



MONTHLY LABOR REVIEW

September 1972

U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics

DEMONSTRATION OF LABOR.

Mammoth Festival, Parade and Pic-Nic

—OF THE—

TRADE & LABOR UNIONS

Under the Auspices of the

Central Labor Union of New York City and Vicinity,

TUESDAY, SEPT. 5th, 1882,

—AT—

Wendels' Elm Park, 92d St. & 9th Ave.

ROUTE OF PARADE.

The First Division will consist of all Unions from Brooklyn, Jersey City, and below Canal Street, and assemble at City Hall Park.

The Second Division comprises all Unions on the Eastside, above Canal St., and form at Cooper Union.

The Third Division consists of all Unions on Westside above Canal Street, to meet at Washington Square.

At 10 o'clock, A. M., Sharp,

The First Division shall move up Broadway, and at Fourth Street the Second Division will fall in; the Third Division to connect at Waverly Place. Thence up Broadway to 14th St. to 4th Ave., to 17th St., to 5th Ave., and dismiss at Reservoir Square (42d St. and 5th Avenue). The procession will be reviewed at Union Square and 17th Street.

COMMITTEE.

Post Conspicuously.

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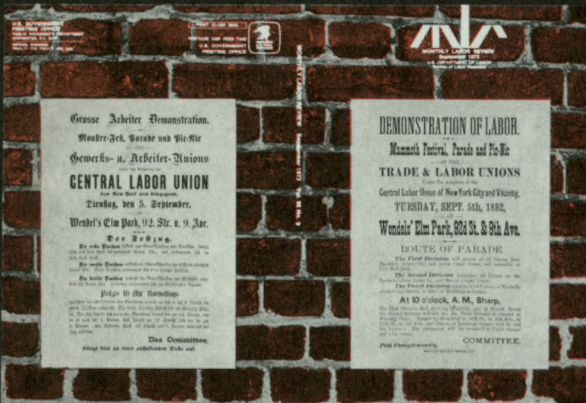
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Labor Month in Review



WORKMEN'S COMPENSATION PROGRAMS in the United States are generally "inadequate and inequitable," and in a majority of States the compensation paid by employers and insurance plans for work-related injuries, disabilities, and deaths is insufficient and unfairly distributed.

These findings—and detailed proposals for reform—were included in a July 31 report to the Congress by the National Commission on State Workmen's Compensation, created by the Occupational Safety and Health Act of 1970. The 15-member commission, appointed by President Nixon in June 1971, is chaired by Professor John F. Burton, Jr., of the University of Chicago.

Defects of the system. Although about 85 percent of employees are covered by workmen's compensation, the commission pointed out, "those not covered usually are those most in need of protection—the non-union, low wage workers, such as farm help, domestics, and employees of small firms." Even for those included in the system, however, compensation does not provide adequate income maintenance; in most cases, disabled workers receive less than two-thirds of their lost wages. In most States, moreover, the maximum weekly benefits for a family of four are below the poverty level of income. Many States also limit the duration of benefits and the total amount.

Further, the commission said, there are substantial differences in the level of benefits among the various States, as well as differences within the States in some cases. Basically, the commission asserted, there are simply not enough incentives for worker safety built into the programs.

Federal takeover opposed. The commission rejected proposals for an immediate Federal takeover of the workmen's compensation system, recommending instead that the States move promptly to broaden coverage, liberalize benefits, and improve medical and rehabilitation services, and that Congress accomplish this improvement by setting minimum national standards for all employers. States would have until 1975 to comply with the "essential elements" of the commission's recommendations. If by 1975 the

States were still lagging, the report suggested that Congress guarantee compliance through an enforcement mechanism placing the burden of compliance on employers rather than on the States. That is, in any State with inadequate programs, employers would be required to provide supplementary insurance or self-insurance.

Priority reforms. The 19 "essential elements" of a modern workmen's compensation program (out of a total of 80 recommendations by the commission) were grouped into seven top priority items:

- Weekly cash benefits for temporary or permanent total disability or death should equal at least two-thirds of the worker's gross weekly wage.
- Payment of weekly cash benefits should not be subjected to arbitrary limits on duration or sum of benefits.
- Neither employers nor employees should have the right to reject coverage. (Currently, 17 States have elective laws.)
- All employers should be covered, and all occupational groups, including farm and household workers. (Now, only half the States cover firms with one employee, only a third cover *any* farm workers, and only a few cover domestic workers.)
- Full coverage should be provided for work-related diseases.
- Any work-related impairment should be compensated with full medical care and physical rehabilitation services, without statutory limits on dollar amounts or length of time.
- Employees should be allowed to file claims in the State where injured, or where hired, or where employment is principally based. (At present, the commission noted, an injured worker may "fall between the cracks" of State law coverage.)

Permanent commission. The report further recommended that Congress establish a permanent National Workmen's Compensation Commission, to replace the present group whose mandate expires this fall. □

Who is the father of Labor Day?

Facts from contemporary records, though insufficient for firm conclusions, shed some light on the issue

JONATHAN GROSSMAN

AFTER MORE than 75 years, a "paternity" battle is still a point of issue between supporters of Peter J. McGuire and supporters of Matthew Maguire as to which one is the father of Labor Day. The difficulty of designating a "father" of Labor Day is inherent in the way the holiday developed. It evolved over a period of time; no one knew that a national holiday was being born.

The first parade

The year 1882 was charged with excitement for the organized workers in New York City. Strikes for increased wages and demonstrations for social reform abounded. "Every day . . . a strike is going on somewhere," one newspaper noted.¹ Meetings, parades, and picnics were held on behalf of penal reform, to support a labor newspaper, or to welcome an Irish patriot. In this atmosphere of enthusiasm, the Central Labor Union of New York, made up of representatives of many local unions, was born and prospered. Here the proposal for a labor festival was made.

The minutes of the Central Labor Union have many references to the holiday. On May 14, the minutes report a proposal for a "monster labor festival" in which all workers could take part early in September. The following week a committee of five was appointed to obtain a suitable park. Two weeks later the committee reported that it had secured for Tuesday, September 5, Wendel's Elm Park at 92d Street and 9th Avenue, the largest park in New York City. By June 11, 20,000 tickets had been distributed to trade unions. In order to encourage sales, the money from the sale of tickets went to the organization selling them. On August 6, the Central Labor Union resolved "that the 5th of September be proclaimed a general holiday for the workingmen in

this city."² Matthew Maguire as Secretary of the Central Labor Union invited T. V. Powderly, Grand Master Workman of the Knights of Labor, to "review the Procession of the Trade and Labor Unions of New York and Vicinity" at Union Square and address the workers at Wendel's Elm Park. The General Assembly of the Knights noted Matthew Maguire's communication and took a break to review the labor demonstration.³

There were varying motives behind the parade. On one hand, some radicals had falsely accused the Duryea Starch Co. of Glen Cove, Long Island, of abusing its workers and had attacked officers of the Knights of Labor when they did not support a boycott against the company. These militants maneuvered to make the parade a display of strength before the delegates of the Knights of Labor who were to convene in New York City that same day.⁴ On the other hand, the Central Labor Union wanted to impress the people of New York with the power of the labor movement. The *New York Herald* called the demonstration a "Plain Hint to Demagogues" and the *Irish World* ran a huge front page cartoon of "The Awakening Labor Gulliver" breaking the bonds of land monopoly, stock speculation, and other evils.⁵ Idealistically, however, supporters of the parade saw it as a source of inspiration that would improve the lot of their fellow workers.⁶

Yet several delegates to the Central Labor Union feared failure. Many paraders would lose a day's pay and a fiasco might damage the emerging labor movement. William McCabe, Grand Marshall of the parade, later recalled that most organizations invited had not responded, and that "the whole thing certainly looked dubious."

On the morning of September 5, just before the parade, only a handful of marchers assembled, while hundreds of onlookers jeered from the sidewalk, but the marchers were encouraged by the unexpected arrival of 200 men and a band from the Jewelers'

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Union of Newark, N.J. With McCabe in the vanguard and a small police escort for protection, the paraders started to move. At almost every intersection the parade was forced to split up, while the police seemed to regard the whole thing as a circus. In the early stages of the parade, policemen along the route stopped McCabe and demanded to see the parade permit, even though "these blue-coated humorists" could easily have gotten the information from the police escort.

The parade began to grow when a column of bricklayers with a band joined the marchers. Around Cooper Union, which was popular with labor organizations, many more groups started to march, carrying banners with slogans such as "Labor Will Be United;" "Close the Stores at 6 p.m.;" "Less Work and More Pay;" and, "To the Workers Should Belong All Wealth." The *New York Herald* reported that "there were perhaps 10,000 in line," and that they were mostly young, well-dressed, and wore derby hats. They were applauded by thousands of spectators as they passed the reviewing stand at Union Square.

The parade was dismissed at the aqueduct at 42d Street and Fifth Avenue. Then many of the marchers met their families and went to Wendel's Elm Park, which was decorated with American, Irish, French, and German flags. Speeches began at 2:30 and continued to nightfall. In the evening a large crowd packed the park for amusements, fireworks, and dancing. It was a big affair, commented one New York newspaper, "and a jolly one as most of the participants can well testify." Other newspapers agreed that the festival was a success, and one reporter noted it was "indeed a day of the people."⁷

Peter J. McGuire was among the estimated 50 labor figures on the reviewing stand at Union Square. More important, he was one of the principal speakers at the picnic after the parade, and possibly the only speaker who emphasized the special nature of the occasion. He said it was a festival of rejoicing which he hoped would be repeated annually. The festival would not be to celebrate a victory or a bloody battle, but to honor labor's coming into its own.⁸

The making of a national holiday

The great parade and picnic of 1882 was a single incident which in itself did not create the Labor Day holiday. But it generated enthusiasm which spread the idea like a prairie fire. In 1883, the Central Labor

Union repeated the celebration on Wednesday, September 5, and in 1884 George K. Lloyd, Secretary of the Central Labor Union, resolved "that the Central Labor Union does herewith declare and will observe the first Monday in [September] each year as Labor Day."⁹ Lloyd also introduced a Labor Day resolution at the 1884 Convention of the Knights of Labor,¹⁰ while A. C. Cameron, a labor leader and editor, introduced a similar resolution at a meeting of the Federation of Organized Trades (the predecessor of the American Federation of Labor).¹¹

Government recognition followed. In 1885 and 1886 some municipalities made Labor Day an official holiday. By 1887 five States, including New York, had Labor Day laws on their books.

The labor movement then pressed for national legislation. In 1894, Senator James Henderson Kyle, Populist from South Dakota, and Representative Amos J. Cummings, Democrat from New York, successfully sponsored congressional legislation and on June 28 President Grover Cleveland signed the bill, making the first Monday in September a legal holiday for workers in the Federal Government, the District of Columbia, and the territories. This Federal act, along with additional State laws, in effect made Labor Day a national holiday.

Conflicting claims

Peter J. McGuire, an organizer of the United Brotherhood of Carpenters and Joiners and co-founder of the American Federation of Labor, claimed the title of "Father of Labor Day." Because McGuire was an important member of the union establishment, most of organized labor tended to support him.

The October 1889 issue of the *Carpenter*, published while McGuire as editor, asserted:

In the spring of 1882, General Secretary P. J. McGuire, of the United Brotherhood of Carpenters first originated the observance of a distinct and a new holiday—with parade and picnic—to be known as 'Labor Day.'¹²

Eight years later, after Labor Day became a national event, P. J. McGuire repeated his assertion:

On May 8, 1882, the writer, present General Secretary-Treasurer of the United Brotherhood of Carpenters, made the proposition. He urged the propriety of setting aside one day in the year, to be designated as 'Labor Day,' . . .¹³

Repetition made reputation. McGuire's article in the

Carpenter in 1897 has been quoted again and again and these repeated assertions marked Peter McGuire's ascent on the pedestal.

Yet the attempt persists to credit Matthew Maguire instead. Though Maguire seems not to have made the claim for himself that he was the "father of Labor Day," others have claimed the distinction for him. Perhaps this was a renewed skirmish in the old war between the Knights of Labor and the American Federation of Labor, since Peter J. McGuire was the Federation candidate.

Nine years after the first parade, the New York City Socialist newspaper, the *People*, featured an article, "Labor Day: Its History and Development in the Land." The editor and many staff members had been active in the Knights of Labor and may have had first-hand knowledge of events. "The first great labor parade," the article opened, "was arranged by the Central Labor Union through the instrumentality of its first Secretary, Matthew Maguire."¹⁴

Fifteen years after the event, William McCabe reminisced how:

One Sunday afternoon the secretary of the central body, Matthew Maguire, a delegate from the Brooklyn K. of L. Assembly . . . suggested that the Central Labor Union call upon the trade and labor organizations of New York City and vicinity to join in a labor parade . . .¹⁵

T. V. Powderly, in letters written many years after the parade, noted that so many articles mentioned McGuire as the founder of Labor Day that he discussed the matter with McGuire himself. Powderly reports that McGuire "never claimed that credit" and allegedly admitted that his name might have been mixed up with that of Matthew Maguire.¹⁶

In 1967, George Pearlman, a retired machinist from Paterson, N.J., became a champion of his fellow machinist, Matthew Maguire. He pored over old newspapers, talked to "oldtimers," and built up an important file of records.¹⁷

Evaluation

In view of the conflicting claims, how is it possible to answer the question, "Who is the father of Labor Day?" As long as it seemed that the big parade would end with a picnic, it did not seem important enough for anyone to document its origin.

To the list of those who helped make the 1882 parade and picnic a success should be added the

names of others who contributed to transform the celebration into a bona fide labor holiday. William McCabe of the printers' union rallied the marchers and worked hard to get union support. Robert Bartholomew of the Piano Makers Union fought hard to make the affair a success. Louis F. Post, later a key figure in the Department of Labor, worked for *Truth*, which gave the Central Labor Union and the parade much publicity. Post was an official reviewer and orator. Similarly, John Swinton of the *Sun* served as publicist, reviewer, and leadoff speaker at the picnic. George Block is mentioned as Chairman of the Committee on Demonstration. Robert Blissert was President of the Central Labor Union. Terence V. Powderly of the Knights of Labor acknowledged each local body as it passed. Robert Price of the Miners' Union is credited with actually designating the day as "Labor Day." Alderman Ferdinand Levy of New York City may have been the first to gain the support of a government body when the New York City Board of Aldermen adopted his resolution of sympathy with labor and its demonstration. All these men may have some claim for the success of this labor festival.¹⁸

In a real sense Labor Day was the creation of the labor movement as a whole, with the cooperation of local, State, and Federal Government. It was a reflection of the growth of the American economy and the role played by labor in that growth. Peter J. McGuire recognized this in words he wrote 15 years after the first parade, giving praise where praise was due:

. . . the thought, the conception, yea the very inspiration of this holiday came from men in the ranks of working people—men active in uplifting their fellows, and leading them to better conditions. It came from a little group in New York City, the Central Labor Union, which had just been formed . . .¹⁹ □

FOOTNOTES

¹ *Irish World*, April 1, 8; June 24, 1882.

² *Truth*, May 15, 22, 28; June 5, 12, 19; Aug. 7, 28; and Sept. 4, 5, 1882. *Irish World*, Apr. 1, July 29, Aug. 5, 12, 1882.

³ Matthew Maguire to T. V. Powderly, Aug. 31, 1882, *Powderly Papers*, Catholic University, Washington, D.C.; Knights of Labor, *Proceedings*, Sept. 5, 1882, p. 1.

⁴ *Journal of United Labor*, November 1882, pp. 379-380; Norman J. Ware, *The Labor Movement in the United States, 1860-95*, New York, D. Appleton & Co., 1929, pp. 104-108; *People*, Sept. 6, 1891; Knight of Labor *Proceedings*, 1883, pp. 447-451.

⁵ *New York Herald*, Sept. 6, 1882; *Irish World*, Sept. 16, 1882.

⁶ William McCabe, "Origin of Labor Day," *Cleveland Recorder*, Sept. 5, 1897.

⁷ *Cleveland Recorder*, Sept. 5, 1897; *Irish World*, Sept. 16, 1882; *Truth*, Sept. 6, 7, 1882; *New York World*, Sept. 6, 1882; *New York Times*, Sept. 6, 1882; *New York Herald*, Sept. 6, 1882.

⁸ *Irish World*, Sept. 16, 1882; *Truth*, July 17, 1882; *New York World*, Sept. 6, 1882; Louis F. Post, "Living a Long Life Over Again," *Louis Post Papers*, Washington, D.C., Library of Congress, Manuscript Division, pp. 190-191.

⁹ Central Labor Union, *Official Handbook*, Sept. 7, 1891, p. 14.

¹⁰ Knights of Labor General Assembly, *Proceedings*, 1884, p. 726.

¹¹ Federation of Organized Trades and Labor Unions, *Proceedings*, 1884, p. 16.

¹² *Carpenter*, October 1889, p. 4.

¹³ *Carpenter*, September 1897.

¹⁴ *People*, Sept. 6, 1891.

¹⁵ *Cleveland Recorder*, Sept. 5, 1897.

¹⁶ T. V. Powderly to Editor of the *Druid*, Scranton, Pa., Sept. 12, 1911; T. V. Powderly to James J. Davis, Secretary of Labor, 1922; *Powderly Papers*, op. cit.; *United Mine Workers Journal*, Aug. 25, 1913.

¹⁷ Much of the material for this article was based on the material that Pearlman located. With wry humor he remarked that those labor historians who have written about Labor Day should have gone into the millinery business because their variations would make them top designers. Pearlman rejected my suggestion that we prepare an article jointly because he is an out-and-out "Matthewite." Though I have personally studied every source cited, it was Pearlman who dug out most of them.

¹⁸ *New York Herald*, Sept. 6, 1882; *New York Times*, Sept. 5, 6, 1882; *New York Sun*, March-September, 1882 passim; *Truth*, March-September, 1882 passim; Louis F. Post, op. cit.

¹⁹ P. J. McGuire, "Labor Day, Its Birth and Significance," *Carpenter*, September 1897.

Verse by the first Secretary of Labor

William B. Wilson, first Secretary of Labor, was in President Woodrow Wilson's cabinet from 1913 to 1921. An immigrant boy, he dropped out of school at the age of nine to work as a coal miner. He became a union organizer, and between 1906 and 1912 was a U.S. Congressman. As a hobby, he wrote poetry. In 1903 he published a book of poems called *Memories*. The book was not for

sale, but printed privately and distributed among his friends.

Many of the poems were sentimental, describing nature, friendship, and so forth. Others dealt with the life of working people, such as "The Coal Miner." On these topics Secretary Wilson wrote from first-hand experience and observation. The following excerpts from his 16-stanza work, "The Explosion," are typical:

Deep beneath the rolling prairie
Shone the miner's feeble light;
All around a dreary darkness,
Blacker than eternal night.
Hundreds there with pick and shovel,
Eking out their daily bread,
Heedless of the dang'rous gases
Or the treach'rous roof o'erhead.

Hundreds, who for years had labored
In the mines, from harm exempt,
Knowing well its many dangers,
Held these dangers in contempt.
It was early in the evening,
Tools were being laid away,
For a week of labor ended
With the ending of the day.

Men with muscles sore and weary,
With a week of toil oppressed,
Thanked the Lord Who gave the Sabbath,
Gave it for a day of rest;
Thanked the Lord, yet while these feelings
From their honest bosoms start,
Hark! A rumbling in the distance
Strikes terror to the heart.

Oh, how well they knew the meaning
Of that distant, dismal roar!
Quick they drew their coats about them,
Threw themselves upon the floor.
Through the headings, airways, chambers,
Every open space it came,
With a voice more loud than thunder,
With a solid wall of flame.

Rails and sleepers, doors and brattice,
Cars and timbers, coal and rock,
Crashing, tearing, rushing, roaring,
Flow before the mighty shock.
Stalwart men were but as feathers,
Driven with a cyclone's ire,
Fast their flesh and sinews shrivelled,
Scorched and roasted with the fire.

Some were hurled against the pillars,
Mangled, bleeding, dying, dead;
Arms and legs torn from the body,
Bodies severed from the head.
Loud the shrieks of burned and wounded,
Prayers and curses rent the air,
Strongmen wept for helpless families,
Tore their garments in despair.

Soon the shocking crash was over,
Deadly vapors round them crept,
Wrapt them in a veil of poison,
Lulled the living till they slept.
Never men slept more intensely,
Never miner breathed more deep,
Not a soul in all the chamber
Ever wakened from that sleep.

One by one the charred and mangled
Bodies of the men were found,
And with gentle hands were carried
To the rough morgue overground.
Many hearts were rent with anguish,
Many tears of sorrow shed,
As with each arrival, loving
Loved ones recognized their dead.

* * * * *

—WILLIAM B. WILSON

Statistical effect of work-training programs on the unemployment rate

Programs have modest direct
impact on the unemployment rate,
but over half enrollees put to
work in programs had been out of
the labor force

SYLVIA S. SMALL

ENROLLMENT in manpower work-training programs funded by the Federal Government has grown from 50,000 in the early 1960's to nearly 1 million persons in any given month in 1971. Nearly two-thirds of the enrollees received training or work experience designed to meet the employment needs of young people in their teens or early twenties.

This article analyzes the statistical effects of average monthly enrollment in manpower programs on labor force, employment, and unemployment data in 1971. Labor force status of enrollees in programs is compared with their status in the labor force at the time they entered the programs, and the results are applied to the official monthly measure of labor force activity. The principal finding is that the unemployment rate might have been 6.2 percent in 1971 rather than 5.9 percent had these programs not been operative. As indicated later, work-training programs had the effect of drawing about 400,000 people into the labor force, raising the number employed by about 600,000, and reducing the number of unemployed by about 200,000. Thus the programs can be said to have resulted in a decrease in the unemployment rate of 0.3 percentage points. There is some evidence that the programs have reduced the rate by similar amounts in recent years.¹

Few studies of this type have been made, partly because of the difficulty of obtaining appropriate data. Especially troublesome is determining how program participants are being reported in the regular monthly survey of the labor force.² The questionnaire used in the household survey does not require information on enrollment, and very few program participants volunteer such information.³ Moreover, it is impossible to determine precisely what the status of participants would have been in the ab-

sence of the programs. Therefore, the estimates which follow involved a number of assumptions.

Employment status of enrollees

As the number of programs grew, a determination had to be made about how enrollees were to be classified in the labor force to assure consistency of employment, unemployment, and labor force data. In 1964, an interagency committee determined the appropriate status of enrollees and set the standards still followed in the classification process.⁴ Considerations included the purpose of each program, whether participants were supposed to work or receive training, and their status as wage earners under the Internal Revenue Code and the Social Security Act. In the final analysis, persons were to be classified as employed if they were receiving wages rather than subsistence or other allowances, or if they were getting on-the-job training; as unemployed if they were enrolled in institutional (classroom) training. Job Corps participants were to be counted as not in the labor force. The household interviewers were given detailed instructions for classifying those who volunteered information on participation.

Most of the large manpower programs involve placing people in jobs rather than in classroom training, and most participants would therefore be counted among the employed. This would probably be true whether or not the household respondent offered any information on the enrollee's specific program participation, because holding a job and receiving wages are fairly clear-cut unambiguous activities. On the other hand, the line of demarcation between being unemployed and outside the labor force is much harder to define. Thus, how participants in programs such as the Work Incentive program are actually classified in the official labor force survey is uncertain.

Although estimates of the statistical effect of the

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programs would be more precise if the labor force survey were able to measure program participation explicitly and directly, experience with the survey has demonstrated that additional questions on work and work-seeking activities could result in a complete break in the historical series, making the data exceedingly difficult to interpret for quite some time. In addition, it is doubtful that household respondents know the necessary details about program participation even if explicitly asked. Thus, for the purposes of this analysis we have no choice but to assume that enrollees are classified in accordance with the interviewer's instructions.

The major work-training programs

The major work-training programs in effect in 1971 generally operate outside the normal educational process, enroll individuals for less than a year, provide skill training and job opportunities for non-professional jobs, and are targeted toward the disadvantaged portion of the population.⁵ Programs vary in length from 2 months to 2 years. Average length of enrollment is 6 months. Programs analyzed here are described in the exhibit.

The earliest programs in operation, the Manpower Development and Training programs, began in 1962.

Exhibit: Major Federal work-training programs in fiscal years 1971-72¹

Program	First year of operation	Type of training	Objective	Method	Eligibility requirements for participants	Benefits
Manpower development and training (MDTA-Institutional).	1962	Skill center or school.	Occupational training for unemployed and underemployed persons along with supportive services.	Training or retraining in skills needed in the local labor market at skill centers or vocational training schools outside the regular school system.	Unemployed household head or member or household with unemployed of underemployed head. Must have one year of work experience.	Eligible persons receive training, subsistence, and transportation allowance.
Manpower development and training on the job ² (MDTA-OJT).	1962 (ended 1971).	On-the-job training.	Occupational training in a job, for unemployed and underemployed persons, combined with instruction.	Contract with public or private employers.	Unemployed and underemployed persons; at least 2/3 must be "disadvantaged"; preference to persons over 18 years old.	Employer pays beneficiary the going wage for such work in the area.
Jobs-Optional (JOP).	1971 (MDTA-OJT merged into JOP in 1971).	On-the-job training.	Training on the job for disadvantaged and non-disadvantaged persons in entry level jobs and upgrading of employees into higher skill shortage occupations.	Contract with private employers or nonprofit companies.	Unemployed or underemployed persons; 50 percent must be disadvantaged poor certified by State Employment Service or other group designated by Regional Administrator of Manpower.	Employer pays beneficiary the going wage, but his additional training costs are reimbursed under contract with the Government.
Job Opportunities in the Business Sector, federally financed (JOBS).	1969	Actual work on the job with supportive services.	Encourage private industry to hire, train and upgrade hard-core unemployed and underemployed.	In cooperation with National Alliance of Businessmen, provides technical assistance and grants to offset added costs of remedial education.	Poor persons who do not have suitable jobs and who are: (1) school dropouts, (2) under 22, (3) 45 or over, (4) handicapped, or (5) subject to special obstacles to employment.	Jobs, training, and remedial education for hard-core unemployed.
Neighborhood Youth Corps—in school and summer (NYC-In School and NYC-Summer).	1965	Work.	To provide opportunities for students in low income families to earn enough to enable them to stay in school.	Private or public nonprofit agency sets up jobs to perform public service for community, using students part-time or during summer.	Students from low income families in grades 9-12 or ages 14-21.	Jobs—part-time or in summer to fit student schedule.
Neighborhood Youth Corps—Out of School Program (NYC-Out of School).	1965	Work and on-the-job training with supportive services.	To provide work experience and on-the-job training to school dropouts to encourage them to return to school or acquire skills to improve employability.	Private or public nonprofit corporation sets up full-time jobs for community service, full time, and provides training on the job and in institutional setting, counseling, and other supportive services.	Unemployed out of school youth 16-17 years old.	Jobs and training for youth.
College Work Study.	1965	Work.	To promote part-time employment of students from low-income families.	Contract with colleges and universities. Federal Government pays 80 percent of student earnings in public service jobs in public or private nonprofit organizations. Students may work up to 15 hours a week.	Full-time undergraduate students whose resources are inadequate to enable them to stay in college.	Jobs, at minimum wage.
Job Corps.	1965	Training away from home.	Training to enable beneficiary to become productive citizen; also placement in jobs or school or the Armed Forces. Remedial services are stressed.	Government funding to train and care for disadvantaged youth while paying them \$30-\$50 a month.	School dropouts 14-21 years old who are unemployed, underprivileged, and in need of a change in environment.	School and work-training—in a residential facility.

See footnotes at end of table.

These programs fall into two major segments: the larger, a program of institutional training, provides classroom instruction in public or private vocational or educational institutions for unemployed and underemployed persons who cannot obtain full-time employment without training. It provides payment of training allowances, transportation, and subsistence allowances. Therefore, people in this program are considered unemployed.

The on-the-job training part of the Manpower Development and Training program (MDTA-OJT) provides Federal funds to pay materials and other training costs to employers; each employer then

pays the trainee the wages prevailing in the industry in his area for the job being learned. People being trained under this part of Manpower Development and Training, and JOBS-Optional, a similar program, are considered employed.

The largest of the programs in effect in 1971 were the Neighborhood Youth Corps In-School and Summer program and the College Work Study program. Together, these accounted for a monthly average of more than one-half million participants in 1971. These were programs to enable disadvantaged young people to stay in school by offering them part-time jobs. Under Neighborhood Youth Corps, begun in

Exhibit—Continued: Major Federal work-training programs in fiscal years 1971-72 ¹

Program	First year of operation	Type of training	Objective	Method	Eligibility requirements for participants	Benefits
Concentrated Employment Program (CEP).	1968	Outreach, counseling, medical, educational, & other supportive services, work training, and placement.	To coordinate and concentrate Federal manpower efforts to attack problems of the hardest hit of the disadvantaged in urban or rural neighborhoods that have serious unemployment or subemployment.	Federal funding to develop delivery of a variety of manpower programs through a single sponsor—generally a community action agency.	Residents of CEP target areas who are disadvantaged, and who meet criteria for JOBS program (above).	Education and other supporting services and work-training to aid in placement in a permanent job.
Public Service Careers (PSC)—includes New Careers, STEP, and other earlier programs.	1969	To train on the job for government work.	To help disadvantaged adults to qualify for jobs with State and local government and private nonprofit agencies.	Federal funds to enable State and local governments to train disadvantaged people in subprofessions in health, education, etc.	Unemployed or underemployed persons, 18 years old or over; or people who are so discouraged that they have not looked for work.	Permanent employment in public service agencies, and upgrading of current employees.
Public Employment Program (PEP).	1971	Work at temporary jobs.	To create transitional employment when the unemployment rate has equalled or exceeded 4.5 for 3 consecutive months.	Federal funds to help State and local governments hire people to perform needed public services.	All unemployed and underemployed persons, with priority consideration to be given Vietnam veterans and young persons entering the labor force.	Jobs for unemployed persons at the going rate for such jobs.
Operation Mainstream.	1968	Work and supportive service.	Work-training and employment, with supportive services, to chronically unemployed poor adults.	Federal funding of 90 percent of cost of State and local community beautification projects, or other community services that do not replace existing programs.	Poor adults, 22 years old or over, and chronically unemployed; 40 percent must be over 55 years old.	Jobs, especially in rural areas.
Work Incentive program (WIN), replaced Work Experience Program which operated from 1965-69.	1968	Work or training for people on welfare.	To move men, women, and out-of-school youth from welfare rolls into meaningful permanent employment at or above the minimum wage.	State Employment Service officers will provide placement or on-the-job training, day care and other supportive services to welfare recipients. Employers will be allowed a 20 percent tax credit for wages paid WIN recipients for the first 12 months of employment, provided the employer retains the welfare recipient in a job for an additional 12 months.	AFDC recipients referred by welfare officers to the State Employment Service.	Public and private jobs for employable adults on welfare with pay at the same rates as other employees.

¹ Does not include stay in school or summer jobs programs of Civil Service Commission, or vocational rehabilitation projects of Department of Health, Education, and Welfare.

² National on-the-job training program provides similar project grants to national organizations able to carry out similar objectives. About 17,000 jobs funded in fiscal 1971.

SOURCES: Manpower Report of the President, 1970, Appendix A: Guide to Federally Assisted Manpower Training and Support Programs, pages 193-197; and Executive Office of the President, Catalog of Federal Domestic Assistance, 1971.

1965, Federal funds are used to provide work experience—primarily part time and during the summer—for teenagers from low-income families in jobs in State and local governments and in nonprofit organizations. Consequently, these youth are considered employed. Similarly, under the College Work Study program Federal funds pay 80 percent of the cost of part-time employment of college students in public service jobs in public and private nonprofit agencies. Students in the College Work Study program are paid at or above the minimum wage. Thus, they are also considered employed.

Job Corps serves young people who have dropped out of school and are not sufficiently trained to work. It provides Federal funds to move them out of their home environment into another residential setting where they may receive both educational and vocational training. They are paid by a monthly allowance rather than wages. Although they may perform useful work, the emphasis is on schooling and training, and participants in Job Corps are therefore classified as being not in the labor force.

The fastest growing program, Work Incentive (WIN), begun in 1965 as the Work Experience program, is intended to move adult men and women and out-of-school youth off the welfare rolls and into permanent employment. A major difference between this program and earlier ones is that participants now receive a whole package of services, including, for example, job counseling and job referral, as well as on-the-job training. The jobs in

which training occurs are varied and include all types ranging from jobs on special work relief projects to regular public service jobs. Participants in this program are classified as employed if they are working or receiving on-the-job training for pay. They are classified as unemployed if they are receiving institutional training or are working but receiving no pay other than welfare payments. Thus, most Work Incentive program enrollees would probably be considered unemployed according to the labor force classification. In 1971, only about 20 percent were in on-the-job training programs and therefore classified as employed.

Employment status of participants in each of the major programs is listed in table 1. Enrollment data in these programs were averaged for the 12 months of the year to make them conceptually consistent with the official labor force survey.⁶

The enrollees

As table 2 indicates, the enrollees tend to be young—3 out of 4 program participants are under 22 years old, reflecting the fact that the two largest programs, Neighborhood Youth Corps and College Work Study, are directed specifically toward the young. In a large proportion of the programs men predominate, but in the Work Incentive program, the fastest growing one, women are 60 percent of the total.

In assessing the statistical effects of enrollments, these proportions should be kept in mind. Since the labor force participation of youth is generally lower than that of the adult population, enrollments of large numbers of young people in the work-training programs are somewhat more likely to draw upon those who would otherwise be out of the labor force than would be the case where the programs are intended for adults. For example, in 1971 only 51 percent of all persons under age 21 were in the labor force, compared with 60 percent of those over 21. Studies have also shown that young people have high elasticity to changes in employment, indicating that many of the youth drawn into the ranks of the employed had been out of the labor force.⁷ The increasing proportion of women in the programs—notably in the Work Incentive program—may also have an effect on the statistical impact, because of the differences in labor force participation of women compared with men. Moreover, the impact on the unemployment rate is likely to be greater if blacks

Table 1. Current Population Survey employment status classification of people enrolled in work-training programs

Program	Classification	1971 average monthly enrollment (thousands)
MDTA-On-the-Job Training.....	Employed	53.0
JOBS-Optional.....	Employed	
Job Opportunities in the Business Sector (federally financed portion).....	Employed	34.0
Neighborhood Youth Corps In-School and Summer.....	Employed	187.6
Neighborhood Youth Corps Out-of-School.....	Employed	38.0
College Work Study.....	Employed	358.8
Public Service Careers.....	Employed	28.6
Public Employment program.....	Employed	14.7
Operation Mainstream.....	Employed	21.3
Work Incentive program.....	20 percent employed 80 percent unemployed	108.5
Concentrated Employment program (work-training segment).....	Employed	36.2
MDTA-Institutional program.....	Unemployed	58.0
Job Corps.....	Not in the labor force	22.1
Total.....		960.8

SOURCE: U.S. Department of Labor, Manpower Administration, and U.S. Department of Health, Education and Welfare, Office of Education. Definitions from Current Population Survey interviewer's manual.

Table 2. Selected demographic characteristics of persons in major work-training programs, 1971

Program	Percent of total			
	Male	Under 22	White	8 years of school or less
MDTA-Institutional.....	59	40	56	12
JOBS-Optional, and MDTA On-the-Job Training.....	74	35	69	15
Job Opportunities in the Business Sector ¹	66	45	36	18
Neighborhood Youth Corps In-School and Summer.....	55	100	38	20
Neighborhood Youth Corps Out-of-School.....	51	94	53	29
College Work Study.....		98		0
Concentrated Employment program.....	60	46	31	16
Operation Mainstream.....	73	5	64	45
Work Incentive program.....	38	27	56	20
Job Corps.....	74	100	27	33
Public Employment program.....	72	11	71	7
Public Service Careers.....	50	36	55	10

¹ Data refer to the federally financed portion.

NOTE: Dashes indicate data not available.

SOURCE: Manpower Report of the President, 1971, and estimates from U.S. Office of Education.

and persons with less than 8 years of school are employed in programs rather than if only white high school graduates are affected.

Prior employment status

For the purposes of this analysis, we assume enrollees would have continued their pre-enrollment status in the absence of the programs. In order to estimate what unemployment would have been if the programs had not been in operation, participants' employment status prior to their entry into the programs is compared with their employment status in the programs.

For most programs, data on prior employment status of participants were available directly from the agencies administering the programs. However, such data had not been collected for College Work Study, Neighborhood Youth Corps, and Job Corps. For these programs, prior employment status is based on the 1970-71 Census Employment Survey—a comprehensive survey of the employment situation in the low-income neighborhoods of large cities. Employment status data from this survey, which are available by age, sex, race, and school enrollment, are appropriate for this analysis because the Neighborhood Youth Corps, the College Work Study program, and the Job Corps are all geared to serve the disadvantaged population in low-income areas.⁸

At the time they entered the programs, nearly half of all youth in Job Corps and the Neighbor-

hood Youth Corps would have been likely to have had other jobs, according to these data. People in Project Mainstream would have been least likely to be employed in the absence of the programs, with only 2 percent of these (primarily older workers) employed. The proportion who were previously unemployed ranges from less than 10 percent for youth in Neighborhood Youth Corps In-School and Summer programs and College Work Study to over 90 percent of those in the Concentrated Employment programs, Project Mainstream, and the Public Employment program. And the proportion who would not have been in the labor force ranged from a low of none in the Public Employment program to nearly 70 percent for Neighborhood Youth Corps In-School and Summer enrollees (table 3).

Net impact

Table 4 compares labor force classification of program participants in 1971 with estimates of their classification in the absence of the programs in aggregate terms. A monthly average of approximately 961,000 persons were enrolled in the major work-training programs in 1971. Of these 794,000 were

Table 3. Distribution of enrollees in major work-training programs by prior employment status, 1971¹

[In percent]

Program	Enrollees			
	1971 total	Employed	Unemployed	Not in the labor force
MDTA-Institutional.....	100	13.5	72.7	13.8
JOBS-Optional, MDTA-On-the-Job Training, and Job Opportunities in the Business Sector ²	100	14.6	64.8	20.6
Neighborhood Youth Corps In-School and Summer.....	100	21.0	9.9	69.1
Neighborhood Youth Corps Out-of-School.....	100	46.0	21.8	32.2
College Work Study.....	100	27.7	8.3	64.1
Job Corps.....	100	50.0	32.9	17.1
Concentrated Employment program.....	100	4.6	92.6	2.8
Public Service Careers.....	100	29.3	29.2	41.5
Public Employment program.....	100	9.0	91.0	0.0
Operation Mainstream.....	100	2.2	93.0	4.8
Work Incentive program.....	100	4.9	83.9	11.2

¹ As reported upon first enrollment for people entering Manpower Development and Training Act program, Concentrated Employment program, Public Employment program, Operation Mainstream, Work Incentive program, and JOBS-Optional in the Business Sector². Data for Public Service Careers were obtained by using labor force participation of target group and applying estimates based on partial data from enrollment forms. For all other programs, data were based on the appropriate population group in Employment Profile of Selected Low Income Areas, U.S. Summary, Urban Areas (U.S. Bureau of the Census, 1971), Series PHC(3)-1, tables A, F, and D. For Neighborhood Youth Corps, employment status of teenagers was used; for youth in Job Corps, black males age 16-19 out of school; and for College Work Study, college-age youth in school.

² Data refer to federally financed portion of this program.

classified as employed, 145,000 as unemployed, and 22,000 as not in the labor force. Only 182,000 of the currently employed group would also have been employed in the absence of the programs; 206,000 would have been unemployed and 406,000 would have been out of the labor force. But most of those now classified as unemployed were unemployed when they enrolled.

When all shifts in classifications are applied to the 1971 labor force data, the net result, as shown in table 5, is that the current unemployment rate in 1971 might have been 6.2 percent rather than 5.9 percent had these programs not been operating. Thus, it is likely that in 1971, in the absence of enrollments in work-training programs, the unemployment rate would have been 0.3 percentage points higher, within the 0.2 to 0.5 range found since the mid-sixties.⁹

Work registration for welfare recipients

The Talmadge Amendment to the Social Security Act requires that all recipients of Aid to Families with Dependent Children register for the Work Incentive program before they may qualify for welfare aid. Those who are able must take work or training or risk losing welfare benefits. According to current estimates, about 1.5 million of those now in Aid for Dependent Children programs were required to register on July 1, 1972. In 1971, most Aid for Dependent Children recipients were classified as not in the labor force. At the moment of registration under the Work Incentive program, their classification changes from not in the labor force to unemployed. Thus they will constitute a net addition to the number classified as unemployed

Table 4. Estimated employment status of enrollees, 1971, compared with prior employment status

(Numbers in thousands)

Current classification	Total		Estimates of classification in the absence of the programs		
	Number	Percent distribution	Employed	Unemployed	Not in the labor force
Employed.....	794	82.6	182	206	406
Unemployed.....	145	15.1	12	115	18
Not in the labor force.....	22	2.3	11	7	4
Total.....	961	100.0	205	328	428
Percent distribution.....		100.0	21.3	34.1	44.6

Table 5. Estimates of effect of work-training programs on labor force data, 1971

(Number in thousands)

Item	Civilian labor force			Not in labor force
	Total	Employed	Unemployed	
Persons in work-training programs:				
Current classification.....	939	794	145	22
Classification in the absence of the work-training programs.....	533	205	328	428
Effect of work-training programs.....	+406	+589	-183	-406
Labor force data, 1971:				
Actual data.....	84,113	79,120	4,993	55,666
Data in the absence of work-training programs.....	83,707	78,531	5,176	56,072
Unemployment rate, 1971:				
Actual rate.....				5.9
Rate adjusted for absence of work-training programs.....				6.2
Effect of work-training programs on unemployment rate.....				-0.3

SOURCE: Table 4, this article, and *Employment and Earnings*, January 1972 p. 23.

in the labor force data. However, because of budgetary limitations and other startup problems, as well as because of normal turnover, it is considered likely that no more than 200,000 additional Aid for Dependent Children recipients will be enrolled in WIN in any single month within the coming year.¹⁰ Moreover, since these added registrants will be phased into the Work Incentive program gradually during the year, the statistical effect on the employment rate is expected to be minimal.

AS A FINAL CAVEAT, it should be pointed out that the impact on the unemployment rate of enrollment is only one measure of the effect of work-training programs. This is especially important since average enrollment is only 6 months. This analysis does not attempt to estimate how many of the enrollees obtained regular jobs as a result of participation in the work-training programs. Since training as well as income maintenance is an important policy objective, the effects of these programs on long-term employability is a primary consideration. □

FOOTNOTES

¹ See Malcolm Cohen, "The Direct Effects of Federal Manpower Programs in Reducing Unemployment," *The Journal of Human Resources*, Fall 1969, pp. 491-507.

² In the Current Population Survey, data about the labor force are collected each month from a representative sample of about 50,000 households on the labor force activity of each person 16 years of age and over during the week that

includes the 12th of the month—the survey week. People are counted as employed if during the survey week they either worked as paid employees, worked in their own businesses, or worked more than 15 hours as unpaid family workers, or were only temporarily absent from a job because of vacation, illness, bad weather, or for personal reasons. They are counted as unemployed if they did not work at all during the survey week, but were looking for work and were available for a job. They are considered to be looking for work if, during the preceding 4 weeks they had made efforts to find work by registering at an employment agency, or writing letters of application, or canvassed for work; or if they were waiting to be called back to a job from which they had been laid off, or to report to a new job within 30 days, and were not in school; or if they would have been looking for work but were temporarily ill. The total of those counted as employed and unemployed in the survey week constitutes the civilian labor force. People who were not in these categories and not in the Armed Forces are counted as “not in the labor force” during the month. See *BLS Handbook of Methods* (Bulletin 1711, 1971), p. 8, for a complete description of the concepts and methods used in obtaining unemployment statistics; see also *Concepts and Methods Used in Manpower Statistics from the Current Population Survey* (BLS Report 313, 1967).

⁸ John E. Bregger, “Labor Force Classification of Persons in Special Government Welfare, Work-Related, or Training Programs,” unpublished Bureau of Labor Statistics position paper. A proposal has been made to survey a sample of program participants in Work Incentive programs and Manpower Development and Training, so that their responses may be compared with their presumed classification.

⁴ The Interagency Committee on Labor Supply, Employment, and Unemployment Statistics made recommendations which were approved by the Policy Committee on the Cur-

rent Population Survey and the Office of Management and Budget.

⁵ *Manpower Report of the President*, 1971, p. 37.

⁶ Except for College Work Study Programs, enrollment data are now available on a month-by-month basis for the number of people enrolled at the end of the month. Actual enrollments at the end of the month conform more closely to the labor force concept of the number of people at work (or looking for a job) during a specific period of time—the survey week. To avoid seasonal variations—especially in youth programs where enrollments vary in accordance with the school year—the average for the 12 months of the year is used. For College Work Study, averages are based on estimates of program administrators.

⁷ Hyman Kaitz discusses assumptions underlying analysis of effects of manpower programs on unemployment, and labor force participation of youth, in *Youth Unemployment and Minimum Wage* (BLS Bulletin 1657, 1970), pp. 34–45. He points out that “Various studies have shown . . . when employment [of youth] rises by 10, unemployment falls by only six; this is an indication that additional people are drawn into the ranks of the employed from out of the labor force. . . .”

⁸ *Employment Profile of Selected Low Income Areas, U.S. Summary—Urban Areas, 1970 Census* (U.S. Bureau of the Census, 1971), series PHC (3)1, table F, p. 5. These data are referred to as the Census Employment Survey (CES).

⁹ Cohen, op. cit., p. 491. His study, using slightly different procedures, showed a reduction of 0.2 percentage points in 1965, 0.3 in 1966, 0.4 in 1967.

¹⁰ Statement by Malcolm R. Lovell, Assistant Secretary for Manpower, U.S. Department of Labor, at a press briefing June 28, 1972.

Importance of early work experience

It is undoubtedly true that many young people suffer little, if any, disadvantage from early hazardous labor market experience. These are the strong individuals who are able to experiment in the job market and benefit from doing so and those who successfully hunt short-term jobs to earn money for temporary needs while they prepare themselves for careers at higher levels.

There are, however, other youth who never emerge, or emerge only with great difficulty, from their early experiences of unemployment and marginal employment. Negroes and high school drop-outs stand out prominently among them, but current information is not adequate to isolate other

specific groups, such as whites from low-income families. Furthermore, it is not known how many of the youngsters who were “effectively” integrated into the world of work had to adjust their sights downward. . . .

There can be little doubt that those who do not make a satisfactory labor market adjustment while young are subsequently likely to be found among the large pools of disadvantaged middle aged for whom special training programs need to be developed or welfare provided.

Manpower Report of the President, March 1972.

How employers screen disadvantaged job applicants

New evidence calls into question
the relationship between
hiring standards
and actual tasks
a worker must perform

GLORIA SHAW HAMILTON AND
J. DAVID ROESSNER

SINCE the 1960's, the Federal Government and employers in the private sector have been attempting to foster the integration of disadvantaged persons into the mainstream of the American labor force. Beginning with the Area Redevelopment Act of 1961 and the Manpower Development and Training Act of 1962, government manpower programs increasingly turned toward efforts to remedy training and educational deficiencies which barred the disadvantaged from employment.

Paralleling the growth of Federal programs were similar activities in the private sector. Confronted with the urban riots of the 1960's, tight labor markets, a labor force with an increasing proportion of disadvantaged members, and continued encouragement and prodding from the Federal Government, many businesses, particularly the large ones, established in-house, privately financed programs. Training efforts, however, are unsuccessful if workers ultimately cannot find jobs utilizing their new skills.

The focus of this paper is the critical juncture where jobseekers and employing organization meet: the point at which officials responsible for hiring decide who among applicants will be offered jobs. The paper analyzes the hiring practices of a sample of employers who employed disadvantaged jobseekers who had participated in one of the largest federally supported job training programs: the Work Incentive program (WIN). It describes employer screening practices in terms of the type of organization and type of jobs involved.

The Work Incentive program, developed in the

late 1960's, is designed to remove individuals from the welfare rolls into productive employment in jobs that offer career mobility. Aid to Families With Dependent Children recipients age 16 and over are referred by the local welfare offices to the program. The Department of Labor is responsible for actual training and placement. Training varies considerably from modest orientation to work settings to some job-specific skill training.

Survey data were collected from a national sample of 280 employers, public and private, who had at least one graduate of the WIN program on their payrolls. Twenty employers were randomly selected in each of 15 Work Incentive program project areas.¹ These areas had also been randomly selected from those project areas within the continental United States that included the largest number of organizations employing Work Incentive program graduates at the time of the study. Sample firms varied widely by size, industry, and geographic location.

In each employing organization, interviews were conducted with a management representative (usually the personnel director) and with the immediate supervisor of a randomly selected WIN employee. While not strictly representative of all employers of disadvantaged workers nationally, there is no persuasive reason to assume that the sample employer differed markedly from the population of employers accessible to disadvantaged jobseekers in terms of organizational features, personnel practices, and entry level job structure.

Employers are able to screen prospective employees according to a number of criteria, only some of which are directly related to an applicant's apparent ability to perform the tasks involved. Screening can be based on broad educational qualifications (such as the demonstrated ability to read and write), the ability to pass a test, or the need to present evidence of attainment of some specific level of school-

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ing (such as a high school diploma). It can also be based on job-related criteria such as job experience or training, or on the applicant's personal characteristics and background, such as race, history of social deviance, or personal appearance. Previous studies suggest that employer requirements, though seldom formalized or rigidly adhered to, tend to be unrealistically stringent for the actual skills required for the jobs in question.²

We hypothesized that screening patterns could be expected to be associated with the size of the organization and the type of employer concerned; for example, larger employers might be expected to place relatively great emphasis on formal requirements such as a high school diploma, literacy, job references, and test passing. Locus of hiring authority was determined by whether the immediate supervisor of the Work Incentive program employee had some, or no, role in hiring for his work unit. We expected that the supervisor who has some role in hiring has a pragmatic, mitigating influence on the managerial tendency to specify unrealistic requirements for jobs. It was hypothesized that white-collar, service, blue-collar, and laboring jobs should be associated with different sets of qualifications and disqualifications; whether the job in question is a "dead end" or not (as defined by the immediate supervisor) was also expected to exert an important intervening influence on these relationships.

The employers and the jobs

The organizations employing Work Incentive program enrollees vary widely in size; one-quarter of the sample employers had fewer than 20 employees, while about the same proportion had 500 or more. In almost a third of the organizations, one individual functioned as both the owner-manager and the immediate supervisor of the WIN employee. These organizations all had fewer than 100 employees.

The public sector was represented by Federal, State, and local government agencies, public schools, and public hospitals and clinics. Private employers included various private institutions—nursing homes, hospitals, and clinics—as well as manufacturing, construction, transportation, and utilities industries and private businesses of all kinds. Of the 280 sample organizations, 66 percent were private businesses, about 13 percent were other private institutions, and 22 percent were public organizations.

Geographically, all major areas of the United

States were represented in the sample. However, because of the large numbers of employers on the west coast with Work Incentive program graduates on their payrolls, five sample sites were located there. Therefore, employers on the west coast, particularly in California, are more heavily represented than those in any other single area across the country.

About a third of all respondents said that all hiring was done by the "front office;" 11 percent said that only the supervisor did the hiring. (These were largely construction firms in which the supervisor was free to hire his own crews.) About half said that both the supervisor and the front office screened applicants but consulted with each other before final decisions were made. Seven percent claimed some other arrangement. From the additional comments made by respondents, it was clear that there was a great deal of flexibility in these arrangements; it is reasonable to assume that even within a single organization the influence on hiring of any single individual would vary with the type of job to be filled and with the informal procedures established between an employer and his supervisors.

Among organizations in which the roles of immediate supervisor and manager were performed by two different persons, most gave the immediate supervisor at least some authority in the hiring process. However, this pattern did not hold among organizations with fewer than 20 employees; in these organizations the owner or manager exercised such close supervision over the jobs involved that it was felt that supervisors need not have any formal role in the hiring process. As might be expected because of the operation of civil service systems, public employers in our sample were more likely than private employers to exclude supervisors from the hiring process.

Almost none of the Work Incentive program workers in the sample had been hired for positions classified as professional or managerial, but otherwise the jobs encompassed a wide variety of occupations. More than a third of Work Incentive program workers were employed in white-collar positions. About one-fourth of the workers were in service occupations. About a fifth of the WIN workers were hired as blue-collar employees, and a relatively small proportion (15 percent) were laborers. The sample employers did not seem to hire so large a proportion of blue-collar workers as is typical of the nationwide labor force.

Less than a fourth of the supervisors described the worker's job as a dead-end position with no

possibility for advancement.³ Jobs without a future tended to occur most often, as one might expect, in small, service organizations such as barber and beauty shops, lunch counters, and restaurants. Three out of every four blue-collar positions held the possibility of promotion. The proportion was the same for laborers. Among white-collar workers, only 1 in 6 was in a job classified as a dead-end job.

Employer screening patterns

On the whole, the employers in our sample appeared to be fairly open-minded in their stipulation of qualifications for the kinds of jobs held by Work Incentive program workers.

The great majority of the employers stated that a prospective employee must be able to read and write, but only 28 percent overall said that a high school diploma was necessary.⁴ The following tabulation shows the percentage of firms requiring a given characteristic:

Qualification	Required	Not required	It depends
High school diploma	28	70	2
Ability to read	85	14	1
Ability to write	85	14	1
Good personal appearance . . .	75	25	—
Work experience, general . . .	26	71	3
Job training, specific	28	69	3
Experience, specific	23	73	4
Job references	50	48	2
Pass a test	35	64	1

The conventional wisdom in the past few decades assumes that many employers felt that a high school education would be a "good thing" for employees at all levels, whether or not there exists any demonstrable relationship between years of formal education and an employee's proficiency. At least for the organizations in our sample, this stress on a high school diploma was not apparent.

Employers were less willing to commit themselves definitely to a set of disqualifying criteria, as suggested by the larger percentage of conditional "it depends" responses:

Disqualification	Would disqualify	Would not disqualify	It depends
Record of alcoholism . .	35	44	21
Record of drug use . . .	56	27	17
Language problem	39	54	7
Garnishment	18	68	14
Overweight	20	69	11
Other health problems . .	59	34	6
Arrest record	25	48	27
Prison record	30	47	23

A majority of the personnel representatives stated that prospective employees would be disqualified in only two instances—if they were drug users or if they came under a loose category called "health problems." This seemed a catchall for stipulations that ranged from health specifications legitimately pertaining to the requirements for particular jobs to an outlet for prejudices and arbitrary standards on the part of employers.

Not surprisingly, since other studies have turned up similar findings, 52 percent of the employers regarded an arrest record as a reasonable basis for rejection, either absolutely (25 percent) or conditionally (27 percent), despite the fact that an arrest record implies neither conviction nor sentence. The number of those who either would, or might, reject an applicant with an arrest record is only slightly smaller than the number who would dismiss candidates with prison records, which at least represents official evidence of a criminal past.

Respondents were much less willing to give qualified ("it depends") responses to the list of hiring standards than they were to disqualifying criteria. What such an approach represents is open to debate. Evidently, they are arbitrary in many respects. However, the managers' apparent willingness to consider the circumstances and the individual concerned before stating that certain situations or conditions would bar him from employment in their organizations indicates a certain degree of flexibility on their part.

Since it might be important for the jobseeker to know if employers tend to group any job prerequisites together into a "package," we paired each job qualification with all of the others and each disqualifying feature with all other bases for rejection. Formalized, general educational requirements do tend to occur together, although they become less important when the employer is searching for specific abilities more demonstrable through training or experience. The more subjectively determined "good personal appearance" does not seem to occur with other criteria in any systematic way, but is paired with almost all of the other job requirements because it is important to most sample employers.

