7	120.9	121.0	121.2	121.5	121.5
Crude fuel.....	138.5	139.4	139.7	139.3	140.3	140.6	140.6	142.7	145.4	145.6	146.2	146.9	147.3	147.2
Manufacturing industries.....	129.6	130.4	130.7	130.2	131.4	131.8	131.8	132.8	135.5	135.7	136.5	137.6	138.1	138.0
Nonmanufacturing industries.....	150.4	151.3	151.5	151.2	152.0	152.2	152.2	155.7	158.4	158.6	159.0	159.1	159.4	159.4
INTERMEDIATE MATERIALS														
Intermediate materials: Supplies and components.....	114.0	114.0	114.8	115.6	115.4	115.0	115.0	115.4	115.9	116.7	117.2	117.7	118.2	118.5
Materials and components for manufacturing.....	113.0	112.8	113.6	114.6	114.4	114.2	114.4	114.9	115.7	115.9	116.4	116.9	116.9	117.1
Materials for food manufacturing.....	116.2	116.3	117.5	118.3	117.1	116.6	116.8	117.3	117.9	119.4	118.6	117.8	118.5	119.2
Materials for nondurable manufacturing.....	105.6	105.9	106.1	106.3	106.2	105.9	105.9	106.3	107.0	107.4	107.5	108.7	109.3	109.6
Materials for durable manufacturing.....	118.8	118.1	119.6	121.7	121.6	121.4	121.2	121.0	121.5	122.7	123.3	123.7	123.9	123.8
Components for manufacturing.....	114.7	114.5	114.9	115.5	115.6	115.4	115.6	115.8	116.0	116.5	116.6	117.0	117.6	118.0
Materials and components for construction.....	119.5	119.2	120.8	122.5	122.5	121.9	121.8	122.3	123.1	124.2	124.9	125.5	125.9	126.3
Processed fuels and lubricants.....	113.4	113.2	113.4	114.6	115.3	114.6	114.4	114.3	116.0	116.8	116.9	117.3	118.1	118.7
Manufacturing industries.....	115.2	114.7	115.1	116.6	117.5	117.2	117.0	117.0	119.2	120.4	120.4	120.8	121.7	122.0
Nonmanufacturing industries.....	110.6	110.9	110.9	111.5	111.9	110.6	110.4	110.1	111.0	111.1	111.5	111.9	112.6	113.7
Containers.....	116.6	116.9	117.2	117.5	117.6	117.6	117.6	117.6	117.8	119.5	120.0	121.2	121.3	122.0
Supplies.....	110.9	111.9	111.9	111.3	110.3	109.6	110.1	111.1	111.0	111.4	112.8	113.0	113.3	113.4
Manufacturing industries.....	113.1	113.5	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.9	114.2	114.5	114.8	114.9
Nonmanufacturing industries.....	109.9	111.2	111.3	110.4	109.0	107.9	108.6	110.2	110.1	110.3	112.3	112.4	112.8	112.8
Manufactured animal feeds.....	104.3	107.8	107.2	104.6	100.8	97.9	99.8	104.4	103.6	103.3	108.3	108.1	108.1	107.3
Other supplies.....	112.6	112.7	113.2	113.2	113.0	113.0	113.0	113.0	113.2	113.8	114.1	114.3	115.0	115.5
FINISHED GOODS														
Finished goods (including raw foods and fuels).....	113.5	113.8	113.8	114.1	113.6	113.8	114.0	115.0	115.5	116.3	116.1	115.8	116.4	116.9
Consumer goods.....	112.7	113.1	113.0	113.3	112.7	112.9	113.1	114.2	114.7	115.6	115.2	114.8	115.5	116.1
Foods.....	115.2	116.4	115.6	116.1	114.9	115.0	115.7	117.7	118.7	120.6	119.4	118.0	119.5	120.7
Crude.....	115.8	121.8	109.0	115.8	109.6	112.2	116.1	121.5	117.4	117.9	115.7	113.4	115.1	115.6
Processed.....	115.0	115.4	116.7	116.1	115.8	115.5	115.6	117.0	118.8	121.0	120.0	118.7	120.2	121.6
Other nondurable goods.....	111.3	111.2	111.6	111.8	111.9	111.7	111.7	111.8	112.0	112.1	112.4	112.7	113.1	113.5
Durable goods.....	110.9	110.7	111.0	111.1	110.4	111.3	111.3	112.6	112.9	113.2	113.1	113.2	113.1	113.2
Producer finished goods.....	116.6	116.5	116.8	117.1	116.9	117.1	117.0	117.8	118.4	118.8	119.0	119.3	119.4	119.6
Manufacturing industries.....	117.3	117.2	117.7	117.9	117.8	117.9	117.8	118.2	118.7	119.1	119.2	119.5	119.6	119.8
Nonmanufacturing industries.....	116.0	115.8	116.1	116.4	116.0	116.3	116.3	117.4	118.1	118.4	118.8	118.9	119.1	119.4
SPECIAL GROUPINGS														
Crude materials for further processing, excluding crude foodstuffs and feedstuffs, plant and animal fibers oilseeds, and leaf tobacco.....	122.7	122.8	122.7	122.3	123.0	122.9	122.6	123.4	125.6	127.0	129.1	129.3	129.9	129.8
Intermediate materials, supplies and components excluding intermediate materials for food manufacturing and manufactured animal feeds.....	114.3	114.1	114.9	115.9	115.9	115.7	115.6	115.8	116.4	117.2	117.6	118.2	118.6	119.0
Consumer finished goods, excluding consumer foods.....	111.2	111.0	111.4	111.5	111.3	111.6	111.6	112.1	112.3	112.5	112.7	112.9	113.1	113.4