Disqualifying attributes are, in general, more "personal" than qualifying features and concern primarily an individual's problem or special characteristics. Although some of them can be documented by the employer if he chooses to do so (such as garnishment and arrest and prison records, under some States' laws), most are open to a certain degree of subjective

evaluation. The pairing of disqualifying criteria brought forth no consistent pattern. Only a very few of them occur together systematically, and there does not appear to be any package as exists for the broad educational requirements among job qualifications.

One final dimension of interest to a jobseeker is the "stringency" of the job screening procedure he encounters. A crude measure of stringency is the total number of hiring standards mentioned by various employers which would apply regardless of special considerations or circumstances. When divided by size of firm only, 3 percent of all employers fell into the most stringent classification, except for the "large" organizations (100-499 employees). None of these cited as many as 16 or 17 qualifications and disqualifications. Large employers also accounted for the most sizable proportion classified as "least stringent." Smaller organizations, on the whole, tended to be somewhat more unbending in their approach to hiring standards than larger organizations. (See table 1.)

When divided into public and private sectors, more public than private employers fell into the more stringent categories because hiring standards in public agencies and institutions are often rigidly defined by civil service or other regulations. However, the great majority of *all* sample organizations—large or small, public or private—fell into the two middle categories, with more in the moderately stringent group than in the stringent classification. (These are, of course, arbitrary classifications.)

Again, it is difficult to determine whether the lack of stringency represents a broadmindedness on the part of employers or merely indicates an unwillingness

Table 1. Stringency of hiring standards, by organizational size and type

[In percent]

Stringency measure ¹	Organizational size				Organizational type	
	Small	Medium	Large	Very large	Public	Private
Most stringent.....	3	3	3	3	4	2
Stringent.....	34	33	31	23	37	28
Moderately stringent.....	54	50	51	60	45	57
Least stringent.....	9	14	18	14	14	13
Number.....	70	94	51	65	51	219

¹ If 3 or fewer of the 17 qualifications and disqualifications were stated as positively applying, the firm was placed in the least stringent category; 4 to 8 definite "yes" answers were scored moderately stringent, 9 to 13 stringent, and 16-17 most stringent. The locus of hiring authority in the organization was taken into account. If hiring was done in the administrative offices only, the managers' criteria were counted; if the supervisor had sole authority to hire, his criteria were used; if joint authority was claimed, both sets of criteria were used, divided by two.

Table 2. Percent of employers stating necessary qualifications for prospective employees, by organizational size and type

Qualification	Organizational size				Organizational type	
	Small	Medium	Large	Very large	Public	Private
High school diploma.....	31	29	24	25	43	23
Ability to read.....	84	88	82	83	88	84
Ability to write.....	86	88	82	82	86	84
Good personal appearance.....	79	79	69	68	75	74
Previous job experience.....	31	28	22	20	28	25
Specific training.....	31	27	24	26	28	27
Specific job experience.....	26	24	20	22	22	22
References.....	57	46	45	49	49	48
Pass a test.....	27	32	28	54	59	28
Number.....	70	92	52	64	51	217

on their part to commit themselves specifically during an interview. The system is loose enough to allow for the employment of disadvantaged workers or for possible discrimination or favoritism throughout the hiring process by both managers and supervisors.

Qualifications

Which qualifications are important depends on the size of the organization, but most differences are not large. The abilities to read and write are required by most employers in organizations of all sizes. A good personal appearance is important to large numbers of employers, and is more important in smaller organizations than in large ones. Small firms in general tend to require more employee qualifications than is the case in large organizations. The single exception is that a majority of the larger organizations ask that hires pass a test—smaller organizations rarely do so. Very large organizations have the facilities to conduct tests, so that reliance on examinations of some type can become a very simple screening device for these employers. Large organizations also have the capacity to conduct training, and often prefer to train their own workers. Not as many of them, therefore, feel that previous experience or training is essential as do the smaller employers who lack training capabilities. Among all organizations, including the smallest, fewer require specific job experience than look for broader qualifications such as references, training, or previous general work experience. (See table 2.)

As stated earlier, a larger proportion of public than private employers require all types of job qualifications for prospective employees, although the

differences, again, are not great. The largest difference appears for those qualifications most easily checked: evidence of a high school diploma and the requirement that the prospective employee pass a test.

To test the hypothesis that supervisors tend to have a more realistic view than managers of necessary qualifications for prospective employees, the data were analyzed in terms of who did the hiring. However, the patterns shown in table 2 were altered very little. There was a slight indication that when hiring authority was shared by the worker's direct supervisor, the supervisor helped reduce the importance of the more formal qualifications such as literacy requirements, appearance, and the need for references. At the same time, regardless of employer size or type, supervisors who exercised some hiring authority were more likely to cite previous general and specific experience as necessary prerequisites to hiring. There was a tendency for specific *training* to be more important in those organizations in which the supervisor had some hiring authority. Although further study is clearly indicated before definite conclusions can be drawn, it would appear that when hiring is located solely in the "front office" the stress is on more general, formal qualifications. When the hiring decision involves a work supervisor, he tends to shift emphasis away from general criteria toward more specifically job-oriented worker attributes.

The type of occupation for which an employee was hired makes a considerable difference in the qualifications required. Typically, employers hold blue-collar workers and laborers up to fewer criteria than they do white-collar and service workers, although this is not a completely consistent trend for each separate criterion. (See table 3.) Previous job experience and specific experience is required more often of blue-collar employees than of any other type. There appears to be a minimum of importance placed on a high school diploma. Requirements for reading and writing abilities are also progressively reduced for each group of employees, but still seem to be somewhat high for both blue-collar workers and laborers.

Possibly because they have hired disadvantaged workers in the past, this group of employers seems to be less restrictive in their approach to requirements for some employers than is the general practice throughout American business and industry. Even these organizations are, however, not entirely free of inconsistencies of hiring standards.

Table 3. Percent of employers stating necessary qualifications for prospective employees, by employee occupation

Qualification	Employee occupation			
	White-collar	Service	Blue-collar	Laborer
High school diploma.....	44	31	7	14
Ability to read.....	97	84	75	69
Ability to write.....	96	85	77	67
Appearance.....	88	89	53	57
Previous job experience....	25	25	30	24
Specific training.....	33	32	25	10
Specific experience.....	22	24	27	19
References.....	51	52	46	45
Pass a test.....	52	37	16	17
Number.....	104	70	61	42

We found that, although employers may claim that educational requirements are necessary so that workers may take advantage of future opportunities, their stated requirements for employees who were hired for admittedly "dead-end" jobs were not much lower than those from which promotion was possible. Although employers required a smaller number of qualifying characteristics for blue-collar workers and laborers in dead-end jobs than for those who might be promoted, generally they wanted white-collar and service workers in dead-end jobs to come equipped with more qualifications than those placed in units where promotion was possible. (See table 4.)

Disqualifying factors

Criteria that disqualify candidates, as pointed out above, are more personal, are probably less likely to be covered by stated organizational policy, and are much more open to subjective evaluation than are qualifications. The most frequently mentioned disqualifications in all organizations are those which are difficult to document: health problems and social-personal pathologies.

In general, the larger the organization, the smaller the proportion of managers there are who state a given characteristic would disqualify an applicant. But there is almost no difference between public and private organizations with respect to either documented or observed incapacities as disqualifying criteria. The greatest differences are found in the larger proportion of private organizations (40 percent versus 28) who would disqualify an employee for "language problems," and the greater proportion of public employers (28 percent versus 16) who con-

sider "overweight" disqualifying.

Criteria for rejection by occupational type show no clearly discernible pattern. As might logically be expected, white-collar workers more than any other type of worker would be disqualified for language problems. But more laborers than any others would be eliminated from consideration for alcoholism, drug use, and having prison records. In terms of the possibility of promotion, a similar relationship to that found for hiring qualifications became apparent: employers with Work Incentive program workers in dead-end jobs often cited more bases for rejection than did employers with jobs that offered future advancement. (See table 5.) The relationship is not consistent among all occupations, but is particularly obvious for service occupations, which frequently are those in which the employee has close relationships with the employer's clientele. Perhaps employers wish to disqualify individuals who they feel would not represent their organizations properly. Nonetheless, inconsistencies in the application of such screening devices suggest that these "disqualifications" do not actually represent a worker's inability to perform the job tasks; rather they give the employer leeway to reject certain applicants he finds undesirable for other reasons.

We found no discernible differences in the grounds for rejection between public and private firms in terms of who has a voice in hiring. But there is a difference between firms of different sizes. (See table 6.) The inverse relationship between number of

qualifications and disqualifications and organizational size, pointed out earlier, persists—somewhat strengthened—in those organizations in which the work supervisor has a part in the hiring process. That is, the larger the organization, the fewer the disqualifying criteria when the supervisor exerts influence. But when the front office is solely responsible for hiring, the relationship reverses. Managers in very large organizations where all hiring is done through the front office stress almost all disqualifying characteristics to a greater extent than do smaller employers and emphasize them much more than do managers in very large organizations in which supervisors share in the hiring. We suspect that managers who are removed from the workers and free of the pragmatic influence of supervisors have a more formal view of job qualifications.

Relevance of job standards

Probably the most important question that can be asked about employer hiring standards is, "How relevant are they?" Even at a time of high unemployment, many employers continue to complain that they cannot find workers who meet their standards. Our findings suggest that some of the trouble lies with the standards rather than the jobseekers.

Traditionally the world of regular employment has been one in which workers function in an environment characterized by a set of norms that specify regularity in hours, promptness, and attendance; conventional dress and behavior on the job; deference to authority figures in the organization; and adherence to specific sets of rules of conduct that often differ from organization to organization. These prescriptions are derived from organizational imperatives, and are enforced by those in authority in the organization. Historically, most workers at all levels largely have conformed to and supported these norms. Existing studies of hiring standards indicate that, knowingly or not, employers use their screening practices to maintain this time-honored state. But the composition of the work force is changing rapidly: more young people are seeking jobs; women are no longer a rarity in many occupational fields; prospective employees who are "different" in race, educational attainment, or life style are looking for meaningful employment. Traditional behavior patterns are finding fewer followers, and experimentation in manner of dress and appearance is no longer restricted to a single age group, class, or race. Many of the characteristics undergoing change play a role in

Table 4. Necessary qualifications for prospective employees by class of employee occupation, controlled for possibility of promotion

[In percent]

Qualification	Employee occupation							
	Promotion possible				Dead-end job			
	White-collar	Service	Blue-collar	Laborer	White-collar	Service	Blue-collar	Laborer
High school diploma.....	43	31	6	19	47	30	7	-----
Ability to read.....	97	80	79	71	100	95	64	64
Ability to write.....	96	82	81	68	100	95	64	64
Good personal appearance.....	85	84	55	65	87	100	43	36
Previous job experience.....	23	22	32	29	38	35	21	9
Specific training.....	33	26	30	10	31	50	7	9
Specific experience.....	23	18	30	23	20	40	15	9
References.....	50	47	45	52	56	65	50	27
Pass a test.....	53	41	21	19	44	25	-----	9
Number.....	88	51	47	31	16	20	14	11

Table 5. Disqualifications for prospective employees by class of employee occupation, controlled for possibility of promotion

[In percent]

Disqualification	Employee occupation							
	Promotion possible				Dead-end job			
	White-collar	Service	Blue-collar	Laborer	White-collar	Service	Blue-collar	Laborer
Alcoholism.....	30	29	28	42	27	74	29	46
Drug use.....	49	56	47	63	53	75	57	64
Language problem.....	53	37	26	26	56	35	36	9
Garnishment.....	15	14	19	13	27	25	29	18
Overweight.....	21	29	15	20	13	20	7	9
Other health problems.....	59	64	49	70	50	70	39	46
Arrest record.....	30	12	23	26	20	45	14	18
Prison record.....	38	16	26	42	20	45	14	18
Number.....	88	51	47	31	16	20	14	11

employers' screening practices, but few have been shown to have a necessary relationship to the ability to perform a job. By continuing many of their present policies, employers may be screening out those highly creative and innovative persons it would be most advantageous to hire.

The data presented here call into question the relationship between employers' hiring standards and ability of Work Incentive graduates to perform the actual tasks the jobs they seek involve. Employers in our sample placed heavy emphasis on personal appearance as a job qualification, while placing far less importance on such directly job-related requirements as previous experience, training, and references. The argument used by many employers as a basis for unreasonably high hiring standards that certain qualifications are necessary because of the likelihood of promotion does not appear to hold water, at least for these employers of Work Incentive program participants; in white-collar and service occupations, dead-end jobs actually had higher overall requirements than did those jobs where promotion was possible. A similar pattern was found for disqualifying criteria.

The evidence also indicates that many managers in large organizations who have sole responsibility to hire may use hiring standards according to their preconceived view of what constitutes "desirability." These managers have been found to be more selective than other managers or supervisors in terms of disqualifying criteria, which have no demonstrable connection with job performance, rather than in terms of qualifying criteria, which are closer to being actual prerequisites for job performance.⁵ Free from

the influence of a supervisor with hiring authority, managers who have little contact with workers in entry level jobs may fail to make realistic connections between the criteria they use to select employees and the tasks the employees are hired to perform.

Viewed within the perspective of recent efforts to place disadvantaged workers (particularly welfare recipients) in public jobs, it is ironic that employers in the public sector tended to have more stringent hiring standards than private employers. Public employers were much more likely to require a high school diploma and a passing score on a test and were more likely to reject a prospective employee because of health problems, overweight, an arrest record, or a prison record. The latter may work more against blacks since they are more likely to be indicted and convicted than whites arrested for the same offenses.⁶

Our larger study showed that managers in small organizations assessed their Work Incentive program workers more favorably than did managers in large organizations. The present paper showed that small organizations are more selective in their hiring requirements than large ones.

Conceivably this stringency in hiring actually screened out the less capable workers for small employers. On the other hand, none of our data showed that Work Incentive program workers employed by smaller organizations were different in background and characteristics from others. Smaller employers in general also have fewer benefits of all kinds to offer the worker and it is unlikely that they are able to pick and choose among only the most highly "qualified" job applicants. If these workers are more productive in small organizations, a more likely ex-

Table 6. Disqualifications for prospective employees by organizational size controlled for locus of hiring authority

[In percent]

Disqualification	Supervisor hiring authority							
	Some				None			
	Small	Medium	Large	Very large	Small	Medium	Large	Very large
Alcoholism.....	55	40	19	8	30	33	20	40
Drug use.....	67	61	53	27	40	53	47	65
Language problem.....	48	76	39	35	10	20	13	50
Garnishment.....	28	20	6	12	20	13	13	15
Overweight.....	17	18	3	24	10	29	20	50
Other health problems.....	54	60	61	61	30	36	67	75
Arrest record.....	37	23	19	10	20	47	7	30
Prison record.....	43	34	22	12	30	33	7	40
Number.....	60	77	36	44	10	15	15	20

planation is that the atmosphere in small organizations is conducive to close association between worker and manager, a more sympathetic approach on the part of the owner or manager, and consequently a higher performance level by the employee. Since small organizations on the whole lack training facilities, Government-sponsored training programs can perform a real service for these employers by helping disadvantaged workers learn skills which can be used by them. Further, efforts should be made to educate smaller employers to the value of disadvantaged workers who have had the experience of Federal training programs. At the same time, small employers should guard against eliminating potentially successful workers through too rigidly adhered to sets of hiring qualifications and disqualifications.

All employers should review the rationale behind the screening practices of their organizations. The data presented in this paper strongly suggests that unrealistic requirements and inconsistencies are not due to employer intent to upgrade workers. Hiring standards have been shown to be largely unrelated to the tasks a worker must perform. If the locus of hiring is widely removed from the work atmosphere, the qualifications which determine which workers get hired and which are rejected tend to become unrealistic to the point of irrelevance. Such hiring practices not only make it more difficult for many capable workers to enter the world of work, but keep the employer himself on a constant search for "really

good workers," workers who might well be the individuals the employer screened out last week. □

—FOOTNOTES—

¹ One WIN site refused us entry, so the final sample included 280, rather than 300, employers.

² Daniel E. Diamond and Hrach Bedrosian, *Industry Hiring Requirements and the Employment of Disadvantaged Groups* (New York University School of Commerce for the U.S. Department of Labor, 1970); Ivar Berg, *Education and Jobs: The Great Training Robbery* (New York, Praeger Publishers, 1970).

³ Our question was worded: "Can an employee in this (these) job(s) be promoted to a better, higher paying job in this unit, into other units, or is it a dead-end job?"

⁴ Management representatives were handed cards with the list of job qualifications and disqualifications and asked, "Which of these qualifications (that is, usual requirements) are necessary for someone to be considered for a job like _____'s?" and "Would any of these situations disqualify a person from a job like this (these)?" In both instances, qualified responses were coded as "depends."

⁵ Several recent studies conducted for the Department of Labor indicate that "hiring requirements" are not "requirements" at all, but are merely devices to select out certain workers. (See, for example, Howard Rosen, "What Counselors Should Know (and Do) About Employers' Hiring Requirements," a paper presented at the American Personnel and Guidance Association meeting, New Orleans, La., Mar. 23, 1970.

⁶ Edwin H. Sutherland and Donald R. Cressey, *Principles of Criminology* (Philadelphia, J.P. Lippincott Co., 1966), p. 146.

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.

Labor markets and manpower policies in perspective

How an active labor market policy
can be used
as an instrument of
redistribution or stabilization:
a review of current thinking

LLOYD ULMAN

MANPOWER POLICY in the United States has, in a decade, moved from an initial concern with unemployment of mature, experienced workers who were presumably the victims of the "new technology" to concentration on the young, the poor, and members of racial and ethnic minorities.

In the 10 years since passage of the Manpower Development and Training Act, a bewildering variety of uncoordinated programs have sprung up. Federal outlays increased from less than a quarter billion dollars in fiscal year 1961 to over 3 billions in fiscal 1971. Thus critics could argue that, when manpower policy was young and quantitatively insignificant, the alleged problem to which it was addressed seemed to go away without its help; after the policy had reached an appreciable scale, its new targets would not yield to its approach. To which reply can be made that, for all its growth, the policy is not yet nearly big enough to be effective. But it is big enough to be visible and for its future to be more widely discussed.

Market imperfections and manpower policy

Whether or not they might differ in the extent to which they would be willing to deploy active labor market policies, most manpower experts agree that the existence of market imperfections supports the case favoring these policies.

In the first place, to the extent that individuals must incur the costs of their own training—especially when the skills to be acquired would make them more valuable to other employers as well as their own—there is a case for subsidizing the training of poorer individuals and particularly of those who are

likely targets of discrimination. Such individuals, as Lester Thurow has pointed out, are likely to have exceptionally high rates of time preference precisely because they are poor—so that the marginal utility to them of a dollar in wages foregone during the training period is exceptionally high—and because their opportunities are limited—so that the private return on a training investment is likely to be exceptionally low. Moreover, there can be little doubt that any would-be borrower for whom discrimination had made the labor market imperfect would find himself regarded as an exceptionally poor risk by any potential lender in the capital market. Subsidies, even if provided on a scale sufficient to eliminate or overcompensate for the direct and indirect costs of training, cannot by themselves overcome the obstacles to career development thrown up by poverty and discrimination, but they would in principle play a useful role in helping to neutralize those disadvantages.

Other types of imperfection, originating both on the buyers' and on the sellers' sides of the labor market, also create a case on equitable grounds for the provision of active labor market programs. Oddly enough, they may do so by generating excessive "credentialism"—that is, demand for and supply of labor whose degree of formal schooling is in excess of the requirements of a perfectly competitive labor market. This can result when employers pay wages above market-clearing levels.² They may do so by design, as in the case of the large, "monopsonistic" employer who seeks the capability of screening job applicants for "quality." Or they may do so out of compulsion, as in the case of the unionized employer who seeks to absorb part of the increased labor costs resulting from collective bargaining by hiring some labor of presumably higher quality. (A nonunion employer who maintains a union-preventive wage would make the same adjustment.) In either case, the employer must incur selection costs. Moreover, to the extent that his employees' wages are raised

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above their "transfer earnings" and that their quit rates are consequently reduced, he finds it profitable to pay for training of a more "general" as well as of a more "specific" nature. Hence he finds that by hiring workers with more impressive educational credentials he can minimize screening costs and, he hopes, training costs as well. Such processes tend to force workers with lower educational credentials into lower paying and otherwise less attractive labor markets. Thus the educational gains registered by Negroes and other nonwhites in the postwar period might have been robbed of a considerable degree of economic payoff. It is understandable that the non-white should find conspiracy where others might deduce only the workings of the modern marketplace. Under the circumstances and given that formal educational inequalities still exist, some compensatory training—and compensatory credentialing—might be in order.

Still another class of labor market imperfections, manifested in the existence of shortages (or bottlenecks) in specific skilled occupations, can be generated and renewed by cyclical alternation and by growth of demand. The work of Sara Behman, Holt, Schultze, and others establishes the inflationary influence of skill shortages during periods of expansion.³

But why should such apparently serious shortages occur during an upswing, given the existence of excess supplies of skilled (as well as other) workers during the preceding recession? The answer is that it is precisely during the slack period, when there is unemployment and underutilization of skilled labor, that potential, or full employment, shortages begin to build up. This happens because normal withdrawals from the skilled work forces (for example, due to death and retirement, but not discouragement caused by cyclical unemployment) are not wholly replaced. Nor is provision made for increased demand, which is generated in the course of secular economic growth and realized during upswings in activity. There is little incentive to invest in human as well as physical capital when demand is generally slack; and there is consequently a bunching of investment in training in the upswing, as stockpiles of downgraded skilled workers and supplies of available rehires begin to dry up.

To be sure, supplies in many categories can be replenished by company training, promotion, and increased hiring at low entry levels. In the case of skills recruited directly from the outside, however,

firms bid up wages in the marketplace as the incidence of quits rises among groups with lateral (inter-employer) instead of vertical mobility. Higher wages and more vacancies induce more investment in training, but training takes time. Skill shortages thus tend to appear and persist when the economy is still quite short of full employment. To this extent, there is a case for training subsidies during periods of slack activity.

Increasing dispersion of unemployment

The practitioner, however, is less concerned with the causes of imperfections than with their effects and with evidence of their growth. Increasingly, the inflationary potential of the economy is an increasing function of the dispersion of *sectoral* unemployment rates (weighted by labor force or by employment). There is little evidence of increasing occupational dispersion and hence, in this respect, of adverse structural changes induced by changes in the composition of demand for labor. This might be taken as lack of support for one version of the "skill twist" hypothesis; and the diminishing geographical dispersion of unemployment is further grist for the skeptics' mill.

On the other hand, unemployment dispersion by age and sex increased dramatically with the disproportionate growth of teenagers and women in the labor force and with the disproportionate rise in their unemployment rates. Associated with these changes has been a very marked decline in the share of the labor force accounted for by men of prime working age and a marked decrease in their unemployment rates relative to the national average. Using demographic dispersion of unemployment as an explanatory variable in a wage-change equation, Charles C. Holt and his associates, like George Perry,⁴ regard the recorded increase in this dispersion as a major inflationary influence. And looking ahead, R. A. Gordon finds little prospect for self-correction. The work force will have a larger proportion of young men out of their teens, but the proportion of prime-age males—whose unemployment rates have already sunk to bottleneck levels—will continue to shrink. Moreover, the shares of high-unemployment groups—women and nonwhites—will increase.

Although the worsening trade-off between unemployment and inflation can thus be associated with changes originating on the supply side of the labor market, bottlenecks could have developed only if

employers had been unable or unwilling to substitute labor which had become more plentiful for labor which had become less plentiful. Unwillingness of workers in the former category to apply for jobs of the type performed by workers in short supply could not have played much of a role in producing bottlenecks, in view of the relatively increased rates of unemployment among younger people and women. Employers, on the other hand, might have found it preferable to bid for the services of men in their thirties and forties if they felt that workers in the more plentiful categories had less education or training and were less capable on that account. Gordon's finding of a relatively great decline in labor force participation among the poorly educated is consistent with this hypothesis. This finding also helps to account for the fact that, while there has been a recent decline in the dispersion of unemployment by color, it has been matched by a relative and absolute decline in participation rates for nonwhite males over the age of 25. The latter are less well educated than whites in the same age group.

Another one of Gordon's findings—that an increased proportion of the unemployed is accounted for by those without previous work experience—is also consistent with the hypothesis that the more abundant sources of labor supply were imperfect substitutes for the scarcer varieties because they had received less training. On the other hand, the young were, by historic standards, very well endowed with formal education; and this should tend to reduce the length and cost of on-the-job training for them. In fact, high unemployment rates among the young and the inexperienced suggests another possible explanation of the inflationary increase in the demographic dispersions of unemployment: rigidity in industrial and occupational wage structures. This hypothesis holds that wage structures have not been sufficiently flexible to make it profitable enough for employers to hire and train less experienced and/or educated people rather than bid up wages of experienced workers. Under rigid wage structures, it would have been profitable to absorb the former in the increased proportions in which they came onto the market only if changes in technology and/or in the composition of demand indicated substitution in favor of less experienced, trained, or educated labor. Such changes, had they occurred, would have been opposite to those postulated by the proponents of the skill-twist hypothesis. However, some of the same adverse effects attributed by this hypothesis to a

relative decrease in demand for untrained labor could have been produced by a relative increase in the supply of such labor, taken in conjunction with an unchanged composition of demand and sufficiently rigid wage structures.

Short-term unemployment and high turnover

Of course, while many market imperfections are attributable to institutions like collective bargaining and minimum wages, to imitative wage-setting policies of employers, and to social discrimination, others in a sense result from changes in conditions of demand or supply, which require time for adjustment. Moreover, the adverse impact of labor market imperfections, whatever their origin, varies with the magnitude of such changes. Nevertheless, dealing explicitly with the role of wage structures might help to make more understandable one distinctive characteristic of recent unemployment.

In contrast to unemployment characterized by long duration of joblessness—the type of “structural unemployment” which might be expected to result from massive technological displacement of a group of experienced workers—unemployment in the 1960's has been characterized by relatively short duration and relatively high incidence of turnover, especially when the overall rate of unemployment has been relatively low. Unemployment characterized by high rates of turnover has usually been described as “frictional;” and, since it results from frequent quitting as well as layoffs, it is often regarded as “voluntary” as well. Hence Thurow argues that manpower policy ought not be directed to reducing the minimum achievable rate of overall unemployment, since “No one is worried about voluntary unemployment at a 3-percent level of general unemployment.” But what about sectors of the labor force where high-turnover unemployment greatly exceeds the average level and where it is frequently associated with low rates of labor force participation as well?

It has been argued that for some such groups unemployment, at least in part, might still be regarded as voluntary since, at prevailing wages, members of the “secondary” work force may have preferable nonmarket alternatives at home or in school.⁵ The latter might thus be contrasted with persons who would be willing to take a job in their line of work at the going wage—or even at a lower wage—if they could find such work.

But for many people in high turnover groups, wages are "too low" because their nonmarket alternatives are clearly detrimental to social welfare and destructive of individual self-regard and happiness. Wages are too low for them relative to wages in entry-level jobs which are not available to them; they seem to be locked into "secondary" labor markets;⁶ and they tend frequently to quit—jobs, labor force, and school—out of frustration and resentment at their segregation. Segregation is caused in part by direct discrimination and sometimes by direct restriction of entry; but restriction of entry into protected labor markets can result simply from the maintenance of high wages in them. (Hence the old craft disclaimer: "We don't discriminate on the basis of color; we discriminate against *everyone*.") The inverse correlation between industry wage rates and quit rates strongly suggest that wage structure rigidities contribute to lack of opportunity and "pathological instability" (the phrase is Hall's) in unprotected labor markets.⁷ People don't quit good, high-wage jobs as frequently as they quit low-wage, dead-end jobs, or for the same reasons.

Secondary and primary labor markets

Indeed, active labor market policy can be defined and distinguished from certain other policies with respect to labor market imperfections and wage rigidities. We have already considered two types of "high-wage" markets: those in which wages are pulled up by shortages of highly trained labor, and those in which wages are pushed up by institutional or conventional forces and where shortages are not prevalent. (In the former supply is highly inelastic; in the latter it is highly elastic at the going wage.) And we have considered certain groups of unemployed and underemployed persons who may be said to be excluded from the first type of market by lack of education and training and from the second by lack of job openings for which they would—or easily could—be qualified. The latter in principle might be absorbed into more desirable markets in one (or more) of the following ways:

1. Structural change, which would induce greater flexibility in relative wages and thus more employment in the second type of market, where wages are set by collective bargaining or discretionary management "policy." If some of the shortages in markets of the first variety are caused by institutional (including legal) barriers to entry and if structural reforms

eliminated such shortages, employment in the first type of market would also be increased.

2. An increase in overall demand, which would also increase employment in the "institutionalized" markets but which would concomitantly raise demand and thus contribute further to wage increases in both sectors (causing the economy to move up along a Phillips curve).

3. An increase in overall demand, as above, but accompanied by an incomes policy, which would permit demand to increase in the institutionalized markets but would hold down the rate of wage increase in those markets (thereby shifting the Phillips curve to the left and downward).

4. An active labor market, or manpower, policy which would simultaneously reduce unemployment and the rate of wage increase by reducing excess supplies of labor and increasing supplies of qualified labor in shortage categories. This would shift the Phillips curve downwards by shifting the sectoral supply curves in opposite directions, rather than by altering relative wages (as is contemplated under both structural reform and incomes policy). It would operate primarily by increasing employment in the excess demand sector rather than in the excess supply sector. This set of policies could be designed to improve labor mobility by increasing the efficiency of employment agencies and counselling services as well as by manpower training.

5. An active labor market policy which would operate by increasing demand selectively—as by concentrating reflation in labor-surplus areas. Such a policy would be designed primarily to cope with geographic "compartmentalization;" but it could be employed in conjunction with policies described above, as indeed it has been in the United States.

In fact, selective job creation in the public service may be employed on a significant scale in this country and not solely as a rather temporary, contra-cyclical device. Manpower training is presumably of only limited effectiveness where the problem is more lack of motivation, induced by low wages and dead-end jobs, than lack of capacity. Neither might selective (relative) reduction in the minimum wage—which is the form of structural change most commonly advocated as a cure for certain types of structural unemployment—be effective in coping with "voluntary" unemployment traceable in part to wages that are too low, rather than too high. Thus public service employment can be regarded as a branch of manpower policy which at least poten-

tially might prove a superior substitute for certain types of structural reform and as both substitute for and complement to other types of manpower policy.

Manpower policy as an alternative

Thus manpower policy can be viewed as an alternative to structural change in the labor market, to general reflationary measures, or to incomes policy. In Sweden, it has been regarded as an alternative to all three. It was originated there by Gösta Rehn and Rudolf Meidner, who were then economists with the Swedish Federation of Labor, because, given the country's very ambitious unemployment goals, incomes policy was ineffective in preventing wage drift and also because wage drift frustrated the labor movement's attempts to implement a "solidaristic" (or egalitarian) wage policy. The task of active labor market policy was to introduce reflation by selective measures aimed simultaneously at pockets of unemployment and at labor bottlenecks. This was supposed to reduce the level of aggregate demand required to maintain any given level of employment and, consequently, to reduce the ability of both employers and union groups to generate wage drift. The Swedes have taken their innovation seriously, judging from the documentation of its growth in expenditure and coverage (to over 4 percent of the labor force).

But manpower policy can be regarded as an alternative to the other policies only to the extent that it is effective in practice. Sar A. Levitan has subjected many of the programs to strenuous (although sympathetic) criticism.⁸ He observes that, despite greatly increased budgets, the number of nonagricultural placements made by the public employment service actually declined in the 1960's. Training subsidies to employers may have fallen under the curse of their class to the extent that the training would have been provided in the absence of public financial support—and that proposed tax incentives would suffer the same fate. Moreover, some of the training and income maintenance provided directly to the trainee seems to have provided more income maintenance than training. Nor, in view of experience to date, is Levitan sanguine about the economic prospects of plans to endow significant numbers of welfare recipients with marketable levels of productivity.

Some of the manpower policies have helped to increase the representation of Negroes in some occupations, but there seems to be no reason to credit

them with narrowing the dispersion of occupational unemployment rates. Thurow questions their effectiveness in coping with unemployment due to "bad habits and low work standards," which have to be corrected by "socialization" and "industrial discipline." And he, together with other analysts, advocates more emphasis on "creaming," or training those already employed to fill skill shortages and thus vacate lower skilled jobs for which the inexperienced and the unemployed might then be trained more efficiently. While increased enrollment in manpower programs has tended to reduce unemployment,⁹ this could also generate some inflationary effect by removing people from the work force. (Thus, the programs would simply be moving the economy up an existing Phillips curve rather than shifting the curve downward.) On the other hand, to the extent that labor market policies make information about job openings and worker availability easier and cheaper to come by, they might increase turnover and thus tend to increase unemployment.

Moreover, while the idea of a contracyclical labor market policy (the so-called "manpower trigger") is attractive in principle, its effectiveness, as the policy grows in magnitude, depends increasingly on the efficiency of economic planning and, in particular, on the ability to forecast changes in the pattern of labor demand. Finally, labor market policies have not been able to prevent perverse shifts in inflation-unemployment trade-offs in either the United States or Sweden. In the United States this could be taken as evidence of the need for a more ambitious use of the policy; this is essentially the position taken by Holt, MacRae, Schweitzer, and Smith. In Sweden, however, where the policy has already grown to considerable size, this explanation would be much less convincing.

Indeed, the adverse trade-off experience of Sweden and other western countries as well suggests that the somewhat distinctive demographic developments in the United States in the 1960's might have not exerted as unique an inflationary effect as they are credited with. And if cost-push influences also played a significant inflationary role, how effective could one have expected labor market policies to be?

Yet these policies cannot be dismissed as ineffective, either here or abroad. The numerous benefit-cost studies of specific programs which have been made are subject to methodological difficulties, notably the difficulty of securing sufficiently comparable "control groups" and lack of allowance for the displace-

ment of qualified workers who did not undergo training in the program in question. On the other hand, the favorable results have been too pronounced and widespread (in Sweden as well as in the United States) to be dismissed by the policymaker. Moreover, some studies suggest that certain American programs might indeed have been effective in improving the work habits and outlook of disadvantaged younger persons, and some success is reported in the post-training placement of unemployed or hard-to-place persons under Swedish programs. As far as the inflationary effect of withdrawing trainees from the labor market is concerned, Gordon concludes that it could not have been great in the case of teenagers and other "secondary" workers whose unemployment rates were already at high levels. And the danger of "bumping" or displacing experienced workers by graduate trainees could be minimized, according to Thurow, by concentrating training during upswings, rather than during downswings, and directing it towards observed vacancies.

A supplement rather than a substitute

Given a mixed bag of evidence on the performance and apparent potentialities of manpower policy, the policymaker might well look upon it more as a supplement to than a substitute for alternative policies. But given the limited effectiveness of the alternatives, manpower policy can be a valuable supplement. Thus, since it is axiomatic that the value of training depends on the availability of jobs for the qualified trainee, a suitably expansive aggregate demand policy is required.

For the same reason, an effective antidiscrimination policy is also a necessary complement to manpower development programs. However, the latter may be required to give effect to expansionary demand management, on the one hand, and to antidiscrimination policies, on the other. Manpower development could help to implement antidiscrimination policy by furnishing an effective reply to the protest that "we would take more of them in if we could find qualified ones." Indeed, the existence of trained members of underprivileged minorities can

exert a salutary coercive effect on employers and unions, for it represents a potential competitive threat.

In this sense, therefore, the provision of training can help to create some of the vacancies for which the training is provided. The strength of such a competitive threat should not be exaggerated, but, in view of the difficulties involved in enforcing antidiscrimination policies in the face of limited economic opportunity, even a modest aid to enforcement should be seriously regarded.

CAN THE RELATIONSHIP between active labor market policy and incomes policy be regarded as complementary? The former, as noted above, originated as an alternative to the latter; and proponents of the two approaches have tended to regard one another as natural enemies ever since. Perhaps this relationship reflects the rivalry between those two socially pioneering countries, Sweden and the Netherlands (the birthplace of modern incomes policy). Perhaps it reflects the difference in outlook between the Department of Labor and the Council of Economic Advisers here at home. Perhaps people who are concerned with vertical supply curves resent the concern of others with horizontal supply curves, and vice versa. In the United States, opposition to incomes policy is contributed by (but not restricted to) those who deny the existence of cost-push influences, but in Sweden proponents of labor market policy argued that it was a superior instrument for dealing with cost-push.

In any event—and whatever their respective merits and drawbacks on other grounds—the two approaches ought not be regarded as mutually exclusive. Not only do organizational influences coexist with other sources of labor market imperfection, interaction occurs. Unionism can help to cause shortages in some sectors. It might also help to spread shortage-generated wage increases to occupations and industries where labor is in excess supply. Thus, the more effective either policy becomes in its own domain, the more effective it helps to make the other. What helps to clean the pot helps to clean the kettle. □

FOOTNOTES

¹This article is adapted from a paper presented at a seminar marking the tenth anniversary of the Manpower Development and Training Act. The original paper will serve as the Introduction to *Manpower Programs and the*

Policy Mix, to be published in early 1973 by the Johns Hopkins Press, which holds the copyright and which has granted permission for publication in the *Monthly Labor Review*. The book, which is edited by Dr. Ulman, includes

contributions by R. A. Gordon; Charles C. Holt, C. Duncan MacRae, Stuart O. Schweitzer, and Ralph E. Smith; Lester C. Thurow; Sar A. Levitan; and Rudolf Meidner and Rolf Anderson. Some of their findings are cited in Dr. Ulman's article.

² V. Lane Rawlins and Lloyd Ulman, "The Utilization of College Trained Manpower in the United States," in *Higher Education and the Labor Market*, to be published by the Carnegie Commission on Higher Education.

³ Sara Behman, "Wage-Determination Process in U. S. Manufacturing," *Quarterly Journal of Economics*, February 1968, pp. 117-142; Charles L. Schultze, "Has the Phillips Curve Shifted? Some Additional Evidence," *Brookings Papers on Economic Activity*, 1971:2, pp. 452-468.

⁴ George L. Perry, "Changing Labor Markets and Inflation," *Brookings Papers on Economic Activity*, 1970:3, pp. 411-441; see also Charles C. Holt and others, "A manpower approach to the unemployment-inflation dilemma," *Monthly Labor Review*, May 1971, pp. 51-54, and George L. Perry, "Inflation vs. unemployment: the worsening trade-off," *Monthly Labor Review*, February 1971, pp. 68-71.

⁵ Jacob Mincer, "Labor-Force Participation and Unemployment: A Review of Recent Evidence," in R. A. Gordon and Margaret S. Gordon, eds., *Prosperity & Unemployment* (New York, John Wiley & Sons, Inc., 1966), pp. 101-102.

⁶ P. B. Doeringer and M. J. Piore, *International Labor Markets and Manpower Analysis* (Lexington, Mass., D. C. Heath & Co., 1971).

⁷ See Lloyd Ulman, "Labor Mobility and the Industrial Wage Structure in the Postwar United States," *Quarterly Journal of Economics*, February 1965, pp. 73-97. This association holds even after allowance is made for differences in skill content, reflecting differences in training investments. See Mark A. Lutz, "The Equilibrium Industrial Wage Structure," University of California, Berkeley, doctoral dissertation. Consistent with the foregoing is the finding by Wachter of "premiums" on the wages of skilled, high-wage labor. See M. L. Wachter, "Cyclical Variation in the Interindustry Wage Structure," *American Economic Review*, March 1970, pp. 75-84.

⁸ See, for example, Sar Levitan and Robert Taggart, *Social Experimentation and Manpower Policy: The Rhetoric and the Reality* (Baltimore, Johns Hopkins Press, 1971) and Sar A. Levitan, Garth L. Mangum, Ray Marshall, *Human Resources and Labor Markets: Labor and Manpower in the American Economy* (New York, Harper and Row, Publishers, 1972).

⁹ See Sylvia Small, "Manpower training programs and the unemployment rate," pp. —, this issue.

An Age of Symbolic Credentials

By now, . . . education, if ever subject to control of the market, has passed under the Empire of Affluence in what has become an Age of Symbolic Credentials. . . .

In recent years the "credentials philosophy" has filtered downward, perhaps in response to increase in the relative number of persons graduating from high school. . . . as educational attainment has risen within the educational range separating primary from higher education, the expectations of employers have been upgraded with respect to the educational qualifications which they demand of those whom they seek to employ. . . .

Presumably, the capacity of the "credentials philosophy" to deny employment to those lacking those symbols would be diminished if the latter were offered probationary employment at lower entry or initial rates of remuneration, and for long enough periods to determine their competence. Then, should the results demonstrate such competence, the current employment-denying influence

of the "credentials philosophy" would be diminished.

. . . In the United States in particular, many have enrolled in the cult of *education for education's sake*, analogue of the 19th century French cult of *l'art pour l'art*. . . . A result may be excessive expenditure upon education, overeducation of specialists (e.g., doctors, teachers), and what could turn out to be a steady increase in societal instability should inflated expectations be frustrated. Another result may be what Clarence Long calls "creeping unemployment." The incomes of the more favored become elevated while so little is done to increase the productivity of the underprivileged that employers cannot afford to hire them on probation and at wages sufficiently above legally defined poverty benchmarks to motivate the unproductive to move from charity rolls to payrolls. . . .

—JOSEPH J. SPENGLER,

"Economic Malfunctioning in the Educational Industry," *American Journal of Economics and Sociology*, July 1972.

Report of the Commission on Federal Statistics —a review essay

RICHARD RUGGLES

Federal Statistics: Report of the President's Commission. Washington, the Commission, 1971. Volume I, 267 pp.; Volume II, 555 pp. \$4, Superintendent of Documents, Washington 20402.

THE PRESIDENT'S Commission on Federal Statistics was established to answer three basic questions (p. 37): What are the present and future requirements for quantitative information about our society? How can we minimize the burden on response and insure that personal privacy and data received in confidence are protected? How can we organize Federal activities for the most effective compilation and utilization of statistics? The report of the Commission is contained in two volumes. Volume I presents a general discussion of Federal statistics, together with the findings and recommendations, Volume II a series of papers on major topics by experts in different fields.

The Commission came up with four general recommendations, as follows (pp. 2, 3): (1) the scope of coordinating activities in the Federal Government should be broadened; (2) more systematic efforts should be made to eliminate obsolete statistical programs; (3) public confidence in data gathering should be increased; and (4) means of increasing the comparability of economic statistics through greater integration in collection processes should be explored.

These recommendations reflect the general approach of the report. No major changes are envisaged; instead, recommendations are made which it is believed would generally improve the statistical efficiency of the various Government agencies and the public confidence in these agencies. The Commission clearly believes that the present state of Government statistics is of a very high order, if not the best in the world, and that no major changes are needed. In the more detailed discussion of its major

recommendations, the Commission does consider specific problems such as the organization of the Federal statistical system, the role of privacy and confidentiality, the need for new kinds of data, and greater utilization of existing data. The following sections will consider the report in terms of each of these problem areas.

Organization of the Federal statistical system

The Commission emphasizes that the statistical system includes very different types of producing agencies—general purpose statistical agencies, operating and regulatory agencies that generate data and apply statistical methods within their programs, management information systems, producers of secondary statistics, and non-Federal Government producing agencies. This diversity, the Commission suggests, makes the creation of a fully centralized system both undesirable and virtually impossible (pp. 37, 38). It finds that the present decentralized system has served the users of statistics reasonably well (p. 177). Much of this general view is supported by the staff report by Paul Feldman, entitled "Commission on Statistics and Statistics on Commission," in volume II. In this presentation Feldman observes that organization has fascinated every commission in the past, but that reorganizers have been remarkably unsuccessful (p. 492). He suggests that concentration on organization arises more from aesthetic reasons than from identifiable systems failure (p. 492). The argument is also made that organizational actions taken by Congress or the executive branch are not related to commission findings (p. 494). The obvious implication of this discussion is that the present Commission is too sensible to indulge in any major consideration of organization.

Despite the skepticism of the Commission concerning organizational matters, some attention to them would have been useful. It would have been

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useful, for instance, if the Commission had reviewed other countries' experiences in these matters. A considerable number of countries currently do have central statistical offices and an examination of their experiences would have been valuable. The Commission's pessimism with respect to the usefulness of making recommendations on organizational matters is also unwarranted. The function of a Commission is not to avoid all ideas which might not be implemented by the legislative and executive branches in the immediate future, but rather to provide ideas which have merit and which may influence the thinking of those responsible for decisions relating to the Federal statistical system.

As was evidenced by the first major general recommendation, the Commission did recognize that more coordination of statistical activity was needed. In order to accomplish this, it recommended that the Statistical Policy Division in the Office of Management and Budget should be expanded to allow an audit, at appropriate intervals, of the statistical activities of all agencies, including the gathering of data by means other than forms (p. 176). Second, it recommended that a National Academy of Science-National Research Council committee should be established to provide an outside review of Federal statistical activity (p. 176). The findings of this committee would be transmitted through the Director of the National Research Council to the Director of the Office of Management and Budget and also should be made public, perhaps through regular publication in statistical journals. It was felt that such an outside committee could review Government statistical activity objectively.

Finally, the Commission did explicitly recognize that certain important functions would not automatically be performed in the decentralized system. Specifically, it recommended that the Bureau of the Census be given the responsibility for creating and maintaining directories and associated unit classifications for use in gathering data and for statistical purposes (p. 180). In order to provide for transfers of data between agencies it was recommended that the Federal Reports Act of 1942 be amended to allow the Statistical Policy Division of the Office of Management and Budget to permit access under controlled conditions to data in confidential records, to be used directly or linked as necessary for research uses. The creation of an all-agency catalog of Federal statistics was also recommended, so that the different agencies would be aware of what was avail-

able within the Federal Government.

Although the letter setting up the Commission specifically asked how Federal activity should be organized for the most effective compilation and utilization of statistics, this question was never really considered by the Commission. The report (p. 138) did admit that as statistical activities grow more complex, periodic rethinking of organizational questions is required. It even goes so far as to note that the present Administration and its predecessors have reviewed issues of statistical organization and have proposed a number of changes in the existing structure of agencies and responsibilities, largely in order to achieve efficiency under continuously changing conditions. Although the Commission supports the intent of these proposals, there is at no juncture any discussion of the content of the proposals or the substantive effect which they might have. This is indeed a serious omission. The most charitable interpretation is that the Commission felt that the Statistical Policy Division of the Office of Management and Budget and the recommended advisory group under the National Academy of Sciences and the National Research Council would be better able to tackle such problems. It is also possible, however, that previous commissions were more correct in concentrating on organizational matters; that they did so not for aesthetic reasons but because organization does have an impact on the statistical system. In a highly decentralized statistical system where relatively little use is made of administrative records, a high degree of duplication will exist, with the consequence that not only will the work within the Federal Government be increased, but respondents will be required to provide similar (but probably not identical) information to different Federal agencies. Under a decentralized system, standards of classification are difficult to develop and even more difficult to enforce. As a consequence the comparability of statistics prepared by different Federal agencies is seriously impaired. Obsolete statistical programs are much more difficult to eradicate under a decentralized system, since the independent agencies develop vested interests and those in charge of a specific program may have no alternative statistical activity. Conversely, it is also true that a monolithic statistical organization which is divorced from both research activity and administrative operation would not be sensitive to the needs of the user. It is important that the statistical system be responsive to both research and administrative needs. These are difficult prob-

lems, and the introduction of a statistical audit by the Statistical Policy Division and the creation of an advisory group under the National Academy of Sciences and National Research Council will not solve them.

Privacy and confidentiality

The Commission devoted a large part of its efforts to the questions of privacy and confidentiality. Its members were impressed less with the magnitude of the problem than with the reality of the public concern which was generated by actions and events beyond their field of reference (p. 219). They were pleased to find little evidence of breaches of confidence within the Federal statistical system. They recommended, in addition to removing opportunities for misunderstanding and strengthening legal safeguards (pp. 220–222), that a Statistics Advisory Board be established to provide an independent review of the practices of Federal agencies with regard to privacy and the gathering, handling, and disclosure of information in the Federal statistical system (p. 223). They recommended the establishment of such a board not because they feel that the Federal agencies need to be policed, but because they feel that such a board is essential for maintaining the necessary public support (p. 224). It is quite true that the major public concern with respect to privacy and confidentiality lies in Government activities which are outside the statistical system.

The Commission recognized that under a decentralized Federal statistical system, measures taken to insure privacy and confidentiality do result in underutilization of data where the data are located in different agencies. The solution was to permit the Statistical Policy Division to authorize the transfer of data among agencies for statistical purposes (p. 179), under the proper safeguards to insure confidentiality. But this provision is not sufficient to discourage the various Government agencies from collecting their own data, even though it duplicates the data being obtained by other Federal agencies. Such duplication results in higher costs for both the Federal Government and the individual respondents, with no improvement in confidentiality. Given the necessity for making special provisions for transfer, Federal agencies will resist giving their data to each other, since doing so might undermine their position in the Federal statistical system.

The inadequacy of the Commission's recom-

mendations in the areas of organization and confidentiality leaves both of these major problems unresolved. Despite the Commission's failure to treat the problems, however, some progress is being made. If the group of Federal statistical agencies could be identified, and all of the group placed under the confidentiality rules which now are in force for the Bureau of the Census, this might both improve the level of privacy and confidentiality and simultaneously make possible interchange of data among the Federal statistical agencies. The current reorganization of the statistical activities of the various Federal agencies is in fact going in this direction. The statistical processing of information is now being considered as a separate activity within Federal agencies. Given such reorganization, it would be possible to define these activities in all agencies as part of a Federal statistical organization which had strict rules relating to confidentiality and at the same time common access to statistical information in other parts of the Federal statistical system. Such a reorganization would result in divorcing the statistical activities in the Federal agencies from their operational activities. The operational part of the agency would have access only to its own data, and not to the basic records of the whole Federal statistical system.

The development of new data

The body of the Commission's report says very little about the need for new data. A few pages and some very general recommendations are devoted to small area statistics, the question of a quinquennial census, and the development of social statistics (pp. 184–188). The substance of these recommendations is that the Commission encourages people to investigate these areas, especially people outside the Federal Government. The Commission was fortunate, however, that a number of excellent chapters were provided on these topics in part II of the report. The problems raised about small area data by Morris Ullman, Herbert Alfasso, and Robert Barraclough provide very useful insights, and in fact go much further than the Commission's recommendations. Specifically, Barraclough recommends that a national geocoding system be established. This is an excellent recommendation, and the 1970 census did provide the basis for such a geocoding system with the Dual Independent Map Encoding (DIME) files. However, no provision has been made by the Federal Government for extending the system to all areas or for

updating. Such a geocoding system is very much needed, and may be as important in the future as standardized industrial classification codes have been in the past. Chapter 7 in part II of the Commission's report, "Social Reporting for the 1970's," by Eleanor Sheldon, also goes much further in its recommendation that the Commission. Her recommendations relating to a number of Federal agencies such as the Bureau of the Census and the Department of Health, Education, and Welfare were condensed, in the Commission's report, to the single recommendation that the Statistical Policy Division should be given the responsibility for and take the leadership in insuring that a long-range program is undertaken to develop social statistics, and that the National Science Foundation should continue its work in this field. It seems highly probable that—with the other tasks which the Commission has proposed for the Statistical Policy Division, for example, statistical audits and coordination—in this period of tight budgets the pursuit by the Statistical Policy Division of long-range programs to develop social statistics will be swept under the rug.

Another topic covered in part II that did not receive the attention it merited in the final report was the use of controlled field studies to improve public policy. The chapter in part II on this topic by Richard Light, Frederick Mosteller, and Herbert S. Winzor pointed up the importance of using controlled field studies to obtain evaluations of specific programs or as a substitute for advance testing of new programs. It is highly desirable that operating agencies undertake controlled studies in order to assess the efficiency and equity of their current program, and to obtain information on how to modify their operations.

Utilization of existing data

Although the Commission recognizes the existence of administrative data, it does not give significant attention to the effective use of the major bodies of such data in the Federal statistical system. There is an implicit realization of the importance of administrative data in the discussion of the need for transfer of data between Federal agencies. There is little

consideration, however, of whether or how administrative data might be altered to improve the efficiency of the Federal statistical system, and to substitute for statistical information obtained by different agencies from the same respondents. Given the relative expenditure of the Government on administrative as against statistical information, this is a major oversight. Careful utilization of administrative records would not only make many statistical programs unnecessary, but also might in many cases improve the quality of the information that is obtained.

In volume II of the report, Morris Hansen goes into the general problem of the role and feasibility of a national data bank based on matched records and alternatives. This chapter suggests some of the opportunities which are available and the advantages and disadvantages of various procedures. Exact matching of major bodies of data can be costly indeed, and for many statistical purposes may not be needed. Nevertheless, there are many analytic purposes for which it is important to be able to relate different files of statistical information to each other. Perhaps if the Commission had gone into the area of identifying "the present and future requirements for quantitative information about our society," this important area would have received more consideration.

The role of the computer

Developments in computer technology have had a major impact on the creation, processing, and storage of statistical information, and on the methodology of economic research itself. The availability of large sets of micro-data and the ability to utilize them in simulation models has made new types of analysis possible. Although there is some reference to the computer in terms of the problems of privacy and confidentiality, little consideration was given to this important topic in terms of its impact on the development of the statistical system, its implications for statistical organization, and its consequences for data delivery. Perhaps there should be a Presidential Commission on this topic. □

Setting national priorities: the 1973 budget —a review essay

C. LOWELL HARRISS

Setting National Priorities: The 1973 Budget. By Charles L. Schultze, Edward R. Fried, Alice M. Rivlin, and Nancy H. Teeters. Washington, The Brookings Institution, 1972. 468 pp. \$8.95, cloth; \$3.50, paper.

The present size of Federal spending (almost \$1,200 per capita, \$4,800 for a family of four), the growth of expenditure (from \$112 billion in 1963 to \$256 billion in 1973), and strongly supported proposals for new undertakings of major significance—such factors make serious study of Federal finances a matter of profound significance. This volume, the third in what we can hope will continue as an annual series, deserves wide attention. The authors and their supporting staff (and all that goes into rapid production of a volume of this size, including its 98 tables) have given us a most timely analysis—or set of analyses.

The volume bears directly upon issues on which Congress may act in 1972 and 1973. More generally, however, “final” decisions will await later action. The scholarly, nonpartisan, and searching substance of these chapters ought to help raise the level of political discussion, so often superficial and even irresponsible.

An initial overview sketches a brief history, gives highlights of the budget proposals of January 1972, and indicates what to expect in the remainder of the volume. Four chapters then deal with foreign policy and national security. They recognize the need for “building systematic relationships between military forces and national security interests” (p. 25).

This section draws upon exhaustive studies of basic choices—not only for the coming year but for a much longer period. Alternatives are “priced”—seven for strategic forces, four each for navy general

purpose forces, tactical air forces, and so on. The dollar costs of military manpower are rising rapidly even as the number in service go down, because pay and benefits have gone up substantially, and pension costs mount. The reader can gain insight into at least some of the more difficult aspects of U.S. participation on an international scene of uncertainty, of change, of both promise and danger. He can learn about some of the complex issues of the various aspects of the defense organization at a time when weapons are incredibly destructive, increasingly powerful, and frightfully expensive.

I found all the 150 pages dealing with foreign policy and national security both illuminating and sobering. The economic portions about which I might claim some qualifications for judgment rate high and inspire confidence in the rest. But the authors do not pretend to give “the” answers. What with the needs for secrecy, the crucial role of as yet untested technology, the long lead-times, and the uncertainty of reactions of potential enemies, the layman—and the typical member of Congress—must take risks. Yet even some of the more expensive alternatives, which presumably involve less risk, would not require the outlays to make defense the chief demander of funds that was the case in the years before Vietnam fighting.

Six chapters deal with selected topics of domestic spending—income support, health insurance, child care, fiscal problems of cities, education, and the environment. The authors make efforts, which I rate as successful, to be objective. Even more obviously and more important, they present solid evidence where it is available—and raise questions, lots of questions. Time after time a series of queries leaves no doubt that further evidence and analysis are needed before policy decisions are made.

In some cases, perhaps, experiments can serve. But, for each of the six problems examined, the complexities, the complications, the uncertainties,

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the interrelations—and especially in this huge country, the diversity—call for more knowledge. *Good intentions are not enough.* The fervor of advocacy, and on occasion the confidence which results from ignorance, have misled us in the past. A law with a fine title cannot assure the results implied. There must be more—funds, competent people, and knowledge of *how* to get human beings to change their ways of acting.

Deficiencies of knowledge

Moreover, as the authors show more than once, because the problems are so complex and so important we cannot know in advance the results of major undertakings. These excellent discussions do, in a sense, have a deficiency which is inevitable in the present state of our knowledge. What would be the effects of, say, one or two of the major programs on others and on the numerous aspects of Federal policy not examined in this volume?

Over the years my teaching and other work have made me somewhat familiar with several aspects of Federal spending. But today no one person can possibly be confident of the quality of accomplishments, relative to costs, of the widely varied programs. He certainly cannot keep abreast of the changes proposed, on the scale and with the ambitions which now receive serious attention. Advocates with the best of intentions can speak with confidence that may inspire assurance. But the analyses of this volume show, among other things, that each of the problems results from several causes, that the hope for “solutions” must be tempered by the fact that conflicts of objectives are inescapable. Moreover, the means available are inadequate, not only the dollars but also the skills and other real resources, including knowledge of how people will respond.

The excellent chapters on income maintenance and health care (prepared with Karen Davis) compare various proposals, including those of the present Administration. The authors conclude in each case (p. 211 and p. 250) with what they believe are “general directions.” Included among proposals are (1) a negative income tax and (2) the expansion of health insurance with Government assistance to “meet even the normal cost of adequate medical care” for the poor and provision of aid for middle-income families in meeting “abnormally high medical costs that accompany prolonged illness.” Medical aid plans must seek deliberately to check “the escalation of medical prices and excessive use of services.”

The chapter on the problems of cities (prepared with the help of Robert Reischauer) explores the problems and possibilities of reducing the growth of expenditures, raising of revenues through local (including suburban) and State means, and Federal assistance. Inflation “was probably the most important factor” in the growth of spending. “By any measure, the recent rise in the compensation of local government employees has been spectacular” (p. 296).

Tax resources in some cities are utilized to the point of endangering significantly the economic base. In other cases, however, the city would seem to have capacity for doing more on its own—except that the authors generally favor means, including federally inspired incentives, to attack the problems on a metropolitan area basis, plus Federal aid. The Administration’s (1971) proposal for “an urban community development revenue sharing program” consolidating a variety of existing programs would not provide much more for large cities. General revenue sharing can help—except that the dollars must come from someone. Federal assumption of more of the costs of welfare would not help most large cities much because they, as local governments, are not now responsible for financing aid to the poor. “The basic choice that the Federal Government now faces is whether to enlist the cooperation of the States and suburbs in improving the condition of the cities or to face the problem alone” (p. 317). The search for improvements in productivity of local employees deserves unending effort but cannot, realistically, be expected to help greatly from 1 year to the next.

The 48-page chapter on education (prepared with Reischauer and Robert W. Hartman) draws upon the work of recent commissions and various other sources. The discussions of fiscal issues, the property tax, local control, inequality, court cases, race, poverty, and conflicting objectives, each includes examination of possible alternatives. The authors summarize the discouraging but challenging findings about the inadequacy of present knowledge concerning the effectiveness of methods and especially of the means for enhancing the fruitfulness of expenditures of money and effect.

HEW and National Education Association data are tabulated (p. 365) to show, for six programs for aid to education, those States that would gain most per pupil and those benefiting least. The differences are striking. New York would be in the top 5 for two programs, in the bottom 5 for one. Mississippi would be two and two. Ohio and Michigan would be in neither.

Chapter 11 (prepared with the aid of Ivars Gutmanis) emphasizes, among other things, that in dealing with environmental problems the Federal Government will properly have a major role. This role, however, should be not so much budgetary as through regulations which will modify actions in the private and State-local sectors. How? The limitations of administrative capacity to regulate, for example, 40,000 industrial plants under one proposal, lead the authors to endorse the development of incentives, such as effluent charges. I commend this discussion (385 ff.) for its use of economic analysis and realistic appraisal of the administrative ability of governmental (political) institutions.

The burgeoning Federal budget

A few of the wealth of figures given will suggest the chief answer to the title of chapter 12, What Happened to the Fiscal Dividend? In the period 1960–65, (1) real (2) civilian (3) outlays (4) per capita rose 4.1 percent a year. In the period 1970–73—again excluding defense, allowing for inflation, and adjusting for population growth—the annual rise was 9.0 percent (p. 399). We got a lot of “dividend,” apparently, in more and better Federal services and aid to State-local governments. But did we not also receive tax reductions? Yes—but! In 1973 taxes paid to Uncle Sam as a percentage of GNP are *greater* than those of 1963—19.5 percent vs. 19.3 percent. Payroll taxes almost quadrupled in dollar amount and nearly doubled as a percentage of GNP.

In accounting for the growth in Federal spending, the authors would find much company in the writings with which I am familiar for their assertion (p. 408), “The people of the United States have come increasingly to believe. . . .” Yet for my part I often wonder. What people? How often is it the aspirant for elected office? Or the representative of this or that rather limited set of interests? Or the official who seeks to disguise and shift a cost—the mayor or governor who urges Federal revenue sharing when the benefits to his community will almost certainly be less than the probable outpayment in taxes? Or the civil servant, now able to press for compensation increases (including pensions) greater than those of the rest of the country? The extent to which there is a true “public” desire for more spending is perhaps irrelevant, if only because the pressures are real even if they come from minorities. And we can expect them to continue when programs are not “price tagged” in terms of taxes as realistic alternatives.

Looking ahead to 1975 and 1977, “full employment revenues under existing tax laws may not be large enough to match projected expenditures under current programs and policies” (p. 420). Yet major new programs involving large additional outlays are being pressed. Even the adoption of lower military outlays than sketched earlier would not “free up” amounts one-third as large as involved in serious proposals for property tax relief, educational equalization, pollution control, day care, and “moderate” expansion of health care.

One paragraph (p. 421) refers to the two prior volumes in the series with discussions of “Federal expenditures . . . yielding only marginal national benefits.” “. . . unsuccessful experience of several administrations . . . does not warrant optimism about the possibility of realizing substantial budgetary savings.” Rationally, I cannot deny the validity of this conclusion. Yet, intuitively, I wonder—has there really been determination, sincere effort to enlist public support?

New expenditure programs to be financed without the risk of aggravating inflation will call for more revenue than the present system will yield. Chapter 14 (prepared with help of Joseph A. Pechman and Benjamin A. Okner) can hardly in 25 pages do justice to either the importance of the subject or the authors’ very extensive work. In discussing criteria for evaluating alternative taxes, for example, they cannot give the attention which I would urge to the effects of high tax rates on economic progress. (High levels of taxes might well be treated more explicitly as sources of apparent need for Government spending, for example, the extent to which Federal taxes—over \$4,400 in 1973 for an “average” family of four—*creates* distress, dissatisfaction, and inability to do more privately.) The authors show the effects by income class of structural reforms (loophole closing), and various alternatives for raising personal income taxes.

We know less than we should like about the effects of alternative taxes (rates and structures) upon productivity and the success of the economy. But the passing references (p. 425) scarcely do justice to the subject. Earlier I questioned, by implication, whether “the public” really wants so much spending growth as often urged. But I submit that no one can question that the American people *expect* (not merely “want”) a level of living which requires large growth in the capital base. Some tax systems will have greater effects than others upon saving and capital formation. The chapter here does not, in my view,

introduce this aspect of tax alternatives adequately.

In discussing the possible role of a Federal tax on value added to replace some of the property tax, the authors make a valuable and original contribution (p. 445) in estimating the incidence of property taxation on two alternative assumptions. One assumes that the tax on improvements rests on capital; then considerable, but not smooth, progression is found. But if this portion rests on renters and consumers, there is considerable regressivity under \$5,000 and essential proportionality in the ranges which include most of the public. The authors emphasize, among other things, that because property taxation differs widely over the country, "efficient" Federal action can hardly be expected.

One cumulative impression of the volume is that apparent aspirations call for an ever more productive economy. A bigger pie, certainly, whatever the hope for advancing the "greatest good for the greatest number" through redistribution! Tax policy, I suggest, should be examined relatively more from the point of view of the effects on the growth of real output (defined most accurately).

'What'—'how much'—'how'

One central conclusion of the excellent concluding chapter, *A New Approach to Priorities*, emerges from a brief glance backward in time: from decisions about "what objectives" to seek and "how much money" to spend, we have come to a vastly more difficult aspect—"how."

New programs on which we set high hopes require that people change their ways of doing things. "Many of the newer programs sought to change fundamental behavior patterns of individuals and institutions" (p. 453). But there has been disappointment and more failure than perhaps any of us sense, especially if we try to compare achievements with costs. And costs, we must never forget, are the alternatives which taxes, open and hidden, force us to sacrifice, including the "excess burdens" of distortions and misallocations.

As shortfalls of accomplishments became evident, various approaches were proposed—"tighter Federal regulation," "coordination," "decentralization of decisionmaking," "spend more," and "spend less." These are "unlikely to lead to a workable new strategy" (p. 455).

How would the authors propose that we proceed? First, they identify three activities for which Federal action is most appropriate—(1) research, demon-

stration, experimentation, and dissemination of information; (2) regulation and inspection of national industries; and (3) redistribution of resources through taxation and subsidy. Each is discussed briefly. Redistribution presents problems which are involved in the implementation of programs discussed in earlier chapters and in the two earlier volumes.

To change behavior, and that is the essence of many of the new undertakings being urged upon us, the authors prefer the structuring of incentives over efforts at regulation. Illustrations are drawn from the discussions of "pollution control, ensuring that welfare recipients who can work do so, and controlling medical costs and quality" (p. 458). Better arrangements than now exist are indicated. But conflicts of objectives are real and must be faced forthrightly, albeit with knowledge which is inadequate.

To improve knowledge of how best to proceed, the authors suggest more experimentation. "In many areas of social policy, no one really knows which techniques or approaches are successful and which are not" (p. 463). For reasons which one can understand, the authors do not mention tax reduction as a possibility. Is it not, however, worth serious consideration as we think about the actual operations of the functioning of the political process—elections, Congressional decisionmaking, the performance of the civil service?

Finally, "the annual budget process is increasingly ill suited to the intelligent setting of national priorities" (p. 464). Five pages summarize weaknesses, which are serious but to some extent needless. Six suggestions are designed to provide better means for examining the major choices in longer perspective—5 years in some cases, 3 in others, year by year in some. But *always*, authorization (substantive) and appropriation legislation should give explicit recognition of the longer run effects.

NO REVIEW can do justice to this volume, tightly written and full of facts, as it deals with widely diversified subjects. Each of the two prior volumes made valuable contributions. (My students have reacted favorably to assigned readings even though aware that much of the specific material would soon become somewhat out of date.) This third deserves careful attention, not least because of the questions it raises without claiming to answer. The "public business" has become big business for every one of us, collectively and individually.

Reality cannot compete with dreams, at least not

“fairly.” How tempting to romanticize about the possibility of improving our lot, or that of others for whom we seek better things, by governmental policy. Mr. Dooley made a point that this volume brings to mind when he said, “A man that’d expect to train lobsters to fly in a year is called a lunatic; but a man that thinks men can be turned into angels by an election is called a reformer and remains at large.”

One issue which the authors do not examine as such—they set themselves a different goal—also warrants attention. What is the cumulative result of the expansion and the extension of the political process through expenditure and taxation? As one after another program has been added—and not always with

the specific results expected from it alone—what improvement has there been in the total performance of *government*? What deterioration? In our proper concern for the “quality” of life, how does the cumulative increase of the influence of political processes affect our well-being—and what does it portend for our children?

“Government,” wrote Alfred Marshall, “is the most precious of human possessions; and no care can be too great to be spent on enabling it to do its work in the best way: a chief condition to that end is that it should not be set to work for which it is not specially qualified, under the conditions of time and place.” □

Changing people—an impossible feat?

The prevalent approach in the treatment of our numerous and still-multiplying social problems is . . . the assumption that, if you go out there and get the message across—persuade, propagandize, explain—people will change, that human beings are, ultimately, quite pliable. Both political leaders and the general public believe that advertising is powerful, that information campaigns work, and that an army of educators, counselors, or rehabilitation workers can achieve everything if they are sufficiently numerous, well trained and richly endowed. . . . Mature people can be taught many things—speed reading, belly dancing, Serbo-Croatian—usually with more cost, sweat, time, and energy than most beginning pupils suspect.

When we turn, though, to the modification of ingrained habits, of basic values, of personality traits, or of other deep-seated matters, the impact is much less noticeable. What is becoming increasingly apparent is that to solve social problems by changing people is more expensive and usually less productive than approaches that accept people as they are and seek to mend not them but the circumstances around them.

—AMITAI ETZIONI,

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

Results of the 1972 International Labor Conference

Technological change
and adherence
to relevancy
stressed

JOSEPH P. GOLDBERG

APPARENT in the Fifty-Seventh International Labor Conference held last June in Geneva, Switzerland, was the continuing impetus of the reaffirmation of tripartism at last year's conference.¹ The International Labor Organization's definitive characteristic of tripartism is viewed as the structural bulwark for the organization's goals of freedom and improved status for the world's workers and their dependents. In the spirit of the meeting, there was the continued effort of the President of the Conference to maintain relevancy in any political references in the plenary session discussions of the Director General's report. When discussions of non-ILO related political issues (e.g., Vietnam, Middle East) exceeded relevancy, the President actively and forcefully required adherence to the standing orders of the Conference.

Concentration on the subject matter of the Conference as set forth in the Conference agenda was assisted greatly by two factors, despite the efforts of those delegates who sought to raise constitutional and procedural issues on the President's rulings. The first was the action of the United States in meeting part of its back payments which had not been made since 1971. The second factor was the nondiscussion of the issue of altering the structure of the ILO, agreed to at last year's Conference, except for action on a constitutional amendment to increase the size of the Governing Body.

Technology and its impact, as well as the social repercussions of automation, both generally and with specific reference to dock labor, were the leading technical themes of the Conference. Also under consideration was the updating of existing ILO conventions on the minimum age for entry into employment.

Joseph P. Goldberg, Special Assistant to the Commissioner, Bureau of Labor Statistics, attended the 57th International Labor Conference as Adviser on the U.S. Government Delegation and as Reporter of the Conference Committee on Dock Labor.

Concern with basic ILO goals was reinforced also in the preparatory work for the Conference by the Committee of Experts on the Application of Conventions and Recommendations, and its use by the Conference committee. The Conference gave especial attention to the committee's reports on such fundamental instruments as those relating to forced labor and discrimination in employment. Efforts to establish dual standards based on differences in social systems failed again this year. A discussion of the submission of ILO instruments to the "competent authorities" was particularly applicable to several Soviet bloc members, with the question of the respective roles of the executive and legislative authorities discussed at length.

One hundred nineteen nations were in attendance. Bangladesh (admitted by Conference action), Qatar, and the United Arab Emirates were represented for the first time. The Conference heard addresses by Mohammad-Reza Pahlavi Aryamehr, Shahanshah of Iran; Rudolph A. Peterson, Administrator of the United Nations Development Program; and Perez Guerrero, Secretary General of the United Nations Conference on Trade and Development.

The U.S. Delegation was fully and actively represented in all the phases of the Conference. The U.S. Government Delegate supported the efforts of the President to enforce the standing rules, as did the U.S. Worker and Employer Delegates. The discussion of the Director General's report by the three delegates, particularly their observations on multinational business enterprises, provided an object lesson in the autonomy of employers and workers in democratic nations.

The U.S. Government delegation was led by Edward B. Persons, Associate Deputy Under Secretary for International Affairs, Department of Labor, and U.S. Government substitute representative in the ILO Governing Body. Daniel L. Horowitz, Special

Assistant to the Secretary of State and Co-ordinator of International Labor Affairs in the Department of State, was the second government delegate. Representatives John N. Erlenborn, Frank Thompson, Jr., and Marvin Esch attended as congressional observers.

Rudolph Faupl, international representative of the International Association of Machinists, AFL-CIO, led the worker delegation, and Edward P. Neilan, director of Chanslor Western Oil and Development Company, headed the employer delegation. Both were reelected to membership on the ILO Governing Body.

Conference officers

G. M. J. Veldkamp, former Netherlands Minister of Social Affairs and Health, was unanimously elected President of the Conference. Vice Presidents elected for the three groups were V. N. Martynenko, government delegate of the Ukrainian S.S.R., M. Ghayour, employer delegate of Iran, and R. Faupl, U.S. worker delegate.

The election of Messrs. Veldkamp and Faupl had a special significance in view of the events at the 1966 International Labor Conference. Then, Veldkamp was defeated by one vote in the election of the Conference President, with the resultant election of the government delegate of Poland. The U.S. workers' delegation, led by Mr. Faupl, then withdrew from the Conference.²

Technology for freedom

The Director General's report, "Technology for Freedom," was a wide-ranging and provocative statement of the impact of technological advance on human ecology, the structure of society, personal freedom, daily work, the role of workers and employers, and the impact and prospects for developing countries. The report warned of the existence of a "global crisis" resulting from both the opportunities and the problems created by technological advance. Social development requires that the forces of economic growth and technological innovation be intimately related. They must be reconciled with protection of the environment, hence new approaches to social and economic policy are needed. Governments, trade unions, and employers are assuming increasingly broad responsibilities for environmental conditions. Asking whether we are "equipping our-

selves to deal effectively with the immense social problems which are the corollary of the immense benefits of modern technology," the report acknowledged that although the response would vary with the social, economic, and cultural framework of each society, it must be universal. Action to cope with growing "bigness" is imperative. Urban concentration, industrial concentration—in domestic and in multinational enterprise—and the growth of the role and powers of governments in economic and social affairs raise the problem of balance between public control and exercise of the popular will. "In centrally planned economies the problem takes a different form but the difficulties of meeting changing aspirations, controlling and assessing technology, and allocating priorities and resources among sectors of production and consumption are acute," the Director General said.

Efficiency resulting from the great capacities of computers for data storing and analysis also spells the danger of intrusion into privacy, a threat to personal freedom. Gains in productivity, improved earnings, elimination of arduous and hazardous tasks, and the changed composition of the labor force have accompanied technological advance, but there are also growing indications of alienation and dissatisfaction at work. The Director General stressed the role of employers and workers as "partners in society."

For developing countries, "technological innovation, potentially a great equalizer, has accentuated many existing inequalities and created new ones." Machines have been substituted for men in situations where the labor supply was more than ample but capital was in short supply. New and more selective approaches are needed to adapt technological innovations to the circumstances of developing countries, with accompanying efforts at social and institutional innovation equally necessary for societal adjustment.

In concluding, the report emphasized that "none of the major issues to which technology gives rise can be effectively tackled without the enlightened, informed and responsible participation and involvement of employers and workers." Democratic control, personal freedom, and constructive policy for technology require their association and involvement. The report ended with the question: "Is the ILO, the only world organization in which representatives of employers and workers enjoy equal status with those of governments, not in a unique position to make a

unique contribution to the formulation of such a policy on the global level?"—a policy to assist initiatives and to provide guidelines for action of individual nations.

The debate on the report, in which 236 speakers participated, was marked by the President's emphasis on relevancy. Political remarks of delegates from Soviet bloc countries were generally circumspect, and political observations by other speakers going beyond ILO concerns and the subjects developed by the Director General in his report were relatively few. Statements by representatives of Cuba and the People's Democratic Republic of Yemen, met by the President's assertion of responsibility for maintaining the relevancy of their debate, as well as by points of order from the floor, produced an effort to challenge the President's decisions.³ Commenting on the role of the President, Mr. Faupl in his closing statement as worker vice president referred to Mr. Veldkamp's record as "champion of freedom and democracy" in seeking to ensure that the requirements for these ideals were met in the conduct of the Conference. Congratulating him on embodying "the genuine spirit of the Conference," Mr. Faupl stated, "May the future Presidents of the Conference be imbued with the same spirit and endowed with the same will and quiet courage to make it prevail."

Mr. Veldkamp, among other observations, left his own impressions of the debate on the report for future consideration. He indicated that his experience in listening to the debates on the report in the plenary session raised doubts for him about the procedure recently followed, particularly when statements were given in a virtually empty hall. He suggested consideration of a procedure whereby the report could be considered by a special committee, which would submit its report to the plenary sitting.

As usual, the report provided primarily a basis for describing developments in individual nations. The role of foreign investment in technological development was commented on favorably by representatives of a number of developing countries. Soviet bloc spokesmen generally criticized the report on the basis that it erroneously attributed all social shortcomings to technology, and that the crisis was universal. In their view, no consideration had been given to the influences of the structure, aims, and principles of the individual countries as explanation for their social problems. While claiming greater efficacy for the socialist societies, even the U.S.S.R. Government representative acknowledged the pres-

ence in his country of complicated problems, including geographic imbalances of manpower, imbalances between youthful vocational aspirations and actual job opportunities, and the need for environmental protection. He went on to cite "certain trends and a number of positive changes in the international situation" as evidence that countries with different social and political systems are capable of international collaboration.

The observations of the spokesmen for the three sides of the U.S. delegation on the Director General's report put forth a variety of views and positions, particularly as regards multinational corporations. The discussion of multinational corporations was only a preliminary one since the ILO has convened a tripartite meeting, to be held in October, on the relationship between multinational corporations and social policy, and the appropriate role of the ILO.

In Mr. Persons' view, "the sweeping general analysis of the ills besetting mankind" in the Director General's report, "carries us far beyond ILO responsibility and diverts our attention from those problems concerning which the ILO can be useful." He saw the need, instead "to focus on the mundane but still essential tasks of looking for feasible solutions of the workplace and of industrial relations, and of setting priorities for effective ILO work." Budget constraints in the foreseeable future would not permit implementation of a program based on this "vision of breathtaking sweep and boldness." What is needed is a realistic assessment of resources in those established ILO programs where further work can be done, particularly in assisting developing countries.

Mr. Persons felt that the report was inconsistent and unbalanced in placing too much emphasis on the role of government while decrying its bigness. Rather solutions should be sought through more emphasis on "intermediary organizations" of society. The producing corporation, socially valuable and irreplaceable, has grown large because it has proven to be more efficient; and its output per unit of input has increased, thus enlarging social production and improving the standard of living of working people. Its role also requires "genuinely independent trade unions to protect workers' interests, regulatory legislation to prevent excesses, and adequate competition to stimulate efficient management." Regarding increased centralization of political power as the sole remedy for the problems cited in the report, Mr. Persons referred to the U.S. tradition, that of "political federalism and the decentralized competitive

economy." While agreeing with the report's reference to "market failure"—namely, the negative external costs of technology, and failure of the market to call forth the production of certain public goods—and the report's recognition of a governmental role in meeting these problems, he stated that it was a question of the appropriate method of intervention. Rather than assigning or transferring production activity to the government, Mr. Persons stated, it is better to adopt "skillfully designed systems of taxes and subsidies which can modify both the allocation of resources and the distribution of income." While questioning the role of the ILO in the broad areas of environmental protection, he called attention to the role of Federal, State, and local governments and private industries in the United States in seeking to meet the problem.

Mr. Neilan found the report to be generally negative in its approach to the problems set forth. In the absence of priorities and the presence of a multitude of questions, he found "a conglomerate of fine words without correlating the numerous questions raised" frustrating efforts to make constructive contributions and suggestions. He pointed out that worldwide practical experience did not support the strong implication in the report that multinational corporations can nullify the policies of governments and organizations for regional cooperation. Rather, "today's multinational corporation, with very few exceptions, exists as a good citizen trying to participate as a partner in the social and economic development of the country or countries in which it operates." He cited a U.S. study reporting that U.S. multinationals increased U.S. domestic employment by 31 percent from 1960 to 1970, more than twice the increase in the national employment average; increased exports by 180 percent, more than three times the national average; and imported less than 10 percent of their foreign production (2 percent, if automobiles and Canadian imports are excluded). Elsewhere, there were further benefits. A study showed that in Latin America between 1957-66, Latin Americans employed by U.S. multinational companies increased by 50 percent, to 1,230,000. These included 40,000 in senior management posts, and more than 100,000 in highly specialized and technical positions. Another study had shown that in Belgium, U.S. multinational corporations in 1958-68 "led other firms in means of production, did the most research in Belgium, and employed the highest number of Belgian officials, in contrast to other multinationals, which mainly bring

such officials from their home nations."

Rather than restraining freedom, Mr. Neilan viewed the growth of freedom in the last century as a byproduct of technical advance. He held that insufficient attention had been given to the role of worker and employer associations and their already manifest awareness "of the need to accept their responsibilities as partners, in working out a viable and improving social structure. This partnership must exist if the world is to reap the benefits of improved technology, and the ILO should point to the successes rather than the failures."

Speaking for the U.S. worker delegation, Bert Seidman found a crucially important theme in the report that "the fact that a particular change seems to offer a net gain to society as a whole is no reason to ignore those who may be adversely affected by that change." Excessive harm may warrant slowing down, postponing, or even discarding the change. In the United States, he said, "the trade union movement has insisted that technological progress must not be permitted to exact a price of massive unemployment, hardship, and suffering." He cited the role of collective bargaining in the United States on adjustments to automation, with provisions (such as an advance notice and attrition) in many contracts aimed at controlling the speed and scope of technological change. The most beneficial environment to such adjustment is a full employment economy. He emphasized the importance of the workplace environment as the appropriate ILO concern, and cited the AFL-CIO's role in the enactment of a national occupational safety and health law.

Commenting on multinational corporations, Mr. Seidman stated that "there is no more powerful agent today for the international transfer of technology than the multinational corporation." He cited intracorporate transactions of multinationals as accounting for "at least 25 percent of what official statistics designate as U.S. exports and imports," with an additional 25 percent between "U.S.-based multinationals and their foreign licensees and other foreign firms with which they have patent and joint venture arrangements." To these he attributed "the annual loss of scores of thousands of jobs in many industries" affecting all job levels and both small and large cities. He agreed with the influence attributed in the report to multinationals, and commended the ILO for the work started in examining the impact of multinationals. "The ILO must play a major role in developing practical and effective measures to deal

with this problem. The American trade union movement is ready to cooperate fully in this effort." He stressed the need for continuing and expanding the activities of the ILO Industrial Committees, citing their past work in bringing both the question of multinational corporations and of automation to the fore, and the participation of U.S. trade unionists in these activities for many years.

Budget

The ILO biennial budget and program having been considered last year, only immediate contingencies were under consideration. The matter of U.S. payment of its contributions, which involved arrears from mid-1970, has figured prominently in the financial affairs of the ILO during the past 2 years. The U.S. contribution represents 25 percent of the ILO budget. The result had been a curtailment of ILO programs, reduction of planned meetings, and non-appointment to vacant staff positions. Congress acted on a supplementary appropriations bill in May to appropriate \$7,692,583 in payment of arrears for the remainder of 1970 and the first half of 1971, and President Nixon signed the bill on May 27. This eased the immediate financial situation, and the Director General withdrew a proposal for an additional assessment of \$4,750,000 in 1973 to meet the increased expenditures arising from the changes in the relative value of different currencies which occurred since original budget estimates were approved in March 1971.⁴

Commenting on the U.S. action for payment of the arrears, Mr. Seidman indicated that the AFL-CIO had never supported nonpayment despite its strong criticism of recent tendencies in the ILO. While listing developments counterbalancing the developments in previous conferences, he stated frankly that "the decision to pay these funds has not set at rest the doubts the AFL-CIO and others in the United States have had about whether the ILO is still committed unreservedly to defending the freedom and safeguarding the welfare of workers all over the world."

ILO structure

The continuing and intense discussion of the thorny questions of increasing representation in or altering the structure of the ILO was eased somewhat for this session by the decision at last year's

Conference to leave most of these matters to the 1973 Conference. Only the question of revision of the ILO constitution to increase the size of the Governing Body was considered. By a vote of 371, none against and 2 abstentions, the Conference adopted a proposed instrument, subject to ratification by governments, proposing to increase the size of the Governing Body to 56 from 48, with government representation increased to 28 from 24, and worker and employer representations each to 14 from 12. R. Ago, government delegate of Italy and chairman of the Conference Committee, reported that some in the committee felt this was as far as constitutional revision should go, while others held that it was only the first step. In his view, the proposed amendment would restore the proportion between Governing Body and the expanded ILO membership; and would also permit better representation "not only to geographical regions but to the various systems and tendencies which today have divided the world into different sectors." He indicated the committee had heard the same arguments on structure that had been heard on previous occasions, and that undoubtedly will be heard in the future.

That structural change remains a live issue was apparent from observations made on the amendment and on the elections to the Governing Body held during the Conference. The U.S.S.R. and Cuban Government delegates contended that this revision should have permitted "better representation of different regions and different tendencies in the three groups." They were particularly irked by the failure of employer representatives from the Soviet bloc to win election to the employers' group on the Governing Body. S. Koku, government delegate of Nigeria, speaking for the African group, indicated that the group in voting for the proposed amendment had not abandoned its efforts for further reform of the ILO structure "in order to remove the elements of discrimination, injustice and privilege, now inherent in the obligatory reservation of 10 permanent seats in the Governing Body for the so-called States of chief industrial importance."⁵

The U.S. Government delegates abstained from voting on the proposed amendments, on the basis, first, that the resultant size of the Governing Body, with 56 members and the additional deputy members, would make for an unwieldy directing group requiring the establishment of an executive committee or some other means to permit effective operation. Mr. Persons said, further, that the intent stated by

some of those supporting the amendment to impose geographical and other requirements on the three groups would undermine the autonomy of the groups. To the contrary, the U.S. Government understood that it was not the purpose of the amendment to change the tripartite character of the ILO.

To charges of the Bulgarian and Polish employer delegates that the representatives of the employers' group represent only private capital, Mr. Neilan replied that the 24 titular and deputy employer members elected to the Governing Body "really represent a worldwide group of socialized, nationalized and semiprivate and private businesses and organizations. They are not elected by country or region but by name to represent the common interests of all employers, regardless of the system in which they operate." To claims that the "socialist employers" have sought to cooperate with the members of the employers' group, he observed that the small group of "socialist employers" have consistently voted against the employers' interests "in group meetings, in committee meetings and whenever the group supported a matter in a Conference Committee, or in this Conference itself."

Application of conventions

The review of the reports of the Committee of Experts on the Application of Conventions and Recommendations was a highlight of the Conference's deliberations again this year, following the renewed attention to Soviet bloc countries at the Conference last year. The Committee of Experts has held 42 meetings over the years to examine the information and reports submitted by State members with regard to the action taken on conventions and recommendations under the ILO constitution. The 18 members of the committee are distinguished jurists. Mr. Earl Warren, former Chief Justice of the United States, participated for the first time this year.⁶

The committee emphasized that the numerous instances of positive action to enforce ILO instruments should not be obscured by its findings regarding situations where difficulties were encountered in applying ratified conventions or in bringing instruments adopted by the International Labor Conference before the competent legislative authorities. It called attention to the numerous instances in which law or practice of many countries have been changed on the basis of past observations or direct requests concerning ratified conventions. The committee also referred

to numerous instances where governments have adopted measures in relation to an instrument even if it is not ratified; and where steps taken to comply with a convention serve as a catalyst for additional measures exceeding the convention's requirements. Developing countries have figured prominently in these positive achievements.

The Committee of Experts noted that in 1973 it will be called upon to conduct a comprehensive survey of the effect given by all ILO member states to the Freedom of Association Convention, 1948 (No. 87) and the Right to Organize and Collective Bargaining Convention, 1949 (No. 98). Its report contained observations regarding the adequacy of the information furnished by individual governments, and questions regarding adherence in law or practice to ratified conventions.⁷ The report contained a separate discussion regarding the "nature of the competent authority" to whom all instruments adopted by the Conference—both conventions and recommendations—are to be submitted. The Committee of Experts was of the opinion that instruments were to be submitted to legislative bodies. But it pointed out that some governments have taken the position that the authority with the power to ratify (the head of the executive branch) is the competent authority to which instruments adopted by the Conference should be submitted. The committee called on governments to "submit to the legislative authority both Conventions and Recommendations, it being clearly understood that governments are free to propose what action should be taken in each instrument." On specific countries, the report noted that instruments had been submitted to the Presidium of the Supreme Soviets of Byelorussia, Ukraine, and the U.S.S.R., to the Presidium of the National Assembly of Bulgaria, and to the Presidential Council of Hungary, and reiterated its hope that these governments will find it possible to communicate these instruments to the Supreme Soviets or national assemblies.

At the Conference Committee, among other matters, there was a lengthy discussion of the question of submission to the competent authority. The extensive arguments regarding the characteristics of the Soviet constitutional system and the opposite view that a single standard should apply were referred to the Experts Committee for further consideration. With regard to the instances of special problems or difficulties on ratified conventions, the Conference Committee listed specifically the following as in-

stances of continued failure to implement the conventions concerned: Greece (Convention 87, Freedom of Association, and Convention 98, Right to Organize); and Upper Volta (Convention 29, Forced Labor). Other countries were listed as having failed to provide certain information. In the case of Czechoslovakia, which had been listed specifically last year in regard to the need to achieve conformity with the Convention on Discrimination (No. 111), its government representative reported that his government was proceeding with the revision of its labor code, and gave his assurance that the revised code would conform to the provisions of the convention. This will be reviewed at next year's conference.

The Conference Committee limited its discussion of the freedom of association conventions (Nos. 87 and 98) in view of the general survey to be undertaken in 1973. It discussed additional ways recommended by the Experts to promote international labor standards and their implementation. It welcomed the resumption of regional seminars for ministry of labor officials to promote better understanding and functioning of ILO procedures relating to international standards. The direct contacts procedure for ILO aid to countries in effectuating the terms of conventions was endorsed, with the understanding that these should include contacts with employers' and workers' organizations, as well as with governments of the countries concerned. The need for more explicit rules on direct contacts was expressed, and the Committee of Experts was requested to develop them. Additional avenues for promoting tripartism in regard to the implementation of international labor standards were suggested, including seminars for members of workers' organizations and more extensive publicity among workers and employers.

Technical items

The work of the three technical committees of the Conference, as usual, produced important results. It is in these committees that the tripartite structure of the ILO achieves fullest fruition, with close attention being paid to the specialized matters under consideration by government, worker, and employer members, who are specialists in the fields under consideration.

The Conference adopted a resolution entitled "Labor and Social Implications of Automation and Other Technological Developments," setting forth

guiding principles and programs for governments, workers, and employers. Its operative terms cover labor-management relations, calling for tripartite consultation to examine the new technology, and for devising programs to protect workers against harmful social effects of technological change. The resolution was adopted by a vote of 225 in favor, 0 against, and 10 abstentions. The employer vice chairman, while noting reservations on some provisions, indicated that "there is a great deal that is good in this resolution" and recommended support.

The subject of "Social Repercussions of New Methods of Cargo Handling (Docks)" was under first consideration, with further consideration to follow next year if the first consideration resulted in decision to support the adoption of one or more instruments. The Conference Committee reached unanimous agreement on the terms of a recommendation, and a majority supported a convention as well, with the employers abstaining. In the plenary sitting, the vote on the majority recommendation for a convention, supplemented by a recommendation, was supported by a vote of 182 for, 0 against, and 75 abstentions. (U.S. Government and worker delegates voted for, and the employer delegate abstained.) The terms of the two draft instruments are closely complementary. The convention contains general terms, with the recommendation including more specific terms. Aside from their applicability to dockworkers who are available regularly, with the work of cargo handling as the main source of their income, the definition of "dockworkers" is left to national law and practice. Consultation with worker and employer organizations should be had on these definitions, under the terms of the instruments. The draft convention, in general terms, and the recommendation, with more specific and comprehensive terms, contain provisions outlining the area of joint worker-employer consideration of the effects of new and changed methods of cargo handling in docks. These include consideration of present and anticipated changes, regularization of employment and income, appropriate and constructive labor-management relations, approaches to efficiency of work in ports, and arrangements for improving the dockworkers' conditions of work.

The "Minimum Age for Admission to Employment" instruments were also under first consideration. The Committee report for a draft convention and recommendation to be considered at next year's conference was adopted unanimously. The employer

vice chairman of the committee, while indicating the employer group's general support for the proposal, expressed reservations on the 18-year minimum for work of a hazardous nature (preferring 16 in the draft convention) and on the prohibition of overtime work, as well as the granting of 4-week holidays with pay for young workers and some other provisions in the draft recommendation as "unrealistic and impractical." The draft convention sets the age of completion of compulsory schooling or, in any case, 14 years of age as the minimum age for entry into employment, with 18 years as the minimum age for hazardous work. The recommendation sets 16 years as a social goal for progressive raising of the minimum entry age.

Resolutions

The Resolutions Committee, which had 27 resolutions before it, was able to complete consideration of only 5 of these. The order of priority was determined by vote in the committee under the Standing Orders of the Conference. Four of the five resolutions were adopted without a formal vote.

A resolution concerning the "Contribution of the International Labor Organization to the Protection and Enhancement of the Environment Related to Work" was adopted unanimously, although some reservations had been expressed in the committee regarding provisions viewed by some government and employer delegates as political concerns outside the sphere of competence of the ILO. The resolution places emphasis on the activities of the ILO related to the work environment, and calls for development of appropriate ILO programs.

The resolution "Concerning the Program of Industrial Activities" of the ILO called for priority to be given to this program. The "Conditions and Equality of Treatment of Migrant Workers" resolution reiterated the need for greater guarantees and assistance to migrant workers, and called for implementation of recommendations made at last year's

Conference, with the ILO to carry out several activities in this field, including consideration at an early session of the Conference.

The resolution concerning women workers called for the development by the ILO of a "coherent program of activities designed to promote true equality of treatment and opportunity for women workers." Suggested also was consideration of the subject of equality of treatment for women workers at an early session of the Conference.

The fifth resolution, concerning the "Policy of Colonial Oppression, Racial Discrimination and Violation of Trade Union Rights Pursued by Portugal in Angola, Mozambique, and Guinea (Bissau)" was adopted by a vote of 211 for, 0 against, and 84 abstentions. The U.S. Government and employer delegates abstained and the U.S. worker delegate voted for. The U.S. Government member of the Conference Committee, along with other government and employer members, had indicated he would abstain since most of the provisions fell outside the scope of ILO competence. The U.S. worker delegate voted for the resolution pledging the ILO's support for "self-determination and civil and trade union rights," and cited the AFL-CIO position that the entire free world should support the freedom movement in the Portuguese territories, as well as in South Africa and Rhodesia.⁸

THE ILO, like other international organizations, is not removed from the pressures and counterpressures of the surrounding environment of international policy. Those who are concerned with the maintenance of the basic purposes and the tripartite structure of the ILO must set their sights by the firmness shown by the President of this Conference which, while protecting the exercise of free speech, required its exercise within the scope and competence of the ILO. Political acrimony would only frustrate the constructive thrust of this tripartite organization. □

—FOOTNOTES—

Members of the U.S. Delegation were: *Government*: Delegates Edward B. Persons, Associate Deputy Under Secretary for International Affairs, Department of Labor, and Daniel L. Horowitz, Special Assistant to the Secretary of State; Substitute Delegate Allen R. Delong, Department of Commerce; Congressional Advisers Representatives Frank Thompson, Jr., John N. Erlenborn, Marvin L. Esch; Advisers Harper Barnes, Hudson Drake, Joseph P. Goldberg,

Russell C. Heater, George H. Hildebrand, Robert L. Kinney, Leonard R. Linsenmayer, Dominick J. Manfredi, Thomas M. Phelan, Ben P. Robertson, Roger C. Schrader, William M. Steen, Thomas E. Walsh. *Employers*: Delegate Edwin P. Neilan; Advisers Joseph T. Bishop, Stephen F. Dunn, William C. Hartman, Robert A. Leavitt, Vernon O'Rourke, James F. Steiner. *Workers*: Delegate Rudolph Faupl; Advisers William T. Dodd, Matthew Guinan, Edward J. Hickey,

Joseph T. Power, Bert Seidman, Hunter P. Wharton.

¹ J. P. Goldberg, "Tripartism reaffirmed by the 1971 International Labor Conference," *Monthly Labor Review*, September 1971, pp. 30-37.

² Poland had been found to be in violation of the ILO Convention on Freedom of Association, *AFL-CIO News*, June 17, 1972. H. M. Douty, "The International Labor Conference of 1966," *Monthly Labor Review*, August 1966, pp. 841-842.

³ With opposition to the President's rulings by those seeking to use the ILO as a platform for political polemics, one entire sitting of the plenary session was devoted to a debate on the rulings and the President's authority to make them (particularly his authority to strike from the record those statements he had ruled out of order). It is clear from that debate that this will remain a serious issue at future conferences.

⁴ Public Law 92-306, May 27, 1972. Appropriations legislation for Fiscal 1973 is pending, with the House authorizing \$4,000,000 for the ILO and the Senate authorizing \$12,617,000, covering all payments through 1972. In withdrawing his additional request, the Director General emphasized that the effects of these changes coupled with the continuing high rate of inflation will have to be taken into account in the budget to be considered next year. "We will do our utmost to finance expansion by the economies of efficiency," Mr. Jenks stated, "but our resources have never been commensurate with our responsibilities."

⁵ Cuba also raised the issue of the 10 leading industrial States. The U.S.S.R., one of the 10, did not.

⁶ The members act as individual experts. The present mem-

bers are Sir Adetokunbo Ademola (Nigeria), Günther Beitzke (Federal Republic of Germany), Boutros Boutros-Ghali (Egypt), Pralhad Balacharya Gajendragadkar (India), E. García Sayán (Peru), Arnold Gubinski (Poland), Begum Raána Liaquat Ali Khan (Pakistan), H. S. Kirkaldy (United Kingdom), L. A. Lunz (USSR), Jean Morellet (France), E. Razafindralambo (Madagascar), Paul Ruegger (Switzerland), Isidoro Ruiz Moreno (Argentina), Arnaldo Lopes Sussekind (Brazil), Joseph J. M. van der Ven (Netherlands), Joza Vilfan (Yugoslavia), Earl Warren (United States), Kisaburo Yokota (Japan).

⁷ The only instances of dissent on observations on particular countries were those relating to Byelorussia, Ukraine, and U.S.S.R. Professor Lunz (U.S.S.R.), regarding the committee's findings that Ukases of 1970 contained provisions falling within the definition of "forced or compulsory labor" of the Forced Labor Convention, No. 29, stated that these did not institute forced labor, their purpose being to reinforce the principle of general obligation to work. On the Freedom of Association Conventions (Nos. 85 and 98), Professors Gubinski (Poland) and Lunz (U.S.S.R.) dissented from the Expert Committee's observations, contending that account should be taken of the economic and social system in these countries. The committee stated that it had applied the same criteria, examining from a purely legal point of view the effectuation in law and practice by the countries of their responsibilities under the ratified conventions, to these as in all conventions. ILO, *Report of the Committee of Experts on the Application of Conventions and Recommendations*, Volume A, *General Report and Observations Concerning Particular Countries* (Geneva, ILO, 1972), pp. 29, 103-5, 151-2.

⁸ *AFL-CIO News*, July 8, 1972.

Plato on the division of labor

Which would be better—that each should ply several trades, or that he should confine himself to his own? He should confine himself to his own. More is done, and done better and more easily when one man does one thing according to his capacity and at the right moment. We must not be surprised to find that articles are made better in big cities than in small. In small cities the same workman makes a bed, a door, a plough, a table, and often he builds a house too. . . . Now it is impossible that a workman who does so many

things should be equally successful in all. In the big cities, on the other hand . . . a man can live by one single trade. Sometimes he practices only a special branch of a trade. One makes men's shoes, another women's, one lives entirely by the stitching of the shoe, another by cutting the leather. . . . A man whose work is confined to such a limited task must necessarily excel at it.

—The Republic of Plato
(New York, Oxford University Press, 1969).

Employment in the atomic energy field

Increased use of atomic energy
for peacetime purposes
affects industry's structure
and employment

MAURICE MOYLAN

EMPLOYMENT in the atomic energy field continued to grow in 1971, according to a survey made by the Bureau of Labor Statistics for the U.S. Atomic Energy Commission.¹ A major factor behind this growth was the expanding peaceful applications of atomic energy, mainly the greater use of nuclear power by private electric utility companies. Employment in Government-owned establishments declined for the fifth straight year. Overall, employment increased by 1.8 percent in the year ending in May 1971.

The atomic energy field is composed of two general types of establishments: (1) those owned by the Government and privately operated on a contract basis, and (2) privately owned establishments. Employment in privately owned establishments increased by 6,000, offsetting the employment decline in Government-owned establishments of 3,100. The following tabulation shows employment in the atomic energy field by type of establishment:

Type	1970	1971
All establishments	154,100	156,900
Government-owned, contractor operated	98,600	95,500
Privately owned	55,500	61,500

This movement to private employment continues a trend in evidence since the early sixties. From 1963 to 1971, employment in Government-owned firms declined almost 6 percent, while employment in the private sector grew by almost two-thirds. By 1971, 40 percent of total employment was in the private sector, up from 25 percent in 1963.

In 1971 as in 1963, close to three-fourths of all atomic energy workers were employed in four areas: Atomic Energy Commission laboratories and

research facilities, atomic energy defense production facilities, reactor and reactor component design, and manufacturing and design and engineering of nuclear facilities.

As the demand for nuclear-generated electricity continued to grow during 1971, employment in power reactor operation and maintenance more than doubled, and employment in the design and engineering of nuclear facilities increased 41 percent. Reductions in Government spending for research and development caused employment in Atomic Energy Commission laboratories to decline by about 4,000 or 8 percent. Although employment in atomic energy defense production increased slightly over 1970, it was 16 percent below 1963 levels (table 1).

Occupational specialization

Atomic energy activities utilize a highly skilled work force. (See table 2.) In 1971, 45 percent of

Table 1. Employment in the atomic energy field, by segment

Segment	1963	1970	1971
All segments	138,500	154,100	156,900
Uranium milling	2,700	1,700	1,600
Production of feed materials	9,100	6,900	7,100
Production of special materials for use in reactors	1,900	1,700	1,400
Fuel element fabrication and recovery activities	5,200	6,600	6,600
Reactor and reactor component design and manufacturing	14,300	22,400	22,600
Design and engineering of nuclear facilities	2,500	9,700	13,700
Power reactor operation and maintenance	1,100	2,300	4,700
Radioactive waste disposal	100	100	1,500
Nuclear instrument manufacturing	5,800	6,500	5,800
Processing and packaging radioisotopes	400	1,100	1,100
Particle accelerator manufacturing	1,100	700	800
Private research laboratories	2,200	2,800	2,400
Atomic Energy Commission laboratories and research facilities	46,200	49,400	45,500
Atomic energy defense production facilities	37,500	31,000	31,500
Industrial radiography	600	1,700	1,600
Miscellaneous	7,700	9,500	9,000

¹ Not strictly comparable with earlier data.

Maurice Moylan is an economist in the Division of Manpower and Occupational Outlook, Bureau of Labor Statistics.

Table 2. Employment in the atomic energy field, by occupation

Occupation	1963	1970	1971
Total employment, atomic energy field.....	138,500	154,100	156,900
Total engineers.....	20,200	26,000	27,600
Mechanical.....	6,400	8,700	9,200
Electrical and electronic.....	4,500	5,800	5,700
Chemical.....	2,600	2,100	2,100
Nuclear.....	1,700	3,300	3,700
Metallurgical.....	1,100	1,000	1,000
Civil.....	1,200	1,440	1,600
Other.....	2,700	3,800	4,300
Total scientists and mathematicians.....	10,700	12,700	12,400
Physical scientists.....	8,500	9,200	8,800
Chemists.....	3,800	3,600	3,700
Physicists.....	3,500	4,300	4,000
Metallurgists.....	600	700	600
Geologists.....	(¹)	100	100
Other physical scientists.....	500	400	400
Life scientists.....	1,200	1,700	1,900
Health physicists.....	500	700	700
Medical.....	200	100	100
Biological.....	500	800	1,000
Other life scientists.....	(¹)	100	100
Mathematicians.....	1,100	1,800	1,700
Total technicians.....	23,500	29,500	29,700
Engineers and physical science technicians.....	11,600	14,600	14,100
Electrical and electronic.....	5,400	5,200	5,200
Other engineers, technicians.....	6,000	5,900	5,900
Physical science technicians.....	3,100	3,000	3,000
Draftsmen.....	3,900	6,100	7,200
Health physics technicians.....	1,700	1,600	1,700
Life science technicians.....	600	600	400
Other technicians.....	4,600	5,500	5,000
Nuclear reactor operators.....	1,200	1,200	1,300
Other employees.....	84,100	85,900	87,200

¹ Less than 50 employees.

NOTE: Dashes indicate data not available.

all employees in the atomic energy field were scientists, engineers, technicians, and nuclear reactor operators. The ratio of scientists and engineers to total atomic energy employment stood at 1 out of 4 in 1971, about the same as in 1963. But some fields have experienced more relative growth than others.

Chart 1 shows changes in the proportions in each field since 1963. Engineers' employment grew the most, registering a 36-percent increase. By 1971, engineers numbered 27,600, up 5.8 percent from the previous year. Although employment of scientists grew 16 percent since 1963, it peaked in 1968 and has continued to decline since then. In 1970-71, employment of scientists declined 4.3 percent to 12,400. Most of the 25-percent increase in the number of technicians shown on the chart occurred since 1967. By 1971, technicians numbered 29,700.

Movement toward nuclear-generated electricity has accounted for much of the greater relative employment growth of engineers and technicians, since they are more likely to be employed in this area than are scientists. The slow decline in the employ-

ment of scientists since 1968 reflects reduced research activities and the leveling off of scientific employment in production of nuclear weapons.

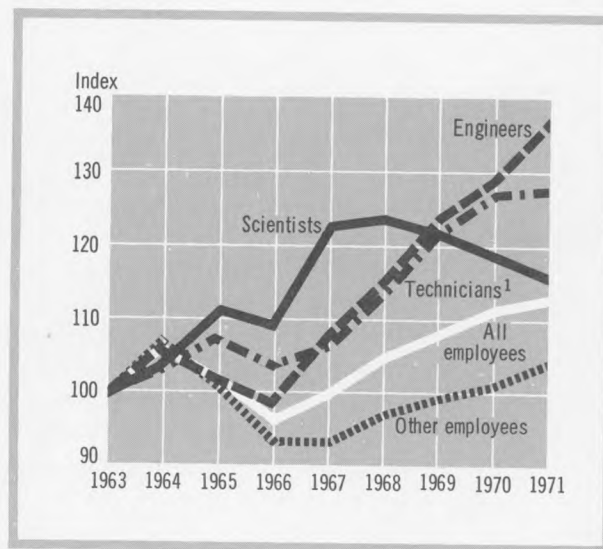
By far the largest group of engineers were mechanical engineers (table 2). Together with electronic and electrical engineers, they made up nearly 70 percent of all engineering employment. Although engineers are employed in all segments of the atomic energy field, most work in Atomic Energy Commission laboratories, reactor design and manufacturing, and the design and engineering of nuclear facilities.

Technicians, the most numerous group, provide strong support to engineers. Their occupations are diverse, ranging from draftsman to nuclear reactor operator. The largest of this group were draftsmen, followed by engineering and electrical and electronic technicians, respectively.

Physicists and chemists accounted for more than 85 percent of the physical scientists, and biologists and health physicists made up close to 90 percent of the life scientists. Physical scientists outnumber life scientists by more than 4 to 1. Recently, however, life scientists are showing a more rapid rate of growth as new techniques in the field of health such as gamma rays and X-rays which use atomic energy are being developed. Two-thirds of all scientists were employed in private and Atomic Energy Commission laboratories and defense production facili-

Chart 1. Changes in employment in the atomic energy field, by occupation, 1963-71

[1963=100]



¹ Excludes nuclear reactor operators.

Table 3. Employment in the atomic energy field, by region

Region	1963		1970		1971	
	Employment	Per cent	Employment	Per cent	Employment	Per cent
United States.....	138,500	100.0	154,100	100.0	156,900	100.0
New England.....	7,000	5.0	5,300	3.5	5,800	3.7
Middle Atlantic.....	19,300	13.9	22,400	14.6	22,800	14.6
East North Central.....	16,100	11.6	21,100	13.7	21,300	13.6
West North Central.....	11,100	8.0	11,400	7.4	11,300	7.2
South Atlantic.....	11,000	7.9	14,600	9.5	18,000	11.5
East South Central.....	15,100	10.9	16,900	11.0	18,800	12.0
West South Central.....	1,800	1.3	3,200	2.1	3,000	1.9
Mountain.....	29,100	21.0	28,700	18.7	27,600	17.7
Pacific.....	27,900	20.1	30,300	19.7	28,300	18.1

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

ties. Most of these scientists were engaged in research.

Research and development

In 1971, more than 50 percent of all scientists and engineers were in research and development activities. Close to four-fifths of scientific employment was in research and development; less than half the engineers were engaged in these activities. Combined employment of scientists and engineers in research and development declined more than 4 percent over the year, but was still about 10 percent above the 1963 level. About one-third of all research and development activities were performed at Atomic Energy Commission laboratories.

Region

Workers in the atomic energy field are employed in nearly every state. Over 35 percent of these workers, however, were employed in the Pacific and

Table 4. Employment in the atomic energy field, by size of establishment, 1971

Number of employees	Number	Percent distribution
All sizes.....	156,900	100.0
1-9.....	400	0.3
10-49.....	3,900	2.5
50-99.....	5,000	3.2
100-499.....	21,800	14.0
500-999.....	18,400	11.8
1,000-4,999.....	74,800	47.9
5,000 and over.....	32,600	20.9

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

Mountain States in 1971. Employment in the New England States has declined approximately 1,200 since 1963. By 1971, employment in this area accounted for only 3.7 percent of total employment. The most significant change over the 1963-71 period has been in the South Atlantic States, where increased demand for electric power in recent years has stimulated employment in the design and engineering of nuclear facilities, reactor manufacturing, and reactor operation and maintenance. Employment in the South Atlantic States increased by more than 60 percent from almost 8 percent in 1963 to 11.5 percent in 1971 (table 3).

Source of funding

Federal funds supported 67 percent of all scientists and engineers in atomic energy activities in 1971, down from 72 percent in 1970.

In the private sector, 26 percent of the scientists and engineers were paid with Federal funds, compared with 32 percent in 1970. Approximately one-half of the scientific and engineering work force in the private sector were paid by companies' own funds in 1971, up from 43 percent in 1970. Other sources accounting for the remainder in both years were funds from other companies not in the field on a contract basis.

Size of establishment

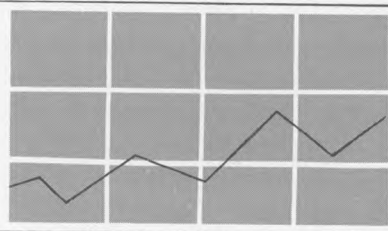
As in the past, large establishments dominate employment in the field. In 1971, nearly 110,000 or close to 70 percent of all atomic energy workers were employed in establishments employing 1,000 workers or more (table 4). About 90 percent of employees in government-owned facilities were in establishments of this size; in the private sector, 35 percent.

From 1963 to 1971, the proportion of the workforce in establishments of 1,000 workers or more declined from 76 percent to 70 percent, reflecting increased employment in the private sector where firms are typically smaller. □

FOOTNOTE

¹ The data were collected from more than 500 establishments, both government-owned and private, which did work in this field. Excluded were workers in uranium mining, construction, education, and Government.