¹ As of January 1967, the index incorporated a revised weighting structure reflecting 1963 values of shipments. Changes were also made in the classification structure, and titles and composition of some indexes were changed. Titles and indexes in this table conform with the revised classification structure, and may differ from data previously published. See Wholesale Prices and Price Indexes, January 1967 (final) and February 1967 (final) for a description of the changes.

² As of January 1971 the indexes were converted from the former base of 1957-59 = 100 to the new base of 1967 = 100. Technical details and earlier data on the 1967 base furnished upon request to the Bureau.

NOTE: For a description of the series by stage of processing see Wholesale Prices and Price Indexes, January 1967 (final) and February 1967 (final).

31. Industry-sector price indexes for output of selected industries¹[1967 = 100 unless otherwise indicated]²

1963 SIC code	Industry	Annual average 1971	1971								1972					
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
MINING																
1111	Anthracite	144.9	140.5	144.7	144.7	145.6	144.7	144.7	144.7	146.4	146.4	146.4	146.4	146.4	146.4	
1211	Bituminous coal	185.0	186.1	186.1	186.1	186.1	186.2	186.2	186.2	194.1	196.6	196.6	196.6	195.0	195.0	
1311	Crude petroleum and natural gas	113.0	113.2	113.3	113.1	113.5	113.6	113.6	113.6	113.3	113.9	114.0	114.2	114.6	114.8	
1421	Crushed and broken stone	117.7	118.3	118.5	118.5	118.5	118.5	118.5	118.8	118.8	119.1	119.4	119.4	119.7	120.1	
1442	Construction sand and gravel	120.6	120.5	120.8	121.9	122.3	122.3	122.3	122.2	122.5	122.5	122.7	122.8	123.0	123.1	
1475	Phosphate rock	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	
1476	Rock salt	118.3	112.2	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	
1477	Sulfur	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	
MANUFACTURING																
2011	Meat slaughtering plants	115.6	115.2	117.7	117.5	117.5	117.1	117.1	120.8	125.4	130.6	126.0	123.0	128.0	133.4	
2013	Meat processing plants	110.7	111.0	111.6	111.4	110.2	112.0	112.4	114.9	117.4	124.5	124.0	122.1	123.5	125.2	
2015	Poultry dressing plants	111.0	117.1	127.1	112.0	113.0	106.0	104.9	100.8	106.8	114.1	115.3	104.9	107.6	113.0	
2021	Creamery butter	113.1	113.3	113.3	113.4	113.5	113.6	114.2	113.9	114.0	114.0	113.8	113.7	113.5	113.5	
2033	Canned fruits and vegetables	111.7	113.0	113.3	113.7	113.0	112.5	112.6	113.0	113.3	112.9	113.6	114.6	114.9	115.6	
2036	Fresh or frozen packaged fish	141.2	142.5	141.0	148.4	145.3	145.3	150.0	158.1	165.3	167.9	166.0	173.2	167.9	164.1	
2041	Flour and other grain mill products (12/71=100)									98.4	97.8	99.5	98.7	97.9	97.7	
2042	Prepared animal feeds (12/71=100)									100.5	100.2	101.7	101.9	102.2	101.6	
2044	Rice milling	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	100.5	100.5	100.5	100.5	103.1	103.1	
2052	Biscuits, crackers and cookies	119.3	120.3	119.6	119.6	119.6	119.6	119.6	119.6	119.6	120.6	122.2	123.0	123.1	121.2	
2061	Raw cane sugar	116.9	117.7	117.7	119.5	116.7	116.7	118.1	121.3	126.7	123.5	126.1	123.6	119.5	120.9	
2062	Cane sugar refining	118.3	117.8	119.5	119.8	119.4	119.4	119.6	120.0	120.9	123.0	123.6	125.4	124.9	125.1	
2063	Beet sugar	116.8	116.7	117.1	117.3	117.0	117.0	117.0	117.3	118.0	119.7	120.2	121.2	120.8	120.9	
2073	Chewing gum	123.6	126.1	126.2	126.2	126.2	126.2	126.2	126.2	125.9	125.9	125.9	125.9	125.9	125.9	
2082	Malt liquors	110.2	110.2	110.2	110.2	110.2	110.2	110.9	110.6	110.7	110.9	110.4	110.7	110.6	110.7	
2083	Malt	98.5	98.9	98.9	98.9	98.9	98.9	98.9	94.2	94.2	94.2	94.2	94.2	94.2	94.2	
2084	Wines and brandy	117.0	115.4	120.4	120.4	120.4	120.5	102.5	119.4	119.7	125.0	125.1	125.2	125.2	125.3	
2091	Cottonseed oil mills	111.4	110.4	113.1	120.0	118.1	105.2	104.9	108.5	106.7	106.4	106.4	104.9	103.6	102.7	