The Anatomy of Price Change



PRICE CHANGES IN THE SECOND QUARTER OF 1972

TOSHIKO NAKAYAMA

THE RATE of inflation, as measured by the Consumer Price Index and the Implicit Price Deflator for private Gross National Product (GNP), slowed markedly in the second quarter of 1972.

The Consumer Price Index increased at a seasonally adjusted annual rate of 2.2 percent for the 3 months ending in June, the slowest rise since early 1967. The rate was down from 3.6 percent in the 3 months ending in March—the first calendar quarter in the post-freeze period of the Economic Stabilization Program. Much of the rise early this year and the deceleration in the second quarter was due to the behavior of the food component of the index. The food index, which advanced at a 7.2-percent rate in the first quarter, was unchanged from March to June. The index for nonfood commodities rose at a 2.7-percent rate and services 3.4 percent in the second quarter, about the same as in the first quarter and slower than in the pre-freeze period last year. (See table 1.)

During the 10 months following the start of the Economic Stabilization Program last August, the CPI rose at a 2.7-percent annual rate. Excluding the period from August to November when most prices were frozen, the rate of advance through June was 3.1 percent. This compares with the 3.8-percent rate in the first 8 months of 1971 and rates of 6 percent for calendar year 1969 and 5.5 percent for calendar year 1970.

The Implicit Price Deflator for private GNP rose at a 1.7-percent rate in the second quarter, the slowest pace since late 1965, except for the period af-

ected by the wage-price-rent freeze last year. The rise in Personal Consumption Expenditures deflator, influenced by changes in the CPI, was moderate and slightly slower than in the first quarter. Rates of advance in other components decelerated after advancing sharply in the first quarter. (See table 2.)

At the same time the rise in the deflator was slowing sharply, unit labor costs were edging down—their first decline since 1965. A larger gain in productivity and a slower rise in hourly compensation resulted in a 0.6-percent rate of decline in unit labor costs from the level in the first quarter of the year. Unit non-labor costs rose at a 5.9-percent rate, compared with 3.5 percent in the first quarter.

Output per man-hour rose at an annual rate of 6.0 percent during the second quarter, compared with 3.3 percent in the first quarter, and 4.3 percent over the year from the second quarter of 1971. The increase in productivity stemmed from a faster rise in private output—at a substantial 10.2-percent rate, compared with 7.0 percent in the first quarter. The rise in man-hours, at a 4.0-percent rate, was larger than in the first quarter. The average workweek changed little but the rise in employment, at a 3.9-percent rate, was faster. Although the increase in employment continued to be sizable, there was large growth in the labor force so that unemployment was 5.7 percent for the quarter, not much different from the 5.8-percent rate of the first quarter.

Compensation per man-hour rose at a 5.4-percent annual rate in the second quarter, considerably slower than in the first quarter and in the first two quarters last year, before the freeze. Wage increases, including benefits, moderated. First-year increases under new union contracts and deferred increases under old contracts were smaller than a year earlier.

Because the deflator increased while unit labor costs held steady, the employee share of private GNP declined. This decline is a continuation of the downward trend in employee share that began in the second quarter of 1970 and was interrupted by a sharp rise in the fourth quarter of 1971 and first quarter of this year. When the employee share rose in the first

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quarter, the shares of private GNP accounted for by capital consumption allowances, business taxes, and interest declined, and the profits share held steady. In the second quarter, taxes and interest shares continued to decline but the shares for capital consumption allowances and profits rose.

Although the rise in the CPI and the deflator moderated in the second quarter, the rise in the Wholesale Price Index failed to show any slackening. The WPI rose at a 4.9-percent rate in the first and second quarters of this year, about the same as in the pre-freeze period of 1971. The sharp rise in the first quarter was primarily due to the upsurge in farm product and food prices, particularly livestock and meats and fresh vegetables; these prices rose at a somewhat slower pace in the second quarter. The rise in the index for industrial commodities accelerated, however, moving up as rapidly as it did before the freeze.

About a third of the rise in the industrial commodity index in the second quarter stemmed from higher prices for three groups of industrial materials—lumber, hides and leather, and textile products—for which the demand has been strong and developments in world markets have affected supplies. In mid-July, the Administration took actions to hold down prices in two of these groups, lumber and hides. Price and wage controls were imposed on 62,000 small lumber companies that had been exempt since May 1 under the general exemption for companies

with 60 employees or fewer. In the lumber industry, smaller companies collectively account for a large part of the business. In addition, the Forest Service was directed to increase timber cutting. In order to hold down leather and shoe costs by reducing hide prices, export controls were imposed on domestically produced cattlehides. The program restricts hide producers (who are also usually meat packers) from exporting more than 1,350,000 hides a month—the level at which they exported hides in 1971.

Prices for other industrial materials such as chemicals and paper and paper products rose at a slightly faster pace in the second quarter, compared with relatively slow rises for these commodities in the period before the freeze. Heavy expenditures on pollution abatement equipment was a factor contributing to the increase in paper prices. The rise in the metals and metal products group slowed considerably in the second quarter. Prices for nonferrous metal products increased. However, prices for copper scrap, iron and steel scrap, and steel mill products, which rose sharply early in the post-freeze period, declined in the second quarter. Price rises also decelerated in the second quarter for finished goods—capital goods and consumer goods.

Consumer goods and services

Food. Following the trend in wholesale prices for farm products and processed foods, consumer food prices at wholesale climbed sharply in late 1971 and

Table 1. Changes in Consumer and Wholesale Price Indexes, 1971-72

[Seasonally adjusted, annual rate, compounded (except Services)]

Index and item	Percent change					
	8 months prior to Phase I, December 1970 to August 1971	3 months, Phase I, August 1971 to November 1971	7 months, Phase II, November 1971 to June 1972	10 months, Phases I and II, August 1971 to June 1972	3 months ending—	
					March 1972	June 1972
CONSUMER PRICE INDEX						
All items.....	3.8	1.9	3.1	2.7	3.6	2.2
Food.....	5.0	1.9	4.0	3.3	7.2	0
Commodities less food.....	2.9	0	2.5	1.7	2.4	2.7
Services.....	4.6	3.1	3.6	3.4	3.7	3.4
WHOLESALE PRICE INDEX						
All commodities.....	5.2	-0.2	5.3	3.6	4.9	4.9
Farm products and processed foods and feeds.....	6.5	1.1	7.6	5.6	7.0	4.8
Industrial commodities.....	4.7	-0.5	4.4	2.8	4.2	4.9
Selected Stage of Processing indexes:						
Crude materials except food.....	3.3	2.3	8.5	6.6	15.0	3.8
Intermediate materials except food.....	6.5	-.7	4.8	3.1	3.8	6.6
Producers' finished goods.....	3.7	-2.0	4.1	2.0	4.9	3.4
Consumer goods except food.....	2.2	-.4	2.9	1.9	2.9	2.5
Consumer foods.....	6.8	.3	5.4	3.8	3.8	2.7

early 1972. The increases were reflected in retail food prices in the first quarter. In late first quarter and early second quarter, wholesale food prices declined as livestock marketings and meat production rose and fresh vegetable supplies increased. These declines resulted in holding the retail food index steady in the second quarter. (See table 3.)

By mid-second quarter, wholesale livestock and meat prices started to advance again, more than they usually do in this period. Higher prices were partly due to strong consumer demand for beef. Fresh fruit and vegetable prices also moved up as supplies decreased. With increases in wholesale food prices pointing to a renewed upsurge in retail food prices, several actions were taken by the Administration in late June in an effort to stabilize food prices: import quotas on meats were suspended for the balance of 1972, and stabilization controls were extended to cover wholesale and retail prices of raw food products such as fresh fruits and vegetables, eggs, and raw seafood.

In other categories of food purchased in grocery stores, prices of dairy products and cereal and bakery products declined in the second quarter following a modest rise in the first quarter. The increase in egg prices was much smaller than in the first quarter. Lower prices for dairy products were partly due to the fact that agricultural support levels were not raised this spring. In addition, the price wars being waged by supermarket chains appeared

to be holding down increases in some retail food prices.

Prices of food away from home—restaurant meals and snacks—increased at a 4.1-percent rate in the second quarter, slightly less than in the first quarter of this year and before the freeze last year. The rise in restaurant prices reflected the increase of 12.6 percent since June 1971 in wholesale prices for meats, poultry, and fish (which make up one-third of the dollar value of food purchases by eating places). The rise in average hourly earnings for nonsupervisory workers in eating and drinking places was a more moderate 2.6 percent from May 1971 to May 1972.

Commodities less food. In the first two calendar quarters in the post-freeze period of the Economic Stabilization Program, the index for nonfood commodities rose at a moderate pace at wholesale and retail. The rise at wholesale was 2.9 percent in the first quarter and 2.5 percent in the second quarter. Wholesale prices for most nonfood commodities rose at a slower pace in the second quarter, except apparel which increased at a slightly faster rate and footwear which accelerated sharply. At retail, the nonfood commodity index rose at a 2.4-percent rate in the first quarter and 2.7 percent in the second. The rise in the second quarter was faster primarily because of a more than seasonal upturn in used car prices and larger increases in house prices (neither of these two items are in the Wholesale Price Index). In addition, price rises accelerated noticeably for footwear and slightly for furniture. Gasoline prices declined much less than in the first quarter. On the other hand, price rises for apparel and new cars were significantly slower than in the first quarter.

Although the rise in retail footwear prices accelerated, the increases have not been as large as those which have occurred at wholesale in the first and second quarters of this year. Before limitations were imposed on hide exports in late June, the Price Commission had changed the method of treating leather costs by shoe manufacturers. While granting price increases to shoe manufacturers in late May, the Commission limited the increases to a dollar-for-dollar pass-through of leather cost increases, instead of treating new leather costs as subject to customary profit margin determination in figuring prices. In granting the increases, the Commission ordered the companies to roll back any price boosts they had been permitted previously and to apply the new

Table 2. The anatomy of price change

Item	Percent change from previous quarter					
	1971				1972	
	I	II	III	IV	I	II
Deflator: Private GNP.....	4.7	4.3	2.8	1.0	4.2	1.7
Personal consumption expenditures.....	4.0	3.7	2.4	1.2	3.0	2.4
Private construction:						
Residential.....	6.1	8.4	5.0	-.8	9.8	6.2
Nonresidential.....	6.2	14.1	14.2	7.2	10.4	7.8
Producers' durable equipment.....	4.3	3.6	1.3	-2.8	6.6	2.9
Government purchases of goods and services ¹	5.0	5.3	.3	-.3	9.1	2.8
UNIT COSTS						
Total private, all persons						
Deflator: Private GNP.....	4.7	4.3	2.8	1.0	4.2	1.7
Unit labor costs.....	1.1	4.0	2.5	1.5	4.7	-6
Compensation per man-hour.....	7.7	6.1	6.4	5.6	8.1	5.4
Output per man-hour.....	6.5	2.0	3.8	4.1	3.3	6.0
Unit nonlabor costs.....	11.3	4.9	3.2	0.2	3.5	5.9

¹ Excludes services of government employees.

Table 3. Changes in wholesale and retail prices for consumer goods and services

[Seasonally adjusted compound annual rates]

Item	Relative importance, December 1971		Index	Percent change for 3 months ending—						
	CPI	WPI		1971				1972		
				March	June	September	December	March	June	July
Consumer Price Index.....				3.0	4.7	3.0	2.6	3.6	2.2	3.3
Consumer goods.....	100.0	100.0	CPI	2.8	4.9	1.7	2.0	3.8	2.0	3.7
			WPI	5.2	2.9	-.4	5.8	2.8	2.5	5.7
Food.....	35.5	39.2	CPI	6.0	5.6	.7	5.1	7.2	0	2.6
			WPI	11.6	4.6	-5.1	14.4	3.8	2.7	9.8
Commodities less food.....	64.5	60.8	CPI	1.4	4.2	2.1	.7	2.4	2.7	3.1
			WPI	2.2	1.5	2.2	1.1	2.9	2.5	2.5
Nondurables less food.....	37.8	37.2	CPI	1.7	3.5	3.8	1.4	2.4	1.4	1.7
			WPI	1.5	.7	2.9	0	2.5	2.9	2.5
Apparel, less footwear.....	7.5	10.7	CPI	1.7	3.4	1.0	2.0	3.0	.3	-1.3
			WPI	.4	.7	4.3	1.1	.7	1.4	2.1
Footwear.....	2.5	2.1	CPI	3.0	3.7	2.0	2.3	2.0	3.6	3.9
			WPI	9.4	2.4	0	-3	10.6	21.9	16.7
Gasoline.....	4.7	5.3	CPI	-7.2	-1.1	13.0	-2.9	-5.8	-.4	7.4
			WPI	-5.0	-6.9	7.4	-1.5	5.0	4.0	2.6
Durables.....	26.8	23.6	CPI	2.1	4.2	.3	0	2.8	3.1	5.2
			WPI	2.2	2.9	1.8	2.5	2.5	2.1	2.5
New cars.....	3.4	12.7	CPI	5.1	3.6	-18.1	-1.5	9.1	3.6	2.5
			WPI	3.3	3.6	.4	5.8	4.3	-1.0	1.4
Furniture.....	2.2	2.7	CPI	2.1	4.1	2.0	1.3	1.3	1.7	1.3
			WPI	2.9	4.6	2.5	0	2.8	2.1	1.4
Appliances, including radio and TV.....	2.7	3.5	CPI	1.1	1.9	.8	-.4	.8	-.4	.4
			WPI	1.2	0	1.6	-1.9	-.8	-.4	.0
Services ¹	100.0		CPI	3.2	5.2	5.1	3.1	3.7	3.4	3.4
Rent ¹	13.5		CPI	4.7	4.6	3.2	2.8	2.8	3.8	3.1
Household less rent.....	41.1		CPI	-4.2	5.7	6.2	6.4	5.1	4.4	5.3
Medical care.....	14.8		CPI	7.0	7.2	5.5	1.5	2.7	3.9	3.3
Transportation.....	14.9		CPI	10.7	8.2	2.4	.3	0	3.0	4.2
Other services.....	15.7		CPI	5.8	3.3	4.3	2.0	1.9	1.6	2.3

¹ Total services and rent not seasonally adjusted.

NOTE: Relative importances are for consumer goods portion of CPI and WPI. For all items in the CPI, consumer goods represent 62.6 percent and services represent

37.4 percent. CPI durables also include home purchases and used cars which are not included in WPI. For WPI, consumer goods represent 33.3 percent of all commodities.

standards to the base-period prices that existed during the 90-day wage-price freeze. Furthermore, shoe prices are to be reduced if cost of raw materials fall.

Retail furniture prices rose at a slightly faster rate in the second quarter than in the first, reflecting increases at wholesale. A shortage of skilled workers, which has been developing over the years, and higher prices for hardwood lumber were among factors which contributed to the increase in wholesale furniture prices. The rise in hardwood lumber prices, in turn, was due in part to increased demand for furniture stemming from expansion in housing starts and the growth in sales by furniture warehouse outlets. From January through May, sales in retail furniture stores were up 13 percent from the same period of last year.

The decline in retail gasoline prices was considerably smaller in the second quarter than in the first, as oil companies attempted to restore prices to the pre-freeze level. This was done by withdrawing discounts, which help retailers maintain profit margins during price wars. The attempt was not completely successful because of competition from low-price volume selling service stations. Prices at the refinery level—included in the Wholesale Price Index—rose in the first and second quarters because consumption of gasoline had been brisk, gasoline stocks were below levels of a year ago, and the increase in refinery output had not been enough to meet demand.

Although retail sales of furniture and appliances, new and used cars, and gasoline had been brisk, sales

in apparel stores from January through May were just 1 percent higher than in the same period last year. This may account in part for the modest rise in retail apparel prices in the second quarter—at an annual rate of 0.3 percent. This was the smallest quarterly increase since 1965. The rise in wholesale prices for apparel was also moderate, although slightly faster than in the first quarter. Higher prices for materials—cotton, wool, and manmade textile products—as well as increases in nonmaterial costs such as labor contributed to the increase in wholesale prices.

Services. The index for consumer services rose at a slightly slower pace in the second quarter than in the first because of a deceleration in charges for household services. The indexes for rent, medical care services, and transportation services increased at a faster pace than in the last two quarters of 1971, but considerably slower than in the first half of 1971.

The slower rise in the household service index in the second quarter was due mostly to smaller increases in property taxes (which are exempt from controls) and charges for utilities—two principal sources of the sharp rise in this index earlier this year and in late 1971. In addition, mortgage interest rates (which are also exempt from controls) declined from November of last year through May before moving up in June. Charges for all utilities advanced sharply following the end of the freeze in late 1971 and in early 1972 before the Price Commission instituted a new freeze on utility rates from February 10 through March 25. In the second quarter, charges for gas services declined and telephone charges rose slightly. Electricity bills, however, rose substantially due to

rate increases, adjustments for higher fuel costs, and tax increases. The rise in home repair and maintenance charges accelerated in the second quarter, but the increases were smaller than usual for this period.

The index for transportation services, which held steady in the first quarter on a seasonally adjusted basis, increased at a 3.0-percent rate in the second quarter. Large increases in parking fees, particularly municipal parking fees (which are exempt from controls), accounted for much of the rise. Auto insurance rates did not decline as much as in the first quarter, but the rise in auto repair services decelerated. Increases in local transit and intercity bus fares also moderated. Airplanes fares declined slightly and railroad fares dropped sharply.

Charges for medical care services rose at a seasonally adjusted annual rate of 3.9 percent in the second quarter, faster than the 2.7-percent rate in the first quarter, primarily because of larger increases in doctors' and dentists' fees. Charges for hospital services moderated.

The index for other services such as apparel, personal care, recreational, funeral, and legal service, as a group, rose at a seasonally adjusted annual rate of 1.9 percent in the first quarter and 1.6 percent in the second. The increase at a 1.8-percent rate for the 6-month period was the smallest since late 1964. Because of decreased spending and smaller increases in prices, receipts in establishments providing personal services such as laundries and drycleaning, beauty and barbershops, and funeral services declined 3 percent in the first 5 months of 1972, compared with the same period last year. On the other hand, receipts for motion picture, amusement, and recreation services rose 11 percent. □

Distribution problems

In viewing the aggregative data for the American economy, . . . one may be tempted to conclude that the share of income going to labor is determined at the bargaining table and that the national data is merely a sum of individual wage decisions made by thousands of employers and employees subject to local labor market pressures. This is both true and false in a very subtle and complex way, and it would be improper to conclude that the balance of union and employer

strength is the prime determinant of various income shares. It would be more appropriate to say that tentative decisions are made at the level of the firm and the industry but that they are ratified or altered at the macroeconomic level. . . .

—ALLAN M. CARTTER and F. RAY MARSHALL,

*Labor Economics: Wages, Employment,
and Trade Unionism*

(Homewood, Ill., Richard D. Irwin, Inc., 1972).

Union Conventions



NATIONAL EDUCATION ASSOCIATION'S 51ST CONVENTION

EDWARD F. HANLEY, JR.

DELEGATES of the National Education Association, meeting at Atlantic City June 26–30, considered two issues which have long-term significance for teachers: a new constitution giving more power to elected NEA officials, and a new policy on merger with the quarter-million-member American Federation of Teachers (AFL–CIO). Because of the recent NEA–AFT merger in New York, affecting 195,000 teachers, the delegates were aware that the million-member organization faced a major turning point.

New constitution

A major item before the delegate assembly was action on a new constitution, drafted earlier in the year at a constitutional convention. After considerable floor debate, the new constitution was endorsed by a substantial margin (4,154 to 2,175), but must now be ratified by the NEA membership.

The new document resulted from efforts to streamline the management of the organization and to place more responsibility in the hands of elected officials. The constitution proposed two major changes: (1) to decrease the size of the board of directors to 30 from 100 and replace State with regional and at-large representation; and (2) to lengthen the presidential term from 1 year to 2 and allow the president to serve up to three consecutive terms.

Executive Secretary Sam Lambert, the senior NEA staff official, was critical of the proposed constitution, arguing that “these documents in some respects are one more step in NEA’s gradual drift toward unionism.” He feared that by approving the proposed

constitution, the membership might be subjecting itself to domination by the national president.

Lambert also criticized the relationship of the NEA national to the State organizations under the proposed constitution, which he claimed were subordinated to the national-to-local relationships. Considering recent court decisions against the use of the local property tax as a primary means of financing public education, Lambert predicted a marked increase in State financing of schools and, consequently, an increase in the scope of items negotiable at the State level. Already tenure laws, retirement systems, negotiation statutes, and basic salary schedules are generally administered, if not always negotiated, State-wide. According to Lambert, “The time will come, and it’s not far off, when practically all bargaining for salaries and general financial support will take place at the State level.” He called for powerful State associations which could secure increased benefits for teachers in the years to come.

In his report to the assembly, outgoing president Donald Morrison asked for ratification of the proposed constitution, pointing out that the professional membership of the organization was “capable of determining who is to lead us at any time.” He disagreed with Lambert on the role the president would play, saying to the delegates, “if you want your wishes and your aspirations reflected through elected leadership, in my opinion you cannot leave the presidents in there 1 or 2 years and change them and throw them out each time.” Most organizations and agencies, he asserted, “have little confidence in dealing with the president who is going to be done in a few months.” On the question of State-national relationships, Morrison contended that complete State representation on the board of directors would create a body too large “to effectively take care of corporate matters of this association.”

Merger and the AFL–CIO

The NEA showed interest in a national merger with the American Federation of Teachers, abandon-

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ing its 1970 position barring any merger talks at all on the national level, but prohibited affiliation with the AFL-CIO. By a vote of 3,723 to 2,051, the delegates forbade the NEA or any of its State and local affiliates (except those where mergers were already in progress) from agreeing to a merger which would require AFL-CIO membership.

Executive Secretary Lambert opposed any actions which would tie the NEA to the AFL-CIO. "The hottest issue is not merger *per se*," he said, "but AFL-CIO affiliation, which goes contrary to our belief in a completely independent teaching profession." He referred to a survey conducted by the NEA research staff which indicated that 61 percent of NEA members would discontinue membership with a merged NEA and AFT, if affiliation with the AFL-CIO was required. Many Southern and Border States would split with the NEA, he argued, in a merger which included AFL-CIO affiliation.

Those advocating merger generally dismissed any role the AFL-CIO would play in a united profession. In a meeting off the convention floor, Tom Hobart and Albert Shanker, co-presidents of the recently merged Congress of New York Teachers, argued that teachers' problems were too immediate for organization rivalries to get in the way. Shanker said performance contracting, voucher systems, and attacks on tenure made unity a necessity.

President Morrison, a merger advocate, acknowledged the AFL-CIO's "historical support to public education." He maintained, however, that the growth of the AFT "is a phenomenon of our neglect of the financing of schools and not a great commitment of these teachers to organized labor." He proposed a merger compromise in which the NEA would deny membership to administrative personnel, and the AFT, which represents only teachers, would, in return, sever its national connections with the AFL-CIO. He argued, though, that locals should be free to decide on AFL-CIO affiliation for themselves.

Morrison also claimed that, by failing to merge, the NEA and AFT risked becoming racially distinct organizations, since AFT affiliates are located mostly in urban centers, where the percentage of minority groups in the population is steadily increasing. According to Morrison, the ethnic backgrounds of the teachers will increasingly reflect those of the students, resulting in an AFT composed primarily of minority teachers and an NEA preponderantly white. Merger would contribute to a more integrated organization and society, Morrison asserted.

Despite its policy on AFL-CIO affiliation, the NEA has demonstrated willingness to work with labor organizations, most notably in lobbying and legal activities. Together with the American Federation of State, County and Municipal Employees and the Firefighters Union, they have drafted and plan to have introduced in Congress legislation calling for the establishment of a National Labor Relations Board for the public sector. If passed, the bill will grant all public employees the right to organize and bargain collectively.

As a substitute to merger, the NEA resolved to seek to establish an independent Confederation of Public Employees, to work for the achievement of goals common to public employees. Two unions, the American Federation of State, County and Municipal Employees and the AFT (both AFL-CIO), were specifically mentioned as possible members.

Other issues

Teacher strikes, which decreased in the 1971-72 school year to one-half the 1969-70 level, were discussed by NEA General Counsel Robert Chanin. He attributed the decline to the increased sophistication and experience of both school boards and teachers in negotiating salaries and benefits. Chanin suggested that future strikes and teacher-school board clashes will probably be centered on matters relating to curriculum and class size, since recent court decisions in several localities have included these items among those for which teachers can bargain. School boards have traditionally exercised almost complete power over these matters. The delegates were unified in demanding more say in class size and curriculum. Teachers could very well be bringing these issues to the tables for negotiation, most likely after the employment picture in their profession improves. Attempts to acquire more control over such policies may raise serious new questions over the role of teachers' organizations in education.

Incoming president Catherine Barrett, an advocate of organizational autonomy, pledged an active role for the NEA in politics, working for "friends of education." Helen Wise will assume the presidency after the 1973 convention in Portland, Oreg. There the delegates will have an opportunity to evaluate the impact of policies established at Atlantic City and at the American Federation of Teachers convention held in August. □

Research Summaries



WHAT SUBCONTRACTORS PAY CONSTRUCTION WORKERS

JOHN LITSAS

IN THE construction industry, subcontractors are engaged by general contractors to perform a single activity such as plumbing, electrical work, masonry or painting. They produce nearly half of the contract construction industry's total product and employ half of its work force.¹ In 1969, an estimated 140,000 subcontractors employed 1,628,000 workers.

Total compensation, including payments for legally required and for voluntary retirement and welfare plans, stood at \$5.47 a work hour for construction workers in 1969 and with a few exceptions (notably bituminous coal mining) was the highest for blue-collar workers in any industry. (See table 1.) However, at \$4.78 a work hour, direct pay was the Nation's highest for blue-collar wage earners and accounted for 87.3 percent of compensation.

Pay for working time was \$4.73 an hour and represented 86.3 percent of compensation. The only other relatively important elements of compensation were employer expenditures for retirement, amounting to 33 cents a work hour and 25 cents for life insurance and health benefit programs. These payments represented 6 percent and 4.6 percent of compensation, respectively. The remaining portion of compensation (3 percent) consisted of low payments for leave time (except sick leave), 1.7 percent; insignificant nonproduction bonuses, 0.3 percent; and payments for unemployment insurance, 1 percent.²

Unlike other goods-producing industries, the production center in construction is always shifting. When a project is finished, the work force disbands or moves to another site, usually to work for another contractor. Because of this continual movement from

one firm to another, there is no way that an employer can establish a plan for paid vacations and holidays, or a pension and welfare program. Thus, the emphasis of the worker on obtaining a high wage rate and as much overtime as possible.

For the nonunion worker, pay for working time accounted for as much as 88.8 percent of compensation. For retirement, accident insurance, and health benefits, he had to rely mostly on Social Security and workmen's compensation, which are not affected by labor turnover.

Many union contracts establish pension, health benefit, and vacation and holiday funds to which employers contribute an amount per work hour or percent of gross payroll. Employer payments for legally required and private retirement and welfare plans, as well as for multiemployer funds, amounted to 93 cents a work hour, or 14.1 percent of compensation, compared with 33 cents, or 8.8 percent, respectively, for the nonunion sector. Consequently, pay for working time in the union sector declined to 85.4 percent of compensation.

In the table, the structure of compensation for production workers in manufacturing is presented. Although not strictly comparable, it helps point up differences in the structure of compensation between that for construction workers and for production workers in other goods-producing industries.

Somewhat more than three-fifths of the workers in the industry were employed by union firms—those where a majority of workers were covered by contracts. Their total compensation averaged \$6.57 a work hour compared with \$3.78 for those in nonunion firms. The striking differential partly reflects the prevalence in this industry of either all-union or all-nonunion firms. Thus, the high average hourly compensation in union firms is not diluted by low nonunion rates, and conversely the average hourly compensation in nonunion firms is unaffected by high union rates.

The three largest branches of the industry, plumbing, electrical work, and masonry, accounted for

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more than half of the workers employed by subcontractors. Electrical contracting had the highest level of compensation, \$6.08 a work hour, followed by plumbing with a level of \$5.75, and masonry with \$5.36; the average for all other branches of the industry combined was \$5.10. Again, the degree of unionization was a factor.

In the industry as a whole, 63 percent of construction workers were employed in union establishments. Electrical contracting had the highest degree of unionization, with 77 percent of its workers employed in union establishments. Plumbing firms were second with 67 percent, followed by masonry with 60 percent. The degree of unionization for all other indus-

Table 1. Compensation paid by construction subcontractors and by manufacturers to blue-collar workers, 1969

Compensation item	Construction						Manufacturing ¹					
	All establishments		Union establishments ²		Nonunion establishments ²		All establishments		Union establishments ²		Nonunion establishments ²	
	Percent of compensation	Dollars per work hour	Percent of compensation	Dollars per work hour	Percent of compensation	Dollars per work hour	Percent of compensation	Dollars per work hour	Percent of compensation	Dollars per work hour	Percent of compensation	Dollars per work hour
Total compensation.....	100.0	\$5.47	100.0	\$6.57	100.0	\$3.78	100.0	\$3.96	100.0	\$4.37	100.0	\$3.27
Pay for working time.....	86.3	4.73	85.4	5.61	88.8	3.35	80.9	3.20	79.4	3.47	84.4	2.76
Straight-time pay.....	83.6	4.58	82.6	5.43	86.2	3.26	76.7	3.04	74.8	3.27	80.7	2.64
Premium pay.....	2.7	.15	2.8	.18	2.6	.10	4.2	.17	4.6	.20	3.7	.12
Overtime, weekend and holiday work.....	2.7	.15	2.8	.18	2.6	.10	3.3	.13	3.4	.15	3.1	.10
Shift differentials.....	(³)	(³)	(³)	(³)	(³)	(³)	.8	.03	1.2	.05	.6	.02
Pay for leave time (except sick leave).....	1.7	.10	1.8	.12	1.5	.06	6.0	.24	6.9	.30	4.6	.15
Vacations.....	.3	.02	.1	.01	.9	.03	3.5	.14	4.1	.18	2.8	.09
Holidays.....	.3	.01	.1	.01	.6	.02	2.2	.09	2.3	.10	1.8	.06
Civic and personal leave.....	(³)	(³)	(³)	(³)	(³)	(³)	.2	.01	.2	.01	.1	(³)
Employer payments to vacation and holiday funds.....	1.2	.06	1.6	.10	(³)	(³)	.1	(³)	.2	.01	(³)	(³)
Employer expenditures for retirement programs.....	6.0	.33	6.6	.43	4.4	.16	6.4	.25	6.9	.30	5.5	.18
Social security.....	3.5	.19	3.3	.21	4.0	.15	3.6	.14	3.5	.15	3.7	.12
Private plans.....	2.5	.14	3.3	.22	0.4	.01	2.7	.11	3.2	.14	1.8	.06
Employer expenditures for life insurance and health benefit programs.....	4.6	.25	5.0	.33	3.5	.13	4.9	.19	5.5	.24	3.7	.12
Life, accident and health insurance.....	2.2	.12	2.8	.18	0.8	.03	3.5	.14	4.1	.18	1.8	.06
Sick leave.....	(³)	(³)	(³)	(³)	0.1	(³)	.3	.02	.5	.02	.6	.02
Workmen's compensation.....	2.3	.12	2.1	.14	2.6	.10	1.1	.04	.9	.04	1.2	.04
Employer expenditures for unemployment benefit programs.....	1.0	.05	1.0	.06	1.0	.04	1.1	.04	1.1	.05	.9	.03
Unemployment insurance.....	1.0	.05	.9	.06	1.0	.04	.8	.03	.7	.03	.9	.03
Severance pay.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Severance pay funds and supplemental unemployment benefit funds.....	(³)	(³)	(³)	(³)	(³)	(³)	.2	.01	.2	.01	(³)	(³)
Nonproduction bonuses.....	.3	.02	.2	.01	.7	.03	.5	.02	.2	.01	.8	.03
Savings and thrift plans.....	(³)	(³)	(³)	(³)	(³)	(³)	.1	(³)	.1	(³)	.1	(³)
Wages and salaries (gross payroll) ⁴	87.3	4.78	85.8	5.64	91.1	3.44	87.9	3.48	87.0	3.80	90.2	2.95
Supplements to wages and salaries ⁵	12.7	.70	14.1	.93	8.8	.33	12.1	.48	13.0	.57	9.8	.32

¹ Interpolated from the 1968 and 1970 surveys of Employee Compensation in the Private Nonfarm Economy.

² A "union establishment" is that where the majority of workers is covered by union contracts, a "nonunion establishment" where the majority is not covered. However, the total work force of the establishment is counted as "union" in the first case and as "nonunion" in the second.

³ Less than 0.05 percent or \$0.005.

⁴ Wages and salaries include all direct payments to workers. They consist of pay for working time; pay for vacations, holidays, sick leave, and civic and personal leave; severance pay; and nonproduction bonuses.

⁵ Supplements to wages and salaries include all employer expenditures for compensation other than for wages and salaries. They consist of expenditures for retirement programs (including direct pay to pensioners under pay-as-you-go private pension plans); expenditures for health benefit programs (except sick leave); expenditures for unemployment benefit programs (except severance pay); payments to vacation and holiday funds, and payments to savings and thrift plans.

NOTES: Because of rounding, sums of individual items may not equal totals. Dash (—) indicates zero.

try branches combined was 57 percent.

As the degree of unionization rose, the average level of compensation increased. For example, if all branches had the same degree of unionization as that of the construction special trade industry as a whole, total compensation for practically all branches would not vary much from the industry's \$5.47 per work hour average. At this assumed level of unionization, compensation per work hour would average \$5.64 in plumbing, \$5.60 in electrical work, \$5.40 in masonry and \$5.24 in all other branches combined.

In the union sector, total compensation per work hour was \$6.88 in electrical work, \$6.86 in plumbing, and \$6.08 in masonry. In the nonunion sector, it was \$3.60, \$3.72, and \$4.32. Thus, total compensation in the union sector exceeded that in the nonunion sector by 91 percent in electrical work, by 84 percent in plumbing, but by only 41 percent in masonry.

These differences resulted primarily from the greater tendency of firms to be all-union or all-nonunion in the electrical and plumbing branches than in the masonry branch. Survey data suggest that it was unusual for plumbing firms to pay union wages and benefits to part of the work force and nonunion to the other and even rarer for electrical work firms to do so. On the other hand, this practice was not uncommon in masonry.

For detailed statistical data, see *Employee Compensation and Payroll Hours: Construction—Special Trade Contractors, 1969* (BLS Report 413, 1972). □

FOOTNOTES

¹ The contract construction industry accounts for about half of the Nation's construction product.

² Unemployment insurance payments were scarcely above the Nation's all-industry average of 0.9 percent for blue-collar workers. Federal Unemployment Tax Act contribution rates reflect unemployment experience as related to an employer's regular work force. The high unemployment rate for construction includes a large number of workers laid off by other industries who, while they are looking for temporary work, in construction and therefore listed as construction unemployed, continue to be carried by their regular employers for unemployment insurance purposes.

OCCUPATIONAL PAY RELATIONSHIPS HOLD STEADY IN TEXTILES

JOSEPH C. BUSH

WAGE RELATIONSHIPS for numerically important jobs in textile mills showed little change over the past

Table 1. Occupational pay relationships: Average hourly earnings for selected jobs as percentages of averages for weavers in yarn and broadwoven textile mills

(Weavers=100)

Selected occupations	Cotton-manmade fiber textile mills		Wool textile mills			
	September 1968	August 1971	Woolen operations		Worsted operations	
			November 1966	August 1971	November 1966	August 1971
Card tenders.....	81	80	80	83	-----	94
Doffers, spinning frame.....	92	90	75	85	79	76
Drawing frame tenders.....	84	82	-----	-----	-----	-----
Inspectors, cloth machine.....	81	81	-----	86	-----	94
Loom fixers.....	115	114	106	106	111	115
Section men (spinning fixers).....	101	100	-----	94	-----	98
Slubber tenders, long draft.....	92	90	-----	-----	-----	81
Spinners, frame.....	84	82	83	86	79	78
Twister tenders, ring frame.....	82	82	-----	80	-----	78
Warper tenders.....	86	86	-----	94	-----	87
Weaving machine operators.....	100	100	105	98	-----	96
Winders, yarn.....	81	80	76	78	75	78

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

few years, according to Bureau of Labor Statistics surveys.¹ Yarn winders and ring-frame spinners, for example, averaged about 20 percent less than weavers in cotton and manmade fiber textile mills in September 1968 and August 1971. (See table 1.) In the limited number of comparisons available in wool mills, wage relationships shifted somewhat for woolen jobs, but held steady for worsted occupations.

Among the occupations selected to represent various pay levels in cotton and manmade fiber textile mills, straight-time averages ranged from \$3.11 an hour for loom fixers to \$1.94 for janitors. Yarn winders, the most numerous group studied, averaged \$2.18 an hour—5 cents less than spinners and twisters on ring-frames. Other numerically important jobs and their averages included handtruckers or bobbin boys, \$2.01 an hour; battery hands, \$2.07; card tenders, \$2.17; inspectors on cloth machines, \$2.19; warper tenders, \$2.35; doffers of spinning frames, \$2.46; and weavers, \$2.72.

For a number of jobs in the wool textile segment of the survey, workers were classified in each mill by the type of yarn they processed. In woolen operations, yarn winders averaged \$2.35 an hour; cloth menders, \$2.51; spinning frame doffers and frame

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spinners averaged \$2.56 and \$2.57 an hour, respectively; and weavers, \$2.85. In worsted operations, earnings for most of these jobs averaged somewhat less: Spinning frame doffers, \$2.17 an hour; yarn winders and frame spinners, \$2.22; cloth menders, \$2.32; and weavers, \$3.

All production and related workers in yarn and broadwoven textile mills averaged \$2.35 an hour in August 1971. In cotton-manmade fiber mills, the 315,700 workers in the regular textile departments (through cloth room) averaged \$2.34. The 27,000 production workers in wool mills averaged \$2.48.

Differences in location, size of mill, and union contract status were among the factors affecting wage levels in each textile sector. Nearly nine-tenths of the production workers in the cotton-manmade sector were employed in the Southeast region, nearly three-fourths of the workers were in nonmetropolitan areas, and a slightly higher proportion were in mills employing 250 workers or more. In the wool sector, only one-half of the workers were in the Southeast (New England and the Middle Atlantic States accounted for 34 and 8 percent, respectively), about three-fifths were in nonmetropolitan areas, and slightly more than half were in mills having 250 workers or more. Establishments with union contracts covering a majority of their workers accounted for one-sixth of the cotton-manmade work force and one-fourth of the wool work force.

Paid holidays, paid vacations, and at least part of the cost of life, hospitalization, and surgical insurance were provided to nine-tenths or more of the workers in both sectors. A number of other health and insurance benefits, as well as retirement pension plans, also applied to a large majority of the workers.

A comprehensive report on the study, including an analysis of occupational pay relationships in earlier surveys, will be issued this fall. Summary tabulations, providing national and regional data, and separate releases for important States and areas in the textile industries are available upon request to the Bureau or any of its regional offices. □

—FOOTNOTE—

¹ See Charles M. O'Connor, "Wages in Textile Mills," *Monthly Labor Review*, June 1969, pp. 60-61, and Edward J. Caramela, "Earnings in Wool Yarn and Broadwoven Fabric Mills, 1966," *Monthly Labor Review*, June 1967, pp. 59-62.

MANPOWER TRAINING PROGRAMS AID THE HANDICAPPED

ALMOST 64,000 handicapped persons received job and work training services through the U.S. Department of Labor during fiscal year 1972, according to a recent report from the Manpower Administration. These services included:

Program	Number handicapped (estimate)	Cost estimate
Total	63,923	\$122,689,000
MDTA (classroom)	21,872	55,555,000
On-the-Job Training	7,145	2,144,000
Jobs Optional (JOP)	5,720	1,716,000
Neighborhood Youth Corps (out-of-school)	3,240	6,279,000
Operation Mainstream	5,958	25,322,000
Public Service Careers (Plans A and B)	1,886	3,159,000
Concentrated Employment Program	6,892	12,778,000
NAB/JOBS	2,708	4,874,000
Work Incentive (WIN) Program	8,239	10,398,000
New Careers	263	464,000

A handicapped worker is defined as one who has a physical, mental, or emotional impairment or chronic condition that could limit work activities. Many are disabled Vietnam veterans, who are given first priority on any available jobs or training under the various manpower programs.

A good part of the activity aimed specifically at helping the handicapped individual train for and obtain suitable employment is carried out by State Employment Service offices. A summary of the States' annual plans of service to the handicapped for fiscal 1972 is available from the Manpower Information Office, U.S. Department of Labor, Washington, D.C. 20210. □

CHARACTERISTICS AND PERFORMANCE OF CENSUS BUREAU INTERVIEWERS

FOR AGENCIES and individuals undertaking research involving field interviewing, it is important to know the attributes of interviewers and the elements that contribute to production and quality performance.

A recent working paper from the U.S. Bureau of the Census summarizes their work in the area of investigating interviewer characteristics, attitudes, and performance.

The paper covers seven major topics: Characteristics of census interviewers; performance as related to characteristics; performance in general—analyses of production and quality; interviewers' attitudes and opinions about their work and training; turnover; areas of application; and future research. A bibliography of work done at the Census Bureau is included. Working Paper No. 34, *Investigation of Census Bureau Interviewer Characteristics, Performance, and Attitudes: A Summary*, was issued by the Research Center for Measurement Methods, U.S. Bureau of the Census, Washington, D.C. 20233. □

DISABLED WIDOW'S ANNUITIES UNDER THE RAILROAD RETIREMENT ACT

IN THE 4 YEARS since the Railroad Retirement Act included provisions for annuities to disabled widows under 60, the Railroad Retirement Board has awarded monthly benefits in about 3,700 cases. According to a recent article in the *RRB Quarterly Review*,¹ the average annuity award has increased from \$93 in 1968 to \$116 in 1971, largely because of general increases of 15 and 10 percent provided by the 1970 and 1971 amendments to the Railroad Retirement Act and by related Social Security amendments.

A disabled widow is eligible for a lifetime annuity as early as age 50, if she meets requirements of the Railroad Retirement Act.² Annuity provisions for disabled widows are basically the same as those for aged widows (60 and over) under the act, except that the amount is reduced 0.3 percent for each month the disabled widow is under 60 when the annuity begins. Since almost two-thirds of those awarded annuities began receiving benefits at ages 55–59, this reduction amounted to an average \$13 in 1968 and rose to \$22 in 1972. The increase is due to two factors: (1) the decline in average age of those entering the rolls from 55.8 years in 1968 to 55.1 years in 1971, which increased the number of months used in computing the reduction, and (2) the larger annuity amount to which the reduction was applied in 1970 and 1971.

Despite the decline in age of award recipients, the average age of disabled widows in current-payment status (3,200 persons in 1971) has increased from 57 years in 1968 to 58.5 years in 1971. By the end of 1971, 35 percent of those on the rolls had attained age 60.

The average annuity to those in current-payment status was \$117. Over three-fourths of these widows were being paid under special guaranty provisions of the act, which grant 10 percent above the benefits provided by the standard RRA "railroad formula" or by Social Security, whichever is higher. These widows received an average \$130, compared with \$77 received by disabled widows whose annuities were computed under the railroad formula. However, most of the latter (20 percent of all recipients)³ were also receiving Social Security benefits averaging \$113 based on their own earnings, bringing their average monthly income to about \$190. The number of dual recipients has grown from one-eighth of all disabled widows in the program in 1968 to one-fifth in 1971. □

—FOOTNOTES—

¹ "Disabled Widow's Annuities Under the RRA," *RRB Quarterly Review*, January–March 1972, pp. 16–18.

² A disabled widow's annuity is payable to an unremarried widow of a completely insured employee (one who has 10 years of creditable railroad service and a "current connection with the railroad industry" at death) if she is unable to engage in any regular employment. Her disability must have begun no later than 7 years after her husband's death unless she received other monthly survivor benefits, in which case it must have begun within 7 months after those benefits ended. The annuity is payable for life unless the widow recovers from her disability before age 60 or remarries at any age.

³ The special guaranty seldom applies to dual beneficiaries, as the guaranty amounts are reduced by the full amount of any social security benefit, while under the railroad formula only a partial offset is applied.

DECLINE IN U.S. FARM POPULATION CONTINUES

IN 1971 about 1 out of every 22 Americans was living on a farm, compared with about 1 out of 12 in 1960 (and 1 out of 3 in 1916, when the U.S. farm population was at its peak). Since 1960 the farm population has declined at an annual average rate of

4.6 percent; the relative loss among Negroes and other races has been greater than among whites, 9.7 percent compared with 3.9 percent.

The farm population is becoming older, also. Of the estimated 9.4 million persons living on farms in rural territory in April 1971, 25 percent were under 14 years of age, compared with 32 percent in 1960. The proportion of persons age 55 and older rose from 18 percent in 1960 to 24 percent in 1971.

The trend toward employment of farm residents in nonagricultural industries continues. In 1971, 44 percent of the labor force living on farms worked in nonagricultural industries, up from 33 percent in 1960. On the other hand, 38 percent of the 3.7 million persons employed in agricultural industries in 1971 were nonfarm residents, compared with 25 percent of the 5.4 million so employed in 1960.

Farm Population of the United States: 1971, a 12-page report prepared by the Bureau of the Census in cooperation with the Economic Research Service of the U.S. Department of Agriculture, is available for 15 cents from the Superintendent of Documents, Washington, D.C. 20402, or any of the field offices of the U.S. Department of Commerce. Refer to *Current Population Reports*, Series P-27, No. 43. □

SOURCES OF DATA

ON WOMEN AND WOMEN WORKERS

To assist employers and other interested persons in acquiring statistical data needed in the development of affirmative action programs for women workers, the U.S. Women's Bureau has compiled a list of suggested source materials. The listing identifies selected publications currently available or soon to be published on persons by sex, race, educational attainment, labor force participation, occupation, and industry. The publications are grouped under five topics: Population; education; civilian labor force, employment, and unemployment; occupation and industry; and labor force reserve. Availability of data by region, State, Standard Metropolitan Statistical Area, or other area is designated.

The 15-page *Guide to Sources of Data on Women and Women Workers for the United States and for Regions, States, and Local Areas* is available from the Women's Bureau, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210 (single copies free while supply lasts). □

Redefining the hard core

Early definitions of "hard-core" unemployable in the labor market centered around demographic variables. "Hard core" tended to be defined as older persons, less well-educated, usually part of some minority ethnic group . . . In other words, these were persons most likely *not* to have jobs and therefore the hard-core of the labor market in terms of employability. . . . [However, data now available] on success of various groups in a hard-core training program that is literally open to all comers [suggests] some need to redefine the concept of hard-core in motivational rather than demographic terms.

In general, . . . one main factor emerged to separate transfers (successful) from terminees (unsuccessful)—age. Older trainees were more likely to succeed. [In comparing] achievement test scores for the various groups, . . . in nearly every group, terminees score better on tests than transfers . . . the trend is strong, indicating that

the person less likely to obtain a job is better on the tests and, one suspects, more intelligent.

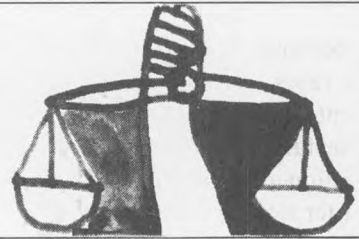
This fact coupled with the age differences found suggests the hypothesis that older, less smart individuals are better bets to succeed in this program. The true "hard-core" then may not be the older person with few skills, but the younger, brighter individual. . . .

All of this suggests that defining the hard-core as persons who have trouble finding jobs is outmoded. Apparently, older, less intelligent minority individuals who are last to get jobs, if given the opportunity, can succeed to an appreciable degree.

Hard-core now should be used more exclusively as a term for the nonmotivated individual who . . . can be reasonably well-educated and young, but who doesn't "make it."

—WAYNE K. KIRCHNER AND JUNE A. LUCAS,
"The Hard-Core in Training—Who Makes It?"
Training and Development Journal, May 1972.

Significant Decisions in Labor Cases



Political contributions by unions

THE U.S. SUPREME COURT'S recent decision in *Pipefitters Local 562*¹ may have appeared to be a breakthrough for the proposition that labor unions have the right to provide financial and material support to candidates in Federal elections. In reality, organized labor has taken this right for granted as a matter of statutory provisions that have been on the books for many years now. Even the prosecution in the present case admitted that the principal law involved here—the Federal Corrupt Practices Act of 1925, section 610—does not prohibit labor unions from making political contributions and expenditures from funds financed by their members' voluntary donations; and the High Court agreed.

It was the Court's opinion on when a union fund designed for political purposes ceases to be legal that was of primary significance in the above decision. "Knowing free-choice donations" of union members, handled as a "segregated fund," even though under the union's control, constitute the criteria of such a fund's legality, ruled the Court by interpreting the pertinent laws.

The issue of the suit—that is, the question of whether the Pipefitters' local was guilty of maintaining an unlawful political fund—remained undecided. The High Court ruled in favor of the union by reversing an appeals court's decision,² but only because that court had upheld the trial court's erroneous interpretation of the law in instructing the jury.

For a number of years, the Pipefitters' local maintained a fund for political purposes, to which its members and other employees working under its jurisdiction contributed regularly. At one time the donations were required of all members, but later they became voluntary, even though the local's agents

collected them at job sites "in the regular systematic method . . . at a prescribed rate based on hours worked." (Sup. Ct.'s language.) In a "voluntary contribution agreement," an employee specified what percent of his wages he would contribute and authorized the fund's management to spend the money, "in their sole judgment and discretion, for political, educational, legislative, charity, and defense purposes," though reserving for himself the freedom "to revoke this agreement by a written notice." He further stated that the donations were "no part of the dues or financial obligations" of the local, and that the union "has nothing to do with this fund." (Quotations from the authorization card.) Some employees did not contribute. As various witnesses testified in court, the contributions were usually "referred to—and actually understood by some to be—assessments, or that they [the employees] paid their contributions voluntarily in the same sense that they paid their dues and other financial obligations." (Sup. Ct.'s language.) A principal union officer was the fund's director, with unlimited power to control its disbursements. And there was a record of substantial political contributions (about \$150,000) to candidates for Federal offices.

In its action against the local, the Department of Justice, without challenging the union's right to have an independent fund for political purposes, maintained that the existing fund was not a separate organization independent of the union, but was a front for the union's illegal use of its money in violation of the Federal Corrupt Practices Act. In fact, the prosecution charged, union officials were in conspiracy³ to commit this violation. As it later said in its brief for the Supreme Court, "The essential charge of the indictment and the theory on which the case was tried was that the [Pipefitters] fund, although formally set up as an entity independent of Local 562, was in fact a union fund, controlled by the union, contributions to which were assessed by the union as part of its dues structure, collected from nonmembers in lieu of dues, and expended, when deemed necessary, for union purposes and the per-

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

sonal use of the directors of the fund.”

The union and some of its officers were indicted and later convicted for the alleged violations. The local was fined \$5,000, and the individuals were sentenced to pay \$1,000 each and to serve 1 year in prison.

The Federal Corrupt Practices Act of 1925, section 610 (original section 313, amended by section 304 of the Labor Management Relations Act and coded as 18 U.S.C. section 610) reads in part:

It is unlawful . . . for any corporation whatever, or any labor organization to make a contribution or expenditure in connection with any election at which Presidential and Vice Presidential electors or a Senator or Representative in . . . Congress are to be voted for, or in connection with any primary election or political convention or caucus held to select candidates for any of the foregoing offices. . . .

As can be seen, the provision does not specifically permit corporations or unions to organize and maintain *separate* financial organizations for the support of political candidates of their choice. But neither does it forbid them to do so; it does not prohibit political contributions and expenditures so long as the money does not come from a union's treasury. The basic question in the present suit, then, was, when is such a fund separate and, therefore, legal?—or in the Supreme Court's language, “when [do] political contributions and expenditures by a union fall outside the ambit of section 610” of the Corrupt Practices Act?

In pursuit of the answer, Justice Brennan, who delivered the opinion of the Court, rather extensively reviewed labor's past practices in the area of political financing, as well as the legislative histories of the amendments to the Corrupt Practices Act and their incorporation in two different statutes. He found that during the 1940's, prior to the enactment of the Labor Management Relations Act which extended the ban on political contributions to labor organizations and added to it the word “expenditures,” labor set a precedent of financing its political activities from members' free donations. Leading in this respect at that time was the Political Action Committee (PAC) of the Council of Industrial Organization (CIO), which beginning with 1944 observed the principle of voluntariness in collecting money for its purposes. But the CIO, certainly, did not abstain from controlling PAC's funds or determining its program. In fact, as Justice Brennan observed, PAC's “connection to the CIO was close at every level of organization.”

During the 1947 congressional debate on extension of the ban to labor organizations, the statements of the LMRA's sponsors, particularly those of Senator Robert A. Taft, made it clear that the ban was intended to prevent unions from exerting too much influence on political processes of the country by using their “aggregated wealth,” said the Justice; but that the unions still were free to organize financial assistance to candidates of their choice on the basis of voluntary donations of members.

Congress further modified the ban in 1971 and incorporated it in a new statute, the Federal Election Campaign Act (section 205). The amendment—an addition to section 610, called Hansen Amendment⁴—was virtually nothing more than codification of the old law, that is, a detailed statement of its prohibitions. But it did change the ban in one respect—it permitted the use of union money to cover the costs of establishing and maintaining a political fund. For it provided that the prohibited “contributions or expenditures . . . shall not include [expenditures in connection with] the establishment, administration, and solicitation of contributions to a separate segregated fund to be utilized for political purposes by a corporation or labor organization: Provided, That it shall be unlawful for such a fund to make a contribution or expenditure by utilizing money or anything of value secured by physical force, job discrimination, or financial reprisals, or the threat of force, job discrimination, or financial reprisal; or by dues, fees, or other moneys required as a condition of membership in a labor organization or as condition of employment, or by moneys obtained in any commercial transaction.” Thus, section 205 gave unions a responsible role in political fundraising, at the same time sternly warning them against coercion in collecting donations.

Justice Brennan gave a close scrutiny to this modification of the Corrupt Practices Act. He analyzed its language and concluded that a “separate segregated” fund means one that need not be completely apart from the union but must be segregated from the rest of the union's moneys. A “threat” of reprisal for refusal to donate to the fund, Justice Brennan said, must not be understood only as “the creation of an appearance of an intent to inflict injury” but also as “the creation of an appearance of an intent to inflict injury even without a design to carry it out”—in short, a threat that is intended to do no more than engender fear. Contributions thus collected cannot be considered voluntary donations.

Further, "dues, fees, and other moneys required as a condition of membership . . . or as a condition of employment," which cannot be used for political purposes, must not be construed as "only actual dues and assessments," such as are traditionally collected for the maintenance and operation of unions. The money thus defined, said the Justice, "includes contributions effectively assessed *even if not actually required* for employment or union membership" (emphasis added). (Of course, this interpretation leaves open the question of whether a union's constitution could provide for a political assessment as a condition of at least membership if not employment.) Finally, Justice Brennan stressed that the ban now does not apply to the use of union money for the purpose of organizing a political fund and soliciting donations.

From this interpretive analysis by Justice Brennan emerged the answer to the central question of when political contributions and expenditures of labor unions are lawful. His conclusion can be summarized as follows:

- Union contributions and expenditures in support of candidates in Federal elections must come "from political funds financed in some sense by the voluntary donations of employees."

- The test of voluntariness of such donations "focuses on whether the contributions solicited . . . are knowing free-choice donations." In the language of the law (the Hansen Amendment), political financing may not be made "by utilizing money or anything of value secured by physical force, job discrimination, financial reprisals, or the threat [of such retaliation]."