2092	Soybean oil mills	111.4	112.9	120.8	120.8	109.2	110.3	110.9	111.3	109.6	112.7	120.0	123.1	121.8	120.0	
2094	Animal and marine fats and oils	125.7	124.3	122.8	124.4	125.4	122.6	120.3	114.0	113.1	115.7	117.0	125.6	129.1	128.9	
2096	Shortening and cooking oils	121.0	118.4	122.9	125.0	123.3	122.4	122.2	121.1	120.6	120.2	119.8	119.8	119.8	120.5	
2098	Macaroni and noodle products	106.3	106.4	106.5	106.4	106.5	105.8	105.8	105.8	105.8	105.8	105.9	106.0	106.2	106.2	
2111	Cigarettes	117.4	117.3	117.3	117.3	117.3	117.3	118.2	117.3	118.2	118.2	118.2	118.2	118.2	118.2	
2121	Cigars	108.1	107.0	107.6	109.6	109.6	109.6	109.6	109.1	109.1	109.1	109.1	109.1	109.1	109.1	
2131	Chewing and smoking tobacco	125.0	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.1	125.8	125.8	
2254	Knit underwear mills	107.8	107.7	107.8	108.3	108.3	108.2	108.3	108.2	108.7	109.8	109.8	109.8	110.1	110.2	
2272	Tufted carpets and rugs	96.0	95.5	95.2	94.2	94.2	94.2	94.2	94.5	94.8	95.1	94.7	94.9	94.9	95.5	
2281	Yarn mills, except wool (12/71=100)									101.0	102.5	103.1	104.2	105.4	106.2	
2311	Men's and boys' suits and coats	128.0	126.5	127.7	129.1	131.0	131.2	131.3	131.3	131.5	131.3	131.2	131.0	131.3	131.8	
2321	Men's dress shirts and nightwear	111.9	112.0	112.2	112.3	112.4	112.4	111.4	111.1	111.5	111.7	111.9	112.0	112.0	112.3	
2322	Men's and boys' underwear	110.3	110.2	110.2	110.6	110.6	110.6	110.5	110.5	111.0	111.7	111.8	111.8	112.0	112.1	
2327	Men's and boys' separate trousers	110.6	110.2	110.7	110.9	111.0	111.0	111.0	111.0	110.7	111.0	111.0	108.3	108.4	108.1	
2328	Work clothing	113.7	113.4	113.4	114.7	114.6	114.6	114.6	114.9	115.0	115.1	115.1	116.3	116.9	117.1	
2337	Women's suits, coats and skirts (12/71=100)									100.0	100.0	100.0	100.0	100.0	100.0	
2381	Fabric dress and work gloves	111.8	111.7	111.7	111.7	111.8	111.8	111.5	111.5	113.2	113.6	115.0	118.7	120.1	121.5	
2421	Sawmills and planing mills (12/71=100)									102.2	104.8	106.4	108.2	109.5	111.0	
2426	Hardwood dimension and flooring	115.5	114.2	116.2	118.8	118.5	118.2	118.2	119.4	120.6	120.8	121.9	124.9	125.6	127.0	
2431	Millwork plants (12/71=100)									100.5	100.6	101.3	102.2	103.2	104.1	
2432	Veneer and plywood plants (12/71=100)									102.3	106.8	110.5	110.7	112.2	113.6	
2442	Wirebound boxes and crates (12/67=100)	117.6	117.5	117.9	117.9	117.9	117.9	118.3	118.5	119.8	120.1	120.5	121.6	122.3	123.9	
2511	Wood furniture, not upholstered (12/71=100)									100.7	101.4	101.7	101.7	101.8	101.9	
2512	Wood furniture upholstered (12/71=100)									100.3	100.6	100.2	100.6	100.6	100.6	
2515	Mattresses and bedspreads	108.8	109.1	108.9	109.0	109.0	109.0	109.0	109.0	108.9	109.6	109.6	109.6	110.9	110.9	
2521	Wood office furniture	117.1	117.1	117.1	117.3	117.3	117.3	117.5	117.5	117.5	117.5	117.9	118.5	118.9	119.1	
2647	Sanitary paper products	119.1	119.5	119.5	119.5	119.5	119.5	119.5	119.5	119.5	119.6	119.6	120.1	121.1	121.1	
2654	Sanitary food containers	106.0	106.1	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.3	106.4	107.2	107.6	107.7	
2819	Inorganic chemicals, nec. (12/71=100)									100.1	100.2	100.2	101.5	101.7	101.7	
2822	Synthetic rubber	99.9	99.9	99.9	99.9	99.9	99.9	99.7	99.7	99.7	99.7	99.7	99.7	99.9	100.1	
2823	Cellulosic man-made fibers	102.5	102.5	102.5	102.8	102.8	102.9	102.7	103.7	104.3	104.8	105.6	105.9	106.0	106.0	
2824	Organic fibers, noncellulosic	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.1	98.1	98.1	98.1	98.1	
2834	Pharmaceutical preparations (12/71=100)									99.9	99.8	100.1	100.0	100.4	100.6	
2841	Soap and other detergents (12/71=100)									100.0	100.0	100.0	100.0	100.2	100.1	
2844	Toilet preparations (12/71=100)									100.0	100.1	99.8	100.0	99.7	99.7	
2871	Fertilizers	91.8	94.1	93.7	89.7	89.7	89.8	89.8	89.7	89.7	89.5	90.2	90.6	90.5	90.6	

See footnotes at end of table.

31. Continued—Industry-sector price indexes for output of selected industries ¹[1967 = 100 unless otherwise indicated]²

1963 SIC code	Industry	Annual average 1971	1971							1972					
			June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
	MANUFACTURING—Continued														
2872	Fertilizers, mixing only.....	102.5	103.5	102.8	102.3	102.4	102.5	102.4	102.3	102.3	101.5	102.9	103.3	103.1	103.3
2892	Explosives.....	112.8	112.9	112.9	112.8	112.8	112.8	112.8	112.7	112.7	112.7	112.9	113.1	114.6	114.9
2911	Petroleum refining.....	105.7	106.3	106.2	106.2	106.3	105.3	105.2	105.0	105.1	104.5	105.2	105.6	105.9	107.1
3021	Rubber footwear (12/71=100).....									102.9	106.7	106.7	106.8	106.9	106.9
3111	Leather tanning and finishing.....	113.0	114.7	114.7	114.7	113.9	114.0	114.0	117.5	120.4	121.1	129.0	139.0	138.7	139.5
3121	Industrial leather belting.....	125.5	125.3	125.5	126.0	125.6	125.6	126.3	126.3	125.6	126.6	125.8	126.9	127.0	136.8
3141	Shoes, except rubber (12/71=100).....									100.7	101.1	102.6	104.7	106.7	107.6
3211	Flat glass (12/71=100).....									100.0	100.0	99.5	99.0	98.9	98.8
3221	Glass containers.....	131.5	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	136.1	136.1	136.1
3241	Cement, hydraulic.....	124.6	123.6	126.7	127.6	127.8	127.8	127.8	127.8	127.8	128.1	128.1	131.5	131.8	131.9
3251	Brick and structural clay tile.....	119.1	119.1	119.1	120.0	120.0	120.0	120.0	120.0	119.9	122.5	122.7	123.2	123.3	123.5
3255	Clay refractories.....	128.7	128.7	128.7	128.7	128.7	128.9	128.9	128.9	128.9	128.9	128.9	128.9	128.9	128.9
3259	Structural clay products nec.....	109.2	109.9	109.9	109.9	110.0	110.0	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9
3261	Vitreous plumbing fixtures.....	112.1	113.2	114.0	114.3	114.6	114.8	114.4	114.7	113.9	114.4	114.9	115.3	115.3	116.0
3262	Vitreous china food utensils.....	132.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	135.8	137.9	137.9	137.9	137.9
3263	Fine earthenware food utensils.....	125.5	120.3	129.7	131.1	131.1	131.1	131.1	131.1	134.6	134.8	140.3	140.3	140.3	140.3
3271	Concrete block and brick.....	118.4	118.3	118.4	118.9	119.1	113.1	119.1	119.1	120.0	120.5	120.8	122.0	122.5	122.9
3273	Ready mixed concrete.....	122.5	121.8	123.3	124.8	124.6	124.6	124.6	124.9	125.3	125.8	126.7	127.3	127.3	127.4
3275	Gypsum products.....	107.0	104.2	112.7	114.4	114.5	113.7	112.3	114.1	113.4	113.0	115.3	114.9	113.6	114.0
3291	Abrasive products (12/71=100).....									100.0	100.3	101.3	101.9	102.1	102.2
3312	Blast furnace and steel mills.....	123.4	121.6	124.0	128.2	128.3	128.3	128.3	128.3	129.6	130.9	130.9	130.9	131.0	130.6
3315	Steel wire drawing, etc.....	120.2	119.1	119.2	124.3	125.3	125.2	125.7	125.7	127.1	127.6	127.7	127.9	127.9	128.2
3316	Cold finishing of steel shapes.....	124.1	122.4	126.2	128.5	128.9	128.9	128.9	128.9	127.9	132.4	132.4	132.1	130.7	129.9
3317	Steel pipe and tube.....	121.9	120.3	120.7	128.4	128.4	128.2	128.2	128.2	128.6	128.5	128.7	129.2	129.2	129.2
3321	Gray iron foundries (12/68=100).....	115.1	115.8	116.0	116.1	116.2	116.3	116.4	116.4	116.1	116.7	116.9	116.8	116.9	117.7
3333	Primary zinc.....	113.3	112.0	112.8	118.8	118.8	118.8	118.8	118.8	119.0	119.1	119.2	122.3	126.1	126.0
3334	Primary aluminum.....	115.9	115.9	115.9	115.9	115.9	115.9	115.9	115.9	101.5	99.2	95.9	95.9	95.9	95.9
3339	Primary nonferrous metals, nec.....	112.8	114.1	111.2	111.8	106.5	104.9	105.1	107.2	110.4	112.2	114.2	115.4	117.8	120.4
3341	Secondary nonferrous metals (12/71=100).....									96.3	96.0	99.7	100.5	100.0	99.1
3351	Copper rolling and drawing.....	119.0	120.4	120.5	120.5	120.0	120.0	119.7	118.3	120.3	122.2	125.6	125.4	125.6	125.5
3352	Aluminum rolling and drawing (12/68=100).....	108.2	108.2	108.3	108.4	108.4	108.3	108.3	108.3	108.3	108.2	108.3	108.6	108.9	108.8
3356	Nonferrous rolling and drawing, nec. (12/71=100).....									100.1	101.1	101.3	101.8	102.2	102.1