- A union may establish and administer such a political fund, and may fully control its disbursements. The fund need not be a separate entity completely detached from the union, but it must be "segregated" from the rest of the union's moneys.

- Political contributions and expenditures must not be made from union money—dues and assessments—paid by employees as a condition of membership in the labor organization or of employment, or from union's commercial transactions. Nor may they come from employees' payments "effectively assessed even if not actually required for employment or union membership."

- A union may use money from its treasury in connection with political fundraising, but only for the purpose of establishing, administering, or soliciting members' contributions to a political fund.

As already mentioned, the question of whether the Pipefitters' fund was lawful remained unresolved. Two points of impropriety that occurred in the lower courts precluded the High Court's decision on the merits of the case. The Government had failed to state the union's offense under the law, merely insisting that the fund in question "was in fact a union fund, controlled by the union" (U.S. brief for the Sup. Ct.); but this did not constitute an offense since the law permits unions to maintain and control such funds. Only an allegation of improper acquisition of a fund's money could constitute an offense; but the Government's position was that regardless of whether the fund consisted of free donations, it belonged to the union and, therefore, its political disbursements were unlawful. As a result, the indictment failed to allege that payments to the fund were involuntary.

The trial judge upheld the prosecution's argument and, in instructing the jury, failed to stress that a finding of the fund's being financed by free donations would provide no ground for conviction. The court of appeals upheld the lower court, saying that "the issue of whether the payment to the fund is voluntary . . . is not controlling."

The High Court considered the instructions to the jury as a "plainly erroneous" interpretation of the law. "The instructions . . . clearly permitted the jury to convict without finding that donations to the Pipefitters fund had been actual or effective dues or assessments." The appellate decision was reversed and the case remanded for further proceeding consistent with this opinion.

Justice Blackmun did not participate in the Court's deliberations or decision. Justice Powell, joined by Chief Justice Burger, dissented on the ground that, generally, the majority's opinion contradicted the "clear and unambiguous" statute. The dissent concluded: "In sum, the opinion of the Court today, adopting an interpretation of section 610 at variance with its language and purpose, goes a long way toward returning unions and corporations to an unregulated status with respect to political contributions. This opening of the door to extensive corporate and union influence of the elective and legislative processes must be viewed with genuine concern. This seems to me to be a regressive step. . . ."

Duties of successor employer

More than 2 years ago, the National Labor Relation Board ruled that when a change in ownership

of a unionized establishment occurs, the new owner is dutybound to recognize and to bargain with the union of the predecessor's employees and to honor its collective bargaining agreement, unless he substantially changes the nature of the acquired business.⁵ A court of appeals agreed with the Board as regards bargaining but rejected the idea that a successor owner is bound by the provisions of the inherited labor contract.⁶ The Supreme Court recently upheld the appellate decision. (*Burns International Security Services*.⁷)

The facts in the case were: A detective agency won a bid to provide plant security for the Lockheed Corp., displacing another agency whose employees were represented by a certified union. The new agency hired most of the predecessor's guards but asked them to join a union representing its employees in various places. It refused to honor the existing contract or to bargain with the incumbent union when the contract expired.

It was the opinion of the Supreme Court that since the Board has the power to determine bargaining units, the new employer in this case was obligated to recognize the unit in question and to bargain with its representative. It said:

. . . It has been consistently held that a mere change of employers or of ownership in the employing industry is not such an 'unusual circumstance' as to affect the force of the Board's certification . . . if a majority of employees after the change of ownership or management were employed by the preceding employer. . . .

[Therefore], where . . . the bargaining unit remains unchanged and a majority of the employees hired by the new employer are represented by a recently certified bargaining agent there is little basis for faulting the Board's implementation of the express mandate of section 8(a)(5) and section 9(a) [to bargain with the employees' representative] by ordering the employer to bargain with the incumbent union. . . .

But the High Court was of different opinion as regards the predecessor's contract. It cited the express statement of section 8(d) of the LMRA that the obligation to bargain "does not compel either party to agree to a proposal or require the making of a concession" (section 8(d) language). Further, the Court pointed to its ruling in *H. K. Porter*⁸ that the Board cannot "compel a company or a union to agree to any substantive contractual provision," and concluded:

. . . Here, Burns had notice of the existence of [its predecessor's] collective-bargaining contract, but it did not consent to be bound by it. The source of its duty to bargain with the union is not the collective bargaining contract but the fact that it voluntarily took over a bargaining unit that was largely intact and that had been certified within the past year. Nothing in its actions, however, indicated that Burns was assuming the obligations of the contract.

The Court also gave a practical consideration to the matter. It said:

We also agree with the court of appeals that holding either the union or the new employer bound to the substantive terms of an old collective bargaining contract may result in serious inequities. A potential employer may be willing to take over a moribund business only if he can make changes in corporate structure, composition of the labor force, work, location, task assignment, and nature of supervision. Saddling such an employer with the terms and conditions of employment contained in the old [labor] contract may make these changes impossible and may discourage and inhibit the transfer of capital. . . .

The Court disagreed with the NLRB's contention that the 1964 decision in *Wiley*⁸ was controlling in the present case. (There the Supreme Court held that a successor employer may be compelled to arbitrate the extent to which he is to be bound by the old contract.) The Court said, "*Wiley* [case] arose in the context of a section 301 [of the LMRA] suit to compel arbitration, not in the context of an unfair labor practice proceeding where the Board is expressly limited by the provisions of section 8(d)" (duty to bargain in good faith). □

—FOOTNOTES—

¹ *Pipefitters Local No. 562 v. United States* (U.S. Sup. Ct., No. 70-74, June 22, 1972).

² 434 F.2d 1127 (C.A. 8, No. 19466, 1970—final rehearing of the court en banc). The court's earlier decision in the case is at 434 F.2d 1116.

³ Under 18 U.S.C. section 371.

⁴ Introduced by Representative Orval Hansen from Idaho.

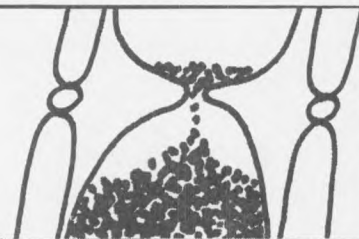
⁵ *William J. Burns International Detective Agency*, 182 NLRB No. 50 (1970); see *Monthly Labor Review*, August 1970, pp. 72-73.

⁶ 441 F.2d 911 (C.A. 2, Nos. 401 and 402, 1971); see *Monthly Labor Review*, August 1971, p. 68.

⁷ *NLRB v. Burns International Security Services, Inc.* (U.S. Sup. Ct., Nos. 71-123 and 71-198, May 15, 1972).

⁸ 376 U.S. 543 (1964); see *Monthly Labor Review*, May 1964, p. 564.

Major Agreements Expiring Next Month



This list of collective bargaining agreements expiring in October 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
American Standard, Inc., Westinghouse Air Brake Co.: Signal & Communications Division (Swissvale, Pa.)	Electrical products	Electrical Workers (UE) (Ind.)	1,350
Production and Maintenance (Swissvale, Pa.)	do	do	1,100
Production and Maintenance (Wilmerding, Pa.)	Transportation equipment	do	2,300
Appleton Electric Co. (Chicago, Ill.)	Electrical products	Electrical Workers (IBEW)	1,000
Bayly Manufacturing Co. (Interstate)	Apparel	Clothing Workers	1,500
Birdsboro Corp. and Birdsboro Armocast, Inc. (Birdsboro and Reading, Pa.)	Machinery	Steelworkers	1,000
Collins Radio Co. (Cedar Rapids, Iowa)	Electrical products	Electrical Workers (IBEW)	3,250
D.C. Transit System, Inc., and Washington, Virginia, and Maryland Coach Co., Inc. (D.C., Maryland, and Virginia)	Transit	Amalgamated Transit Union	2,400
Federation of New England Bakery Employers (Interstate)	Food products	Teamsters (Ind.)	2,000
First National Stores, Inc. (New Jersey and New York)	Retail trade	Meat Cutters	1,600
Food Fair Stores, Inc. (New Jersey and New York)	do	Retail Clerks	1,250
Gas Service Co. (Kansas, Oklahoma, and Missouri)	Utilities	District 50, Allied and Technical Workers (Ind.)	1,000
General Dynamics Corp., Stromberg-Carlson Division (Rochester, N.Y.)	Electrical products	Electrical Workers (IUE)	2,500
General Telephone Co. of Illinois, Plant Department (Illinois)	Communication	Electrical Workers (IBEW)	1,600
Grinnell Corp. (Columbia, Pa.)	Fabricated metal products	Molders	1,200
Hughes Aircraft Co., Tucson Division (Tucson, Ariz.)	Ordinance	Machinists	1,200
Infant & Juvenile Manufacturers Association, Inc. (New York, New Jersey, and Connecticut)	Apparel	Clothing Workers	5,000
ITT World Communications, Inc. (Interstate)	Communication	Communications Workers	1,000
Kelvinator, Inc. (Grand Rapids, Mich.)	Electrical products	Auto Workers (Ind.)	² 1,400
National Electrical Contractors Association, Inc., Nassau/Suffolk Chapter (New York)	Construction	Electrical Workers (IBEW)	1,850
Olin Corp., Energy Systems Division, Indiana Army Ammunition Plant (Charlestown, Ind.)	Ordinance	Firemen and Oilers; and Chemical Workers	14,550
Outboard Marine Corp., Johnson Motors Division (Waukegan, Ill.)	Machinery	Independent Marine and Machinists Association (Ind.)	3,000
Plain Dye and Machine Print Companies (Interstate) ³	Textiles	Textile Workers Union	6,500
Prudential Insurance Co. of America (Wisconsin, Minnesota, and Ohio)	Insurance	Insurance Agents (Ind.)	2,000
Restaurant League of New York, Inc. (New York, N.Y.)	Restaurants	Hotel and Restaurant Employees	1,500
Retail Baking Industry in the Chicago Area (Chicago, Ill.) ³	Retail trade	Retail Clerks	1,200
Scovill Manufacturing Co. (Waterbury and New Milford, Conn.)	Fabricated metal products	Auto Workers (Ind.)	3,300
Screen Print and Screen Makers Agreement (Interstate) ³	Textiles	Textile Workers Union	1,000
Timex Corp. (Oakville and Middlebury, Conn.)	Instruments	Waterbury Watch Workers' Union, Directly Affiliated-AFL-CIO	1,350
Union Carbide Corp., Union Carbide Nuclear Co., Oak Ridge Gaseous Diffusion Plant (Oak Ridge, Tenn.)	Chemicals	Oil, Chemical and Atomic Workers	1,000
United Parcel Service (Los Angeles, Calif.)	Trucking	Teamsters (Ind.)	1,600
Western Airlines, Inc., Clerical (Interstate) ²	Air transportation	Railway Clerks	4,000
Wire & Metal Products Manufacturers Guild, Inc. (New York, N.Y.)	Fabricated metal products	Teamsters (Ind.)	1,800

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

² Information is from newspaper.

³ Industry area (group of companies signing same contract).

Developments in Industrial Relations



\$1.90 pay exemption voided

On July 14, District of Columbia Judge William B. Jones ruled that the Cost of Living Council had exceeded its authority when it exempted from wage controls those workers earning \$1.90 or less. The Council's action, taken in February (*Monthly Labor Review*, April 1972, p. 58), had set off a storm of criticism, with organized labor charging that the implied intent of Congress (when it amended the Economic Stabilization Act of 1970 to exempt the working poor from controls) called for a cutoff figure of at least \$3.35 an hour.

The ruling was in response to suits filed by the Electrical Workers (IUE) and the Meat Cutters unions. Although Judge Jones did not order the Council to adopt the \$3.35 figure, he did find questionable "the assumptions of [the Council] in adjusting the level of exemption from controls downward from approximately \$3.35 per hour to \$1.90 per hour." He enjoined the Government from enforcing the Council's \$1.90-an-hour rule, holding that "it wasn't necessary to freeze workers at the poverty level to carry out the stated aims" of the Stabilization Act. The \$1.90 cutoff exempted about 9 million workers from controls. It was estimated that a rise to \$3.35 would affect an additional 14 million.

On July 26, the Cost of Living Council raised the cutoff to \$2.75 an hour, exempting an additional 10 million workers from Phase 2 controls. Council Director Donald Rumsfeld said other factors that led to the Council's action were "moderate increases in the cost of living since the \$1.90 figure was established" and an expected rise in the \$1.60 minimum wage.

The Electrical Workers union said \$2.75 was still

too low and that it would ask the judge to set the cutoff at about \$3.80. The union also objected to the July 15 effective date set by the Council, asserting that regardless of whatever figure was finally implemented, it should be retroactive to when controls were established.

As a result of the latest exemption, combined with the earlier decision to exempt most small businesses from controls, 56 percent of the nearly 58 million private nonfarm workers would be exempt from Pay Board controls, according to the Cost of Living Council, compared with 39 percent under the \$1.90 cutoff. An undetermined number of government and farm workers also were affected.

In a related action, the Council approved a 65-cent raise in the District of Columbia minimum wage, to \$2.25 an hour. The ruling covered 41,500 hotel, restaurant, and apartment house employees. In June, the panel had blocked the full rise, allowing a boost only to \$1.90.

In another Phase 2 development, 62,000 lumber companies that were among the 5 million firms with 60 or fewer employees exempted from wage and price controls on May 1 (*Monthly Labor Review*, July 1972, p. 48) became subject to controls again in mid-July. The Council's reimposition of controls for the lumber firms was explained by Director Rumsfeld as having been prompted by Internal Revenue Service surveys showing that "in recent months exempt lumber firms have increased prices considerably more rapidly than those remaining under controls." (Of the 62,000 firms, 17,000 were manufacturers and processors, 10,000 wholesalers, and 35,000 retailers.)

Rail manning disputes settled

In a historic settlement ending one of the longest labor-management disputes in American history, the Nation's railroads and the United Transportation Union agreed to eventually eliminate the job of fireman on diesel freight locomotives. On July 20, they

"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.

announced the new agreement, under which the railroads will fill all engineer vacancies from the ranks of the 18,000 firemen on freight trains. The provision was to remain effective until all firemen are so employed or retire, resign, or die. Firemen must now retire at age 65, a provision speeding the phase-out. Generally, management has agreed that firemen should be kept on passenger trains for the sake of passenger safety. The carriers also agreed to rehire some 2,000 of the firemen furloughed as the result of prior arbitration rulings. About 75 percent of railroad firemen are employed on freight trains.

The dispute began in 1937, when the railroads started replacing steam locomotives with diesels and firemen were no longer needed to shovel coal. Firemen then began serving as lookouts. The carriers claimed they were superfluous, while the unions resisted efforts to phase them out. In 1959, the railroads began a campaign to eliminate certain crew members, including firemen, on freight trains. The dispute subsequently involved presidential panels, arbitration boards, Congress, and the courts.

Under the settlement, committees were established to study work rules affecting firemen's duties and to evaluate the results of the agreement. Both sides stressed that the settlement was achieved through voluntary negotiations.

A settlement of the manning dispute on the Penn Central was reached on July 21. Assistant Secretary of Labor William J. Usery said the railroad had reached agreement with the United Transportation Union on a "formula designed to deal with the question of how many men should make up a train crew." Mr. Usery declined to reveal the terms until union representatives could discuss them with other officials.

The settlement averted a crisis on July 26, when the railroad planned to implement its program to cut freight crews from four to three men. Under the plan, which was approved by Federal Judge John P. Fullam, overseer of the bankrupt railroad, the reduction would have been accomplished partly through attrition, and workers would have been accorded job protection equal to their seniority, up to 6 years. The Penn Central had originally announced its crew-reduction plan in March, but the move was delayed by court tests and a strike threat that led to President Nixon's invocation of the emergency provisions of the Railway Labor Act (*Monthly Labor Review*, August 1972, p. 59).

Transportation strike bill shelved

On July 21, Secretary of Labor James D. Hodgson commented on an Administration decision not to push for passage of the Crippling Strikes Prevention Bill this year. He said the bill had no chance of passage in this session of Congress. He added that no emergency disputes were likely to occur in transportation this year and that many unions and much of management objected to the bill and wanted to consult further with the Department. Mr. Hodgson said one of the main points to be resolved was whether the bill should still apply to the same five industries—trucking, airlines, railroads, maritime, and longshoring.

Social Security benefits increased

A 20-percent increase in Social Security benefits was signed into law by President Nixon on July 1. The increase, effective September 1, raises the average monthly benefit for an individual to \$161, from \$133, and for couples to \$270, from \$223. The President, who had backed a 10-percent increase, approved the larger increase because it was tied to a vital bill maintaining the public debt ceiling at \$450

Hourly Earnings Index

The Hourly Earnings Index rose 0.6 in July to 137.5. 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 July 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	136.8
June	113.3	120.6	129.3	^p 136.9
July	113.9	121.4	130.0	^p 137.5
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

^p = Preliminary.

billion. Mr. Nixon said the increase would boost the Federal deficit for fiscal 1973 by \$3.7 billion. Beginning Jan. 1, 1973, the Social Security tax rate paid by both employers and employees will be 5.5 percent of the first \$10,800 of annual earnings, a maximum payment for each of \$594. The base will rise to \$12,000 in 1974, bringing the maximum tax for each to \$660. Beginning in 1975, benefits will be automatically adjusted whenever the Consumer Price Index rises by at least 3 percent. This feature would be financed by further increases in the taxable annual base. Previously, the tax was 5.2 percent of the first \$9,000 and was scheduled to rise to 5.65 percent of the first \$9,000 in 1973.

The President also signed a bill extending the Emergency Unemployment Compensation Act of 1971 for 6 months. The extension adds 13 weeks of benefits for workers who have exhausted their benefits in States with high unemployment levels. The measure brings total jobless benefits to 52 weeks.

Boyle sentenced to 5 years

W. A. (Tony) Boyle, who was convicted in April of making illegal political contributions, was sentenced to 5 years in prison and fined \$130,000. The sentence was imposed by Federal Judge Charles R. Richey on June 27. In May, Federal Judge William B. Bryant upheld charges of irregularities in Mr. Boyle's 1969 reelection and ordered a new election (*Monthly Labor Review*, August 1972, p. 59).

Judge Richey ordered that the fine be paid out of the union chief's own funds and restrained Mr. Boyle from "dissipating his assets" until the fine was paid. In addition, Mr. Boyle was ordered to repay to the union treasury \$49,250 in funds contributed between 1967 and 1969 to various political campaigns.

Mr. Boyle, who was initiating an appeal, received two concurrent 5-year terms. He was convicted of conspiring to convert money from the union's general fund to the use of others and of converting union funds for political campaigns in violation of the Landrum-Griffin Act. Each count also brought a \$10,000 fine. Judge Richey also imposed \$10,000 fines for each of 11 other counts, and placed Mr. Boyle on 2 years' probation. The 11 counts charged specific contributions to political campaigns in violation of the Corrupt Practices Act. The probation, effective after completion of the prison term, was conditioned on the repayment of the \$49,250 in union funds.

In an unrelated development, the executive board elected Leonard J. Pnakovich, 53, to the union's vice presidency, to succeed George J. Titler, 77, who resigned because of poor health. Mr. Pnakovich had been president of District 31 in Northern West Virginia and was the union's acting safety director. He was scheduled to run on the Boyle slate in the new election ordered in May by a Federal judge who had set aside Mr. Boyle's 1969 election after finding election law violations.

On July 17, United Mine Workers officials Albert E. Pass, 51, and William J. Prater, 53, were indicted and charged with murder in connection with the December 1969 slaying of union dissident Joseph A. Yablonski and his wife and daughter. Mr. Pass, a member of the union's executive board, had been arrested in May (*Monthly Labor Review*, July 1972, p. 49), and was scheduled to go on trial October 16, as was Mr. Prater, an international organizer of the union. Five other persons have been implicated in the slayings, including Silous Huddleston, 63, president of a Tennessee local, who in May pleaded guilty to three charges of murder. Paul Gilly, 38, a son-in-law of Mr. Huddleston, and Aubran Martin, 23, are appealing their first-degree murder convictions.

Pipefitters upheld on donations

The Supreme Court, in a 6-2 vote, reversed the Justice Department's first "successful" prosecution of labor leaders charged with making illegal campaign contributions. The Court rejected the Government's contention that unions (and corporations) can only raise or spend money for Federal political campaigns through political funds independent of union or corporate control. The ruling reversed and sent back to a Federal district court in St. Louis the conviction of Pipefitters Local 582, which collected nearly \$1 million for political purposes from 1963 to 1968. The Government had contended that the Pipefitters' Voluntary, Political, Educational, Legislative, Charity, and Defense Fund was organized as a front for making illegal union campaign contributions. (For details, see pp. 63-65, this issue.) In May, similar charges against the Seafarers Union were dismissed by a New York Federal district judge (*Monthly Labor Review*, August 1972, p. 60).

Dockers yield on pay raise

In late June, Thomas W. Gleason, president of the International Longshoremen's Association, and

James J. Dickman, president of the New York Shippers Association and head of the council of North Atlantic Steamship Associations, announced acceptance of the Pay Board's decision to pare the first-year wage increase for 45,000 East and Gulf Coast longshoremen from 70 cents an hour to 55. The 3-year settlement, reached in January, had also called for 40-cent-an-hour increases in the second and third years. The Pay Board approved the contract's first and second year benefit improvements and the second year wage increase, but did not rule on the third-year provisions.

The panel, on June 6, had rejected a union-management request that it let the 70-cent boost stand. Mr. Gleason estimated that the longshoremen would now receive some \$60 million in retroactive pay to Nov. 14, 1971, when Phase 2 began. However, details on whether the back pay increases were to be handled in lump-sum payments or spread over a period of time had not been worked out. Acceptance of the reduction was reportedly influenced by the Cost of Living Council's decision to allow North Atlantic longshore employers to pass along to their customers the full cost of the contract (estimated at 10.9 percent the first year by management), rather than forcing the employers to absorb increased labor costs above 5.5 percent.

Marine Engineers settle

The 11,000-member Marine Engineers Beneficial Association reached a 3-year agreement with the Maritime Service Committee and the Tanker Service Committee. The contract provided for a 6-percent increase in base and supplemental wages and improved vacation and pension benefits. The contract also provided for wage reopeners in June of 1973 and 1974.

Pay Board trims increase

On June 29, the Pay Board announced it had sliced to 5.5 percent a first-year pay increase of 19 percent negotiated by the Philadelphia Food Store Employers Labor Council and seven locals of the Retail Clerks International union (*Monthly Labor Review*, March 1972, p. 66). It also allowed a 1.17-percent increase in fringe benefits. Wendell Young, president of one of the locals, said the decision would be appealed and that the cut would reduce the average employee's wage increase from \$26 a week to a little more than \$7. The Board did not

rule on the balance of the 20-month agreement, which included a \$10 wage increase.

Wage concessions

Electrical Workers (IUE) at Pittsfield, Mass., ratified a General Electric Co. proposal to convert 2,300 incentive workers to the straight hourly pay system already in use for the 2,300 other production workers at the plant. At the end of a 61-week transition period, the former would reportedly be earning an average of \$4.06 an hour, compared with their current \$4.68. The company said the change was necessary because of a severe cost-price squeeze in the transformer industry and that union acceptance would lead to a \$12-14-million plant modernization and return of some work that had been transferred out of Pittsfield.

Members of Plumbers Local 719 agreed to a contract with the Hydro-Mechanical Contractors of Broward County (Fla.), Inc., which calls for a \$3.80-an-hour reduction in pay for work in "low-rise" construction projects. The new rate will be \$6.90 an hour; workers in high-rise projects will continue to earn \$10.70 an hour. Dwight Hall, business manager of the 730-member local, said wages had "gotten out of hand" and that it was hoped the wage cut would help members in competing with nonunion plumbers.

NEA curbs mergers

The recent trend of mergers between units of the National Education Association and the American Federation of Teachers (AFL-CIO) apparently ended when delegates to the NEA's annual convention banned any further mergers that would require affiliation with the AFL-CIO. However, the delegates rescinded a bylaw forbidding merger negotiations with the AFT, indicating the 1.1-million-member organization was willing to negotiate with the 260,000-member union if the latter withdrew from the AFL-CIO, a development considered unlikely by labor observers. Since 1969, several units of the two organizations have united, most recently the New York State bodies. See pp. 55-56 for a detailed report on the convention.

Union cards for managers?

An American Management Association survey of "middle managers" has found a surprising degree of pronoun sentiment. The findings were based on 536

replies to questionnaires mailed to 3,000 middle managers in nontechnical fields. The survey classified middle managers as those below corporate or division vice presidents, but above first-line supervisors. The survey showed that nearly half of the respondents favored new laws to require companies to bargain with managers' unions; 35 percent would consider joining such unions, and about 75 percent favored having "informal associations" of middle managers at individual companies to deal with top management on working conditions. About 50 percent of the participants expected to see the unionization of management ranks, with most of them expecting it within this decade. The most common complaint was that economic gains for blue-collar unionized workers exceeded those of the managers. Other complaints included low salaries, job insecurity, lack of involvement in decisionmaking, and increased responsibilities without more authority.

Chicago construction strike ends

A 2-week strike that had idled 100,000 construction workers ended July 7, when Cement Masons and Carpenters ratified settlements with the Mid-America Regional Bargaining Association, consisting of 1,000 contractors in the Chicago area. The Carpenters contract, which covered 30,000 workers, provided for a 65-cent-an-hour wage increase retroactive to June 1 and 35 cents on December 1, which would bring the hourly rate to \$8.65. In addition, the employer payment for benefits was increased to \$1.15 an hour, from \$1. The Cement Masons contract provided for a 5.5-percent increase in wages and benefits, bringing the total to \$10.24 an hour. The settlements were subject to approval by the Construction Industry Stabilization Committee.

Women take the wheel

After conferring with the Equal Employment Opportunity Commission, United Parcel Service, Inc., agreed to hire women to fill 1 out of every 4 driver vacancies that occur during the next 12 months in its Pacific region. The Commission said United Parcel initiated the talks, although no discrimination charges had been filed against it in the five-State region. The Commission would not disclose whether charges had

been filed in other regions. The parties said the action was designed to ensure equal job opportunities for women in cases where they are no longer restricted by State job protective laws. These laws, which many courts have held to be discriminatory, limit hours women can work and weights they can lift.

Electrical Workers convene

In Washington, D.C., delegates to the Electrical Workers' (IUE) 15th biennial convention focused on stemming the transfer of jobs to other countries and on expansion of the union's membership. Senator George McGovern addressed the convention on its final day. He said he didn't believe "American companies should be skipping the country—with the encouragement of our tax laws—to make American brand products for the American markets in overseas plants." The delegates approved a \$300,000 loan from the union's defense fund to be used by the international for organizing activities. President Paul Jennings and Secretary-Treasurer David J. Fitzmaurice were reelected to 2-year terms.

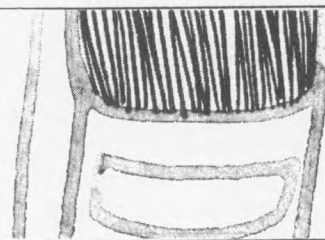
Union president dies

Charles Feinstein, President of the Leather Goods, Plastics and Novelty Workers, died on July 3. Two weeks earlier he had been elected for a 5-year term. Prior to becoming president in 1970, Mr. Feinstein had served as a vice president and member of the executive board. Executive Vice President Ben Feldman was to complete the term of office.

Progress report on job training

Secretary of Labor James D. Hodgson announced that over 887,000 "disadvantaged" and "underemployed" persons had been hired and trained in the Job Opportunities in the Business Sector (JOBS) program since it began in May 1968. Some 262,000 were employed this year under the program, developed and sponsored by the National Alliance of Businessmen. Of this number, 37,000 were being trained with Labor Department funds. Mr. Hodgson said that 606,000 of the 887,000 hired and trained under JOBS were in programs sponsored solely by Alliance employers. □

Book Reviews and Notes



A judicious view of unorthodox thinking

John Kenneth Galbraith and His Critics. By Charles H. Hession. Introduction by Robert Lekachman. New York, New American Library, 1972. 239 pp. \$6.95.

Charles H. Hession, professor of economics at Brooklyn College, has written a useful book on the economics of John Kenneth Galbraith. Only passing references are made to the wide spectrum of Galbraith's extensive writings. Attention is focused on three major economic works: *American Capitalism* (1952), *The Affluent Society* (1958), and the *The New Industrial State* (1967). Hession has two chapters on each of these three books. One chapter in

each case is a summary of the contents of a Galbraith book, and a second chapter discusses the views of Galbraith's critics. Since Galbraith has never been one to shun controversy, he has many critics even among those who are in basic agreement with his unorthodox thinking. The review of reviews includes several types of critics: fellow professionals in technical journals, popular journals of opinion, and foreign as well as domestic critics.

Hession injects his own views sparingly, and he might have written a better book if he had included more of his own ideas. He is judicious in presenting the views of Galbraith's critics and also in his own evaluations of Galbraith. Hession sees Galbraith as a major, original contributor to the discipline of economics. The reviewer acquiesces in this judgment

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National Planning Association, *U.S. Foreign Economic Policy for the 1970's: A New Approach to New Realities*. Reviewed by Irving H. Siegel.

Alexander Eckstein, editor, *Comparison of Economic Systems: Theoretical and Methodological Approaches*. Reviewed by James H. Street.

John P. Powelson, *Institutions of Economic Growth: A Theory of Conflict Management in Development Countries*. Reviewed by Joel B. Dirlam.

Gaston V. Rimlinger, *Welfare Policy and Industrialization in Europe, America, and Russia*. Reviewed by Robert Campbell.

Benjamin Aaron and others, *A Review of Industrial Relations Research, Volume II*. Reviewed by Harry P. Cohany.

Robert H. Bates, *Unions, Parties, and Political Development: A Study of Mineworkers in Zambia*. Reviewed by Robert J. Alexander.

Howard M. Bahr, Bruce A. Chadwick, Robert C. Day, editors, *Native Americans Today: Sociological Perspectives*. Reviewed by Calvin A. Kent.

Sar A. Levitan, Martin Rein, David Marwick, *Work and Welfare Go Together*. Reviewed by Leonard Goodwin.

Ronald A. Buel, *Dead End: The Automobile in Mass Transportation*. Reviewed by Edmond L. Kanwit.

Raanan Weitz, *From Peasant to Farmer: A Revolutionary Strategy for Development*. Reviewed by Vernon W. Ruttan.

Marcus A. Foster, *Making Schools Work: Strategies for Changing Education*, and Joseph Turner, *Making New Schools: The Liberation of Learning*. Reviewed by Joseph B. Giacquinta.

Peter N. Stearns, editor, *The Impact of the Industrial Revolution: Protest and Alienation*. Reviewed by Robert F. Banks.

Erling Olsen, *International Trade Theory and Regional Income Differences: United States 1880-1950*. Reviewed by M. E. Bond.

but suspects that a majority of professional economists in the United States do not. Nevertheless, Galbraith occupies (1972) the prestigious position of president of the American Economic Association, which suggests that his thinking and force of personality have made some impact on professional economists. The dust jacket hails Galbraith as "the most widely read economist of all time," which seems an exaggeration, but he is surely the professional economist currently most widely read by noneconomists. Hession's book is intended mainly for non-professionals and is self-contained in the sense that it does not presuppose that the reader has studied Galbraith's writings in the original.

The reader comes away from Hession's book with a sense of the evolution of Galbraith's thinking toward a more radical view of economic theory and policy. The dominant concept in *American Capitalism*, "countervailing power," is permeated with complacency about the operation of the American economy. In *The Affluent Society* the imbalance between the poverty of the public sector and the affluence of the private sector is presented as a fundamental but remediable flaw in the American economic system. In keeping with his emphasis on the neglect of the public sector, Galbraith opposed the 1964 Kennedy-Johnson tax cut, which was favored by nearly all American economists. *The New Industrial State* represents a more fundamental attack on American corporate capitalism and also marks the beginning of a *system* of microeconomic analysis.

Galbraith's fundamental analytical question is, What is the characteristic behavior of an economic system dominated by large firms? This contrasts with traditional economic theory that starts with a model of many small firms operating in a system of what is euphemistically called pure or perfect competition. Galbraith breaks cleanly with the orthodox tradition that competition is essential as the scientific basis for economic theory.

Galbraith's realistic assumptions appeal to non-economists, who are not burdened with all the doctrines and dogmas of traditional economics. Business as a system of power, for example, is built into Galbraith's economics from the start, whereas pure competition has no place for power because the impersonal market supposedly dictates the behavior of many small firms each of which is rendered powerless by market forces.

From Galbraith's microeconomics flows the case for wage and price restraints as a necessary anti-

inflationary policy. For a long time he has been perhaps the most prominent advocate among American economists of this policy. Galbraith's microeconomics, which argues for price and wage restraints, complements Keynesian macroeconomics, which argues for fiscal and monetary restraints against inflation (as well as stimulus against deflation). While Galbraith has not yet provided the analytics in microeconomics equivalent to Keynes' contribution to macroeconomics, he has taken an important step in that direction. Further developments in microeconomics along the road charted by Galbraith may provide the integration of macroeconomic and microeconomic analysis which economic theory urgently needs in the present stage of its broad development.

—DUDLEY DILLARD

Professor of Economics
University of Maryland

Intellectual development of organizational behavior

Organizations in Theory and Practice. By Cyril Sofer.
New York, Basic Books, Inc., Publishers, 1972,
419 pp. \$12.50.

In addition to its scholarly qualities, this book is well-written, organized in an innovative manner, and full of interesting ideas.

After defining organizations, Sofer exposes the reader to those individuals and groups that have made landmark contributions to the field. He includes Taylor, Myers, Mayo, Lewin, Sherif, Asch, Simon, Lindblom, Fayol, and Urwick. Each contribution is discussed thoughtfully and its strengths and limitations presented fairly. More important Sofer identifies those contributions from each scholar that have continued to the present. The reader soon realizes that through these discussions he is learning about the intellectual development of the field of organizational behavior.

Some readers might criticize Sofer for certain omissions. If Asch's and Milgram's works were included, why not the research on consistency-dissonance and attribution theories? The former is centrally relevant in understanding the way human beings deal with dissonance, and organizations, as Sofer shows, are full of dissonance-producing situations. The latter is especially important in understanding interpersonal relations. Some sociologists may wonder why Weber was not included in this section (although his work

is cited elsewhere). To the writer, Sofer does illustrate the Weberian view by discussing the contributions of scientific management. The writers identified with this field have had a significantly greater influence on present-day organizations than has had Weber.

Another innovation is that Sofer provides an extended biography to help the reader in understanding why he has organized his book as he has. Sofer is a behavioral scientist; a scholar at home on several different levels of analysis. He has conducted research in urban studies, economics, race and industrial relations, organizational diagnosis and change, social consultancy within organizations, consumer behavior, and group relations training.

In part III, Sofer illustrates, by the use of the work of the Tavistock group and of Samuel Stouffer and his colleagues, how social scientists can use social science technology to analyze and help solve real and important problems in our society. The discussion is well organized and complete. It would have been helpful if Sofer extrapolated from these discussions the major lessons learned and went on to develop some generalizations about how social science would be utilized even more effectively in the future.

Part IV describes Sofer's view of propositions on organizational behavior that emerge from his analyses. Examples are: (a) Organizations as subsystems of larger collectives; (b) technology and task as determinants of internal structure, style of behavior, and personnel composition; and (c) the organization as a role system.

Although I found these generalizations helpful, they lacked, as Sofer admits, the conceptual structure of a set of interrelated concepts that would indicate the beginnings of a theory of organizations. The generalizations offered are more in the form of guideposts than statements about what happens under a given set of conditions.

Finally, the book closes with two sections that consist of essays on the way bureaucratically administered organizations actually work and on leadership, conflict, and change. These essays provide case material for the reader to test and enlarge his learning as well as to see the limits of the present state of organizational behavior. I especially liked the essay on organizational decisionmaking and organizational change. The former illustrates how one can present a behavioral point of view to enlarge the maps presently available from scholars such as Simon and Lindblom. Sofer's decisionmakers seem more real

because he shows them to be more than rational and illustrates how feelings and defenses can influence muddling through.

The latter includes new concepts such as distinguishing between "decentralization" and "debureaucratization," between a shift towards greater delegation of powers and a shift towards greater flexibility. It also makes important points, such as: the purpose of an organizational change is not necessarily to increase productivity; the time perspective of a change program is crucial; and increase in productivity may have little or nothing to do with particular organizational changes introduced.

—CHRIS ARGYRIS

James Bryant Conant, Professor of
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Harvard University

To avoid a 'perpetual coming apart'

Beyond the Stable State. By Donald A. Schon. New York, Random House, Inc., 1971, 254 pp. \$7.95.

The paradox of our time is the inconceivable amount of knowledge now at man's disposal—together with his inconceivable confusion about his choices and priorities. Thus the tragedy of our time is man's inability to use his knowledge to satisfy his needs.

The vast amount of knowledge greatly increases the number and kind of choices potentially available. It thus creates both fear and optimism. Fear due to the threat of uncertainty in face of prospective change; optimism born out of the realization that anything man can conceive he can achieve.

Donald A. Schon's book *Beyond the Stable State* discusses this dilemma. He asserts that "No established institution in our society now perceives itself as adequate to the challenges that face it . . . e.g., the American Labor Movement suffers from what the more articulate of its leaders are calling 'a failure of success' . . . A leader like Walter Reuther asked what new missions are appropriate to Labor? What will sustain its mission and vitality?"

Schon does not offer specific answers to particular sectoral problems. Indeed, there is nothing parochial about the phenomenon. It cuts right through society:

The most important feature of the threat to stable institutions and to stable anchors for identity is the sense in which they have caused us to lose faith in

the stable state itself. Not only do we regard our established institutions as inadequate to the challenges they face; we find it increasingly difficult to believe in the feasibility of developing new institutions which will be stable.

In face of this uncertainty, our institutions—our social system—exhibit resistance to change in the form of “dynamic conservatism” (as Schon terms it), that is to say, they fight to remain the same. But in a period when the stable state has been lost, the forms taken by dynamically conservative institutions condemn them to increasing irrelevance. Or, if the loss of the stable state means that dynamically conservative institutions must yield to change of state, and if they can do so only through crisis and disruption, then we must look forward to a period of continuing disruption—to an era of perpetual coming apart.

Schon therefore postulates that dynamic conservatism must operate at such a level and in such a way as to permit change of state without intolerable threat to the essential functions the system fulfills. He suggests that we must therefore invent and develop institutions which are “learning systems,” systems capable of bringing about their own continuing transformations. If *continuing* change is the norm for tomorrow, the most crucial capability of a “learning system” must be to develop projective models of its future. As Schon defines it:

These are ‘models’ in the sense of being conceptual descriptions which relate characteristics of action, situation, and outcome at some level of generality. They are ‘projective’ in the sense of being projected on to the next situation, always as a perspective on that situation and always subject to transformation through contact with that situation.

Dr. Schon’s profound, original research into innovation and change has contributed substantially to the formulation of public policies in this field. Those of us who have been similarly engaged find provocative stimulation in this book. Even so, it is not a book destined primarily for the esoteric expert. It should be compulsory reading for political, business, labor, and financial leaders. It offers imaginative and courageous guidance to those whose actions will shape the future. We must learn to manage change as brilliantly as we have learned to create the knowledge that makes change possible.

—MICHAEL MICHAELIS

Arthur D. Little, Inc.
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A redefinition of economics

The Three Worlds of Economics. By Lloyd G. Reynolds. New Haven, Conn., Yale University Press, 1971, 344 pp. \$12.50, cloth; \$3.45, paper.

This is a highly useful book. In it Lloyd Reynolds, Chairman of the Inter-University Committee on Comparative Economics (the volume is the 12th in the series of studies sponsored by the committee), covers three somewhat widespread subject areas: (1) The structural characteristics and pressing policy issues in the three major economic systems (capitalist, socialist, and less developed); (2) the different branches of modern economic theory and their usefulness in “different institutional settings” (the same three worlds); and (3) an exploration of fruitful future directions in comparative economics research and teaching.

Space prevents my treating this third area, but suffice it to say I must personally note that teaching comparative economics can never be the same in the future, as a result of reading Reynolds’ chapter on “Comparative Economic Studies.”

Turning to the first of his subjects, one welcomes Reynolds’ up-to-date analysis of the key institutional features as well as the critical policy priorities facing all three worlds. His review of the “reform” efforts in the East European Soviet style economies is particularly fresh and stimulating. The enormous diversity of the less developed countries leads to more superficial treatment, but Reynolds’ chapters on these countries are nevertheless full of comparative insights. Of greatest interest in the descriptive part of the volume, however, is the author’s summation of similarities and differences between the three worlds. He tentatively concludes that as regards major characteristics today (size of agricultural sector; income per capita; income distribution; population; and so forth), “the capitalist and socialist groups resemble each other more closely than either resembles the less developed economies. The reason is perhaps that both groups are on a more secure growth path.”

As for policy issues in the three worlds, Reynolds finds that while there is some overlap, “more striking is the extent to which” the areas diverge in terms of pressing policy priorities. For example: managing a steady expansion of aggregate demand is still a key problem in the “Keynes world of the West,” but not in the other two worlds; implementing a detailed plan is a central problem for the socialist countries,

but beyond the capacity of less developed areas; laying down infrastructure—physical, human, institutional—is a central issue in less developed countries, but not in the other two worlds; the capitalist and socialist economies do not face high rates of population growth which plague the less developed countries; and so on.

In the light of this great divergence between systems as regards policy priorities, it is not surprising that Reynolds is forced to conclude that a good deal of modern economic theory and theorizing in the West has only limited value for socialist and less developed economies, even when adapted to their needs. In what is something of a tour de force Reynolds runs through the eight or nine main branches of Western economic theory (microeconomics, growth theory, welfare economics, and so on) and “tests” these against the pressing needs of each of the three worlds.

Generally speaking, he seems to find most of the mathematically oriented branches of theory least useful in all three worlds. (Incidentally, he neatly disposes of the idea that computers are ushering in a “computopia,” so far as solving economic problems in any of the three worlds!)

Reynolds’ broad survey of the three worlds, and the world of the economist, finally leads to a call for a redefinition of economics. The profession has too long been burdened with Robbins’ useful but overly limited definition of economics as ‘the science which studies human behavior as a relationship between ends and scarce means which have alternative uses.’ This has its place, but in the three worlds of today, economics

. . . is concerned also with changes over time in resource supplies, technology, and the organization of production; with short-term fluctuations in resource use; . . . with long-term trends in the size and composition of national output, . . . with the behavior of economic decisionmakers, in the public as well as the private sector; and with economic organization, in the sense of structure-performance relations. Its scope is not limited to the Western market economies, but extends to the curious variety of national economies throughout the world.

Reynolds has written a valuable and provocative book which will be of interest to economists in all three of today’s worlds.

—E. M. KASSALOW
Professor of Economics
University of Wisconsin

Self-exhortation and restatement

U.S. Foreign Economic Policy for the 1970's: A New Approach to New Realities. A Policy Report by an NPA Advisory Committee, with Supporting Papers by C. F. Bergsten and others. Washington, National Planning Association, 1971, 216 pp. \$2.50.

This is an uneven and, perhaps, redundant addition to the growing literature on the chosen subject; but it does have some redeeming features, and it also has some documentary or archival value as the contribution of a nonprofit organization “devoted to planning by Americans in agriculture, business, labor, and the professions.” It virtually ignores multinational corporations, which received much adverse notice in another nongovernment report on foreign trade policy, issued by AFL-CIO Industrial Union Department in October 1971. It is similar in structure to, but much less comprehensive and thorough than, the three-volume report of the Williams Commission, release of which was deferred until September 1971, a month after the President’s announcement of a “New Economic Policy.” This policy was tellingly influenced by a much slighter Peterson report, which had been briefed to the President, the Cabinet, and members of the Congress for months prior to publication in December 1971. The NPA study, on the other hand, could well have helped to shape at least the title of a report issued by the House Subcommittee on Foreign Economic Policy in February 1972.

The first quarter of the NPA volume consists of the Advisory Committee’s policy report and its members’ qualifying notes; the rest of the book comprises six supporting papers, with an addendum on some international statistics. The policy report is liberally sprinkled with recommendations. The qualifying notes are occasionally sprightly. The supporting essays are competent, but they are not well integrated with the policy report, and the topics seem to have been selected almost at random. These essays relate to trading blocs, nontariff barriers, monetary reform, balance-of-payments adjustment, defense commitments in Europe and Asia, and programs of adjustment assistance.

The main trouble with this book is that it has difficulty living up to its title, that it says little “new” about either “approaches” or “realities.” Many of the recommendations are only self-exhortations, restatements of problems in pseudo-operational lan-

guage. For example, the Committee's members gratuitously "urge that both parties now cooperate as fully as possible in working toward the attainment of the hitherto elusive national goals of full employment and stable prices." The policy report volunteers that agreement on measures for meeting the "new realities" was hampered by "insufficient information about the nature and significance of the basic developmental trends likely to shape the economic systems of the OECD countries during the 1970's and beyond." Besides, the Committee did not have "the time and the funds for commissioning the necessary additional research and analysis." Differences of opinion in the Committee are acknowledged on such basic questions as the comparative advantage of U.S. manufactures and the benefits of direct investment abroad, but harmony was restored by "general agreement" on the need for "more and better data and analyses."

The future, alas, always comes to pass much sooner than the results of the research that is always seen to be necessary for dealing with it. In short, we shall have to forge "U.S. foreign economic policy for the 1970's," without the benefit of knowledge that may not even be available by the 1980's.

—IRVING H. SIEGEL
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Bethesda, Md.

Ideology and performance

Comparison of Economic Systems: Theoretical and Methodological Approaches. Edited by Alexander Eckstein. Berkeley, University of California Press, 1971. 366 pp. \$15.75.

The study of comparative economic systems has changed markedly over the period since World War II with the increasing realization that national economies rarely correspond closely to the pure ideologies with which they have been identified. Even the most polarized systems such as the United States and the Soviet Union have shown significant changes over time, and according to the much discussed "convergence hypothesis" may be developing functional similarities under common pressure of growth. At the same time, the accumulation of data and the development of new research techniques has made possible more refined analyses of the comparative performances of such systems.

In view of these changes, the aim of this collec-

tion of essays is to provide a more rigorous and systematic basis for comparing systems, to consider alternative methodological approaches now available, and to probe some theoretical issues that have arisen. The essays emerged from a conference held at the University of Michigan in November 1968. Participants included distinguished students of the Soviet system as well as eminent economists with other, though related, backgrounds. In general the papers are of a high order, though they will appeal primarily to specialists in the field. Alexander Eckstein, the editor, has provided an introduction which effectively summarizes and synthesizes the respective contributions in the collection.

An opening essay by Tjalling C. Koopmans and John Michael Montias on "The Description and Comparison of Economic Systems" is intended to construct a comprehensive terminological framework for the comparison of all economic systems and their variants. At such a level of generality, the treatment is necessarily formalistic and abstract. It seems more suited to a pre-Darwinian form of taxonomy than to an operational and qualitatively meaningful description of evolving systems.

Similarly abstract, though mathematically rigorous, is a general model by Leonid Hurwicz designed to permit a complex comparison of degrees of centralization and decentralization in market vs. command economies.

These models appear to have had little influence on the remainder of the volume, which reflects vigorously independent approaches and points of view. An empirical analysis by Abram Bergson, continuing the work for which he is well known, compares the economic performance of the U.S.S.R. and the U.S.A. for the year 1960. He concludes that Soviet productivity, in relation to its production possibilities, falls notably short of that of the U.S.A. In a lively exchange with Evsey D. Domar, Bergson acknowledges that the difference in calculated efficiency may not be attributable solely to the relative superiority of the capitalist over the socialist system, but may be due partly to the late start of the U.S.S.R. toward industrialization and the associated inferiority of Soviet to U.S. technological knowledge. However, he clearly believes that by 1960 these gaps were steadily closing, and that difficulties in centralist planning bear a large share of the responsibility for inferior performance by the U.S.S.R.

A provocative essay by Simon Kuznets examines

the effect that stages of economic growth resulting from major epochal innovations, such as atomic energy, space exploration, and the discovery of DNA, may have on modern economic systems. Such innovations seem to be bringing forth variants of the free-market, individual enterprise state and of the Communist economies that may be more significant than the conventional descriptions of these systems. These variants he designates as the new industrial state, the new military state, the new welfare state, and the new scientific state. The underdeveloped countries, he believes, must be typed separately, since they have been subject to other cultural and historical influences. His discussion is modestly speculative but strongly suggestive of the impact of economic development theory on its sister field of comparative systems.

The volume also contains a brief debate by Alexander Gerschenkron and Albert O. Hirschman on the degree to which ideology may actually determine an economic system, and an essay by Alexander Erlich on a comparison of capitalism and socialism as seen from a shifting Marxist-Leninist point of view.

—JAMES H. STREET
Professor of Economics
Rutgers University

Evaluating institutional effectiveness

Institutions of Economic Growth: A Theory of Conflict Management in Developing Countries. By John P. Powelson. Princeton, N.J., Princeton University Press, 1972. 275 pp. \$10.

Powelson's book sketches a general theory of institutions in a context of growth, drawing on his extensive consulting and teaching experience in Latin America and, to a lesser extent, East Africa. In the first summary chapter, Powelson insists on the importance of conflict resolution as the function of economic institutions, defined as organizations or modes of behavior, although he recognizes that institutions are not ordinarily analyzed so exclusively from this standpoint. The next four chapters spell out the theory in greater detail.

Chapter 2 analyzes the nature of conflicts resulting from growth. Powelson believes that institutions should first be capable of resolving such conflicts in such a way that, during the takeoff period, a consensus on goals will be reached. This will permit

later solutions to move out to a new production possibility curve and benefit all parties. The more developed societies must understand that the proposals initially emanating from the less developed societies will not, therefore, always increase total product nor make possible rising incomes for all.

Instead of measuring effectiveness by the conventional input-output efficiency tests, chapter 3 develops "a new concept of institutional effectiveness." It is the ability of institutions to identify conflicts, devise rules for their settlement, and command general approval for the decisions that should be the measure of success. As an illustration, Powelson hypothesizes the differing standards that might be applied by an engineer and by an economist in reviewing loan applications for a development bank. In an appendix, William Loehr applies the technique to the rural credit program in Nicaragua, showing the consequences of differences in the approaches of the field and the office staffs.

In chapter 4 Powelson addresses himself to the process of creating institutions necessary to further growth. He attempts to measure the costs and benefits as they might manifest themselves to participants. "Usually the cost to power groups consists of the expenditures of effort toward increasing the opportunity cost to other groups . . . of maintaining obsolete institutions." This "micro-theory" of institutions is extended in the succeeding chapter by a "macro-theory" that turns into a plea for U.S. tolerance of ideologies, such as the Chilean, appropriate for development when value systems differ from our own. For Powelson, the nationalist bias of what he calls the "third ideology," which denies the benefits of foreign investment, may have positive value. In an interesting appendix, Powelson shows how, contrary to his model, the Alliance for Progress is "designed to inculcate into Latin American countries the cultural values and institutions of the United States."

In his conclusion Powelson tries to explain why some nations have institutions superior to others and have better growth response. His model would have GNP depend on five variables: the quantity of productive factors; the level of education; the stock of technology; entrepreneurial capacity; and the national ratings for aggregate institutional effectiveness. Both the value and the novelty of his model, according to Powelson, derive from the fifth variable, which integrates a multitude of important factors, such as political stability, consensus on goals, and

administrative efficiency, that are closely related to growth, but difficult to handle if separately considered.

Among model-builders, Powelson must surely be one of the most reasonable and catholic. And in an effect to appeal to all social scientists, regardless of discipline, he has developed his argument with what is, for a tightly knit theoretical discussion, exceptional clarity. Unfortunately, to apply many of the key components in Powelson's system would require precise measurement of subjective reactions. And even though he may be justified on the basis of experience in Mexico and Venezuela in proposing a coalition of left-wing intellectuals and progressive businessmen to offset dogmatic Marxism, it is not clear that the model is required to reach this conclusion. Moreover, it would be difficult to avoid a *post-hoc, propter-hoc* bias in evaluating institutional effectiveness. On balance, I believe Powelson's most important contribution is his demonstration that growthmen of all persuasions should gear their programs to prevailing value systems and ideologies.

—JOEL B. DIRLAM

Professor of Economics
University of Rhode Island

The origins of social security

Welfare Policy and Industrialization in Europe, America, and Russia. By Gaston V. Rimlinger. New York, John Wiley and Sons, 1971. 362 pp. \$10.95.

The author says that he was motivated to write this book to bring to life some basic issues in social security programs by showing how this institution emerged from and was molded by political and ideological forces attending the development of modern industrial societies. He succeeds admirably in his aim, basing his study on variations in the experience of several societies—England, France, Germany, the United States, and Russia. One of his most interesting achievements is showing how the timing of the adoption of these programs and the form they have taken have depended on variations in the political power of class groupings and on differences in the ideological climate, domestically and generally.

Part I shows how the mercantilist efforts and institutions aimed at controlling poverty and idleness

gave way before the force of "liberal" ideas, which counted on individual freedom and self-reliance to eliminate these problems. This was ultimately succeeded by a new legitimization of the notion that some social intervention was needed in response to the increasingly demonstrable need for protection against the insecurities of modern industrialism. But there were great differences in the way this double transition took place in different countries. It was smoother in Germany because liberalism was never so powerful a force. In France, the double transition barely missed being telescoped into one, since the "liberal" elements in revolutionary thought were accompanied by ideas about rights and humanitarian concerns as well.

The material likely to be most novel to many is the section on the Russian case, spanning both the Tsarist and Soviet periods. One of the most interesting aspects of Soviet experience is how the Stalinist version of social security echoes the mercantilist effort to use it for the purpose of introducing discipline and industriousness into the labor force as much as to provide security. The section on the German experience is also long and detailed, and to the reviewer seemed an extremely informative and successful illustration of the complexity of social and political forces that must be managed to obtain adoption of social security measures.

The book concludes with a kind of comparative-systems analysis of how differences in economic systems should affect the design of an optimal program. This section seemed to the reviewer less conclusive and illuminating than it might have been, probably because it lacks an adequate theoretical framework. Social security (and the author never really gives a satisfying explanation of the considerations he thinks should govern the scope of this concept) is a peculiar blend of (a) coercion designed to correct market failure and individual shortsightedness, (b) a purely humanitarian impulse to cope with dire need, and (c) an equity-rationalized program to redistribute income. It seems to the reviewer that any interpretation of social security would benefit from some discussion in terms of such relevant underlying ideas as the theory of public goods, grants economics, and so on. One of the consequences of Professor Rimlinger's historical approach is to make one aware of how much the nature of the problem of social security and attitudes toward it can change with economic development. This naturally stimulates our imaginings about possible

future scenarios—such as possible integration and rationalization of the “welfare mess” under the general rubric of income maintenance. Some interpretation of the past in terms of more general theoretical underpinnings would help that transition in our thought.

—ROBERT CAMPBELL

Professor of Economics
Indiana University

Summarizing a decade of research

A Review of Industrial Relations Research, Volume II. By Benjamin Aaron and others. Madison, Wis., Industrial Relations Research Association, 1971. 230 pp. \$5.

That industrial relations research is no longer the stepchild it once may have been is amply demonstrated in the second Industrial Relations Research Association volume, which reviews a vast array of publications and their findings issued, for the most part, during the last decade. (For a review of Volume I, see the July 1971 issue of the *Monthly Labor Review*.)

Benjamin Aaron and Paul S. Meyer discuss Public Policy and Labor-Management Relations in an essay largely devoted to decisions handed down by courts and administrative agencies. One may argue that in this case the term “research” is perhaps misapplied, since most of the sources cited are law review articles and similar commentaries, often polemic in nature, not the type of research one usually encounters in the social sciences. Two observations by the authors are worthy of special note. One, the conclusion that none of the writers in the field predicted the rise of collective bargaining in the public sector and, thus, practitioners and academicians alike found themselves overwhelmed by developments in the mid and late 1960’s. The other is the frank admission, after a painstaking review of the voluminous literature on emergency disputes, that “no fundamentally new approaches to the problem have been presented.”

Garth Mangum’s essay on “Manpower Research and Manpower Policy” deserves to be singled out for special commendation, written as it is with the sure hand of the insider who has followed changes in policies and thus research programs from close up. As Mangum points out, generous government

research grants were readily available and this, rather than deepseated commitments or interests, accounts for the large output in the manpower area. This, however, is a flimsy base on which to build for long term results. In his own words, “researchers . . . tend to go where the headlines and the money are.” Little, he notes, has emerged from university-funded research or from unsubsidized individuals.

Nevertheless, a sizable research cadre has now come into existence, but, if the past is any guide, the impact of research results on policy decisions is likely to be minimal. And perhaps for good reason, since the methodology of manpower program evaluation still leaves a great deal to be desired. “Cost-benefit and cost effectiveness analysis may have its day in manpower policy, but not yet.” To this must be added the difficulty of “attracting the attention of program administrators with a vested interest in ignoring unpleasant findings.”

In “Collective Bargaining Trends and Patterns,” James Stern summarizes the literature on automation, developments in the public sector and in agriculture, strikes, and selected noneconomic agreement terms, particularly grievances and arbitration, and changes in bargaining structure. The data now available to practitioners and academicians are indeed enormous, but, regrettably, Stern has little to say about their quality or usefulness. He also notes without further comment that the period 1954–66 saw a vast outpouring of literature on automation. Has the problem been solved or have the predictions been way off the mark? There must be a lesson in all this somewhere.

The final essay in the volume, “Industrial Relations in Western Europe and Canada” by John Crispo, while it does not deal with research and is thus outside the task assigned to the authors, is nevertheless an excellent synopsis of the legal and institutional framework in England, Germany, Sweden, and Canada, with scattered references to other countries. The sections dealing with incomes policies and industrial democracy rate high marks for a succinct treatment of difficult topics.

The essayists, while they have given us a thorough and very readable rundown of the literature, have often, contrary to their instructions, failed to give us an appraisal of its value and effectiveness in solving specific problems. Except for Mangum, none has singled out existing problems or pointed to new directions. Should the IRRA decide to issue a followup volume in 1980, it may want to keep

these shortcomings in mind. An assessment of different types of research methodologies would also be helpful.

—HARRY P. COHANY

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Interaction between politics and unionism

Unions, Parties, and Political Development: A Study of Mineworkers in Zambia. By Robert H. Bates. New Haven, Conn., Yale University Press, 1971. 291 pp. \$12.95.

This is a fascinating study of the interactions of trade unionism and politics in a developing country. Although it deals only with Zambia, and within that country only with the copper mine workers, it reflects the kind of problems which are widespread throughout the so-called Third World.

In Zambia two movements developed during the same period. One of these was the trade union movement among the African workers in the mines. The other was the drive for black control of the political process in what was then the British colony of Northern Rhodesia. Until the achievement of independence by Zambia under an all-black government, the two movements were allies and had basically the same objectives. The independence movement, and the United National Independence Party, which by the beginning of the 1960's held the predominant role in that movement, counted upon, and received, strong support from the African Mineworkers Union.

The great majority of Union members, as well as virtually all of their leaders, belonged to the United National Independence Party. However, this did not mean that they would allow the government party to dictate who their leaders should be or the policies those leaders should follow. Even before independence, there were conflicts over the party's attempts to mobilize the union behind tactical maneuvers of the party's drive for independence, maneuvers which did not necessarily conform to the material welfare of the union members.

Once independence had been achieved, the immediate interests of the unionists and the government tended increasingly to diverge. Two basic issues tended to cloud their relations: party control over the union, and wage policies which the government urged upon the union. Since copper provided virtually all

of the country's exports and foreign exchange, the government was vitally interested in keeping costs of production as low as possible, in maintaining steady production, and in diverting income arising in the copper industry for use in its overall economic development program. The workers, on the other hand, were interested in continuing to increase their own incomes and to improve their living and working conditions.

These kinds of problems are by no means confined to Zambia. Much of that part of the world which has emerged from colonial status since World War II has seen a trade union movement which was a major support for the drive for independence come into conflict with the government and its dominant party once independence had been achieved. One of the major virtues of this volume is that it gives a detailed case study of this widespread phenomenon.

Dr. Bates, Assistant Professor of Political Science at the California Institute of Technology, sketches the history of the African Mineworkers Union, and gives details on its structure and organization. He also traces the struggle for independence and the evolution of the parties fighting for it. He studies in detail the interaction between the political and trade union movements. The author gathered his information at first hand, during a long stay in Zambia, in the process of which he interviewed a wide range of participants in politics and the union, attended numerous union meetings, and studied the functioning of both labor and political organizations on the spot.

This book should have a varied audience. It should be of interest to Africanists, students of industrial relations, and those concerned with economic and political development.

—ROBERT J. ALEXANDER

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Focus on American Indians

Native Americans Today: Sociological Perspectives. Edited by Howard M. Bahr, Bruce A. Chadwick, Robert C. Day. New York, Harper and Row, Publishers, 1972. 547 pp. \$4.95, paper.

This collection of writings concerning the current status of the North American Indian is both excellent and uneven. As the editors admit, this is due

to the state of research in the field, which has long been almost the exclusive prerogative of the anthropologist. This book is important, if for no other reason, because it summarizes investigations done from the point of view of the sociologist. From the book's summary, it is obviously that only a few areas (educational failure and alcoholism) have received more than cursory attention from scholars. For those interested in researching Indian life, the book is a clear indication of the paths that their inquiries might follow.

But this collection is important also because it is good. The editors have generally selected articles of quality and readability. I know of no other single source where a reader can learn as much about the Indians in as few pages.

The scope of this collection is commendable. "The Setting" provides the reader with the needed background for the works to come. "Patterns of Prejudice and Discrimination" includes a collection of studies attempting to document what almost everyone knows, that Indians are not fully accepted into the dominant society. From the standpoint of research quality, the third chapter, "Indian Education," is the best, presenting both the extent of failure and the causes.

The fourth chapter, "Acculturation and Identity," least impressed this reviewer. The editors indicate that the term "acculturation" lacks precise definition, and the articles in this section suffer from this imprecision. This is not the fault of the editors, but reflects on the primitive state of research in the area. The fifth chapter, "Crime and Deviant Behavior," details the problems produced by poverty, isolation, and dependency.

The last two chapters must be given special mention. "The Urban Indian" is the first collection drawn from the sparse literature on this subject. With more Indians in cities than on reservations, the neglect of the urban Indian is inexcusable. The final chapter, "Red Power, Action Programs, and the Future," captures the dilemmas and directions of the "new" Indians. Those interested in the contemporary mood of younger, more articulate Indian leaders can be satisfied with this chapter.

This reviewer is an economist who has worked with economic development on the Sioux reservations. To him the book reflects the failure of economists and sociologists to talk to each other on this subject. The authors in this collection are content to describe the Indian's economic condition.

Research on Indians would be strengthened if there was a realization that economic forces determine many social conditions, and that changed economic conditions would lead to solutions of old problems and the creation of different sociological perspectives.

Each chapter is prefaced by a short but fully adequate summary of the articles to follow as well as the research which was not included. The authors wrote this book as a text for minority studies. It is more than that. On the basis of both content and style, it merits reading by all with an interest in native Americans today.

—CALVIN A. KENT

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The continuing dilemma of 'welfare reform'

Work and Welfare Go Together. By Sar A. Levitan, Martin Rein, David Marwick. Baltimore, Md., Johns Hopkins Press, 1972, 137 pp. \$6 cloth, \$2.50, paper.

This brief book provides a handy reference to figures and charts regarding the growth of welfare rolls, attempts to train welfare recipients in manpower programs, and the problems associated with various proposals at welfare reform. The chapters flow easily in logical order, examining such specific issues as welfare benefits in cash in relation to those in-kind such as food stamps. Available evidence on the willingness of recipients to work is summarized. The failure of manpower training programs, such as the Work Incentive Program, in lowering welfare rolls is discussed.

There is little in this material that is new to those who are familiar with issues of welfare reform and manpower training. But it would be a useful primer for those having general interest in, or just entering, these fields.

The authors are concerned, however, not merely with past welfare and manpower efforts, but with current policy issues. The preface states their interest in examining "options available in developing a welfare system that encourages recipients to supplement their incomes, even though they may not achieve complete self-support." Thus the authors opt for providing welfare recipients with ample incentives to work.

They point out in their last chapter that irreducible

conflicts emerge in pursuit of this goal. Work incentives can be increased by making low base welfare payments. But low payments provide less than a minimum level of subsistence to those who cannot work. On the other hand, high base payments and low tax rates on earned income make the support program very expensive. Congress and the public, they point out, are unwilling to spend large sums of new money on such a scheme.

The authors then correctly point out that the inability to reach a policy that satisfactorily balances work incentives, adequate subsistence, and reasonable costs leads to "a diffuse sense of malaise and dissatisfaction." There is little in their policy discussion to relieve that uncomfortable feeling.

There is a suggestion in the last chapter that manpower programs be consolidated administratively and channeled through one congressional committee. This does not really address the dilemma posed. Another suggestion is that "there is a pressing need for careful demonstration projects of the principles of welfare reform." The precise nature of these principles and how the dilemma mentioned above is to be resolved by a demonstration project remains unclear.

If the authors are saying that the Government should be prepared to spend many billions of dollars in subsidizing work for welfare recipients, they are not making this clear. If they think that costs need to be kept within current limits, it seems improbable that work incentives will be present.

A fundamental problem with the policy analysis in this book is unwillingness to confront the possibility that the "welfare problem" exists because affluent people are unwilling to provide the poor with equal opportunity to advance in our society. There is evidence, not cited in this book, that discrimination exists against poor people in educational institutions and in the job market. If it is true as the authors suggest, and this reviewer's research supports, that poor people want to work and do work, then, discussion of policies to help them cannot avoid the issue of providing them with opportunity to advance equal to that of affluent persons. The authors might still not wish to suggest spending the money needed to meet such a challenge, but the reader would be given a better sense of the context within which discussions of welfare reform should take place.

In summary, this is a useful book for those who wish a quick overview of some issues involved in welfare and manpower training problems. The policy discussion is useful with respect to highlighting cur-

rent dilemmas, but little is offered in the way of new options. More serious is omission of discussion of how blocked opportunity for the poor relates to the welfare problem.

—LEONARD GOODWIN

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Wheels

Dead End: The Automobile in Mass Transportation.

By Ronald A. Buel. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1972. 231 pp. \$6.95.

Mr. Buel, now employed in the office of the Commissioner of Public Safety of Portland, Oreg., has written a popular book of breadth and passion, decrying the role of the automobile and its supporting industries in American life. The book presents in short, well-written chapters an analysis of the automobile in the economy, the main facts on highway carnage and associated crime, and the threat of air pollution emanating from the automobile. Then, *seriatim*, Buel considers freeway design and displacement and the privileged position of the oil industry. Two chapters discuss quickly and incisively highway transportation and the poor, and the various alternatives to auto-dominance in our cities and suburbs. The last chapter deals with the power of the highway lobby, corporate domination of the channels of opinion-molding, and the kind of grass roots revolt necessary to change it all.

The book is well documented from a wide-ranging selection of quotations from newspaper and magazine articles. The literature on the subject in book form is much less adequately represented. The book is highly polemical and not, in the judgment of this reviewer, very well-balanced. There is almost no material on how much the transportation planning process has changed in response to public opinion in recent years as far as social and environmental impact is concerned. The example of Interstate 40 as planned through the black quarter of Nashville describes how the route was planned before a Supreme Court decision stopped it cold, in 1969, but does not tell how it was subsequently modified.

Bus and rail transportation is not always preferable to the auto, especially with the level of service public transportation provides today. It is hard to believe that Buel believes the approach of the road bureaucracy is "penny-pinching." We certainly have done more than "executed it" (the Interstate Pro-

gram) without regard to the simplest of design principles.

Buel's chapter on the environmental, economic, and political sins of the oil industry is perhaps the best in the book; the rapacity and machinations of American oil barons have, if anything, become more unconscionable since the days of the founder of the Rockefeller dynasty.

Mr. Buel is least convincing on his proposed alternatives to the automobile. If rail transit *and* freeways were the answer, New York would have the problem solved. Somehow in the welter of ideas, Buel has never understood that the basic cause of our difficulty is irrational land use, and that both rail and highway have aided the increasing separation of where people live from where they work and carry on their other activities. There is a suggestion of this in the oft-quoted Jane Jacobs, but neither Buel's proposed hardware solutions nor his proposals for political reform show any real understanding of the basic issue.

However, the present reader, who has spent many years in the area of urban transportation, benefited from a reading of the book. The inside story of the promotion of BART (the Bay Area Rapid Transit system) and the frank and valid critique of schemes, largely unsuccessful, to move ghetto dwellers to suburban employment were special dividends.

In summary, Mr. Buel believes that the gross effects of the automobile on our culture have been negative. Perhaps so, on net balance, but there is a vast amount to be said on the other side in terms of reduced isolation, mobility, services, and emptying out the slums. I, for one, believe that the future will be better served by curtailing the excesses of highway lobby, arrogant manufacturers, corrupting oil magnates than by the kind of dubious newfangled and unproved transportation systems in which Buel rather naively places his trust.

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A 3-stage evolution

From Peasant to Farmer: A Revolutionary Strategy for Development. By Raanan Weitz. New York, Columbia University Press, 1971. 292 pp. \$10.

The literature of agricultural development is now well into its third stage. In the 1950's, discussion of

the problems of agricultural development was confined primarily to the professional journals and the annual reports and fugitive literature of the specialized international agencies and agricultural ministries. The late 1950's and the 1960's were marked by the publication of a substantial body of scholarly monographs, conference proceedings, and collections of the best of the literature from the professional journals. More recently we have seen the publication of a number of important books designed to provide the educated layman, the development administrator, and the undergraduate student with greater insight into agricultural development processes, programs, and problems. The Weitz book falls into this third group.

The distinctive feature of the Weitz book is its emphasis on the central role of the farm and the farm operator in the agricultural development process. He continuously stresses the importance of institutional innovations designed to achieve consistency between the objectives of individual farm operators and the objectives of national development policy, if planning for agricultural development is to be effective.

Another distinctive feature is the emphasis on the evolutionary character of the economic organization of agricultural production. He visualizes an evolution through three stages—from subsistence agriculture, through small-scale mixed farming, to specialized commercial farms. He regards the family-operated farm production unit as the most efficient form of organization in all three stages—"With the aid of technology and supporting services and through increasing specialization, the family farm has been able to circumvent the limitations set by the size of the family labor force. This seemingly feeble institution—strengthened by sophisticated technological, scientific and managerial innovations—has displayed extraordinary powers of survival."

Weitz also stresses the importance of political organization at the farm level to assure effective performance by the rural development bureaucracies. In spite of this emphasis, Weitz remains too committed to an "altruistic" view of bureaucratic behavior. He views rural organization as a useful "tool in the hands of policymakers and planners." My own "economic" view of bureaucratic behavior leads me to emphasize, even more strongly than Weitz, the essential role of a viable indigenous political organization in rural areas.

In contrast to several other recent popular treatments of agricultural development, Weitz emphasizes

the role of institutional rather than the role of technological change. There is, in my judgment, inadequate recognition of the role of technical change as a source of change in the behavior of individuals and institutions in agricultural development.

If I were assembling a reading list for an undergraduate course in agricultural development, or selecting references on agricultural development for a course in economic development, I would want to balance the strengths and the weaknesses of Weitz' treatment with assignments in recent books by Lester R. Brown, Willard W. Cochrane, Arthur T. Mosher, and Theodore W. Schultz.

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Shibboleths of change in education

Making Schools Work: Strategies for Changing Education. By Marcus A. Foster. Philadelphia, The Westminster Press, 1971. 171 pp. \$5.95, cloth; \$2.65, paper.

Making New Schools: The Liberation of Learning. By Joseph Turner. New York, David McKay Co., Inc., 1971. 302 pp. \$5.95, cloth; \$2.95, paper.

Marcus Foster's *Making Schools Work* and Joseph Turner's *Making New Schools* are additions to the growing educational change literature. Foster, recounting some of his successful experiences as an administrator in the Philadelphia public schools, argues that under proper leadership ghetto schools can be changed. Turner's basic objective, in presenting discussions of actual and proposed experiments in both public schools and higher education selected from the literature and his personal experiences, is to convince readers that experimentation and innovation in all aspects of American education are not only warranted but critically needed.

The authors have chosen serious educational issues: How is successful change in education brought about? and What innovations in education should be tried? Both books read easily. One can hardly wait to reach the end of each of the Foster episodes for each problem's resolution. Turner's most detailed and interesting discussion was about the ESS (elementary school science) curriculum, which emphasizes classroom activities that hopefully teach chil-

dren how to learn (the process) as well as specific subjects.

Unfortunately, neither book is potentially useful to educators, informed public officials and parents, or social scientists concerned with education. In *Making Schools Work* first a set of leadership principles are delineated, 11 in all and many rather simplistic—for example, "People are always more important than the system." "To move people, start where they are." "Massive problems are solved little by little." The thesis is that successful change results from behavior guided by these principles. But the vignettes recounted fail to demonstrate clearly how Foster's reported actions indeed conformed to the espoused principles and, furthermore, how these actions, and not a multitude of other factors, led to the reported successful outcomes. Which principles, for example, were operative and how did they account for the averting of the teacher-parent conflict over a "racist" school book and the subsequent channeling of tempers into constructive dialogue and curriculum development, or for the building of a needed addition to Gratz High School and the development of community cohesion after it appeared that political conflicts would thwart construction of the addition? The reader is told at the end of each episode that the author's actions, presumably reflective of his principles, were related to the success, but no objective data are presented to document the alleged success nor are explicit, systematic connections made between it, the principles, and Foster's actions.

Analysis of a few Foster mistakes would have given the book greater credibility. (It is reasonable to assume that he made at least a few while in Philadelphia, and that, despite his successes, some of his actions were in error.) Comparison of some less successful episodes to the more successful ones would have clarified whether the principles were more operative during the successes and, therefore, whether they really made a significant difference. Lastly, not even cursory mention is made of the voluminous literature on leadership, group conflict and its resolution, the process of educational change, and the politics of education, even though subtitles such as "The New Role of Leadership," "The Sociology of Conflict," and "Retooling Schools," are employed. *Making Schools Work* presents a melodramatic picture of educational reality, an oversimplified portrait of "how to do it," which sheds no new light.

Instead of presenting challenging new ideas that would lead to greater understanding and new per-

spectives, *Making New Schools* contains a series of brief, largely superficial discussions of many perennial educational topics including: making education "less dreary," what is worth knowing and who should decide, who should teach and how should they be prepared, the value of and criteria for process-oriented curricula, inservice training, evaluating experiments, and a number of specific innovations such as ESS science, "black" English, the use of artists as teachers, and decentralization. To be sure, the last words have not been spoken about these topics and innovations but nothing new is added to the already voluminous pertinent literatures to which little reference is made.

Paraphrasing the rather fatuously presented educational philosophy permeating the book is Montaigne's idea that children should not be subjected to "thundering in their ears," which Turner equates with the traditionally heavy emphasis on lecturing. They should instead be permitted to "taste things with their minds and thereby to choose and discern them," which Turner equates with the heavy emphasis on discovery in process-oriented education. The issue of when "thundering" might be more effective than "tasting" is never raised. In addition, the book abounds with seemingly glib opinions such as: "The schools have destroyed the connection between reading and life; the task is to restore it," and "I am not all that enthusiastic about TV, but it is a model of art children possess of necessity, and teachers should work with it. Teachers should also introduce students to other models."

The book's major shortcoming, however, has to do with achieving its objective, convincing others to experiment. This requires that one marshal available evidence to show how specific changes are indeed better than what is presently being used, or, in the absence of evidence, a sound logical analysis of why improvement is expected with the innovation. No data are offered, other than a few personal experiences and testimonials, and instead of systematic logic a melange of current shibboleths about change are offered. Unfortunately, those searching for sound criteria with which to judge or make educational changes will not find *Making New Schools* palatable.

—JOSEPH B. GIACQUINTA

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The rich fabric of experience

The Impact of the Industrial Revolution: Protest and Alienation. Edited by Peter N. Stearns. Englewood Cliffs, N.J., Prentice-Hall, Inc., 1972. 186 pp. \$5.95.

Traditionally, the social history of industrialization has been written in terms of great men, new inventions, and social movements. However, in recent years the writings of historians like Marc Bloch, Georges Lefebvre, Albert Soboul, George Rudé, and E. P. Thompson have examined the social, political, and economic consequences of industrialization "from below" through detailed investigations of its impact on the "common man"—the displaced agricultural worker, the urban industrial proletariat, the new industrialists, and the preindustrial middle class. Peter Stearns' edited book of readings on the impact of the industrial revolution, which is in accord with this new emphasis in social history, makes a significant contribution to the literature of the field.

This collection is organized into four groups of readings which focus respectively on "early industrial protest," "industrial protest," "the middle classes," and "the workers." The documents in each section were chosen because of their contribution to an understanding of a range of major issues reviewed by Dr. Stearns in separate introductory essays. The section on "early industrial protest" is concerned with the extent, character, and sources of social discontent in the early years of the industrial revolution. The documents on "industrial protest" are directed to an exploration of the significance of strike activity, the relative importance of revolutionary versus "ameliorative" industrial protest, and the role of trade unions and socialist parties in protest activities. The section on "the middle classes" emphasizes the divergent responses of the "new" and "old" middle classes to industrialization. Finally, the readings on "the workers" explore the widely variable impact of industrialization on working class living standards, values, and attitudes in the 18th and 19th centuries.

Professor Stearns' book of readings is particularly valuable for three reasons. First, the selected documents range widely in terms of groups covered and countries selected, with British, French, and German materials being most prominent. Traditional sources, such as presentations on the Luddites, British Parliamentary inquiries, and the writings of Cobbett and Smiles are included along with selections from local police reports, the demands of particular worker

groups, and statements from little known industrialists. Second, each introductory essay discusses the reliability of the source materials and heavy emphasis is placed properly on the various limitations of the perspectives supplied in the documents for making broad generalizations about the behavior of particular classes and groups. Third, great care is taken to show the extent of divergent attitudes toward and responses to the industrial revolution among both the lower and middle classes. In sum, the Stearns reader supplies both a rich fabric of material for study by social historians and an important caveat to those sociologists who might otherwise draw broad and over-simplified generalizations about the impact of industrialization in Western Europe during the last two centuries.

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Income differentials

International Trade Theory and Regional Income Differences: United States 1880–1950. By Erling Olsen. Amsterdam, North-Holland Publishing Co., 1971. 218 pp. \$13.

Within the study area of international economics, numerous researchers have tested existing theories on trade and have hypothesized new forms that account for the resource impact of trade. Mr. Olsen's work constitutes a new addition to the literature within this area. His work can best be summarized as an amalgamation of previous work into a new theoretical model of trade along with an empirical test of his model. His research has been carefully documented and his empirical work is presented in an orderly manner. It is for these reasons that his objectives of the book are satisfied; interested economists will find this work a net contribution to the literature.

A review of the book shows three distinct parts. Part 1 is a succinct review of theories of international trade, including Heckscher-Ohlin, Burenstam Linder, and the Social Physics models, and a careful comparison of the assumptions and conclusions of each theory.

Part 2 is a development of Mr. Olsen's model, which is a mixture of certain of the models in Part 1, and the reasons behind his model. It is a recursive

model, designed for the computer, and developed to test the reasons for changes in income through time.

Part 3 is a test of the model; the data used in the test are U.S. regional data for the 1880–1950 time periods.

As with any specialized piece of work, there will be those who will find the results useful and those who will find them not so useful. I found two aspects of the book to be quite praiseworthy. First, the careful review of the main theories of international trade and income distribution undoubtedly is a result of the author's critical examination of them. Readers of the book will find this a convenient reference review. Second, Mr. Olsen's model (Part 2) is an addition to the literature. Although there will be those who will not agree with his entire formulation, the model is carefully structured and well documented with his reasoning for it.

The major limitation of the work is largely outside the direct control of the author—he faced a near impossible data problem for the empirical test. Inasmuch as his test gave somewhat inconclusive results of the explanatory efficacy of his model, the entire Part 3 becomes an exercise in methodological gymnastics. The merit of this exercise is to caution others against following the same path. Few research benefits result from his work when his model is crammed with forced data so that a determined fit results—see pages 133, 141, 147, and 175.

Sections of the book are also quite involved with the computer program—rather than the economics of the author's work. For example, the discussions on pages 82–83 and 96 detract from the main theme and therefore could easily be placed in an appendix.

Finally, Mr. Olsen notes (p. 173) that the model tested better for the first half of the period than the second half. The "fundamental" feature that might explain this is the technological changes that occurred during the period and the resultant impact on regional output. Clearly his model could not accommodate these technological changes.

In conclusion the book is a net contribution to the specialized literature on income differentials. My view is that it is a blend of theoretical review, new model building, and computer gymnastics in the testing of the model.

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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

[Numbers 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..	23,521	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	798	822	835	827	787	784	781	772	779	776	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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ³	Feb.	Mar.	Apr.	May	June	July
FULL TIME													
Total, 16 years and over:													
Civilian labor force.....	71,995	72,218	72,341	72,550	73,021	73,169	73,261	72,997	73,714	73,691	74,032	74,333	74,218
Employed.....	68,128	68,209	68,284	68,643	68,890	69,022	69,279	69,123	69,734	69,725	69,918	70,643	70,437
Unemployed.....	3,867	4,009	4,057	3,907	4,131	4,147	3,982	3,874	3,980	3,966	4,114	3,690	3,781
Unemployment rate.....	5.4	5.6	5.6	5.4	5.7	5.7	5.4	5.3	5.4	5.4	5.6	5.0	5.1
PART TIME													
Total, 16 years and over:													
Civilian labor force.....	11,954	12,211	12,293	12,190	12,125	12,083	12,595	12,540	12,596	12,466	12,406	11,867	12,208
Employed.....	10,918	11,086	11,280	11,158	11,094	11,072	11,476	11,482	11,497	11,369	11,403	10,825	11,211
Unemployed.....	1,036	1,125	1,013	1,032	1,031	1,011	1,119	1,058	1,099	1,097	1,003	1,042	997
Unemployment rate.....	8.7	9.2	8.2	8.5	8.5	8.4	8.9	8.4	8.7	8.8	8.1	8.8	8.2

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. Nonemployment and unemployment, by age and sex, seasonally adjusted ¹

[In thousands]

Employment status	Annual average		1971						1972						
	1970	1971	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ²	Feb.	Mar.	Apr.	May	June	July
TOTAL															
Total labor force.....	85,903	86,929	86,727	87,088	87,240	87,467	87,812	87,883	88,301	88,075	88,817	88,747	88,905	88,788	88,855
Civilian labor force.....	82,715	84,113	83,930	84,313	84,491	84,750	85,116	85,225	85,707	85,535	86,313	86,284	86,486	86,395	86,467
Employed.....	78,627	79,120	79,014	79,199	79,451	79,832	80,020	80,098	80,636	80,623	81,241	81,205	81,394	81,667	81,682
Agriculture.....	3,462	3,387	3,374	3,407	3,363	3,416	3,419	3,400	3,393	3,357	3,482	3,324	3,353	3,337	3,445
Nonagriculture.....	75,165	75,732	75,640	75,792	76,088	76,416	76,601	76,698	77,243	77,266	77,759	77,781	78,041	78,330	78,237
Unemployed.....	4,088	4,993	4,916	5,114	5,040	4,918	5,096	5,127	5,071	4,912	5,072	5,079	5,092	4,728	4,785
MEN, 20 YEARS AND OVER															
Total labor force.....	49,948	50,308	50,369	50,458	50,492	50,530	50,527	50,463	50,498	50,373	50,714	50,711	50,760	50,904	50,979
Civilian labor force.....	47,189	47,861	47,949	48,057	48,113	48,179	48,200	48,169	48,259	48,181	48,582	48,614	48,700	48,882	48,961
Employed.....	45,553	45,775	45,879	45,893	45,969	46,124	46,066	46,080	46,247	46,255	46,569	46,541	46,628	46,919	47,032
Agriculture.....	2,527	2,446	2,449	2,462	2,435	2,494	2,503	2,439	2,442	2,394	2,400	2,370	2,404	2,437	2,474
Nonagriculture.....	43,026	43,329	43,430	43,431	43,534	43,630	43,563	43,641	43,805	43,861	44,169	44,171	44,224	44,482	44,558
Unemployed.....	1,636	2,086	2,070	2,164	2,144	2,055	2,134	2,089	2,012	1,926	2,013	2,073	2,072	1,963	1,929
WOMEN, 20 YEARS AND OVER															
Civilian labor force.....	28,279	28,799	28,594	28,826	28,960	29,082	29,254	29,284	29,424	29,358	29,574	29,508	29,625	29,657	29,789
Employed.....	26,932	27,149	26,964	27,144	27,319	27,471	27,571	27,592	27,794	27,878	27,972	27,913	27,883	28,029	28,078
Agriculture.....	549	537	529	543	548	530	528	547	564	575	620	563	551	496	556
Nonagriculture.....	26,384	26,612	26,435	26,601	26,771	26,941	27,043	27,045	27,230	27,303	27,352	27,350	27,332	27,533	27,522
Unemployed.....	1,347	1,650	1,630	1,682	1,641	1,611	1,683	1,692	1,630	1,480	1,602	1,595	1,742	1,628	1,711
BOTH SEXES, 16-19 YEARS															
Civilian labor force.....	7,246	7,453	7,387	7,430	7,418	7,489	7,662	7,772	8,024	7,996	8,157	8,162	8,161	7,856	7,717
Employed.....	6,141	6,195	6,171	6,162	6,163	6,237	6,383	6,426	6,595	6,490	6,700	6,751	6,883	6,719	6,572
Agriculture.....	386	404	396	402	380	392	388	414	387	388	462	391	398	404	415
Nonagriculture.....	5,755	5,791	5,775	5,760	5,783	5,845	5,995	6,012	6,208	6,102	6,238	6,360	6,485	6,315	6,157
Unemployed.....	1,105	1,257	1,216	1,268	1,255	1,252	1,279	1,346	1,429	1,506	1,457	1,411	1,278	1,137	1,145

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	8,381	8,646	8,642	8,799	8,612	7,988	7,860	7,860
Sales workers.....	4,854	5,066	4,660	4,714	4,777	4,787	4,813	4,934	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						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
NUMBER OF UNEMPLOYED													
Lost last job.....	2,280	2,460	2,369	2,206	2,360	2,365	2,169	2,077	2,118	2,040	2,199	2,210	2,093
Left last job.....	510	572	583	541	629	666	564	603	674	611	649	624	616
Reentered labor force.....	1,534	1,509	1,536	1,486	1,493	1,432	1,652	1,503	1,542	1,557	1,460	1,238	1,455
Never worked before.....	570	651	603	663	651	736	742	713	737	917	802	621	564
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.....	46.6	47.4	46.5	45.1	46.0	45.5	42.3	42.4	41.8	39.8	43.0	47.1	44.3
Left last job.....	10.4	11.0	11.5	11.0	12.3	12.8	11.0	12.3	13.3	11.9	12.7	13.3	13.0
Reentered labor force.....	31.3	29.1	30.2	30.4	29.1	27.5	32.2	30.7	30.4	30.4	28.6	26.4	30.8
Never worked before.....	11.6	12.5	11.8	13.5	12.7	14.2	14.5	14.6	14.5	17.9	15.7	13.2	11.9
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE													
Lost last job.....	2.7	2.9	2.8	2.6	2.8	2.8	2.5	2.4	2.5	2.4	2.5	2.6	2.4
Left last job.....	.6	.7	.7	.6	.7	.8	.7	.7	.8	.7	.8	.7	.7
Reentered labor force.....	1.8	1.8	1.8	1.8	1.8	1.7	1.9	1.8	1.8	1.8	1.7	1.4	1.7
Never worked before.....	.7	.8	.7	.8	.8	.9	.9	.8	.9	1.1	.9	.7	.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	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total, 16 years and over.....	4.9	5.9	5.9	6.1	6.0	5.8	6.0	6.0	5.9	5.7	5.9	5.9	5.9	5.5	5.5
16 to 19 years.....	15.3	16.9	16.5	17.1	16.9	16.7	16.7	17.3	17.8	18.8	17.9	17.3	15.7	14.5	14.8
16 and 17 years.....	17.1	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	16.5
18 and 19 years.....	13.8	15.5	15.0	15.0	15.8	14.5	15.4	16.3	16.8	16.7	15.8	1.5	15.8	12.9	13.5
20 to 24 years.....	8.2	10.0	9.8	10.0	9.6	9.2	10.4	10.1	10.1	8.8	9.9	10.0	9.9	8.7	9.8
25 years and over.....	3.3	4.0	4.0	4.1	4.0	4.0	4.0	4.1	3.7	3.6	3.7	3.8	3.9	3.9	3.7
25 to 54 years.....	3.4	4.2	4.2	4.2	4.3	4.3	4.2	4.3	3.9	3.7	3.9	3.8	4.0	4.0	3.8
55 years and over.....	2.8	3.4	3.2	3.5	3.2	3.0	3.4	3.4	3.1	3.1	3.3	3.6	3.6	3.6	3.4
Male, 16 years and over.....	4.4	5.3	5.2	5.5	5.4	5.3	5.4	5.4	5.3	5.3	5.3	5.3	5.3	4.8	4.7
16 to 19 years.....	15.0	16.6	15.8	17.2	16.3	16.5	16.2	17.3	17.3	19.6	17.8	16.7	16.6	13.8	13.6
16 and 17 years.....	16.9	18.6	18.4	19.4	18.6	20.3	18.1	19.0	18.7	21.8	21.4	19.3	18.0	15.4	14.6
18 and 19 years.....	13.4	15.0	13.7	15.0	14.6	13.7	14.7	16.0	16.1	17.6	15.1	14.8	16.2	12.4	12.8
20 to 24 years.....	8.4	10.3	10.2	10.5	10.2	9.7	10.7	10.5	10.4	9.2	10.4	10.7	9.4	8.3	9.6
25 years and over.....	2.8	3.5	3.4	3.6	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.3	3.4	3.3	3.0
25 to 54 years.....	2.6	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	3.0
55 years and over.....	2.9	3.4	3.1	3.3	3.0	2.9	3.2	3.0	3.0	3.2	3.4	3.5	3.5	3.5	3.1
Female, 16 years and over.....	5.9	6.9	6.9	7.0	6.9	6.7	6.9	7.0	6.9	6.4	6.8	6.8	6.8	6.5	6.9
16 to 19 years.....	15.6	17.2	17.2	16.9	17.6	17.0	17.3	17.3	18.4	17.9	17.9	18.0	14.6	15.4	16.4
16 and 17 years.....	17.4	18.7	18.3	19.5	18.0	19.2	18.7	18.5	19.6	22.3	19.8	19.0	14.8	18.1	18.9
18 and 19 years.....	14.4	16.2	16.4	15.1	17.3	15.6	16.2	16.7	17.7	15.6	16.8	16.4	15.3	13.5	14.4
20 to 24 years.....	7.9	9.6	9.4	9.4	8.9	8.6	10.0	9.6	9.6	8.4	9.2	9.0	10.6	9.2	10.1
25 years and over.....	4.1	4.9	4.9	5.0	4.9	4.9	4.8	5.0	4.6	4.3	4.7	4.6	4.8	4.8	4.8
25 to 54 years.....	4.5	5.3	5.4	5.4	5.3	5.3	5.2	5.4	4.9	4.7	5.1	4.9	5.0	5.1	5.1
55 years and over.....	2.8	3.4	3.3	3.8	3.4	3.0	3.7	3.9	3.3	2.9	3.1	3.6	3.8	3.8	4.0

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 rates, seasonally adjusted ¹

Selected categories	Annual average		1971						1972						
	1970	1971	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total (all civilian workers).....	4.9	5.9	5.9	6.1	6.0	5.8	6.0	6.0	5.9	5.7	5.9	5.9	5.9	5.5	5.5
Men, 20 years and over.....	3.5	4.4	4.3	4.5	4.5	4.3	4.4	4.3	4.2	4.0	4.1	4.3	4.3	4.0	3.9
Women, 20 years and over.....	4.8	5.7	5.7	5.8	5.7	5.5	5.8	5.8	5.5	5.0	5.4	5.4	5.9	5.5	5.7
Both sexes 16-19 years.....	15.3	16.9	16.5	17.1	16.9	16.7	16.7	17.3	17.8	18.8	17.9	17.3	15.7	14.5	14.8
White.....	4.5	5.4	5.4	5.6	5.4	5.3	5.6	5.4	5.3	5.1	5.3	5.4	5.3	5.0	5.0
Negro and other.....	8.2	9.9	10.0	9.9	10.4	10.4	9.4	10.4	10.6	10.5	10.5	9.6	10.7	9.4	9.9
Married men.....	2.6	3.2	3.1	3.2	3.3	3.0	3.3	3.2	3.0	2.8	2.8	2.9	2.9	2.9	2.7
Vietnam Era veterans, ² men:															
20 to 29 years.....	6.9	8.8	8.6	9.3	9.8	8.0	8.5	8.4	8.5	7.4	8.6	8.6	8.1	7.2	7.3
20 to 24 years.....	9.3	12.2	11.2	13.4	12.3	9.7	12.0	12.6	12.3	9.7	12.3	12.7	10.3	9.9	10.7
25 to 29 years.....	4.3	5.7	6.3	5.7	7.6	6.5	5.6	5.1	5.6	5.4	5.6	5.4	6.4	5.3	5.0
Nonveterans, men:															
20 to 29 years.....	6.0	7.3	7.2	8.0	6.7	7.3	8.1	7.7	7.5	7.0	7.5	7.6	7.1	6.5	6.5
20 to 24 years.....	8.0	9.5	9.2	10.5	8.6	9.3	10.3	9.6	9.8	9.0	10.1	10.0	9.1	8.0	8.6
25 to 29 years.....	3.8	4.7	4.7	4.9	4.4	4.9	5.5	5.2	4.5	4.4	4.1	4.6	4.5	4.6	3.7
Full-time workers.....	4.5	5.5	5.4	5.6	5.6	5.4	5.7	5.7	5.4	5.3	5.4	5.4	5.6	5.0	5.1
Unemployed:															
15 weeks and over ³	8	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	1.3
State insured ⁴	3.6	4.4	4.0	4.2	4.3	4.4	4.1	4.1	3.4	3.5	3.5	3.6	3.7	3.6	3.7
Labor force time lost ⁵	5.4	6.4	6.3	6.5	6.3	6.5	6.4	6.4	6.4	6.1	6.3	6.3	6.3	5.5	6.0
OCCUPATION															
White-collar workers.....	2.8	3.5	3.5	3.5	3.4	3.4	3.4	3.6	3.6	3.3	3.5	3.4	3.6	3.1	3.4
Professional and managerial.....	1.7	2.9	2.3	2.3	2.2	2.4	2.5	2.5	2.6	2.2	2.3	2.1	2.0	1.7	2.2
Sales workers.....	3.9	4.3	4.6	4.4	4.1	3.9	3.9	4.0	4.4	4.0	4.1	3.7	4.5	4.0	4.3
Clerical workers.....	4.0	4.8	4.9	4.9	4.8	4.7	4.6	4.9	4.7	4.7	4.9	4.9	5.3	4.8	4.6
Blue-collar workers.....	6.2	7.4	7.2	7.5	7.7	7.1	7.5	7.5	7.1	7.0	6.9	6.8	6.8	6.4	6.4
Craftsmen and kindred workers.....	3.8	4.7	5.1	5.3	5.3	4.7	4.6	4.8	4.3	4.4	4.0	4.4	4.7	4.5	4.3
Operatives.....	7.1	8.3	8.1	8.3	8.3	7.8	8.2	8.2	7.9	7.5	7.7	7.4	7.1	6.8	7.1
Nonfarm laborers.....	9.5	10.8	9.2	10.6	11.2	10.6	11.8	11.9	11.6	11.8	11.7	10.7	10.9	9.5	9.3
Service workers.....	5.3	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	6.6
INDUSTRY															
Nonagricultural private wage and salary workers ⁶	5.2	6.2	6.1	6.2	6.2	5.9	6.2	6.3	6.1	5.9	6.1	5.9	6.0	5.5	5.8
Construction.....	9.7	10.4	9.8	9.9	9.7	10.2	9.7	11.2	9.8	10.3	9.8	10.6	12.5	9.5	10.9
Manufacturing.....	5.6	6.8	6.7	6.8	6.9	6.2	6.6	6.9	6.4	6.0	6.2	5.8	6.0	5.6	5.7
Durable goods.....	5.7	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	5.7
Nondurable goods.....	5.4	6.5	6.5	6.8	6.8	5.8	6.3	7.1	6.0	6.0	6.1	5.9	5.7	5.5	5.6
Transportation and public utilities.....	3.2	3.8	3.1	3.3	3.6	4.3	4.4	4.1	4.1	3.9	4.0	3.7	3.5	3.1	3.6
Wholesale and retail trade.....	5.3	6.4	6.4	6.3	6.3	6.1	6.6	6.5	6.3	6.2	6.7	6.2	6.3	6.5	6.5
Finance and service industries.....	4.2	5.1	5.2	5.3	5.1	4.9	5.1	4.9	5.3	4.9	5.3	5.1	5.0	4.2	4.6
Government wage and salary workers.....	2.2	2.9	2.9	3.1	3.0	3.2	3.2	3.2	3.0	2.8	2.8	2.9	2.9	2.5	2.8
Agricultural wage and salary workers.....	7.5	7.9	7.8	8.8	8.5	7.0	9.6	7.5	8.6	8.3	6.0	6.0	8.8	7.5	6.0

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

[Numbers in thousands]

Period	Annual average		1971						1972						
	1970	1971	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Less than 5 weeks.....	2,137	2,234	2,150	2,320	2,317	2,140	2,290	2,410	2,358	2,142	2,311	2,169	2,223	2,175	2,149
5 to 14 weeks.....	1,289	1,578	1,532	1,553	1,567	1,529	1,650	1,509	1,502	1,454	1,412	1,521	1,514	1,437	1,478
15 weeks and over.....	662	1,181	1,255	1,291	1,250	1,253	1,311	1,273	1,198	1,294	1,224	1,137	1,180	1,148	1,155
15 to 26 weeks.....	427	665	704	735	683	628	741	724	636	634	591	482	587	594	658
27 weeks and over.....	235	517	551	556	567	625	570	549	562	660	633	655	593	554	497
15 weeks and over as a percent of civilian labor force.....	.8	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	1.3
Average (mean duration, in weeks).....	8.8	11.4	11.5	11.6	12.0	12.5	11.8	11.4	11.8	12.5	12.4	12.4	12.5	13.5	11.8

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*.

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					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Employment service:²													
New applications for work.....	1,005	815	779	767	663	763	679						
Nonfarm placements.....	365	315	366	353	288	317	266						
State unemployment insurance program:													
Initial claims ^{3,4}	1,152	1,468	1,277	1,043	1,048	1,336	1,623	1,643	r1,241	p 1,095	p 947	991	
Insured unemployment ⁵ (average weekly volume) ⁶	1,893	1,993	1,912	1,739	1,716	1,879	2,221	2,524	2,492	2,279	2,005	1,740	1,634
Rate of insured unemployment ⁷	3.6	3.8	3.6	3.3	3.2	3.5	4.2	4.8	4.7	4.3	3.8	3.3	3.1
Weeks of unemployment compensated.....	7,542	6,740	6,503	5,923	5,561	6,177	7,546	8,972	r8,871	p 9,372	p 7,320	6,927	
Average weekly benefit amount for total unemployment.....	\$52.09	\$55.23	\$56.08	\$56.25	\$53.46	\$53.96	\$54.58	\$55.35	r\$56.71	p \$56.63	p \$56.90	\$56.17	
Total benefits paid.....	\$446,691	\$428,002	\$433,636	\$400,329	\$367,169	\$406,905	\$489,566	\$550,902	\$589,509	\$628,936	\$472,916	\$429,206	
Unemployment compensation for ex-servicemen:^{8,6}													
Initial claims ^{9,6}	54	53	54	48	43	51	59	68	p57	p 54	p 48	47	
Insured unemployment ⁶ (average weekly volume).....	114	120	120	106	97	105	118	133	140	136	127	p.119	110
Weeks of unemployment compensated.....	506	494	525	478	409	426	498	530	p550	p 623	p 508	519	
Total benefits paid.....	\$30,117	\$30,449	\$31,552	\$29,650	\$25,012	\$26,089	\$29,180	\$29,998	\$33,580	\$38,349	\$31,668	\$31,976	
Unemployment compensation for Federal civilian employees:^{9,10}													
Initial claims ⁹	20	15	12	12	13	14	13	16	p12	p 11	p 11	12	
Insured unemployment ⁶ (average weekly volume).....	31	36	35	33	35	35	35	37	36	34	30	28	28
Weeks of unemployment compensated.....	126	r142	157	148	135	144	156	147	p146	p 157	p 121	122	
Total benefits paid.....	\$7,843	r\$8,605	\$9,261	r\$9,026	\$8,224	\$8,960	\$9,811	\$8,755	\$9,008	\$9,911	\$7,674	\$7,445	
Railroad unemployment insurance:													
Applications ¹¹	45	89	98	100	48	19	7	8	4	4	2	2	10
Insured unemployment (average weekly volume).....	13	15	32	33	27	48	33	36	27	26	23	15	14
Number of payments ¹²	68	99	105	163	124	106	857	87	63	64	48	40	33
Average amount of benefit payment ¹³	\$58.97	\$46.07	\$83.28	\$69.35	\$61.95	p\$100.32	\$101.32	\$97.79	\$99.11	\$98.70	\$88.74	\$91.27	\$94.84
Total benefits paid ¹⁴	\$4,159	\$3,800	\$8,698	\$11,134	\$7,616	\$9,930	\$8,891	\$8,007	\$6,212	\$5,983	\$4,113	\$3,462	\$2,839
All programs:¹⁵													
Insured unemployment ⁶	2,332	2,431	2,349	2,174	2,129	2,311	2,666	3,097	3,123	p 2,923	p 2,431	2,105	1,952

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.

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	7,664	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	June 1971	May 1972	June 1972 ^p	State	June 1971	May 1972	June 1972 ^p
Alabama	1,028.0	1,035.1	1,040.1	Montana	212.5	208.6	213.8
Alaska	102.2	100.7	108.3	Nevaska	491.4	501.3	506.2
Arizona	576.7	621.1	620.4	Nevada	212.6	215.1	220.1
Arkansas	550.4	554.7	565.0	New Hampshire	265.4	262.2	272.8
California	6,966.0	7,064.6	7,137.9	New Jersey	2,638.8	2,609.0	2,654.0
Colorado	774.6	798.4	811.7	New Mexico	306.4	317.6	323.2
Connecticut	1,181.6	1,180.1	1,188.7	New York	7,108.5	6,968.4	7,027.1
Delaware	216.1	216.8	219.1	North Carolina	1,790.1	1,836.3	1,852.9
District of Columbia	694.8	683.7	688.5	North Dakota	167.7	169.3	171.5
Florida	2,199.1	2,286.3	2,283.4	Ohio	3,893.1	3,880.7	3,915.8
Georgia	1,580.4	1,602.5	1,615.7	Oklahoma	783.5	805.7	809.8
Hawaii	309.7	303.2	312.4	Oregon	740.2	757.6	778.8
Idaho	217.6	220.6	226.4	Pennsylvania	4,311.8	4,322.5	4,361.3
Illinois	4,331.1	4,293.8	4,351.3	Rhode Island	343.3	339.3	344.1
Indiana	1,849.4	1,878.3	1,890.8	South Carolina	862.5	895.9	900.6
Iowa	893.5	911.3	923.7	South Dakota	183.8	182.2	188.2
Kansas	672.6	686.1	690.7	Tennessee	1,361.1	1,401.9	1,412.2
Kentucky	934.3	953.5	954.5	Texas	3,685.2	3,767.7	3,781.5
Louisiana	1,053.6	1,075.4	1,078.1	Utah	374.7	388.2	388.6
Maine	338.1	333.6	344.5	Vermont	148.9	148.8	152.1
Maryland	1,334.2	1,350.3	1,365.7	Virginia	1,515.3	1,543.0	1,567.8
Massachusetts	2,275.2	2,273.0	2,293.2	Washington	1,067.6	1,079.9	1,100.3
Michigan	3,007.6	3,034.7	3,046.7	West Virginia	532.4	539.2	529.3
Minnesota	1,322.1	1,330.0	1,340.1	Wisconsin	1,541.2	1,551.9	1,574.8
Mississippi	592.2	609.3	609.7	Wyoming	116.7	115.6	122.5
Missouri	1,644.3	1,640.3	1,651.6				

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 group¹

[In thousands]

Industry division and group	Annual average		1971								1972						
	1970	1971	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^p	July ^p		
TOTAL	70,616	70,699	70,452	70,542	71,184	71,379	71,638	72,034	70,643	70,776	71,374	71,928	72,533	73,361	72,413		
MINING	622	601	613	625	623	522	524	605	602	596	599	597	602	612	613		
CONTRACT CONSTRUCTION	3,345	3,259	3,480	3,509	3,471	3,478	3,410	3,177	2,965	2,880	2,974	3,117	3,246	3,401	3,399		
MANUFACTURING	19,369	18,610	18,448	18,651	18,840	18,709	18,693	18,595	18,440	18,537	18,653	18,713	18,824	19,137	18,766		
Production workers ²	14,033	13,487	13,315	13,524	13,738	13,616	13,605	13,514	13,373	13,465	13,572	13,626	13,723	14,005	13,639		
Durable goods	11,198	10,590	10,487	10,485	10,657	10,605	10,612	10,575	10,522	10,590	10,671	10,732	10,811	10,962	10,722		
Production workers ²	8,043	7,612	7,512	7,514	7,695	7,650	7,660	7,629	7,581	7,648	7,723	7,781	7,852	7,987	7,750		
Ordnance and accessories.....	242.1	193.0	189.9	189.9	190.2	188.3	187.3	185.5	184.2	183.0	182.9	183.9	185.5	189.5	192.7		
Lumber and wood products.....	572.5	579.8	596.4	602.3	601.5	601.8	598.1	591.8	584.5	587.3	591.8	596.0	604.5	628.8	627.9		
Furniture and fixtures.....	459.9	459.1	452.1	459.1	468.3	472.8	475.8	478.3	477.8	479.3	481.2	482.0	482.7	491.4	481.2		
Stone, clay, and glass products.....	638.5	628.5	638.6	643.8	644.0	637.7	636.3	627.3	620.5	621.7	631.3	641.1	652.6	670.5	667.2		
Primary metal industries	1,314.8	1,224.6	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	1,232.0	1,240.8	1,222.8		
Fabricated metal products.....	1,379.9	1,331.9	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	1,365.5	1,386.9	1,366.6		
Machinery, except electrical.....	1,976.9	1,791.0	1,772.4	1,767.6	1,788.4	1,774.4	1,778.9	1,786.2	1,782.3	1,806.6	1,808.2	1,814.2	1,827.8	1,849.2	1,835.2		
Electrical equipment.....	1,922.9	1,787.8	1,758.7	1,777.2	1,803.2	1,800.2	1,806.7	1,805.8	1,793.6	1,800.8	1,816.9	1,811.3	1,822.1	1,848.0	1,809.8		
Transportation equipment.....	1,806.8	1,751.4	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	1,774.1	1,775.5	1,652.0		
Instruments and related products.....	458.6	432.0	430.2	432.4	434.8	436.2	436.7	435.3	435.1	436.8	438.1	440.6	444.9	452.8	450.2		
Miscellaneous manufacturing.....	425.7	410.6	402.1	421.4	428.1	429.6	425.8	409.8	400.2	407.3	412.7	416.7	418.8	428.8	416.6		
Nondurable goods	8,171	8,020	7,961	8,166	8,183	8,104	8,081	8,020	7,918	7,947	7,982	7,981	8,013	8,175	8,044		
Production workers ²	5,990	5,875	5,803	6,010	6,043	5,966	5,945	5,885	5,792	5,817	5,849	5,845	5,871	6,018	5,889		
Food and kindred products.....	1,781.7	1,753.5	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	1,685.7	1,758.8	1,792.6		
Tobacco manufactures.....	81.7	73.6	61.9	77.7	84.2	80.0	76.5	73.4	70.2	68.4	67.2	66.0	64.8	65.2	66.9		
Textile mill products.....	977.6	961.7	948.6	964.7	964.5	965.5	973.7	976.3	972.3	976.6	985.0	985.6	989.8	1,007.5	978.7		
Apparel and other textile products.....	1,372.2	1,361.5	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	1,361.3	1,374.5	1,285.4		
Paper and allied products.....	706.5	687.5	677.7	688.1	696.7	691.9	693.5	693.5	684.3	683.9	687.1	690.7	695.7	710.7	700.6		
Printing and publishing.....	1,106.8	1,087.7	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	1,091.3	1,096.6	1,087.2		
Chemicals and allied products.....	1,051.3	1,014.8	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	1,003.1	1,013.8	1,011.4		
Petroleum and coal products.....	190.4	189.8	193.7	193.2	191.9	190.4	189.1	188.6	183.2	186.8	186.8	187.8	189.4	193.0	194.0		
Rubber and plastics products, nec.....	580.4	582.0	577.4	584.5	595.9	597.4	597.0	597.8	597.5	597.5	603.0	602.8	612.8	634.8	623.5		
Leather and leather products.....	322.2	307.9	300.0	313.2	305.5	304.1	308.6	308.0	306.1	309.5	308.2	307.7	312.9	319.8	303.9		
TRANSPORTATION AND PUBLIC UTILITIES	4,504	4,481	4,534	4,486	4,509	4,455	4,447	4,469	4,430	4,407	4,482	4,486	4,521	4,582	4,579		
WHOLESALE AND RETAIL TRADE	14,922	15,174	15,132	15,151	15,242	15,327	15,537	16,089	15,266	15,147	15,274	15,460	15,592	15,788	15,703		
Wholesale trade.....	3,824	3,855	3,877	3,886	3,880	3,896	3,905	3,915	3,871	3,866	3,894	3,902	3,926	4,001	4,011		
Retail trade.....	11,098	11,319	11,255	11,265	11,362	11,431	11,632	12,174	11,395	11,281	11,380	11,558	11,666	11,787	11,692		
FINANCE, INSURANCE, AND REAL ESTATE	3,690	3,800	3,867	3,865	3,829	3,826	3,836	3,841	3,833	3,844	3,867	3,885	3,913	3,965	3,986		
SERVICES	11,630	11,917	12,040	11,994	11,986	12,020	12,032	12,029	11,926	12,031	12,131	12,279	12,401	12,519	11,573		
Hotels and other lodging places.....	761.9	774.2	878.1	882.9	812.1	759.0	736.0	746.8	750.3	760.6	771.4	784.5	809.4	872.8		
Personal services.....	992.3	946.1	939.6	932.2	933.3	939.9	946.4	935.3	922.1	919.6	921.4	925.9	930.6	934.6		
Medical and other health services.....	3,052.4	3,239.6	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	3,396.9	3,439.5		
Educational services.....	1,136.2	1,158.6	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	1,230.1	1,125.0		
GOVERNMENT	12,535	12,858	12,338	12,261	12,684	13,042	13,159	13,229	13,181	13,334	13,394	13,391	13,434	13,357	12,794		
Federal.....	2,705	2,664	2,688	2,690	2,666	2,659	2,655	2,684	2,654	2,656	2,656	2,664	2,662	2,659	2,650		
State and local.....	9,830	10,194	9,650	9,571	10,018	10,383	10,504	10,545	10,527	10,678	10,738	10,727	10,772	10,698	10,144		

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.