3411	Metal cans.....	121.9	123.9	124.0	124.0	124.0	124.0	124.0	124.0	124.0	127.5	127.6	127.6	127.6	129.3
3423	Hand and edge tools (12/67=100).....	120.8	119.6	121.3	123.1	123.1	123.0	123.2	123.2	124.4	125.0	125.0	125.9	126.0	126.4
3431	Metal plumbing fixtures.....	114.0	114.2	116.2	117.7	117.7	117.7	117.8	117.8	116.9	116.9	117.5	117.9	118.0	119.3
3493	Steel springs.....	111.9	111.7	110.2	111.5	113.3	113.1	114.3	115.9	116.6	118.7	118.9	119.0	119.0	119.0
3494	Valves and pipe fittings (12/71=100).....									100.3	100.6	100.6	100.9	101.1	100.9
3496	Collapsible tubes.....	118.4	119.8	119.9	120.0	120.0	119.9	119.9	119.9	119.9	120.5	120.7	120.8	120.9	120.8
3498	Fabricated pipe and fittings.....	133.0	135.6	135.6	135.6	136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.7
3519	Internal combustion engines.....	117.4	116.6	116.8	118.4	118.5	118.5	118.5	119.3	120.2	120.9	121.1	121.1	121.5	121.4
3533	Oil field machinery.....	123.3	123.8	123.8	124.0	123.9	123.9	123.9	123.9	125.3	125.6	125.6	126.5	128.4	128.7
3534	Elevators and moving stairways.....	121.0	120.6	102.6	122.2	122.2	122.2	122.2	122.2	122.3	122.3	122.3	122.3	122.3	122.3
3535	Conveyors and conveying equipment (12/71=100).....									100.2	101.1	101.1	101.2	101.5	102.1
3537	Industrial trucks and tractors.....	120.4	118.6	121.6	123.5	121.7	121.7	121.7	124.2	124.2	123.3	123.4	123.5	123.5	123.3
3541	Machine tools, metal cutting types (12/71=100).....									100.2	100.7	100.9	101.4	102.0	102.1
3542	Machine tools, metal forming types (12/71=100).....									100.3	100.7	101.4	101.4	101.4	101.4
3552	Textile machinery (12/69=100).....	108.9	109.4	109.7	109.8	110.1	110.4	110.4	110.4	110.3	111.3	111.3	111.4	111.4	111.1
3562	Ball and roller bearings.....	114.2	113.9	114.0	114.6	114.6	114.6	114.6	114.6	115.0	115.7	116.2	116.8	117.6	117.6
3572	Typewriters.....	103.4	103.4	103.4	103.5	103.5	103.5	103.5	103.5	103.5	104.0	104.4	104.5	104.5	104.7
3576	Scales and balances.....	114.3	113.9	114.1	114.1	114.1	114.5	114.5	114.5	116.5	116.5	117.6	117.8	118.5	118.6
3611	Electric measuring instruments (12/71=100).....									100.5	100.7	101.2	101.2	100.2	100.3
3612	Transformers.....	97.3	96.9	96.7	95.6	95.5	94.8	92.4	93.0	94.4	94.1	94.3	95.5	95.4	95.1
3613	Switchgear and switchboards.....	113.3	113.5	113.1	113.1	112.7	113.0	112.5	112.3	112.0	112.0	112.4	111.7	111.0	111.5
3624	Carbon and graphite products (12/67=100).....	113.1	113.3	113.3	113.3	113.3	113.3	113.3	113.3	113.4	113.4	113.4	113.4	113.6	114.3
3634	Electric housewares and fans (12/71=100).....									99.7	99.9	100.1	99.8	99.9	99.4
3635	Household vacuum cleaners.....	100.4	100.2	100.5	100.5	100.5	100.5	100.5	100.4	100.4	100.4	101.8	101.8	101.8	101.8
3641	Electric lamps.....	113.6	113.5	113.3	113.8	113.8	114.3	114.0	114.2	114.2	114.5	116.3	117.4	117.7	117.6
3642	Lighting fixtures (12/71=100).....									100.3	101.1	101.1	101.5	101.8	101.8
3652	Phonograph records.....	106.8	105.4	105.4	105.4	105.4	105.4	105.4	105.4	113.2	113.2	113.2	113.2	111.2	111.2
3671	Electron tubes, receiving type.....	132.0	132.2	132.2	132.2	132.2	132.2	132.2	132.2	132.1	139.8	139.9	139.9	144.1	144.1
3672	Cathode ray picture tubes.....	86.4	87.7	87.7	87.7	83.3	83.0	83.0	83.0	83.0	82.9	83.1	82.8	83.7	83.7
3673	Electron tubes, transmitting.....	111.4	111.7	111.7	111.7	111.6	111.6	111.6	111.4	111.4	111.2	112.1	112.4	114.1	114.1
3674	Semiconductors.....	93.9	93.5	93.3	93.7	93.5	93.5	93.5	93.0	93.0	93.1	92.5	92.3	92.5	92.5
3692	Primary batteries, dry and wet.....	118.9	120.5	121.8	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.1	123.1	123.1
3693	X-ray apparatus and tubes (12/67=100).....	128.5	129.6	129.5	129.5	129.5	129.5	129.5	129.5	129.5	132.1	132.1	132.1	132.1	131.9
3861	Photographic equipment (12/71=100).....									100.0	100.3	100.5	99.9	99.9	99.9
3941	Games and toys.....	112.9	113.0	113.0	113.0	113.0	113.0	113.0	113.1	113.3	114.3	115.5	115.7	115.7	115.8