14. Employees on nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted ¹

[In thousands]

Industry division and group	1971						1972						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^P	July ^P
TOTAL	70,531	70,529	70,853	70,848	71,042	71,185	71,584	71,729	72,030	72,263	72,558	72,647	72,565
MINING	597	609	616	521	525	607	616	612	613	603	602	598	597
CONTRACT CONSTRUCTION	3,228	3,219	3,250	3,290	3,320	3,245	3,320	3,236	3,272	3,233	3,256	3,242	3,153
MANUFACTURING	18,533	18,457	18,616	18,560	18,603	18,566	18,609	18,690	18,777	18,870	18,973	18,995	18,898
Production workers ²	13,440	13,371	13,515	13,462	13,505	13,474	13,527	13,597	13,677	13,770	13,852	13,884	13,802
Durable goods	10,552	10,485	10,597	10,561	10,572	10,548	10,574	10,637	10,696	10,770	10,857	10,862	10,834
Production workers ²	7,594	7,534	7,630	7,600	7,614	7,594	7,629	7,685	7,741	7,815	7,886	7,897	7,872
Ordnance and accessories.....	191	191	190	189	186	184	183	182	183	185	187	190	193
Lumber and wood products.....	579	583	591	597	601	600	604	603	604	608	608	608	610
Furniture and fixtures.....	461	456	465	467	470	474	478	481	484	486	489	490	491
Stone, clay, and glass products.....	625	627	633	631	634	632	640	641	645	646	655	657	653
Primary metal industries.....	1,226	1,156	1,182	1,187	1,178	1,176	1,186	1,187	1,213	1,219	1,226	1,218	1,209
Fabricated metal products.....	1,335	1,331	1,346	1,341	1,339	1,331	1,336	1,345	1,356	1,365	1,377	1,376	1,383
Machinery, except electrical.....	1,770	1,775	1,794	1,791	1,797	1,793	1,784	1,798	1,792	1,802	1,826	1,833	1,833
Electrical equipment.....	1,773	1,772	1,791	1,793	1,791	1,793	1,792	1,803	1,812	1,828	1,841	1,841	1,850
Transportation equipment.....	1,751	1,754	1,758	1,720	1,732	1,719	1,716	1,736	1,743	1,764	1,778	1,763	1,762
Instruments and related products.....	431	430	435	437	436	434	436	438	439	441	447	451	451
Miscellaneous manufacturing.....	410	410	412	408	408	412	419	423	425	426	423	426	425
Nondurable goods	7,981	7,972	8,019	7,999	8,031	8,018	8,035	8,053	8,081	8,100	8,116	8,133	8,064
Production workers ²	5,846	5,837	5,885	5,862	5,891	5,880	5,880	5,912	5,936	5,955	5,966	5,987	5,930
Food and kindred products.....	1,762	1,748	1,755	1,728	1,750	1,748	1,757	1,749	1,757	1,751	1,750	1,761	1,757
Tobacco manufactures.....	69	70	72	69	71	69	71	71	73	75	74	74	75
Textile mill products.....	959	959	960	963	970	974	979	981	988	989	995	995	989
Apparel and other textile products.....	1,349	1,351	1,361	1,365	1,370	1,357	1,353	1,365	1,365	1,376	1,364	1,360	1,329
Paper and allied products.....	676	681	694	693	691	690	688	689	692	697	702	702	699
Printing and publishing.....	1,083	1,080	1,082	1,085	1,084	1,084	1,090	1,090	1,092	1,093	1,097	1,096	1,088
Chemicals and allied products.....	1,008	1,004	1,008	1,008	1,008	1,005	1,003	1,003	1,002	1,000	1,006	1,007	1,001
Petroleum and coal products.....	188	188	190	189	189	188	188	192	191	190	190	189	188
Rubber and plastics products, nec.....	584	582	591	594	592	594	600	604	612	617	623	633	631
Leather and leather products.....	303	309	306	305	306	306	306	309	309	312	315	316	307
TRANSPORTATION AND PUBLIC UTILITIES	4,476	4,428	4,460	4,442	4,434	4,465	4,502	4,479	4,536	4,522	4,539	4,532	4,520
WHOLESALE AND RETAIL TRADE	15,158	15,223	15,273	15,270	15,278	15,315	15,447	15,495	15,518	15,647	15,671	15,729	15,730
Wholesale trade.....	3,835	3,844	3,865	3,873	3,874	3,884	3,902	3,913	3,941	3,949	3,970	3,977	3,967
Retail trade.....	11,323	11,379	11,408	11,397	11,404	11,431	11,545	11,582	11,577	11,698	11,701	11,752	11,763
FINANCE, INSURANCE, AND REAL ESTATE	3,806	3,804	3,821	3,834	3,851	3,860	3,872	3,879	3,890	3,897	3,921	3,934	3,923
SERVICES	11,921	11,946	11,962	11,996	12,044	12,089	12,120	12,177	12,217	12,254	12,303	12,358	12,449
Hotels and other lodging places.....	755	760	796	784	785	801	813	813	814	806	813	834	-----
Personal services.....	933	935	938	937	941	932	293	933	929	927	926	920	-----
Medical and other health services.....	3,241	3,260	3,283	3,297	3,306	3,323	3,336	3,252	3,369	3,385	3,414	3,416	-----
Educational services.....	1,142	1,139	1,160	1,165	1,168	1,165	1,160	1,171	1,185	1,187	1,183	1,172	-----
GOVERNMENT	12,812	12,843	12,855	12,935	12,987	13,038	13,098	13,161	13,207	13,237	13,293	13,259	13,295
Federal.....	2,643	2,650	2,674	2,675	2,669	2,669	2,675	2,672	2,669	2,669	2,670	2,625	2,606
State and local.....	10,169	10,193	10,181	10,260	10,318	10,369	10,423	10,489	10,538	10,568	10,623	10,634	10,689

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	4.0	4.8	5.3	p 5.3						
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	3.6	4.1	p 4.1						
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	3.8	4.4	p 4.4						
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	2.2	2.2	p 2.2						
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	.9	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	1.0	.8	p 1.3						

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).

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 group¹

[Per 100 employees]

Major industry group	Accession rates						Separation rates								
	Total			New hires			Total			Quits			Layoffs		
	June 1971	May 1972	June 1972 ^p	June 1971	May 1972	June 1972 ^p	June 1971	May 1972	June 1972 ^p	June 1971	May 1972	June 1972 ^p	June 1971	May 1972	June 1972 ^p
MANUFACTURING	4.9	4.8	5.3	3.5	3.6	4.1	3.8	3.8	4.4	1.8	2.2	2.2	1.2	.8	1.3
Seasonally adjusted ²	3.7	4.7	4.0	2.4	3.5	2.9	4.1	4.1	4.8	1.9	2.3	2.3	1.5	1.0	1.6
Durable goods	4.4	4.5	4.7	3.0	3.4	3.7	3.5	3.4	4.2	1.5	1.8	1.9	1.2	.7	1.4
Ordnance and accessories.....	2.5	3.2	-----	1.3	2.0	-----	2.2	2.0	-----	.8	.7	-----	.7	.7	-----
Lumber and wood products.....	8.3	7.5	8.3	6.8	6.4	7.0	4.8	5.6	5.2	3.2	4.0	3.8	.7	.6	.5
Furniture and fixtures.....	5.7	7.0	6.3	4.8	6.2	5.7	4.5	5.9	5.6	2.7	4.0	3.5	.8	.5	1.0
Stone, clay, and glass products.....	5.5	5.7	6.2	4.3	4.3	5.2	3.7	3.6	4.2	1.9	2.2	2.3	.9	.6	.8
Primary metal industries.....	3.4	3.8	3.6	2.2	2.3	2.6	3.1	2.5	2.7	1.1	1.0	1.2	1.1	.6	.6
Fabricated metal products.....	5.3	5.2	-----	3.8	4.0	-----	4.0	3.9	-----	1.6	2.1	-----	1.4	.9	-----
Machinery, except electrical.....	3.1	3.4	3.9	1.9	2.5	3.1	2.8	2.6	3.2	1.0	1.2	1.5	1.0	.6	.9
Electrical equipment.....	3.6	3.9	-----	2.1	2.8	-----	3.5	2.9	-----	1.2	1.5	-----	1.4	.4	-----
Transportation equipment.....	4.1	4.2	-----	2.4	2.8	-----	3.6	3.3	-----	1.2	1.4	-----	1.6	1.0	-----
Instruments and related products.....	3.8	3.5	4.2	2.9	2.8	3.7	2.6	2.4	2.8	1.2	1.4	1.6	.6	.3	.5
Miscellaneous manufacturing.....	7.1	6.3	6.3	5.8	5.0	5.0	4.7	4.9	4.9	2.3	2.9	2.8	1.4	1.0	1.2
Nondurable goods	5.6	5.2	6.0	4.1	3.9	4.7	4.2	4.5	4.6	2.2	2.6	2.7	1.2	1.0	1.1
Food and kindred products.....	8.6	6.6	9.4	6.1	4.5	6.8	5.1	5.4	5.7	2.6	2.7	3.0	1.8	2.0	1.8
Tobacco manufactures.....	4.7	2.8	3.8	2.4	1.9	2.3	2.4	2.6	2.1	1.1	1.3	1.2	.5	.5	.3
Textile mill products.....	5.9	6.9	6.4	4.7	5.7	5.4	5.1	6.0	5.6	3.3	4.4	4.1	.8	.5	.5
Apparel and other textile products.....	5.8	6.5	6.4	4.0	4.6	4.8	5.8	6.0	6.0	2.7	3.6	3.4	2.2	1.6	1.6
Paper and allied products.....	4.3	3.8	4.5	3.3	3.0	3.7	2.6	2.7	2.9	1.4	1.5	1.6	.5	.4	.5
Printing and publishing.....	3.8	3.2	3.9	2.9	2.5	3.3	3.1	3.0	3.5	1.6	1.7	2.0	.9	.7	.9
Chemicals and allied products.....	3.0	2.5	3.1	2.3	1.9	2.5	2.3	2.2	2.4	.9	1.0	1.0	.8	.4	.7
Petroleum and coal products.....	3.4	2.7	3.2	2.9	2.3	2.7	1.8	1.8	1.8	.8	.6	.7	.5	.6	.6
Rubber and plastics products, nec.....	5.4	5.6	6.2	4.0	4.5	5.4	3.8	4.4	4.7	2.1	2.7	3.0	.7	.7	.7
Leather and leather products.....	6.1	7.9	7.0	4.6	6.2	5.6	5.1	6.4	5.9	2.9	4.2	3.9	1.2	1.0	1.1

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 manufacturing¹

Industry	Annual average		1971							1972					
	1970	1971	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^p
Job vacancies in manufacturing (number in thousands).....	132	88	90	90	106	98	90	79	78	90	97	111	124	127	122
JOB VACANCY RATES²															
Manufacturing.....	0.7	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	0.6
Durable goods industries.....	.6	.4	.4	.4	.5	.5	.4	.4	.4	.5	.5	.5	.6	.6	.6
Nondurable goods industries.....	.7	.6	.6	.6	.6	.6	.5	.5	.5	.5	.6	.6	.7	.7	.7
Selected durable goods industries:															
Primary metal industries.....	.5	.2	.2	.2	.2	.2	.2	.1	.1	.2	.2	.2	.3	.3	.2
Machinery, except electrical.....	.7	.4	.4	.4	.4	.5	.4	.4	.4	.5	.5	.6	.7	.7	.7
Electrical equipment and supplies.....	.7	.5	.5	.5	.6	.5	.6	.5	.5	.6	.7	.7	.8	.8	.7
Transportation equipment.....	.5	.4	.4	.5	.6	.5	.4	.4	.3	.4	.5	.5	.7	.6	.7
Instruments and related products.....	1.0	.7	.9	.8	.8	.8	.7	.6	.6	.7	.7	.9	1.1	1.1	1.3
Selected nondurable goods industries:															
Textile mill products.....	.9	.8	.9	.8	1.0	.9	.9	.8	.8	.8	.9	1.1	1.2	1.2	1.0
Apparel and other textile products.....	1.4	1.2	1.3	1.3	1.4	1.2	1.2	1.0	1.1	1.2	1.2	1.4	1.3	1.4	1.3
Printing and publishing.....	.6	.4	.3	.3	.4	.3	.4	.3	.3	.3	.3	.4	.4	.4	.3
Chemicals and allied products.....	.7	.4	.4	.4	.4	.4	.4	.3	.3	.4	.4	.5	.6	.5	.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	1.260			
1950				44.55	40.5	1.100	50.52	37.7	1.340			
1951				47.79	40.5	1.18	54.67	37.7	1.45			
1952				49.20	40.0	1.23	57.08	37.8	1.51			
1953				51.35	39.5	1.30	59.57	37.7	1.58			
1954				53.33	39.5	1.35	62.04	37.6	1.65			
1955				55.16	39.4	1.40	63.92	37.6	1.70			
1956				57.48	39.1	1.47	65.68	36.9	1.78			
1957				59.60	38.7	1.54	67.53	36.7	1.84			
1958				61.76	38.6	1.60	70.12	37.1	1.89			
1959 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	\$118.37	41.1	\$2.88	74.28	37.9	1.96	85.79	37.3	2.30	\$69.84	36.0	\$1.94
1965	125.14	41.3	3.03	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	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^P	July ^P
TOTAL PRIVATE	37.1	37.0	37.3	37.4	37.0	37.0	37.0	37.3	36.7	36.8	36.9	37.0	36.9	37.5	37.7
MINING	42.7	42.4	42.6	42.3	42.1	42.8	42.3	42.8	42.5	42.0	42.2	42.4	42.4	43.1	42.7
CONTRACT CONSTRUCTION	37.4	37.3	38.1	38.3	36.9	38.2	37.9	36.5	35.8	36.0	36.8	36.6	36.8	37.7	38.3
MANUFACTURING	39.8	39.9	39.8	39.8	39.8	40.0	40.2	40.7	39.8	40.1	40.3	40.5	40.5	40.9	40.5
Overtime hours.....	3.0	2.9	2.9	3.0	3.1	3.1	3.1	3.2	2.8	3.0	3.1	3.3	3.3	3.5	3.4
Durable goods	40.3	40.4	40.1	40.0	40.0	40.5	40.7	41.4	40.4	40.7	41.0	41.2	41.2	41.6	41.0
Overtime hours.....	2.9	2.9	2.7	2.8	3.0	3.0	3.0	3.2	2.8	3.0	3.2	3.4	3.4	3.6	3.5
Ordnance and accessories.....	40.6	41.7	41.3	41.7	41.9	41.8	42.0	42.4	41.7	42.2	42.2	42.2	42.0	42.4	42.1
Lumber and wood products.....	39.7	40.3	40.4	40.5	40.4	41.0	40.6	40.8	40.0	40.4	40.9	41.1	41.3	41.7	41.0
Furniture and fixtures.....	39.2	39.8	39.7	40.4	40.0	40.4	40.4	40.9	39.7	39.8	40.2	40.2	40.2	41.1	40.4
Stone, clay, and glass products.....	41.2	41.6	42.0	42.3	41.9	42.1	41.9	41.6	40.9	41.2	41.8	41.9	42.0	42.5	42.5
Primary metal industries.....	40.5	40.4	40.7	38.8	39.5	39.7	39.9	41.0	40.7	41.0	41.3	41.5	41.5	41.8	41.5
Fabricated metal products.....	40.7	40.3	40.3	40.3	39.9	40.3	40.6	41.3	40.1	40.4	40.6	40.9	41.1	41.5	41.1
Machinery, except electrical.....	41.1	40.6	40.3	40.3	40.6	40.8	41.1	41.9	41.0	41.4	41.7	41.8	41.7	42.2	41.7
Electrical equipment.....	39.9	39.9	39.6	40.0	40.0	40.1	40.4	40.9	40.0	40.2	40.3	40.4	40.3	40.7	40.0
Transportation equipment.....	40.3	40.7	39.4	39.3	39.1	41.0	41.1	42.5	40.6	41.2	41.7	42.0	42.1	42.1	40.8
Instruments and related products.....	40.1	39.8	39.5	39.6	40.0	40.1	40.5	40.8	40.1	40.4	40.3	40.5	40.5	40.8	40.1
Miscellaneous manufacturing.....	38.7	38.9	38.6	39.2	38.9	39.3	39.5	39.5	38.7	39.2	39.3	39.5	39.2	39.6	38.6
Nondurable goods	39.1	39.3	39.4	39.5	39.5	39.4	39.6	39.8	39.1	39.2	39.4	39.5	39.5	39.9	39.9
Overtime hours.....	3.0	3.0	3.0	3.2	3.4	3.2	3.1	3.1	2.9	3.0	3.1	3.1	3.1	3.4	3.3
Food and kindred products.....	40.5	40.3	40.6	40.7	40.9	40.1	40.1	40.6	39.8	39.6	40.0	40.0	40.2	40.7	41.1
Tobacco manufactures.....	37.8	37.0	39.3	37.4	37.8	36.0	35.7	36.0	34.1	33.1	33.3	33.1	33.5	34.8	33.7
Textile mill products.....	39.9	40.6	40.1	40.8	40.6	41.0	41.4	41.5	40.8	41.0	41.3	41.3	41.1	41.7	41.1
Apparel and other textile products.....	35.3	35.5	35.8	36.0	35.5	35.9	36.3	35.9	35.3	35.9	36.0	35.9	35.6	36.0	36.2
Paper and allied products.....	41.9	42.1	42.4	42.5	42.2	42.3	42.4	42.8	41.9	42.2	42.4	42.6	42.5	42.9	42.8
Printing and publishing.....	37.7	37.6	37.6	37.7	37.7	37.6	37.6	38.0	37.1	37.2	37.6	37.8	37.6	38.0	38.2
Chemicals and allied products.....	41.6	41.6	41.3	41.3	42.1	41.5	41.6	41.9	41.6	41.6	41.8	41.9	41.6	42.0	41.9
Petroleum and coal products.....	42.7	42.4	43.0	42.6	42.8	42.6	42.1	42.3	41.7	41.4	41.6	42.5	42.3	42.5	42.5
Rubber and plastics products, nec.....	40.3	40.3	40.1	40.3	40.5	40.6	40.8	41.2	40.6	40.7	40.8	41.1	41.1	41.5	40.7
Leather and leather products.....	37.2	37.7	38.2	37.6	36.9	37.7	38.4	38.7	38.2	38.5	37.9	38.0	38.7	39.1	38.1
TRANSPORTATION AND PUBLIC UTILITIES	40.5	40.2	38.4	40.7	40.8	40.5	40.6	40.6	39.8	40.2	40.2	39.9	40.3	40.6	40.9
WHOLESALE AND RETAIL TRADE	35.3	35.1	36.1	36.0	35.2	35.0	34.9	35.5	34.7	34.6	34.8	34.8	34.8	35.6	36.2
Wholesale trade.....	40.0	39.8	39.9	39.9	39.7	39.8	39.8	40.3	39.6	39.7	39.8	39.8	39.8	40.0	40.1
Retail trade.....	33.8	33.7	34.8	34.7	33.7	33.5	33.4	34.1	33.2	33.0	33.2	33.3	33.3	34.2	34.9
FINANCE, INSURANCE, AND REAL ESTATE	36.8	37.0	37.1	37.3	36.9	37.0	37.0	37.0	37.3	37.1	37.1	37.3	37.0	37.2	37.5
SERVICES	34.4	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	35.0

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).

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 workers ¹ on private nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted

Industry division and group	1971						1972						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^p	July ^p
TOTAL PRIVATE	36.9	36.9	36.7	37.0	37.1	37.2	37.0	37.2	37.1	37.3	37.0	37.3	37.3
MINING	42.2	42.0	41.9	42.5	42.3	42.6	43.0	42.5	42.9	42.3	42.4	42.8	42.3
CONTRACT CONSTRUCTION	37.1	37.1	35.7	37.6	39.0	36.8	37.4	37.3	37.5	36.7	36.6	36.9	37.3
MANUFACTURING	40.0	39.8	39.5	39.8	40.1	40.3	40.0	40.5	40.4	40.8	40.5	40.7	40.7
Overtime hours.....	3.0	2.9	2.8	3.0	3.0	3.1	2.9	3.2	3.3	3.6	3.4	3.4	3.5
Durable goods	40.4	40.0	39.7	40.3	40.6	40.9	40.6	41.1	41.0	41.5	41.2	41.4	41.3
Overtime hours.....	2.8	2.8	2.7	2.8	2.9	3.0	2.9	3.2	3.3	3.7	3.5	3.5	3.6
Ordnance and accessories.....	41.9	41.9	41.7	41.8	41.9	42.0	41.2	42.4	42.3	42.4	42.0	42.2	42.7
Lumber and wood products.....	40.5	40.2	40.1	40.7	40.8	40.8	40.9	40.9	40.9	41.1	40.9	41.2	41.1
Furniture and fixtures.....	40.1	39.9	39.4	39.7	40.0	39.9	40.3	40.7	40.5	40.8	40.6	40.9	40.8
Stone, clay, and glass products.....	41.8	41.8	41.4	41.8	41.9	41.6	41.8	42.0	42.2	41.9	41.8	42.2	42.3
Primary metal industries.....	40.6	38.8	39.5	40.1	40.1	41.0	40.6	41.1	41.3	41.4	41.4	41.5	41.4
Fabricated metal products.....	40.7	40.2	39.3	40.1	40.4	40.9	40.4	41.0	40.8	41.2	41.1	41.2	41.5
Machinery, except electrical.....	40.7	40.8	40.5	40.8	41.1	41.3	41.0	41.4	41.4	41.8	41.7	42.2	42.2
Electrical equipment.....	40.1	40.0	39.6	39.9	40.1	40.3	40.1	40.7	40.3	40.8	40.4	40.5	40.5
Transportation equipment.....	39.5	39.9	38.5	40.5	40.5	41.7	40.7	41.9	42.1	42.9	42.0	42.0	40.9
Instruments and related products.....	39.8	39.8	39.7	39.9	40.2	40.4	40.3	40.8	40.3	40.7	40.7	40.7	40.4
Miscellaneous manufacturing.....	39.2	39.2	38.7	38.9	39.1	39.2	39.0	39.6	39.3	39.6	39.3	39.5	39.2
Nondurable goods	39.3	39.3	39.1	39.3	39.5	39.5	39.4	39.6	39.6	39.8	39.7	39.8	39.8
Overtime hours.....	3.0	3.1	3.1	3.0	3.0	3.0	3.1	3.2	3.3	3.3	3.2	3.4	3.3
Food and kindred products.....	40.2	40.1	40.1	40.0	39.9	40.4	40.1	40.2	40.6	40.7	40.4	40.6	40.7
Tobacco manufactures.....	39.6	37.1	36.6	34.7	35.6	35.6	34.8	33.6	34.4	33.8	33.9	34.3	34.0
Textile mill products.....	40.3	40.7	40.4	40.8	41.1	41.0	41.3	41.2	41.4	41.7	41.3	41.5	41.3
Apparel and other textile products.....	35.8	35.7	35.4	36.0	36.2	35.9	35.7	36.2	35.8	36.0	35.6	35.9	36.2
Paper and allied products.....	42.4	42.4	41.9	42.0	42.3	42.3	42.1	42.6	42.7	43.0	42.6	42.9	42.8
Printing and publishing.....	37.6	37.5	37.4	37.5	37.6	37.5	37.5	37.5	37.6	38.0	37.7	38.0	38.2
Chemicals and allied products.....	41.4	41.5	42.1	41.5	41.4	41.7	41.8	41.8	41.8	41.7	41.6	42.0	42.0
Petroleum and coal products.....	42.6	43.4	42.9	42.4	41.8	42.7	42.2	42.0	41.7	41.9	41.6	42.2	42.1
Rubber and plastics products, nec.....	40.3	40.1	40.0	40.3	40.6	40.9	40.8	41.0	41.2	41.5	41.2	41.5	40.9
Leather and leather products.....	37.7	37.6	37.3	37.9	38.3	37.9	38.0	38.5	38.2	39.1	38.7	38.5	37.6
TRANSPORTATION AND PUBLIC UTILITIES ...	38.0	40.5	40.6	40.3	40.4	40.5	40.0	40.4	40.6	40.3	40.5	40.5	40.5
WHOLESALE AND RETAIL TRADE	35.3	35.1	35.1	35.2	35.2	35.3	35.1	35.1	35.1	35.2	35.1	35.4	35.4
Wholesale trade.....	39.6	39.7	39.7	39.8	39.9	40.0	39.7	40.0	39.9	40.0	40.0	39.9	39.8
Retail trade.....	33.8	33.6	33.6	33.8	33.7	33.9	33.7	33.5	33.6	33.7	33.7	33.9	33.9
FINANCE, INSURANCE, AND REAL ESTATE ...	37.1	37.3	37.0	36.9	36.9	37.0	37.3	37.1	37.1	37.3	37.1	37.2	37.5
SERVICES	34.4	34.3	34.2	34.2	34.1	34.2	34.1	34.2	34.0	34.1	34.0	34.2	34.6

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	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^p	July ^p
TOTAL PRIVATE	\$3.22	\$3.43	\$3.43	\$3.45	\$3.49	\$3.49	\$3.48	\$3.51	\$3.54	\$3.55	\$3.57	\$3.60	\$3.61	\$3.61	\$3.62
MINING	3.84	4.05	4.05	4.10	4.15	3.92	3.92	4.27	4.32	4.31	4.30	4.35	4.32	4.33	4.35
CONTRACT CONSTRUCTION	5.25	5.72	5.68	5.75	5.86	5.90	5.90	5.93	5.99	5.98	5.97	5.99	6.03	5.96	5.96
MANUFACTURING	3.36	3.57	3.57	3.56	3.60	3.60	3.60	3.69	3.71	3.72	3.74	3.77	3.79	3.79	3.79
Durable goods.....	3.56	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	4.02
Ordnance and accessories.....	3.61	3.85	3.89	3.88	3.90	3.91	3.88	3.98	3.98	4.04	4.02	4.06	4.07	4.09	4.11
Lumber and wood products.....	2.96	3.14	3.19	3.19	3.21	3.21	3.20	3.19	3.21	3.22	3.25	3.29	3.31	3.31	3.31
Furniture and fixtures.....	2.77	2.90	2.91	2.94	2.95	2.93	2.93	2.98	2.98	3.01	3.03	3.03	3.03	3.05	3.06
Stone, clay, and glass products.....	3.40	3.66	3.70	3.73	3.75	3.73	3.71	3.74	3.76	3.78	3.82	3.84	3.87	3.89	3.91
Primary metal industries.....	3.93	4.23	4.19	4.29	4.35	4.35	4.36	4.50	4.54	4.55	4.57	4.60	4.62	4.64	4.65
Fabricated metal products.....	3.53	3.74	3.74	3.75	3.77	3.77	3.78	3.87	3.88	3.89	3.92	3.95	3.96	3.98	3.97
Machinery, except electrical.....	3.77	3.99	4.00	4.02	4.04	4.04	4.04	4.16	4.16	4.19	4.21	4.23	4.24	4.26	4.24
Electrical equipment.....	3.28	3.50	3.51	3.50	3.52	3.51	3.52	3.60	3.60	3.62	3.63	3.64	3.66	3.67	3.69
Transportation equipment.....	4.06	4.44	4.39	4.37	4.42	4.44	4.44	4.62	4.60	4.65	4.67	4.72	4.74	4.73	4.68
Instruments and related products.....	3.35	3.53	3.55	3.55	3.57	3.55	3.56	3.62	3.67	3.69	3.70	3.71	3.72	3.71	3.72
Miscellaneous manufacturing.....	2.82	2.96	2.94	2.95	2.96	2.96	2.97	3.05	3.07	3.06	3.06	3.08	3.09	3.08	3.08
Nondurable goods.....	3.08	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	3.48
Food and kindred products.....	3.16	3.38	3.39	3.34	3.38	3.38	3.40	3.51	3.52	3.53	3.56	3.59	3.60	3.59	3.59
Tobacco manufactures.....	2.92	3.15	3.33	3.19	3.03	3.02	3.08	3.29	3.32	3.37	3.39	3.45	3.47	3.52	3.45
Textile mill products.....	2.45	2.57	2.56	2.57	2.58	2.59	2.59	2.62	2.69	2.71	2.71	2.72	2.71	2.72	2.72
Apparel and other textile products.....	2.39	2.49	2.47	2.50	2.53	2.52	2.52	2.55	2.56	2.58	2.57	2.58	2.57	2.59	2.59
Paper and allied products.....	3.44	3.68	3.71	3.73	3.77	3.73	3.73	3.80	3.81	3.83	3.84	3.86	3.88	3.92	3.96
Printing and publishing.....	3.92	4.20	4.21	4.23	4.28	4.27	4.27	4.36	4.35	4.36	4.39	4.43	4.46	4.46	4.49
Chemicals and allied products.....	3.69	3.94	3.99	3.99	4.03	4.00	4.00	4.06	4.10	4.12	4.11	4.13	4.16	4.20	4.23
Petroleum and coal products.....	4.28	4.58	4.60	4.59	4.66	4.65	4.65	4.65	4.84	4.88	4.88	4.94	4.96	4.94	4.97
Rubber and plastics products, nec.....	3.20	3.41	3.44	3.45	3.48	3.46	3.46	3.53	3.54	3.54	3.54	3.56	3.56	3.58	3.63
Leather and leather products.....	2.49	2.59	2.58	2.59	2.62	2.63	2.61	2.65	2.67	2.70	2.70	2.69	2.71	2.70	2.70
TRANSPORTATION AND PUBLIC UTILITIES	3.85	4.21	4.23	4.25	4.33	4.31	4.33	4.41	4.46	4.48	4.50	4.56	4.58	4.60	4.65
WHOLESALE AND RETAIL TRADE	2.71	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	3.01
Wholesale trade.....	3.44	3.67	3.67	3.70	3.72	3.72	3.74	3.79	3.82	3.82	3.83	3.86	3.84	3.85	3.87
Retail trade.....	2.44	2.57	2.58	2.57	2.60	2.60	2.60	2.61	2.66	2.66	2.67	2.68	2.68	2.69	2.70
FINANCE, INSURANCE, AND REAL ESTATE	3.08	3.28	3.29	3.30	3.30	3.31	3.30	3.34	3.40	3.40	3.41	3.45	3.43	3.42	3.44
SERVICES	2.81	2.99	2.98	2.99	3.04	3.03	3.04	3.06	3.09	3.11	3.11	3.13	3.12	3.11	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	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^P	July ^P
TOTAL PRIVATE	\$119.46	\$126.91	127.94	\$129.03	\$129.13	\$129.13	\$128.76	\$130.92	\$129.92	\$130.64	\$131.73	\$133.20	\$133.21	\$135.38	\$136.47
MINING	163.97	171.72	172.53	173.43	174.72	167.78	165.82	182.76	183.60	181.02	181.46	184.44	183.17	186.62	185.75
CONTRACT CONSTRUCTION	196.35	213.36	216.41	220.23	216.23	225.38	223.61	216.45	214.44	215.28	219.70	219.23	221.90	224.69	228.27
MANUFACTURING	133.73	142.44	142.09	141.69	143.28	144.00	144.72	150.18	147.66	149.17	150.72	152.69	153.50	155.01	153.50
Durable goods	143.47	153.52	151.98	151.60	153.20	154.71	155.88	162.70	159.58	161.17	163.59	165.62	166.04	168.06	164.82
Ordnance and accessories.....	146.57	160.55	160.66	161.80	163.41	163.44	162.96	168.75	165.97	170.49	169.64	171.33	170.94	173.42	173.03
Lumber and wood products.....	117.51	126.54	128.88	129.20	129.68	131.61	129.92	130.15	128.40	129.68	131.70	133.58	135.88	138.03	135.71
Furniture and fixtures.....	108.58	115.42	115.53	118.78	118.00	118.37	118.37	121.88	118.31	119.00	121.00	121.81	121.81	125.36	123.62
Stone, clay, and glass products.....	140.08	152.26	155.40	157.78	157.13	157.03	155.45	155.58	153.78	155.74	159.68	160.90	162.54	165.33	166.18
Primary metal industries.....	159.17	170.89	170.53	166.45	171.83	172.70	173.96	184.50	184.78	186.55	188.74	190.90	191.73	193.95	192.98
Fabricated metal products.....	143.67	150.72	150.72	151.13	150.42	151.93	153.47	159.83	155.59	157.16	159.15	161.56	162.76	165.17	163.17
Machinery, except electrical.....	154.95	161.99	161.20	162.01	164.02	164.83	166.04	174.30	170.56	173.47	175.56	176.81	176.81	179.77	176.81
Electrical equipment.....	130.87	139.65	139.00	140.00	140.80	140.75	142.21	147.24	144.00	145.52	146.29	147.06	147.50	149.37	147.60
Transportation equipment.....	163.62	180.71	172.97	171.74	172.82	182.04	182.48	196.35	186.76	191.58	194.74	198.24	199.55	199.13	190.94
Instruments and related products.....	134.34	140.49	140.23	140.58	142.80	142.36	144.18	147.70	147.17	149.08	149.11	150.26	150.66	151.37	149.17
Miscellaneous manufacturing.....	109.13	115.14	113.48	115.64	115.14	116.33	117.32	120.48	118.81	119.95	120.26	121.66	121.13	121.97	118.89
Nondurable goods	120.43	128.12	129.63	129.17	130.75	129.63	130.28	133.73	132.16	133.28	134.35	135.49	135.88	137.66	138.85
Food and kindred products.....	127.98	136.21	137.63	135.94	138.24	135.54	136.34	142.51	140.10	139.79	142.40	143.60	144.72	146.11	147.55
Tobacco manufactures.....	110.38	116.55	130.87	119.31	114.53	108.72	109.96	118.44	113.21	111.55	112.89	114.20	116.25	122.50	116.27
Textile mill products.....	97.76	104.34	102.66	104.86	104.75	106.19	107.23	108.73	109.75	111.11	111.92	112.34	111.38	113.42	111.79
Apparel and other textile products.....	84.37	88.40	88.43	90.00	89.82	90.47	91.48	91.55	90.37	92.62	92.52	92.62	91.49	93.24	93.76
Paper and allied products.....	144.14	154.93	157.30	158.53	159.08	157.78	158.15	162.64	159.64	161.63	162.82	164.44	164.90	168.17	169.49
Printing and publishing.....	147.78	157.92	158.30	159.47	161.36	160.55	160.55	165.68	161.39	162.19	165.06	167.45	167.70	169.48	171.52
Chemicals and allied products.....	153.50	163.90	164.79	164.79	169.66	166.00	166.40	170.11	170.56	171.39	171.80	173.05	173.06	176.40	177.24
Petroleum and coal products.....	182.76	194.19	197.80	195.53	199.45	198.09	195.77	196.70	201.83	202.03	203.01	209.95	209.81	209.95	211.23
Rubber and plastics products, nec.....	128.96	137.42	137.94	139.04	140.94	140.48	141.17	145.44	143.72	144.08	144.43	146.32	146.32	148.57	147.74
Leather and leather products.....	92.63	97.64	98.56	97.38	96.68	99.15	100.22	102.56	101.99	103.95	102.33	102.22	104.88	105.57	102.87
TRANSPORTATION AND PUBLIC UTILITIES	155.93	169.24	162.43	172.98	176.66	174.56	175.80	179.05	177.51	180.10	180.90	181.94	184.57	186.76	190.19
WHOLESALE AND RETAIL TRADE	95.66	100.74	103.61	103.68	102.08	101.85	101.56	103.31	103.06	103.11	104.05	104.40	104.40	106.80	108.96
Wholesale trade.....	137.60	146.07	146.43	147.63	147.68	148.06	148.85	152.74	151.27	151.65	152.43	153.63	152.83	154.00	155.19
Retail trade.....	82.47	86.61	89.78	89.18	87.62	87.10	86.84	89.00	88.31	87.78	88.64	89.24	89.24	92.00	94.23
FINANCE, INSURANCE, AND REAL ESTATE	113.34	121.36	122.06	123.09	121.77	122.47	122.10	123.58	126.82	126.14	126.51	128.69	126.91	127.22	129.00
SERVICES	96.66	102.26	103.70	103.75	103.66	103.32	103.36	104.65	104.75	105.74	105.74	106.42	105.46	106.67	109.20

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.

23. Gross and spendable average weekly earnings of production or nonsupervisory workers ¹ 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:												
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	122.85	123.85	99.64	134.00	107.80
May.....	133.21	106.82	109.47	87.79	118.77	95.24	153.50	123.10	124.44	99.79	134.63	107.96
June.....	135.38	108.30	111.07	88.86	120.48	96.38	155.01	124.01	125.55	100.44	135.81	108.65
July.....	136.47	108.74	111.87	89.14	121.34	96.69	153.50	122.31	124.44	99.16	134.63	107.27

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

[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	r 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	r 3.3	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						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All items	121.3	121.8	122.1	122.2	122.4	122.6	123.1	123.2	123.8	124.0	124.3	124.7	125.0	125.5
All items (1957-59=100)	141.0	141.7	142.0	142.1	142.4	142.6	143.1	143.3	143.9	144.3	144.6	145.0	145.4	145.9
Food	118.4	119.8	120.0	119.1	118.9	119.0	120.3	120.3	122.2	122.4	122.4	122.3	123.0	124.2
Food at home	116.4	118.1	118.1	116.9	116.6	116.7	118.2	118.2	120.5	120.6	120.4	120.2	120.9	122.4
Food away from home	126.1	126.5	127.1	127.6	128.0	128.2	128.3	128.6	128.9	129.4	130.0	130.4	130.9	131.3
Housing	124.3	124.5	125.1	125.5	125.9	126.4	126.8	127.3	127.6	127.9	128.2	128.5	129.0	129.5
Rent	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	119.0
Homeownership	133.7	133.5	134.4	135.1	135.7	136.7	137.0	137.8	138.0	138.2	138.5	138.9	139.6	140.7
Apparel and upkeep	119.8	119.3	119.0	120.6	121.6	121.9	121.8	120.2	120.7	121.3	121.8	122.5	122.1	121.1
Transportation	118.6	119.5	119.3	118.6	119.3	118.8	118.6	119.0	118.3	118.4	118.6	119.5	119.8	120.3
Health and recreation	122.2	122.6	123.1	123.6	123.5	123.7	123.9	124.3	124.7	125.0	125.5	125.8	126.1	126.3
Medical care	128.4	129.3	130.0	130.4	129.6	129.7	130.1	130.5	131.0	131.4	131.7	132.0	132.4	132.7
Special groups														
All items less shelter	119.3	120.0	120.2	120.2	120.3	120.4	120.9	120.9	121.5	121.8	122.1	122.4	122.7	123.1
All items less food	122.1	122.4	122.7	123.1	123.5	123.7	123.9	124.0	124.2	124.5	124.9	125.4	125.7	125.9
All items less medical care	120.9	121.4	121.6	121.7	122.1	122.3	122.7	122.8	123.4	123.6	123.9	124.3	124.6	125.1
Commodities	117.4	118.1	118.2	118.1	118.4	118.5	118.9	118.7	119.4	119.7	119.9	120.3	120.7	121.2
Nondurables	117.7	118.3	118.6	118.7	118.8	118.9	119.5	119.2	120.3	120.6	120.7	121.0	121.2	121.7
Durables	116.5	117.5	116.9	116.4	117.1	117.4	117.2	117.3	117.1	117.3	117.7	118.4	119.2	119.6
Services	128.4	128.8	129.4	129.8	130.0	130.4	130.8	131.5	131.8	132.0	132.4	132.7	133.1	133.5
Commodities less food	116.8	117.0	117.1	117.4	118.0	118.1	118.1	117.7	117.8	118.2	118.5	119.2	119.4	119.4
Nondurables less food	117.0	116.7	117.2	118.2	118.7	118.7	118.8	118.1	118.4	118.9	119.1	119.7	119.5	119.3
Apparel commodities	120.1	119.5	119.1	120.9	122.0	122.4	122.2	120.3	120.9	121.6	122.1	122.9	122.4	121.3
Apparel commodities less footwear	119.9	119.3	118.6	120.7	121.9	122.3	122.1	119.9	120.6	121.3	121.8	122.6	122.0	120.7
Nondurables less food and apparel	115.2	115.1	116.2	116.6	116.8	116.5	116.8	116.8	117.0	117.3	117.4	117.9	117.9	118.2
Household durables	112.9	113.2	113.4	113.5	113.6	113.6	113.7	113.7	113.6	114.1	114.4	114.8	115.1	115.3
Household furnishings	114.3	114.7	114.8	114.9	115.1	115.1	115.3	114.9	115.0	115.6	115.9	116.2	116.4	116.4
Services less rent	130.9	131.2	131.9	132.3	132.5	132.9	133.3	134.1	134.4	134.7	135.0	135.3	135.7	136.2
Household services less rent	132.6	132.5	133.6	134.2	134.7	135.4	136.1	137.0	137.4	137.7	138.1	138.5	138.9	139.6
Transportation services	133.1	134.3	134.1	133.8	133.9	134.0	134.2	135.6	135.7	135.5	135.6	135.8	136.0	136.3
Medical care services	133.3	134.4	135.1	135.6	134.6	134.8	135.3	135.8	136.4	136.9	137.3	137.6	138.0	138.4
Other services	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	125.8

See footnotes at end of table.

25. Continued—Consumer Price Index—U.S. average

Group, subgroup, and selected items	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
FOOD	118.4	119.8	120.0	119.1	118.9	119.0	120.3	120.3	122.2	122.4	122.4	122.3	123.0	124.2
Food away from home	126.1	126.5	127.1	127.6	128.0	128.2	128.3	128.6	128.9	129.4	130.0	130.4	130.9	131.3
Restaurant meals	125.8	126.2	126.9	127.3	127.7	127.9	128.0	128.3	128.6	129.3	129.9	130.4	130.9	131.3
Snacks	127.5	128.0	128.2	128.6	129.5	129.4	129.6	130.0	130.0	130.2	130.6	130.7	131.0	131.1
Food at home	116.4	118.1	118.1	116.9	116.6	116.7	118.2	118.2	120.5	120.6	120.4	120.2	120.9	122.4
Cereals and bakery products	113.9	114.8	114.5	114.6	114.3	114.1	113.8	113.7	114.3	114.8	115.0	114.7	114.5	114.4
Flour	101.0	101.3	101.2	101.5	101.1	101.1	100.5	100.8	100.9	100.8	100.4	100.2	99.4	99.2
Cracker meal	129.8	130.8	131.1	131.5	131.6	131.7	131.9	132.2	133.9	134.9	135.4	135.5	135.9	135.9
Corn flakes	107.3	109.0	105.6	104.2	103.6	103.5	103.0	102.5	102.2	102.0	101.4	101.0	100.3	100.0
Rice	109.4	109.6	109.9	110.1	109.9	109.8	110.0	110.3	110.3	110.0	110.0	109.7	109.3	109.6
Bread, white	112.3	113.9	112.9	113.4	112.1	112.0	111.4	111.2	112.7	113.2	113.3	112.7	113.0	112.7
Bread, whole wheat	117.5	118.4	118.7	119.1	119.2	119.3	118.5	118.9	119.3	119.2	120.5	120.3	119.3	119.7
Cookies	108.7	109.9	110.0	109.9	109.9	108.7	109.3	109.2	109.7	110.7	111.2	111.4	109.5	109.9
Layer cake	120.1	120.3	121.2	121.5	120.7	120.5	120.8	119.6	119.2	120.4	120.1	119.8	119.9	120.2
Cinnamon rolls	118.2	118.8	119.1	118.6	119.6	119.2	118.5	119.0	119.2	120.0	120.8	120.8	121.3	120.7
Meats, poultry, and fish	116.9	118.0	118.7	119.1	118.4	118.1	118.9	120.7	126.3	126.8	125.9	124.8	126.4	129.9
Meats	116.7	117.6	118.4	118.8	118.3	118.2	119.1	121.1	127.5	127.9	126.9	125.6	127.5	131.3
Beef and veal	124.9	126.6	126.8	127.7	127.1	126.6	128.0	130.8	136.1	137.1	135.9	134.1	135.8	139.4
Steak, round	123.5	124.4	125.3	126.1	1.5	125.2	126.3	130.8	137.2	137.5	134.0	130.6	132.6	137.3
Steak, sirloin	122.8	126.7	125.0	127.8	125.3	123.5	125.5	128.5	132.1	132.3	130.9	127.5	131.9	136.9
Steak, porterhouse	124.1	128.1	128.1	129.5	127.3	125.7	127.5	131.1	134.4	134.8	132.2	130.4	134.0	139.2
Rump roast	122.4	122.4	124.1	124.0	125.2	124.0	124.4	128.1	134.6	135.4	132.7	129.2	132.1	135.6
Rib roast	126.2	129.3	129.9	130.8	129.3	128.8	131.8	135.2	139.2	140.1	138.2	136.6	136.7	141.0
Chuck roast	124.4	125.1	126.0	125.9	125.6	125.9	128.9	131.0	139.5	141.2	137.6	133.9	132.4	138.4
Hamburger	126.2	127.5	127.1	128.3	127.6	127.6	129.1	130.8	135.9	137.3	136.6	135.7	136.6	138.7
Beef liver	113.7	114.5	114.3	114.0	114.8	114.7	114.6	114.8	118.3	121.3	128.5	132.2	133.0	133.0
Veal cutlets	141.7	144.6	145.5	146.0	146.7	147.2	148.0	150.1	156.2	157.4	159.1	159.6	162.0	164.5
Pork	105.0	104.7	106.9	106.4	105.8	106.3	107.2	109.2	119.4	118.2	116.7	115.4	118.0	124.0
Chops	107.4	108.0	113.1	109.9	109.8	110.5	111.2	111.4	124.2	119.0	115.9	114.7	119.8	130.7
Loin roast	106.6	106.6	111.1	110.0	108.7	109.2	109.7	111.1	121.4	119.5	115.8	114.7	119.0	130.1
Pork sausage	111.4	110.9	111.4	113.0	112.8	112.0	111.4	112.9	120.3	123.5	124.6	124.9	126.1	129.1
Ham, whole	103.9	103.0	102.9	103.8	102.0	102.4	105.9	110.0	112.6	114.3	112.7	110.5	112.0	113.9
Picnics	108.0	105.6	107.4	106.7	107.9	108.7	111.3	113.3	122.7	123.8	122.8	121.0	119.9	122.7
Bacon	96.6	96.7	96.6	97.7	96.6	97.4	97.3	101.0	114.0	112.6	112.3	110.8	113.1	116.3
Other meats	115.6	116.1	116.4	117.0	116.5	116.5	116.6	116.8	120.3	121.6	122.0	121.7	122.8	124.0
Lamb chops	121.5	123.5	124.2	124.7	123.4	124.5	124.4	124.8	127.1	127.3	122.6	126.6	129.5	131.6
Frankfurters	115.1	114.7	115.7	116.0	116.0	115.9	115.2	115.4	121.3	123.3	123.1	122.1	122.4	124.4
Ham, canned	107.2	105.9	106.6	108.0	107.8	108.3	107.8	109.0	111.4	112.7	112.6	113.6	112.8	113.0
Bologna sausage	118.8	119.4	119.8	120.4	120.1	119.9	120.1	120.0	124.5	126.3	127.8	126.8	128.1	128.9
Salami sausage	116.3	117.4	117.6	117.7	116.8	116.4	117.4	116.9	119.8	122.5	123.8	124.2	125.4	126.8
Liverwurst	114.3	115.5	114.2	114.8	114.5	113.8	114.1	114.2	117.4	117.5	118.3	117.1	118.4	119.3
Poultry	109.0	112.1	112.1	112.2	110.0	108.1	107.5	108.4	110.7	111.6	109.4	108.4	108.9	111.8
Frying chicken	108.5	112.3	111.7	111.9	109.0	106.8	106.2	107.5	110.1	111.0	108.3	107.2	107.6	111.5
Chicken breasts	109.5	111.1	113.5	112.7	111.3	109.7	109.8	110.4	112.0	112.5	111.6	111.9	112.4	113.7
Turkey	111.1	112.2	112.6	113.3	113.7	112.9	111.4	111.1	112.2	113.7	112.9	110.9	111.4	111.6
Fish	130.2	131.0	131.9	132.5	132.8	132.9	133.2	134.7	137.0	138.3	139.8	140.2	141.3	142.0
Shrimp, frozen	117.6	118.8	119.9	119.7	120.1	120.6	120.4	123.1	128.3	131.9	133.9	133.7	136.3	136.5
Fish, fresh or frozen	140.2	141.9	142.4	142.5	143.0	142.7	142.7	144.7	145.0	144.9	146.2	147.7	149.1	151.5
Tuna fish, canned	128.4	129.1	129.1	129.2	128.9	128.2	128.7	128.6	130.4	132.0	133.3	133.7	134.0	133.3
Sardines, canned	134.7	134.3	136.3	138.5	139.1	139.7	140.9	142.2	144.1	144.1	145.4	145.7	145.6	146.6
Dairy products	115.3	116.0	116.0	116.1	116.0	115.9	116.1	116.4	116.9	117.3	117.4	117.3	117.0	116.8
Milk, fresh, grocery	114.6	115.1	115.2	115.4	115.3	115.2	115.2	115.7	116.4	116.9	116.9	116.8	116.3	116.0
Frying chicken	117.6	118.1	118.1	118.1	118.1	118.1	118.1	118.5	118.8	119.4	120.0	120.3	120.3	120.3
Milk, fresh, delivered	119.7	120.5	120.3	120.8	120.3	120.1	120.1	120.5	121.3	121.8	121.9	122.0	121.9	121.9
Milk, fresh, skim	118.6	120.4	121.2	121.2	121.4	120.2	120.6	120.9	120.9	120.8	120.8	120.5	118.8	118.1
Milk, evaporated	106.2	107.2	106.5	106.9	106.1	106.4	107.2	106.7	106.1	107.1	106.8	106.5	106.7	106.5
Ice cream	121.0	122.1	122.0	121.8	122.1	122.3	122.1	122.3	123.4	123.4	124.2	124.1	125.4	124.5
Cheese, American process	105.8	105.6	105.7	105.8	105.8	105.7	105.4	105.8	105.8	105.8	105.7	105.3	104.8	104.7
Butter	119.1	126.0	123.6	116.6	115.6	117.8	124.4	120.9	123.9	121.4	122.1	123.9	127.2	128.4
Fruits and vegetables	121.0	132.2	127.4	115.3	113.6	117.3	128.2	122.1	126.8	122.3	123.2	126.7	132.2	134.1
Fresh fruits and vegetables	117.5	132.0	133.8	124.0	115.9	113.0	112.2	112.6	115.2	115.5	120.1	121.0	130.8	134.2
Fresh fruits	114.2	136.1	139.0	125.3	101.8	98.5	102.1	106.8	109.9	112.2	114.1	121.8	131.4	140.3
Apples	95.5	97.4	99.5	98.5	101.8	94.1	92.2	92.6	100.4	98.3	109.4	104.4	108.4	105.0
Bananas	125.5	128.7	135.3	138.3	137.1	133.1	128.4	123.7	122.0	121.3	117.3	118.0	123.3	126.9
Oranges	124.3	126.8	128.2	129.4	129.1	129.9	130.5	130.8	130.6	130.7	131.3	130.6	130.6	130.8
Orange juice, fresh	135.7	168.2	175.9	171.6	153.5	126.8	120.6	121.2	121.1	124.6	122.4	131.9	145.1	152.4
Grapefruit	143.8	171.4	169.7	120.3	119.6	138.2	-----	-----	-----	-----	-----	-----	-----	180.9
Grapes ¹	114.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	119.2	103.3	115.0
Strawberries ¹	141.7	135.1	119.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	144.8	121.0
Watermelon ¹	123.9	132.4	122.4	108.6	111.8	120.8	141.3	129.8	136.3	127.9	125.9	131.4	133.4	134.2
Fresh vegetables	117.3	134.0	127.7	115.0	111.2	110.2	112.4							