¹ For a description of the series, see **BLS Handbook of Methods** (BLS Bulletin 1711, 1971), Chapter 12. See also "Industry and Sector Price Indexes," in the **Monthly Labor Review**, August 1965, pp. 974-982.

² As of January 1971, the indexes were converted from the former base 1957-59 = 100 to the new base of 1967=100. Other bases are shown in parenthesis following

NOTE: Beginning in January 196

32. Work stoppages resulting from labor-management disputes ¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year (thousands)	In effect during month (thousands)	Number (thousands)	Percent of estimated working time
1945.....	4,750		3,470		38,000	0.31
1946.....	4,985		4,600		116,000	1.04
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.....	5,135		3,263		47,417	.26
1970: January.....	279	458	71.1	269.9	3,710.8	.25
February.....	330	529	116.3	329.6	2,110.6	.15
March.....	427	630	316.2	402.5	2,471.2	.16
April.....	640	884	451.1	523.1	5,431.1	.34
May.....	699	1,050	331.1	675.4	6,650.7	.46
June.....	657	1,060	288.1	538.0	5,845.6	.36
July.....	585	989	242.2	467.1	5,112.1	.32
August.....	527	950	127.3	340.7	3,851.8	.26
September.....	560	971	591.1	785.0	8,669.5	.57
October.....	448	881	231.1	753.9	11,573.6	.73
November.....	340	695	83.6	552.0	7,798.0	.54
December.....	224	529	455.5	919.9	3,188.7	.20
1971: January.....	416	647	234.5	319.9	2,868.2	.20
February.....	359	632	128.4	206.0	1,934.5	.14
March.....	457	725	150.0	260.0	2,489.5	.15
April.....	550	859	180.5	269.3	2,388.6	.15
May.....	612	957	276.9	817.7	4,000.1	.28
June.....	617	1,031	280.4	420.0	4,093.6	.26
July.....	499	938	747.8	937.6	7,894.8	.52
August.....	437	890	182.5	489.8	5,022.5	.32
September.....	351	668	108.2	316.0	3,109.5	.20
October.....	304	551	245.6	311.9	5,480.6	.36
November.....	315	561	234.6	450.3	5,032.4	.33
December.....	218	485	43.7	236.2	3,102.8	.20
1972: January P.....	300	460	79	154	2,284	.15
February P.....	290	455	58	137	1,597	.11
March P.....	360	540	122	161	1,517	.09
April P.....	380	600	130	203	1,983	.14
May P.....	420	630	109	186	2,058	.13

¹ The data include all known strikes or lockouts involving 6 workers or more and lasting a full day or shift or longer. Figures on workers involved and man-days idle cover all workers made idle for as long as 1 shift in establishments directly involved in a stoppage. They do not measure the indirect or secondary effect on other establish-

ments or industries whose employees are made idle as a result of material or service shortages.

P=preliminary.

33. Indexes of output per man-hour, hourly compensation, unit costs, and prices, private economy, seasonally adjusted

[Indexes 1967=100]

Year and quarter	Output		Man-hours		Output per man-hour		Compensation per man-hour ¹		Real compensation per man-hour ²		Unit labor costs		Unit nonlabor payments ³		Implicit price deflator	
	Private	Private non-farm	Private	Private non-farm	Private	Private non-farm	Private	Private non-farm	Private	Private non-farm	Private	Private non-farm	Private	Private non-farm	Private	Private non-farm
1969: 1st.....	107.1	107.2	103.4	104.0	103.6	103.1	112.6	111.9	104.9	104.3	108.7	108.6	102.5	102.4	106.3	106.3
2d.....	107.5	107.9	104.2	104.9	103.1	102.8	114.4	113.7	104.8	104.2	110.9	110.6	102.6	102.2	107.7	107.4
3d.....	108.0	108.3	104.5	105.4	103.4	102.7	116.6	115.5	105.4	104.4	112.8	112.5	102.9	102.8	109.0	108.8
4th.....	107.6	107.8	104.0	105.2	103.4	102.4	118.9	117.5	105.9	104.7	115.0	114.7	102.6	102.2	110.2	110.0
Annual average.....	107.5	107.8	104.0	104.9	103.4	102.7	115.6	114.7	105.3	104.5	111.9	111.6	106.2	102.3	108.3	108.1
1970: 1st.....	106.7	107.1	103.7	104.9	103.0	102.1	121.1	119.7	106.3	105.0	117.7	117.2	102.1	101.3	111.6	111.2
2d.....	106.9	107.2	103.1	104.0	103.7	103.1	122.5	121.5	105.9	105.0	118.1	117.8	104.4	104.0	112.8	112.6
3d.....	107.3	107.7	102.0	103.1	105.3	104.6	125.3	124.1	107.1	106.0	119.0	118.7	106.4	106.6	114.1	114.1
4th.....	106.1	106.2	100.8	102.0	105.3	104.1	127.2	125.7	107.2	106.0	120.7	120.7	108.1	108.8	115.9	116.2
Annual average.....	106.8	107.1	102.4	103.5	104.3	103.5	124.0	122.7	106.6	105.5	118.9	118.6	105.3	105.2	113.6	113.5
1971: 1st.....	108.3	108.5	101.3	102.5	106.9	105.8	129.8	128.4	108.6	107.4	121.4	121.3	110.4	110.9	117.1	117.4
2d.....	109.3	109.5	101.7	102.8	107.4	106.5	131.7	130.4	109.0	108.0	122.6	122.4	111.7	112.2	118.4	118.6
3d.....	110.0	110.0	101.4	102.6	108.5	107.1	133.7	132.2	109.6	108.3	123.3	123.4	112.6	112.8	119.1	119.4
4th.....	111.7	111.9	102.2	103.3	109.3	108.3	135.1	133.8	110.1	109.0	123.6	123.5	113.0	112.6	119.5	119.4
Annual average.....	109.8	110.0	101.7	102.8	108.1	107.0	132.6	131.2	109.3	108.1	122.7	122.7	111.9	112.1	118.5	118.7
1972: 1st.....	113.3	113.9	103.1	104.2	109.9	109.4	137.9	136.8	111.5	110.6	125.5	125.1	113.8	113.1	120.9	120.5
Percent change over previous quarter at annual rate ⁴																
1969: 1st.....	3.0	2.5	3.4	4.2	-0.4	-1.7	6.4	5.8	1.4	-0.8	6.8	7.7	1.0	0.0	4.6	4.7
2d.....	1.4	2.4	3.3	3.6	-1.8	-1.1	6.5	6.4	-0.4	-0.5	8.4	7.6	0.4	-0.9	5.4	4.4
3d.....	1.8	1.6	0.9	1.9	0.9	-0.3	7.9	6.7	2.0	0.9	7.0	7.1	1.3	2.4	4.8	5.3
4th.....	-1.5	-1.7	-1.6	-0.7	0.1	-1.0	8.0	7.1	2.2	1.3	7.8	8.2	-1.1	-2.3	4.5	4.4
1970: 1st.....	-3.0	-2.7	-1.4	-1.2	-1.6	-1.5	7.9	7.5	1.5	1.1	9.7	9.1	-1.9	-3.4	5.4	4.5
2d.....	0.8	0.6	-2.2	-3.6	3.1	4.3	4.7	6.3	-1.7	-0.2	1.6	1.9	9.0	11.2	4.2	5.1
3d.....	1.5	2.0	-4.3	-3.5	6.1	5.6	9.4	8.7	4.6	4.0	3.1	2.9	8.2	10.4	4.9	5.5
4th.....	-4.4	-5.6	-4.5	-4.0	0.2	-1.6	6.1	5.5	0.7	0.1	6.0	7.2	6.6	8.2	6.2	7.6
1971: 1st.....	8.5	8.8	2.1	2.1	6.2	6.6	8.5	8.6	5.1	5.2	2.1	1.9	8.7	8.1	4.4	4.1
2d.....	3.6	3.7	1.7	1.0	1.9	2.7	6.2	6.6	1.7	2.1	4.1	3.8	4.6	4.6	4.3	4.1
3d.....	2.7	1.8	-1.2	-0.5	4.0	2.3	6.2	5.4	2.1	1.3	2.2	3.0	3.3	2.4	2.5	2.8
4th.....	6.3	7.2	3.0	2.6	3.2	4.5	4.4	5.0	1.9	2.7	1.0	0.5	1.4	-0.9	1.2	-0.1
1972: 1st.....	5.9	7.4	3.6	3.4	2.3	3.9	8.6	9.4	5.1	5.7	6.2	5.3	3.1	1.7	5.1	4.0
Percent change over previous year ⁵																
1971: 1st.....	1.5	3.1	-2.3	-2.3	3.8	3.7	7.1	7.3	2.1	2.2	3.2	3.5	8.1	9.5	4.9	5.5
2d.....	2.2	1.2	-1.3	-1.2	3.6	3.3	7.5	7.3	3.0	2.8	3.8	3.9	7.0	7.8	5.0	5.3
3d.....	2.5	0.2	-0.5	-0.4	3.0	2.5	6.7	6.5	2.4	2.2	3.6	4.0	5.8	5.8	4.4	4.6
4th.....	5.2	3.5	1.4	1.3	3.8	4.0	6.2	6.4	2.7	2.8	2.3	2.3	4.5	3.5	3.1	2.7
1972: 1st.....	4.6	5.0	1.7	1.6	2.8	3.4	6.3	6.6	2.7	3.0	3.4	3.1	3.1	1.9	3.3	2.7

¹ Wages and salaries of employees plus employers contributions for social, insurance and private benefit plans. Also includes an estimate of wages, salaries and supplementary payments for the self-employed.

² Compensation per man-hour adjusted for changes in the consumer price index.

³ Nonlabor payments include profits, depreciation, interest, rental income and indirect taxes.

⁴ Percent change computed from original data.

⁵ Current quarter divided by comparable quarter a year ago.

NOTE: Data for 1969, 1970, and the first two quarters of 1971 have been adjusted to new benchmarks and are not comparable to those previously published in the Monthly Labor Review.

SOURCE: Output data from the Office of Business Economics, U.S. Department of Commerce. Man-hours and compensation of all persons from the Bureau of Labor Statistics.

P= Preliminary.

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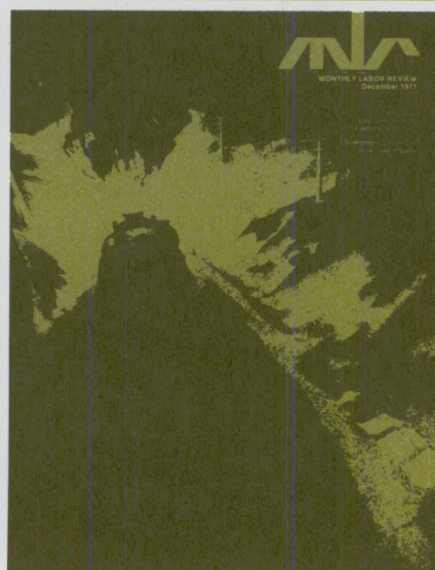
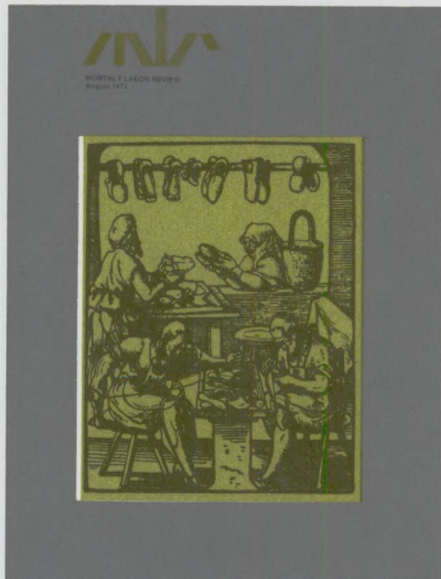
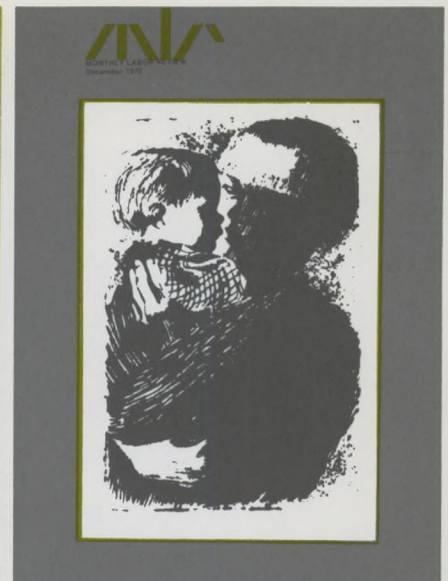
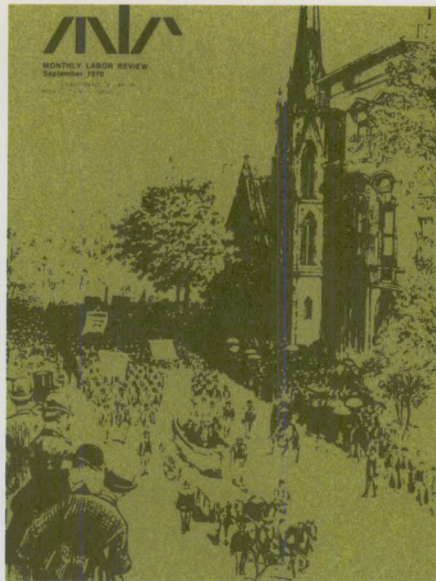
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