25. Continued—Consumer Price Index—U.S. average

Group, subgroup, and selected items	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
FOOD—Continued														
Spinach.....	129.2	129.8	129.0	128.1	130.8	131.0	140.0	143.8	143.8	135.8	135.5	136.5	135.2	137.9
Tomatoes.....	131.8	154.3	122.0	95.4	106.0	121.7	159.1	139.1	140.2	112.9	130.7	135.2	155.1	130.4
Processed fruits and vegetables.....	116.2	116.9	117.9	118.6	118.4	118.5	118.8	119.2	119.5	119.9	120.3	119.8	119.9	120.0
Fruit cocktail, canned.....	117.9	119.0	119.1	120.2	120.0	119.9	120.2	121.4	120.9	121.4	122.2	121.6	121.1	121.3
Pears, canned.....	116.7	116.9	117.4	117.7	117.5	116.9	116.5	116.9	117.3	117.2	117.3	117.3	117.7	117.7
Pineapple-grapefruit drink.....	113.6	113.5	114.1	114.0	114.5	115.1	114.4	114.7	114.4	115.2	115.6	114.8	114.3	115.6
Orange juice concentrate, frozen.....	127.2	130.3	133.6	136.3	136.0	135.3	135.6	135.8	135.9	136.6	136.6	136.2	135.3	136.0
Lemonade concentrate, frozen.....	113.9	113.8	114.8	115.5	115.9	115.3	116.9	117.4	117.5	117.8	118.0	117.3	117.3	115.5
Beets, canned.....	115.1	115.7	116.6	117.5	117.4	116.8	117.0	118.3	119.0	119.8	120.2	120.4	121.4	121.4
Peas, green, canned.....	106.6	107.2	107.6	108.0	107.0	108.0	108.6	108.6	108.5	107.9	108.7	107.4	107.2	107.6
Tomatoes, canned.....	115.6	115.9	116.2	116.6	115.7	115.7	115.1	114.9	115.3	115.5	115.4	115.6	115.5	115.8
Dried beans.....	122.8	124.7	128.1	129.5	130.6	131.9	133.2	133.9	135.4	136.6	137.1	137.0	136.9	137.2
Broccoli, frozen.....	117.7	118.2	118.7	118.4	117.9	117.8	117.9	117.8	118.5	119.0	119.2	118.1	118.9	118.7
Other food at home.....	115.9	115.7	116.7	115.5	116.2	115.6	116.6	116.2	115.6	116.7	116.2	116.0	114.5	115.3
Eggs.....	108.4	105.2	109.7	102.4	106.7	103.2	110.5	108.0	101.4	107.5	102.9	101.7	94.2	101.9
Fats and oils:														
Margarine.....	116.0	115.6	116.4	117.6	118.1	117.8	117.7	117.3	118.1	118.6	118.4	117.8	118.2	117.4
Salad dressing, Italian.....	109.3	110.2	110.0	110.2	109.9	110.6	110.9	110.2	110.4	110.8	111.4	110.6	109.1	109.5
Salad or cooking oil.....	120.1	119.7	121.6	123.3	123.4	123.5	123.5	123.9	124.0	123.7	123.0	122.3	121.5	120.1
Sugar and sweets.....	119.3	119.7	120.3	120.2	120.1	120.0	120.1	120.1	120.5	121.2	121.4	121.4	120.6	120.4
Sugar.....	112.5	112.6	113.2	113.5	113.4	113.5	113.5	113.6	114.3	114.9	115.3	115.4	114.8	114.5
Grape jelly.....	119.3	120.4	121.7	121.6	121.2	121.4	121.6	121.5	122.7	124.5	125.1	125.5	124.9	125.0
Chocolate bar.....	130.9	131.3	131.7	131.4	131.5	131.3	131.3	130.8	130.7	130.6	130.8	130.8	130.6	130.5
Syrup, chocolate flavored.....	113.2	113.3	113.4	113.2	113.0	112.5	112.7	113.3	113.4	113.5	113.4	112.6	111.1	110.4
Nonalcoholic beverages.....	121.6	122.0	122.0	121.0	121.2	120.9	120.5	120.4	120.7	120.9	120.9	121.0	120.5	120.3
Coffee, can and bag.....	121.8	121.8	121.8	119.3	119.3	119.0	118.5	118.2	118.3	118.3	118.2	118.1	117.2	117.2
Coffee, instant.....	124.7	124.9	125.2	125.4	125.3	125.1	125.1	124.7	125.5	125.1	125.0	125.0	124.3	123.4
Tea.....	107.6	108.5	108.0	108.0	107.8	107.8	106.0	106.1	107.1	108.1	108.2	108.9	109.0	108.8
Cola drink.....	125.9	126.4	126.7	127.0	127.3	127.1	127.1	127.7	127.8	128.1	128.2	128.2	127.8	128.2
Carbonated fruit drink.....	126.4	127.2	127.5	127.2	127.8	127.7	127.9	127.9	127.6	128.2	128.2	128.3	128.3	127.8
Prepared and partially prepared foods.....	112.7	113.1	113.5	113.4	113.4	113.2	113.3	113.5	114.1	114.4	114.5	114.7	114.4	114.3
Bean soup, canned.....	114.1	113.7	114.8	114.7	114.7	114.7	114.7	114.5	115.7	116.2	116.3	116.6	116.3	116.2
Chicken soup, canned.....	106.4	106.4	106.3	106.6	106.5	106.0	105.7	106.4	106.9	106.4	106.6	105.8	104.2	104.4
Spaghetti, canned.....	117.3	117.1	117.6	117.7	117.7	117.7	117.5	118.1	117.8	116.8	117.4	118.3	118.9	119.5
Mashed potatoes, instant.....	110.8	112.4	111.9	110.4	110.4	110.7	111.0	111.5	112.2	112.3	111.3	112.2	112.3	111.5
Potatoes, French fried, frozen.....	110.1	110.8	110.9	110.3	109.9	108.5	109.3	108.5	110.0	110.4	111.0	110.8	111.0	110.8
Baby food, canned.....	110.9	111.0	111.8	111.8	111.6	111.3	111.1	111.1	111.2	111.4	111.4	111.3	110.4	110.1
Sweet pickle relish.....	117.4	117.4	118.9	119.5	120.0	120.6	121.2	122.0	122.5	124.4	125.2	125.2	124.3	124.1
Pretzels.....	113.1	114.5	114.1	114.5	114.4	114.0	114.5	114.1	114.5	115.2	115.0	115.5	116.1	115.1
HOUSING	124.3	124.5	125.1	125.5	125.9	126.4	126.8	127.3	127.6	127.9	128.2	128.5	129.0	129.5
Shelter	128.8	128.8	129.5	130.1	130.6	131.3	131.6	132.3	132.5	132.7	133.0	133.4	134.1	134.9
Rent.....	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	119.0
Homeownership.....	133.7	133.5	134.4	135.1	135.7	136.7	137.0	137.8	138.0	138.2	138.5	138.9	139.6	140.7
Mortgage interest rates.....	120.4	117.4	118.1	118.7	119.1	118.9	118.6	118.4	118.2	117.7	117.1	117.0	117.1	117.2
Property taxes.....	131.1	130.5	132.2	133.1	134.6	136.3	137.6	141.1	141.8	143.6	144.7	145.0	144.8	144.9
Property insurance rates.....	119.9	121.5	121.5	121.5	122.4	122.4	122.4	122.4	122.4	122.4	122.6	122.7	122.6	123.4
Maintenance and repairs.....	133.7	134.7	135.8	136.8	137.0	137.1	137.4	137.8	138.0	138.6	139.2	139.9	140.6	141.1
Commodities.....	119.0	119.9	120.6	120.9	120.9	120.8	120.8	121.3	121.3	122.0	122.4	123.3	123.9	124.2
Exterior house paint.....	115.9	115.7	115.3	116.5	116.5	116.5	116.8	117.7	117.9	118.2	118.5	117.5	117.4	117.2
Interior house paint.....	114.5	114.2	115.2	115.5	115.6	115.3	115.4	115.8	115.6	116.3	116.4	117.2	117.5	117.4
Services.....	140.0	141.2	142.4	143.7	144.0	144.1	144.6	144.9	145.2	145.9	146.5	147.1	147.8	148.5
Repainting living and dining rooms.....	148.3	149.6	151.3	153.0	153.1	153.6	154.0	154.4	155.1	155.6	156.5	157.7	159.5	160.5
Reshingling roofs.....	144.8	147.2	148.8	150.1	150.7	150.6	151.6	152.0	152.3	153.0	154.3	155.0	156.2	156.2
Residing houses.....	130.6	131.1	132.1	132.8	133.1	133.2	133.3	133.4	133.7	133.9	134.5	135.0	135.2	135.9
Replacing sinks.....	140.6	142.2	143.0	143.4	143.4	143.6	143.7	143.9	144.2	145.1	145.5	145.7	145.8	146.1
Repairing furnaces.....	144.3	144.5	145.9	148.9	149.2	149.1	150.2	150.9	151.2	152.2	152.4	152.8	153.6	154.6
Fuel and utilities	115.1	115.5	116.3	116.3	116.3	116.8	117.9	118.7	119.3	119.6	119.9	120.1	120.1	120.2
Fuel oil and coal.....	117.5	117.5	117.8	117.8	117.8	118.1	118.1	118.7	118.7	118.7	118.6	118.7	117.8	117.7
Fuel oil, #2.....	116.1	116.1	116.4	116.4	116.4	116.4	116.4	116.5	116.5	116.5	116.5	116.5	116.5	116.5
Gas and electricity.....	114.7	114.7	115.7	115.7	115.7	116.2	118.2	119.0	119.4	119.7	102.2	120.5	120.3	120.3
Gas.....	116.3	116.1	116.8	116.8	116.8	118.1	120.5	121.7	121.9	122.2	122.3	122.2	121.2	121.2
Electricity.....	113.2	113.5	114.6	114.6	114.6	114.5	116.0	116.6	117.0	117.2	118.2	118.9	119.5	119.4
Other utilities.....														
Residential telephone.....	108.0	108.9	110.2	110.2	110.2	110.2	110.7	111.8	113.5	113.5	113.7	114.0	114.9	115.0
Residential water and sewerage.....	133.4	135.0	135.0	135.0	135.0	136.4	136.4	136.4	136.4	137.7	137.7	137.7	137.7	138.8
Household furnishings and operations	118.1	118.9	119.1	119.4	119.5	119.5	119.6	119.5	119.6	120.1	120.5	120.8	121.0	121.1
House furnishings.....	114.3	114.7	114.8	114.9	115.1	115.1	115.3	114.9	115.0	115.6	115.9	116.2	116.4	116.4
Textiles.....	111.6	111.3	111.1	111.9	112.2	112.9	113.1	110.8	112.1	113.2	113.7	113.6	114.2	113.4
Sheets, percale, or muslin.....	113.9	112.0	110.2	114.0	113.4	116.5	116.5	110.1	114.1	114.4	116.0	114.9	116.7	113.4
Curtains, tailored, polyester marquisette.....	110.0	106.7	111.5	111.3	111.5	110.9	110.6	110.3	111.2	110.9	111.3	112.2	112.1	112.5
Bedsprads, chiefly cotton.....	107.8	106.7	107.0	107.4	107.8	108.4	108.8	105.1	106.9	109.8	111.0	111.5	111.6	110.3

25. Continued—Consumer Price Index—U.S. average

Group, subgroup, and selected items	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
HOUSING—Continued														
Furniture and bedding.....	119.1	119.6	119.6	119.7	119.9	119.9	120.1	119.8	119.5	120.7	121.0	121.7	121.5	121.3
Bedroom furniture, chest and dresser ²	103.6	104.5	104.5	104.6	104.7	104.8	104.7	104.6	104.1	104.6	104.9	105.3	105.1	104.8
Dining room chairs ³	103.0	103.2	102.9	103.4	103.3	103.4	103.5	103.4	103.3	104.2	104.9	105.3	105.1	104.1
Sofas, upholstered.....	117.5	116.8	117.5	117.5	119.4	119.1	119.5	119.3	119.0	119.7	120.2	120.6	120.8	120.6
Sofas, dual purpose.....	116.4	116.4	116.5	116.3	116.4	116.4	116.9	116.7	115.9	116.9	116.8	117.2	116.9	116.9
Bedding, mattress, and box springs ⁴	103.4	103.9	104.0	103.7	104.1	103.9	104.4	103.7	104.4	104.4	104.5	104.5	104.5	104.9
Cribs.....	117.9	118.9	118.0	118.4	118.0	119.2	118.8	118.0	118.1	119.0	117.6	118.0	119.0	119.3
Cocktail table ⁵							100.0	100.1	99.7	99.5	100.6	100.4	100.4	100.0
Recliner, upholstered ⁶							100.0	99.2	98.2	98.6	98.7	98.7	98.0	98.0
Floor coverings.....	106.3	106.3	106.8	106.5	106.5	106.3	106.6	106.3	106.1	106.3	106.5	106.7	106.4	106.8
Broadloom carpeting, manmade fibers.....	102.3	102.1	102.7	102.2	102.3	101.8	102.1	101.9	101.4	101.5	101.6	101.8	101.4	101.7
Vinyl sheet goods.....	114.7	114.9	115.9	116.1	116.0	116.3	116.5	115.6	116.3	116.7	117.7	117.7	117.9	118.6
Vinyl asbestos tile.....	116.6	116.9	116.4	116.7	116.7	117.0	117.4	117.6	117.6	117.8	117.9	118.3	118.2	118.2
Appliances.....	105.5	105.7	105.7	105.8	105.8	105.7	105.8	105.8	105.7	105.8	105.7	105.7	105.8	105.8
Washing machines, automatic.....	109.4	109.7	109.9	110.1	110.0	110.0	110.0	110.2	110.4	110.6	110.4	110.4	110.5	110.6
Vacuum cleaners, canister type.....	103.8	104.3	104.3	104.3	104.1	103.9	103.6	104.0	103.8	103.7	103.7	103.8	104.0	103.8
Refrigerator-freezers.....	108.1	108.3	108.2	108.3	108.3	108.2	108.3	108.2	108.3	108.3	108.0	107.9	107.9	107.9
Ranges, free standing, gas or electric.....	111.0	111.7	111.4	111.2	112.0	111.0	111.3	111.2	110.4	110.5	110.4	110.0	111.0	111.3
Clothes dryers, electric.....	112.4	113.1	113.2	113.4	113.1	113.0	113.0	113.3	113.5	113.6	113.6	113.7	114.4	114.5
Air conditioners ¹	110.2	111.4	111.0							110.4	110.4	111.1	111.0	110.9
Room heaters, electric, portable ²	108.1				108.0	108.5	108.9	108.6	108.4	108.5				
Garbage disposal units.....	110.1	110.1	110.2	110.3	110.2	110.3	110.4	110.9	111.0	111.0	111.2	111.0	111.0	111.0
Other house furnishings:														
Dinnerware, earthenware.....	117.8	118.4	118.9	119.2	119.3	119.2	119.4	120.1	121.0	122.2	122.6	122.9	123.7	125.4
Flatware, stainless steel.....	120.4	120.4	121.5	121.7	122.1	122.0	121.8	122.0	122.2	121.4	121.8	121.6	122.9	123.7
Table lamps, with shade.....	121.0	121.9	122.3	122.2	122.0	122.2	121.8	122.0	122.2	121.7	122.2	121.8	123.0	124.4
Housekeeping supplies:														
Laundry soaps and detergents.....	109.8	110.6	111.1	111.1	110.9	110.6	110.8	111.0	111.0	111.2	111.1	110.9	111.0	111.1
Paper napkins.....	125.7	127.6	128.1	128.3	128.8	128.9	128.6	128.6	128.4	128.9	129.5	130.8	130.6	131.7
Toilet tissue.....	123.6	124.0	122.6	123.7	123.9	123.6	123.8	124.5	124.8	125.1	125.6	126.0	125.2	124.4
Housekeeping services:														
Domestic service, general housework.....	133.8	134.5	134.9	135.1	135.3	136.0	136.1	136.4	136.4	136.9	138.4	138.9	139.2	139.4
Baby sitter service.....	130.0	130.5	130.7	132.1	132.3	132.4	132.8	133.4	133.8	134.8	135.0	135.3	135.6	136.6
Postal charges.....	138.1	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6	146.6
Laundry, flatwork.....	133.3	133.9	134.6	135.0	135.4	135.6	136.3	136.4	136.6	137.0	137.6	138.0	138.5	139.0
Licensed day care service, preschool child.....	118.2	118.0	119.0	119.1	119.4	119.1	119.4	119.4	120.0	120.3	120.3	121.3	122.2	122.4
Washing machine repair.....	135.3	137.3	137.3	137.4	137.6	138.2	138.2	138.1	138.4	138.9	138.9	140.4	140.8	141.1
APPAREL AND UPKEEP	119.8	119.3	119.0	120.6	121.6	121.9	121.8	120.2	120.7	121.3	121.8	122.5	122.1	121.1
Men's and boys'	120.3	119.9	119.6	120.8	121.8	121.8	121.6	119.9	119.7	120.3	121.9	122.4	121.9	120.4
Men's:														
Topcoats, wool or all weather coats, polyester blend ¹	122.3			121.9	123.4	124.4	124.2	121.2	119.5	119.3				
Suits, year round weight.....	129.0	127.1	127.7	130.5	132.4	133.0	131.5	126.5	125.6	127.6	131.1	132.4	131.8	128.1
Suits, tropical weight ¹	129.2	125.1								130.9	136.3	138.0	136.8	131.3
Jackets, lightweight.....	112.5	112.2	112.1	112.2	112.9	114.2	114.3	113.0	112.7	115.0	115.1	115.7	114.8	114.0
Slacks, wool or blend.....	116.8	117.3	115.4	118.2	118.2	117.6	116.8	115.7	116.3	115.7	117.2	116.7	114.9	113.5
Slacks, cotton or blend.....	132.3	131.0	130.9	132.5	133.9	134.7	134.0	134.0	137.1	137.4	137.0	137.3	133.9	133.1
Trousers, work, cotton.....	113.0	113.5	113.7	113.7	114.0	114.0	114.0	114.1	114.4	114.4	114.6	114.7	114.7	115.0
Shirt, work, cotton.....	113.3	113.9	114.0	114.2	114.6	114.8	114.5	114.5	114.2	114.5	114.9	115.1	115.5	115.4
Shirt, business, cotton.....	112.7	113.1	112.4	113.0	113.0	114.4	114.4	112.6	112.7	112.4	113.1	113.4	113.7	112.1
T-shirts, chiefly cotton.....	119.0	119.4	119.0	118.8	118.9	118.4	118.2	118.3	118.0	117.8	117.4	117.4	117.4	117.4
Socks, cotton or manmade fibers.....	115.5	114.9	114.9	115.1	115.7	115.7	115.8	114.3	114.9	116.2	116.6	116.7	116.7	115.9
Handkerchiefs, cotton.....	114.9	115.2	115.2	115.4	115.7	115.7	116.1	116.3	116.0	116.2	115.4	115.7	116.2	116.3
Boys':														
Coats, all purpose, cotton or cotton blend ¹	118.3				119.2	120.3	118.3	115.8	114.8	122.3				
Sport coats, wool or blend ¹	122.0			123.5	128.1	118.3	121.3	118.1						
Dungarees, cotton or blend.....	122.5	122.6	122.7	123.2	123.2	125.2	125.8	126.4	126.1	126.3	127.1	127.1	127.3	127.5
Undershorts, cotton.....	119.5	119.1	119.9	119.6	119.6	119.6	119.6	119.9	120.6	120.5	120.5	120.5	120.5	120.8
Women's and girls'	120.1	119.3	118.2	121.3	122.7	123.4	123.2	120.2	121.7	122.5	122.3	123.4	122.6	121.2
Women's:														
Coats, heavyweight, wool or wool blend ¹	122.9			121.7	127.2	127.7	126.0	116.2						
Skirts, wool or wool blend ¹	131.7			131.1	135.7	142.1	142.1	135.0	125.3					
Skirts, cotton or polyester cotton or manmade fibers.....	114.0	114.7	102.9								115.5	121.3	121.4	116.7
Blouses, cotton.....	121.9	121.8	119.1	122.1	120.0	122.2	121.6	117.6	122.9	122.2	123.7	124.3	122.8	123.4
Dresses, street, chiefly manmade fiber.....	127.6	124.5	126.8	127.5	129.4	131.1	130.1	129.6	131.3	320.4	130.1	129.6	128.8	127.4
Dresses, street, wool or wool blend ¹	140.4			140.3	144.3	143.8	142.7	138.4						
Slips, nylon.....	110.7	110.9	111.1	111.1	111.1	110.4	111.2	111.2	111.0	110.5	110.9	110.9	111.0	110.8
Panties, acetate or nylon.....	115.2	115.7	115.7	115.8	115.4	116.2	116.2	116.7	116.3	116.5	116.6	117.0	118.1	118.1
Girdles, manmade blend.....	116.2	116.3	116.8	117.1	117.7	117.9	118.1	116.1	117.2	117.4	118.2	118.2	116.9	116.9
Brassieres, nylon lace.....	120.9	121.2	121.2	122.2	123.0	123.4	123.4	122.3	121.3	121.6	121.9	121.9	121.9	122.1
Hose, or panty hose, nylon, seamless.....	98.9	99.2	98.6	97.9	98.1	98.2	98.3	97.4	97.7	97.5	96.1	96.5	96.0	96.4
Anklets or knee-length socks, various fibers.....	115.8	115.6	114.8	114.8	114.6	115.6	116.4	115.9	115.8	116.1	115.9	114.9	114.4	114.4
Gloves, fabric, nylon or cotton.....	109.6	110.5	109.7	109.9	109.5	109.7	109.8	110.2	109.8	110.3	110.7	111.2	111.7	109.9
Handbags, rayon faille or plastic.....	132.4	132.1	134.2	135.6	134.8	136.8	138.2	138.9	140.2	141.5	142.5	143.2	144.6	142.8

See footnotes at end of table.

25. Continued—Consumer Price Index—U.S. average

Group, subgroup, and selected items	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
APPAREL AND UPKEEP—Continued														
Girls':														
Raincoats, vinyl plastic or chiefly cotton ¹	116.5	-----	-----	115.6	118.5	119.5	119.3	117.1	117.3	116.8	-----	-----	-----	-----
Skirts, wool or wool blend ¹	106.8	-----	-----	105.2	109.0	107.1	108.6	100.2	-----	-----	-----	-----	-----	-----
Dresses, cotton, manmade fibers or blends.....	107.4	105.2	107.4	109.3	110.3	109.4	109.3	108.9	107.2	119.2	121.4	125.3	119.2	120.0
Slacks, cotton ¹	131.3	-----	-----	-----	131.8	131.5	131.7	131.1	-----	-----	-----	-----	-----	-----
Slips, cotton blend.....	110.4	110.4	109.8	111.0	110.9	111.3	111.9	111.7	112.1	112.1	111.1	111.0	110.2	110.5
Handbags.....	129.0	129.7	126.9	128.3	129.3	130.0	129.3	124.1	127.5	128.8	130.6	129.8	124.7	122.6
Footwear.....	121.5	120.9	121.5	122.2	122.7	132.2	123.1	122.7	122.7	123.5	124.1	124.6	124.7	124.6
Men's:														
Shoes, street (oxford or buckle strap).....	119.6	119.4	119.2	120.9	119.8	121.1	121.0	119.7	119.9	121.6	121.4	123.1	123.8	124.2
Shoes, work, high.....	118.7	118.9	119.5	120.0	120.1	120.4	120.6	121.1	121.4	121.3	121.3	121.5	120.9	123.2
Women's:														
Shoes, street, pump.....	123.4	122.0	122.9	123.2	124.5	125.2	125.1	124.3	123.8	124.6	125.8	126.6	125.9	125.1
Shoes, evening, pump.....	120.2	118.8	119.6	120.3	121.0	121.0	121.1	120.7	120.5	121.4	122.0	122.1	122.3	121.8
Shoes, casual, pump.....	124.1	122.9	123.5	124.3	125.7	126.0	125.8	125.1	124.7	125.5	126.5	125.9	126.1	122.8
Houseslippers, scuff.....	121.9	122.5	123.5	123.4	123.5	123.6	123.4	124.0	124.0	124.2	124.5	124.3	124.8	125.4
Children's:														
Shoes, oxford.....	122.3	122.1	122.4	122.8	123.8	124.4	124.1	122.4	123.6	124.6	125.9	126.5	126.9	127.3
Sneakers, boys', oxford type.....	118.8	119.4	119.4	119.5	119.7	119.9	120.3	121.0	121.5	122.3	122.6	123.1	123.5	124.2
Dress shoes, girls', strap or pump.....	125.8	124.4	126.4	127.3	128.4	128.6	128.4	128.6	128.7	128.7	129.5	129.8	129.8	130.1
Miscellaneous apparel:														
Diapers, cotton gauze or disposable.....	112.0	112.3	112.5	112.7	112.8	113.3	113.3	113.0	113.0	113.2	113.5	114.0	114.5	115.3
Yard goods, polyester blend.....	122.1	122.4	121.9	122.1	122.1	122.3	121.9	120.6	120.5	118.9	118.1	117.8	119.0	119.1
Apparel services:														
Drycleaning, men's suits and women's dresses.....	116.6	116.8	116.8	117.1	117.2	117.0	117.1	117.2	117.4	117.4	117.4	117.5	117.5	117.6
Automatic laundry service.....	113.8	112.9	113.2	113.3	113.3	113.8	113.9	113.7	114.3	114.2	114.9	115.1	114.8	114.9
Laundry, men's shirts.....	119.1	119.1	119.2	119.1	119.2	119.2	120.4	120.5	120.7	120.9	120.6	120.8	121.0	121.6
Tailoring charges, hem adjustment.....	128.5	128.3	129.0	129.6	130.0	131.2	131.6	131.7	131.8	132.1	132.1	132.5	132.5	132.9
Shoe repairs, women's heel lift.....	112.0	112.3	112.4	113.5	114.0	114.0	113.8	113.8	113.8	114.0	114.6	115.1	115.4	115.6
TRANSPORTATION														
Private.....	118.6	119.5	119.3	118.6	119.3	118.8	118.6	119.0	118.3	118.4	118.6	119.5	119.8	120.3
Automobiles:														
Automobiles, new.....	116.6	117.4	117.3	116.4	117.2	116.6	116.3	116.4	115.7	115.9	116.1	117.1	117.3	117.8
Automobiles, used.....	112.0	113.8	109.3	105.6	109.1	109.6	110.4	112.2	111.9	111.7	111.4	111.4	111.3	111.0
Gasoline, regular and premium.....	106.3	104.1	107.9	108.7	108.8	106.9	107.3	106.7	105.7	106.1	105.0	106.2	105.6	106.9
Motor oil, premium.....	120.0	120.5	121.0	121.5	121.7	121.8	121.9	122.3	122.5	122.7	122.9	123.3	123.4	123.9
Tires, new, tubeless.....	116.3	116.2	117.3	117.5	117.6	118.8	118.3	117.9	117.4	116.6	116.0	116.3	115.8	116.0
Auto repairs and maintenance.....	129.2	130.3	131.0	131.2	131.3	131.6	131.9	133.1	133.6	134.0	134.3	134.6	134.9	135.2
Auto insurance rates.....	141.4	142.7	142.9	142.9	141.8	141.8	141.8	141.0	140.8	140.9	140.7	140.6	140.7	141.1
Auto registration.....	123.2	123.8	123.7	123.7	123.7	123.7	123.7	127.1	127.1	127.1	127.5	127.5	127.5	127.5
Public:														
Local transit fares.....	137.7	139.0	139.1	139.3	139.3	139.3	139.7	143.4	143.5	142.3	142.7	142.7	143.0	143.3
Taxicab fares.....	143.4	143.8	144.0	144.0	144.0	144.0	144.4	150.2	150.3	148.4	149.1	149.1	149.9	150.3
Railroad fares, coach.....	126.5	131.7	131.7	131.7	131.7	131.7	132.8	132.8	132.8	132.9	132.9	132.9	133.6	133.6
Airplane fares, chiefly coach.....	126.9	127.4	127.4	127.4	127.7	127.6	128.2	128.2	128.2	128.2	127.0	127.0	127.2	122.9
Bus fares, intercity.....	132.7	132.9	132.9	135.9	135.9	135.9	135.9	136.1	136.1	137.6	137.6	137.6	138.1	138.1
HEALTH AND RECREATION														
Medical care.....	128.4	129.3	130.0	130.4	129.6	129.7	130.1	130.5	131.0	131.4	131.7	132.0	132.4	132.7
Drugs and prescriptions:														
Over-the-counter items.....	105.4	105.5	105.6	105.7	105.6	105.7	105.6	105.5	105.5	105.5	105.5	105.7	105.8	105.6
Multiple vitamin concentrates.....	110.2	110.0	110.2	110.3	110.4	110.5	110.2	110.3	110.6	110.8	110.9	111.7	111.6	111.2
Aspirin compounds.....	96.6	95.4	95.3	95.1	95.4	95.4	95.1	95.1	95.0	95.1	95.2	95.3	95.0	95.1
Liquid tonics.....	114.1	114.3	114.2	115.1	115.8	115.4	114.0	114.1	114.5	115.0	115.4	117.7	118.1	116.6
Adhesive bandages, package.....	101.3	101.2	101.3	100.7	100.9	100.8	100.8	100.8	101.2	101.2	101.2	101.3	101.3	101.2
Cold tablets or capsules.....	122.6	123.2	123.8	124.1	123.6	123.6	124.1	123.8	123.7	123.9	124.1	124.1	123.6	123.4
Cough syrup.....	111.3	111.8	112.2	112.0	112.0	113.2	112.9	112.8	113.1	113.5	113.2	113.9	113.9	114.2
Prescriptions.....	112.4	111.2	111.3	111.4	111.4	111.2	111.3	111.7	112.7	112.9	112.8	114.1	113.9	113.5
Anti-infectives:														
Anti-infectives.....	101.3	101.6	101.7	101.8	101.6	101.6	101.7	101.5	101.2	101.1	100.9	100.7	100.9	100.9
Sedatives and hypnotics.....	80.2	80.4	80.0	79.9	79.6	79.4	79.1	78.9	77.4	76.7	76.0	75.2	75.4	74.7
Ataractics.....	122.9	123.9	123.8	124.2	123.8	124.6	124.8	124.7	124.9	125.1	125.2	125.9	126.5	127.4
Anti-spasmodics.....	101.7	101.2	102.3	102.6	102.5	102.6	102.6	102.6	102.7	102.8	102.8	102.7	102.9	103.3
Cough preparations.....	107.1	108.1	108.1	108.1	107.9	107.8	108.0	107.9	107.7	107.8	107.8	107.9	108.0	108.0
Cardiovasculars and antihypertensives.....	126.0	126.8	127.3	127.9	127.4	127.2	127.2	127.1	127.8	128.5	128.9	129.7	130.7	131.9
Analgesics, internal.....	111.1	111.7	112.0	112.0	112.0	112.0	112.1	112.0	111.8	111.8	111.8	111.4	111.4	111.5
Anti-obesity.....	107.8	108.2	108.2	108.3	107.7	107.9	108.3	108.2	109.1	109.2	109.4	109.5	109.5	109.6
Hormones.....	114.9	115.9	116.6	117.1	117.0	117.0	117.3	117.7	117.7	117.5	116.7	117.1	117.2	118.0
Professional services:	94.9	94.6	94.8	94.9	94.7	94.6	94.8	94.0	94.0	93.8	94.0	92.9	92.8	92.5
Physicians' fee:														
Physicians' fee.....	129.8	130.3	131.2	131.5	131.7	132.0	132.2	132.3	132.6	132.9	133.2	133.3	133.9	134.0
General physician, office visits.....	131.4	132.2	132.7	133.0	133.0	133.1	133.3	133.3	133.5	134.0	134.2	134.3	135.0	135.1
General physician, house visits.....	131.0	131.6	132.0	133.6	133.9	134.1	134.6	134.8	135.1	135.5	135.6	135.8	137.0	137.2
Obstetrical cases.....	129.0	129.0	130.9	131.3	131.5	131.5	131.6	132.0	132.3	132.8	133.9	134.0	134.0	134.2
Pediatric care, office visits.....	132.0	132.6	133.4	133.5	133.6	134.7	135.3	135.3	135.6	135.5	135.6	135.6	135.8	135.9
Psychiatrist, office visits.....	124.8	125.1	125.7	125.7	125.9	127.2	127.3	127.9	128.3	128.5	128.5	128.5	129.0	129.2
Herniorrhaphy, adult.....	123.4	123.6	124.3	124.4	125.2	126.2	126.4	126.8	127.0	127.4	127.8	127.9	128.2	128.2
Tonsillectomy and adenoidectomy.....	125.2	125.0	128.0	128.0	128.2	128.7	128.7	128.7	129.2	129.2	129.6	129.8	130.0	129.8

See footnotes at end of table.

25. Continued—Consumer Price Index—U.S. average

Group, subgroup, and selected items	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
HEALTH AND RECREATION—Continued														
Dentists' fees.....	127.0	127.5	127.9	128.2	129.6	129.8	130.0	130.5	130.6	131.0	131.6	131.9	132.4	132.7
Fillings, adult, amalgam, one surface.....	128.0	128.7	129.3	129.5	131.0	131.0	131.3	131.8	131.8	132.3	133.0	133.4	133.9	134.2
Extractions, adult.....	126.9	127.3	127.4	127.7	128.9	129.4	129.6	130.4	130.6	131.0	131.5	131.9	132.6	132.8
Dentures, full uppers.....	124.9	125.1	125.6	126.0	127.7	127.7	127.7	128.2	128.3	128.3	128.8	129.0	129.1	129.5
Other professional services:														
Examination, prescription, and dispensing of eyeglasses.....	120.3	120.5	121.9	122.1	122.6	122.9	122.9	123.1	123.8	124.0	124.5	124.7	125.0	125.0
Routine laboratory tests.....	116.1	115.7	117.2	117.6	117.8	117.8	118.6	100.0	100.6	101.2	101.5	101.8	102.0	102.4
Hospital service charges ¹ :														
Semiprivate rooms.....	163.1	164.8	165.8	166.8	167.0	167.0	167.9	169.6	171.1	172.2	172.7	173.2	173.8	174.9
Operating room charges.....	156.2	157.8	156.7	158.0	159.1	159.0	162.6	163.5	165.0	166.0	166.6	167.3	167.2	168.6
X-ray, diagnostic series, upper G.I.....	124.9	125.9	126.4	126.5	126.6	126.6	126.9	127.7	127.9	128.6	129.0	128.9	128.8	129.3
Laboratory test, urinalysis ²								100.0	100.9	101.4	101.5	101.9	102.0	102.3
Anti-infective, tetracycline, HCL ³								100.0	99.7	100.0	100.9	100.3	101.1	99.8
Tranquilizer, chloridazepoxide, HCL ⁴								100.0	99.7	99.9	100.6	101.1	101.9	101.7
Electrocardiogram ⁵								100.0	101.9	102.5	102.8	102.8	102.8	102.8
Intravenous solution, saline ⁵								100.0	100.5	101.4	101.5	101.9	102.2	102.3
Physical therapy, whirlpool bath ⁵								100.0	100.5	100.7	100.8	101.9	102.0	102.1
Oxygen, inhalation therapy ⁵								100.0	101.2	101.5	101.6	101.7	101.9	102.0
Personal care.....	116.8	117.1	117.5	117.6	117.9	117.9	117.9	118.1	118.4	118.7	119.1	119.7	120.0	120.0
Toilet goods.....	113.8	114.2	114.5	114.6	114.9	114.8	114.8	115.1	115.4	115.8	116.3	117.1	117.4	117.3
Toothpaste, standard dentifrice.....	107.7	107.2	107.7	108.6	108.8	108.3	109.3	109.9	109.6	119.5	108.8	109.9	109.4	110.0
Toilet soap, hard milled.....	114.1	115.4	116.8	115.2	118.4	118.8	119.7	119.7	120.3	121.1	121.0	122.9	122.6	122.5
Hand lotions, liquid.....	119.5	117.5	119.0	119.7	120.5	120.0	120.4	121.2	124.0	123.8	125.1	125.2	126.0	124.9
Shaving cream, aerosol.....	106.6	107.3	106.9	107.2	107.1	107.8	107.3	107.1	106.4	107.2	107.5	108.0	108.2	107.0
Face powder, pressed.....	123.5	123.8	124.0	124.1	123.9	122.4	122.0	122.0	123.1	125.1	126.2	131.4	133.3	135.0
Deodorants, aerosol.....	105.6	105.7	106.0	106.4	106.3	105.9	105.9	104.9	105.0	105.6	105.6	106.0	105.5	105.6
Cleansing tissues.....	123.3	124.8	124.2	124.1	122.6	123.6	121.8	124.4	123.1	123.4	125.4	124.3	125.1	124.5
Home permanent wave sets.....	110.9	111.7	111.5	111.7	111.8	111.7	111.6	111.3	111.3	110.5	110.9	109.3	109.1	109.2
Personal care services.....	120.0	120.2	120.6	120.8	121.0	121.2	121.2	121.3	121.5	121.7	122.0	122.4	122.7	122.9
Men's haircuts.....	122.6	122.5	123.2	123.4	123.7	123.7	123.9	123.9	124.1	124.2	124.4	124.9	125.1	125.3
Beauty shop services.....	118.2	118.5	118.8	118.9	119.1	119.4	119.2	119.4	119.7	119.9	120.0	120.7	121.0	121.2
Reading and recreation.....	119.3	119.6	119.7	120.5	120.5	120.8	121.1	121.4	121.5	121.7	122.3	122.5	122.9	123.0
Recreational goods.....	106.6	106.8	106.9	107.1	107.2	107.2	107.3	107.4	107.3	107.6	107.7	107.8	108.0	108.1
TV sets, portable and console.....	100.1	99.9	99.9	100.0	100.2	100.3	100.3	99.9	99.7	100.0	99.8	99.6	99.5	99.4
TV replacement tubes.....	122.5	122.2	122.1	123.4	124.1	124.5	124.7	126.4	126.9	128.8	129.8	130.6	131.1	131.8
Radio, portable and table model.....	98.5	98.4	98.4	98.5	98.1	98.4	98.4	98.4	98.4	98.5	98.9	99.0	99.1	99.1
Tape recorders, portable.....	94.2	94.1	93.6	93.0	92.7	92.5	93.1	93.4	93.3	93.3	93.8	94.4	94.7	94.9
Phonograph records, stereophonic.....	103.5	104.9	105.8	106.5	106.5	106.5	107.1	107.2	107.0	106.6	106.4	106.5	107.2	107.5
Movie cameras, Super 8, zoom lens.....	89.4	89.3	89.3	89.1	89.2	88.9	88.9	88.3	88.7	88.8	88.8	87.5	88.2	88.3
Film, 35mm, color.....	108.3	108.6	108.4	108.4	108.3	108.5	108.7	108.6	108.3	108.3	108.3	108.2	108.1	108.0
Bicycle, boys'.....	112.6	113.9	114.0	113.7	114.0	113.6	113.3	113.8	114.2	114.9	114.8	116.0	117.0	117.4
Tricycles.....	111.2	111.6	111.9	112.0	111.9	111.7	112.2	112.6	113.0	113.4	112.7	113.1	114.0	114.3
Recreational services.....	125.2	126.1	126.1	126.3	126.2	126.6	126.4	126.9	127.0	127.3	127.8	128.0	128.7	128.9
Indoor movie admissions.....	137.6	138.8	138.2	138.9	138.3	138.7	137.9	139.0	138.6	139.2	140.7	141.2	142.5	144.1
Drive-in movie admissions, adult.....	140.1	141.9	142.5	142.5	142.3	142.3	142.5	143.1	143.5	143.7	143.8	145.9	147.8	146.7
Bowling fees, evening.....	116.3	116.3	116.1	116.1	116.7	117.7	117.6	117.9	118.4	119.1	119.3	118.9	118.6	118.4
Golf greens fees ¹	127.5	128.6	128.8	128.4	128.3						129.6	129.0	130.7	130.8
TV repairs, picture tube replacement.....	98.0	98.2	98.1	98.5	98.4	98.5	98.6	98.6	98.5	98.3	98.1	98.0	98.2	98.0
Film developing, color.....	116.7	117.4	117.7	118.3	118.1	118.3	118.2	118.2	118.3	118.2	118.1	117.8	116.6	116.5
Reading and education:														
Newspapers, street sale and delivery.....	129.6	130.4	130.5	130.6	130.5	130.6	130.7	130.7	130.9	130.8	131.6	131.8	132.8	133.1
Piano lessons, beginner.....	121.0	120.7	120.7	121.4	121.5	121.5	121.6	122.0	122.0	122.1	122.1	122.2	122.2	122.3
OTHER GOODS AND SERVICES														
Tobacco products.....	120.9	121.2	121.8	122.4	122.6	122.8	123.0	123.5	124.3	124.6	125.1	125.4	125.6	125.8
Cigarettes, nonfilter tip, regular size.....	126.4	126.9	127.9	128.9	129.0	129.0	129.2	130.2	132.0	132.0	132.7	133.2	134.0	134.0
Cigarettes, filter, king.....	127.9	128.5	129.6	130.2	130.2	130.3	130.6	131.6	133.2	133.7	133.9	134.4	135.6	135.6
Cigars, domestic, regular.....	128.1	128.6	129.6	130.8	130.8	130.8	131.1	132.2	134.3	134.8	135.0	135.5	136.1	136.1
Cigars, domestic, regular.....	107.1	106.3	107.3	108.5	108.7	109.3	109.5	109.7	110.3	110.6	110.7	110.7	110.9	110.9
Alcoholic beverages.....	116.9	117.0	117.4	117.6	117.9	118.3	118.4	118.5	118.7	118.9	119.3	119.5	119.1	119.6
Beer.....	112.9	113.3	113.3	113.4	113.6	113.7	113.8	113.5	113.6	113.9	114.1	114.2	113.1	113.4
Whiskey, spirit blended and straight bourbon.....	106.4	106.3	107.0	107.0	106.8	106.9	107.0	107.4	108.5	108.5	108.6	108.6	108.5	109.0
Wine, dessert and table.....	122.3	123.0	123.9	124.5	124.7	124.9	125.1	125.3	125.6	125.9	126.4	126.5	126.7	127.5
Beer, away from home.....	126.4	126.2	126.8	127.1	127.7	128.8	128.8	129.3	129.0	129.1	130.1	130.5	130.7	131.2
Financial and miscellaneous personal expenses:														
Funeral services, adult.....	117.2	117.7	118.3	118.4	118.8	119.1	119.2	119.5	120.2	120.6	120.6	120.7	121.1	121.3
Bank service charges, checking accounts.....	110.6	110.8	110.9	110.9	109.3	109.3	109.5	109.7	108.5	108.2	107.4	107.4	107.4	107.0
Legal services, will.....	135.5	133.6	133.9	137.4	139.9	140.2	141.4	141.7	141.8	141.9	149.3	149.3	150.6	150.2

¹ Priced only in season.² March 1970=100.³ June 1970=100.⁴ December 1971=100.⁵ January 1972=100.

NOTE: For a description of the general method of computing the monthly Consumer Price Index, see BLS Handbook of Methods for Surveys and Studies (BLS

Bulletin 1711, 1971), chapter 10.

r= 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. Indexes for services reflect revision of auto finance charges which are imputed to changes in new car prices.

°=corrected.

26. Consumer Price Index¹—U.S. city average, and selected areas

[1967 = 100 unless otherwise specified]

Area ²	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All items														
U.S. city average ³	121.3	121.8	+122.1	+122.2	+122.4	122.6	123.1	123.2	123.8	124.0	124.3	124.7	125.0	125.5
Atlanta, Ga.....	121.7	(*)	(*)	+122.0	(*)	(*)	(*)	(*)	(*)	132.8	(*)	(*)	124.8	(*)
Baltimore, Md.....	123.4	(*)	(*)	+124.4	(*)	(*)	123.5	(*)	(*)	124.9	(*)	(*)	125.5	(*)
Boston, Mass.....	122.8	122.9	(*)	(*)	+124.5	(*)	125.1	(*)	(*)	(*)	(*)	(*)	127.1	(*)
Buffalo, N.Y.....	121.8	(*)	+122.8	(*)	(*)	123.1	(*)	124.9	(*)	(*)	126.2	(*)	(*)	(*)
Chicago, Ill.-Northwestern Ind.....	120.8	120.9	+121.5	+121.7	+121.7	121.8	122.3	122.1	123.0	123.2	123.3	123.7	124.2	124.4
Cincinnati, Ohio-Kentucky.....	120.7	(*)	(*)	+121.4	(*)	(*)	121.9	(*)	(*)	123.0	(*)	(*)	124.6	(*)
Cleveland, Ohio.....	122.8	(*)	+123.2	(*)	(*)	124.4	(*)	(*)	125.9	(*)	(*)	126.1	(*)	(*)
Dallas, Tex.....	121.3	(*)	+122.7	(*)	(*)	122.4	(*)	(*)	123.7	(*)	(*)	124.6	(*)	(*)
Detroit, Mich.....	121.7	121.8	+122.8	+122.8	+122.8	123.4	123.7	124.2	124.9	125.0	125.0	125.5	126.0	126.7
Honolulu, Hawaii.....	118.9	(*)	(*)	+121.2	(*)	(*)	121.1	(*)	(*)	122.4	(*)	(*)	122.2	(*)
Houston, Tex.....	120.9	121.3	(*)	(*)	+122.4	(*)	(*)	(*)	123.2	(*)	(*)	124.8	(*)	125.2
Kansas City, Mo.-Kansas.....	120.5	(*)	(*)	+121.5	(*)	(*)	121.4	(*)	(*)	122.4	(*)	(*)	123.9	(*)
Los Angeles-Long Beach, Calif.....	118.5	119.1	+119.5	+120.3	+120.3	120.1	120.1	120.2	120.4	121.2	121.3	121.4	121.7	122.8
Milwaukee, Wis.....	120.1	(*)	+121.4	(*)	(*)	120.9	(*)	(*)	122.2	(*)	(*)	122.8	(*)	(*)
Minneapolis-St. Paul, Minn.....	121.7	121.9	(*)	(*)	+123.4	(*)	(*)	(*)	123.8	(*)	124.2	(*)	(*)	125.5
New York, N.Y.-Northeastern N.J.....	125.9	126.8	+126.9	+127.3	+127.5	127.6	128.0	128.4	129.5	130.0	130.3	130.5	130.9	131.4
Philadelphia, Pa.-N.J.....	123.5	123.7	+123.6	+124.6	+125.0	124.7	125.0	124.7	125.2	125.8	126.0	126.1	126.5	127.0
Pittsburgh, Pa.....	121.5	121.8	(*)	(*)	+122.9	(*)	(*)	(*)	123.2	(*)	(*)	124.7	(*)	125.5
Portland, Oreg.-Wash. ⁵	116.1	116.2	(*)	(*)	+117.4	(*)	(*)	118.1	(*)	(*)	118.4	(*)	(*)	119.6
St. Louis, Mo.-Ill.....	119.6	(*)	(*)	+120.5	(*)	(*)	120.9	(*)	(*)	120.8	(*)	(*)	121.9	(*)
San Diego, Calif.....	119.9	(*)	+120.7	(*)	(*)	120.9	(*)	(*)	122.3	(*)	(*)	123.8	(*)	(*)
San Francisco-Oakland, Calif.....	120.2	(*)	(*)	+120.9	(*)	(*)	121.8	(*)	(*)	122.9	(*)	(*)	124.3	(*)
Scranton, Pa. ⁶	121.4	(*)	+123.2	(*)	(*)	122.6	(*)	(*)	123.6	(*)	(*)	125.1	(*)	(*)
Seattle, Wash.....	116.4	(*)	+117.6	(*)	(*)	117.6	(*)	(*)	119.0	(*)	(*)	118.8	(*)	(*)
Washington, D.C.-Md.-Va.....	122.7	(*)	+123.5	(*)	(*)	124.2	(*)	(*)	124.7	(*)	(*)	125.6	(*)	(*)
Food														
U.S. city average.....	118.4	119.8	120.0	119.1	118.9	119.0	120.3	120.3	122.2	122.4	122.4	122.3	123.0	124.2
Atlanta, Ga.....	118.1	119.1	119.3	119.0	118.4	118.7	119.6	120.6	122.1	122.6	123.7	123.3	123.6	124.3
Baltimore, Md.....	121.0	122.0	122.6	122.2	121.8	121.7	123.2	121.9	123.2	123.9	122.7	123.2	123.2	125.0
Boston, Mass.....	118.5	119.0	119.2	118.5	118.4	118.8	119.9	119.5	121.2	122.3	122.5	122.8	122.9	124.0
Buffalo, N.Y.....	119.7	121.4	122.0	119.6	119.8	119.8	120.9	121.1	122.9	122.8	122.5	122.5	123.2	124.4
Chicago, Ill.-Northwestern Ind.....	118.5	120.5	120.7	119.4	118.9	119.2	119.6	119.8	122.8	122.7	122.3	122.3	123.9	124.3
Cincinnati, Ohio-Kentucky.....	118.4	119.2	119.7	118.7	118.9	118.9	120.7	120.5	123.6	123.6	123.2	123.5	122.4	125.6
Cleveland, Ohio.....	118.9	120.3	119.0	118.2	118.1	118.4	119.2	118.9	121.7	122.1	121.7	121.6	122.9	124.4
Dallas, Tex.....	117.8	118.8	119.5	118.6	118.7	118.5	120.6	120.8	122.5	122.1	121.4	121.6	122.9	123.0
Detroit, Mich.....	117.3	118.9	119.4	118.4	117.8	117.8	119.2	119.7	122.1	122.0	121.3	121.1	122.4	124.2
Honolulu, Hawaii.....	118.1	116.5	119.6	121.4	121.8	120.4	120.9	120.7	123.7	123.2	122.8	122.3	121.3	122.1
Houston, Tex.....	118.8	120.1	120.5	120.1	120.2	120.0	121.5	121.9	123.2	124.0	123.6	123.2	123.6	124.8
Kansas City, Mo.-Kansas.....	118.6	119.6	120.3	120.0	119.5	119.8	120.8	120.9	122.8	122.8	122.5	122.0	123.2	124.1
Los Angeles-Long Beach, Calif.....	114.9	115.8	115.8	115.1	115.3	115.8	116.6	117.5	118.9	118.8	119.2	119.0	120.0	121.3
Milwaukee, Wis.....	115.7	117.6	117.6	116.8	116.3	116.3	117.2	117.0	119.4	119.4	119.1	119.4	120.1	120.9
Minneapolis-St. Paul, Minn.....	119.2	121.8	122.1	119.5	119.1	119.2	120.6	120.5	122.0	122.8	122.9	123.3	124.1	125.3
New York, N.Y.-Northeastern N.J.....	123.1	124.8	124.9	124.2	124.3	124.3	125.2	125.2	126.9	127.4	127.4	127.3	128.1	129.5
Philadelphia, Pa.-N.J.....	120.1	121.4	121.8	121.4	121.0	120.6	122.0	122.2	123.8	124.3	124.2	123.0	123.0	124.0
Pittsburgh, Pa.....	118.9	120.3	120.1	119.4	119.0	119.4	120.9	120.9	122.6	123.1	122.4	121.5	121.5	123.0
Portland, Oreg.-Wash. ⁵	113.4	114.6	-----	-----	112.5	-----	-----	114.9	-----	-----	116.4	-----	-----	118.9
St. Louis, Mo.-Ill.....	118.0	119.6	120.0	118.8	118.3	118.5	119.4	119.7	120.9	120.8	121.0	121.4	122.0	123.5
San Diego, Calif.....	117.3	118.3	118.2	117.8	117.7	118.6	119.5	120.0	121.8	121.8	122.0	122.3	123.4	124.2
San Francisco-Oakland, Calif.....	116.1	117.2	116.6	115.5	116.3	116.9	118.9	119.1	120.2	119.8	119.7	120.9	121.2	122.4
Scranton, Pa. ⁶	120.1	-----	122.8	-----	-----	119.6	-----	-----	123.6	-----	-----	121.7	-----	-----
Seattle, Wash.....	115.9	116.7	117.0	116.8	116.3	116.5	118.2	118.4	119.6	119.0	119.1	119.3	120.4	121.1
Washington, D.C.-Md.-Va.....	120.2	121.4	122.2	121.3	121.4	121.2	122.0	120.9	123.7	124.0	123.8	122.9	124.8	126.1

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						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
	All commodities.....	113.9	114.6	114.9	114.5	114.4	114.5	115.4	116.3	117.3	117.4	117.5	118.2	118.8	119.7
	All commodities (1957-59=100).....	120.9	121.6	121.9	121.5	121.4	121.5	122.4	123.4	124.5	124.6	124.7	125.4	126.0	127.0
	Farm products and processed foods and feeds.....	113.8	115.0	114.6	113.0	113.0	113.6	115.9	117.4	119.6	119.1	118.3	120.0	121.3	124.0
	Industrial commodities.....	114.0	114.5	115.1	115.0	115.0	114.9	115.3	115.9	116.5	116.8	117.3	117.6	117.9	118.1
	FARM PRODUCTS AND PROCESSED FOODS AND FEEDS														
	Farm products.....	112.9	113.4	113.2	110.5	111.3	112.2	115.8	117.8	120.7	119.7	119.1	122.2	124.0	128.0
01	Fresh and dried fruits and vegetables.....	120.1	109.3	115.9	103.6	115.8	127.1	126.3	124.9	127.5	112.8	117.6	120.6	121.7	129.9
01-2	Grains.....	100.9	102.5	92.8	89.0	88.3	87.8	95.3	94.1	93.0	93.8	96.0	97.5	94.5	96.3
01-3	Livestock.....	118.3	121.3	121.3	119.1	120.9	121.0	124.7	132.2	139.6	136.7	133.8	139.8	146.4	152.4
01-4	Live poultry.....	100.3	121.1	100.8	102.8	93.5	92.3	87.2	94.3	105.4	107.6	94.1	96.3	102.9	118.4
01-5	Plant and animal fibers.....	92.8	92.6	93.4	95.2	96.3	97.3	102.5	109.5	113.2	114.3	122.1	130.1	127.3	125.4
01-6	Fluid milk.....	118.8	119.5	119.3	119.2	119.2	118.8	119.0	120.5	120.5	121.8	122.1	122.5	121.7	122.0
01-7	Eggs.....	100.8	89.4	110.1	107.8	92.4	88.5	114.4	92.6	91.9	107.7	87.2	90.6	91.9	102.2
01-8	Hay, hayseeds, and oilseeds.....	109.2	114.4	114.3	108.9	107.9	109.0	109.2	108.7	110.2	114.4	118.5	116.9	116.9	116.8
01-9	Other farm products.....	115.4	113.3	113.9	115.6	115.4	111.8	117.3	118.0	116.8	117.5	118.0	119.5	119.9	121.8
02	Processed foods and feeds.....	114.3	116.0	115.4	114.6	114.1	114.4	115.9	117.2	118.8	118.6	117.7	118.6	119.6	121.5
02-1	Cereal and bakery products.....	111.4	111.5	111.4	111.3	111.3	111.5	111.6	112.2	112.4	112.6	112.8	113.3	113.3	113.6
02-2	Meats, poultry, and fish.....	116.0	119.6	117.7	117.5	116.9	117.1	120.4	125.4	130.5	127.3	123.6	126.8	131.4	135.8
02-3	Dairy products.....	115.4	116.2	115.4	115.4	116.4	116.3	117.4	117.3	117.5	118.0	117.5	117.4	115.3	117.7
02-4	Processed fruits and vegetables.....	114.3	115.9	116.2	115.7	115.3	115.4	115.8	116.0	116.1	116.7	118.3	119.0	119.5	119.6
02-5	Sugar and confectionery.....	119.2	119.4	120.5	119.8	118.7	119.1	120.2	120.1	121.1	121.9	121.1	120.8	121.3	122.2
02-6	Beverages and beverage materials.....	115.8	115.9	116.1	116.0	116.4	116.6	116.4	116.4	116.4	116.8	116.7	117.2	117.8	117.9
02-7	Animal fats and oils.....	130.9	135.7	144.0	136.5	132.1	130.1	122.3	121.4	133.5	130.4	127.8	127.3	125.8	124.1
02-72	Crude vegetable oils.....	128.8	136.7	147.5	135.6	128.9	128.6	118.2	114.2	116.8	115.6	118.9	112.8	112.0	106.9
02-73	Refined vegetable oils.....	134.8	135.5	140.7	133.6	127.9	130.4	122.7	121.0	120.1	120.6	120.9	119.6	119.1	115.8
02-74	Vegetable oil end products.....	121.1	122.8	124.6	123.3	122.8	122.8	122.0	121.7	121.1	120.8	120.7	120.7	121.5	121.4
02-8	Miscellaneous processed foods.....	113.2	113.8	113.8	113.0	112.7	113.0	113.1	113.6	113.8	113.7	113.8	115.0	114.4	114.4
02-9	Manufactured animal feeds.....	104.4	106.9	104.7	101.3	98.7	100.3	104.5	103.8	103.7	108.5	108.5	108.4	107.7	110.9
	INDUSTRIAL COMMODITIES														
03	Textile products and apparel.....	108.6	109.2	109.7	109.7	109.6	109.8	110.6	111.3	112.0	112.1	112.6	113.3	113.6	114.0
03-1	Cotton products.....	110.6	111.9	112.5	112.2	112.2	112.5	113.6	116.7	118.0	119.6	120.5	121.5	122.6	123.0
03-2	Wool products.....	93.5	92.6	92.7	92.5	92.4	92.3	91.5	92.0	92.2	92.0	93.0	98.3	99.2	100.0
03-3	Manmade fiber textile products.....	100.8	101.9	103.1	103.1	102.5	103.2	104.3	105.4	105.9	106.1	107.2	108.0	108.6	108.9
03-5	Apparel.....	112.9	113.3	113.6	113.8	113.8	113.8	113.8	113.8	114.0	114.1	114.1	114.3	114.4	115.1
03-6	Textile housefurnishings.....	104.2	104.8	104.8	104.1	104.1	104.1	106.1	106.2	108.5	108.7	108.7	109.3	109.5	109.5
03-7	Miscellaneous textile products.....	117.2	119.9	117.2	119.8	120.8	121.2	136.2	137.4	141.6	130.9	131.1	129.8	125.8	122.6
04	Hides, skins, leather, and related products.....	114.0	114.2	114.4	114.7	114.7	115.1	116.2	117.8	119.1	123.0	127.2	129.5	130.9	131.6
04-1	Hides and skins.....	115.1	114.0	114.6	117.7	117.2	123.1	128.6	136.0	148.9	173.8	188.6	200.3	204.1	212.5
04-2	Leather.....	112.5	114.4	114.4	113.4	113.4	113.5	117.0	120.0	120.6	128.4	138.1	137.8	138.6	138.1
04-3	Footwear.....	116.8	116.8	117.1	117.1	117.1	117.1	117.1	118.1	118.5	120.1	122.4	124.6	125.8	126.5
04-4	Other leather and related products.....	108.3	108.2	108.2	109.0	109.0	109.1	109.8	110.6	111.2	111.9	113.7	115.3	116.7	116.5
05	Fuels and related products and power.....	114.2	114.4	114.8	115.3	114.8	114.7	115.0	116.0	116.1	116.5	116.9	117.5	118.2	118.6
05-1	Coal.....	181.8	182.9	182.9	182.9	182.9	182.9	190.2	192.7	192.6	192.6	191.2	191.2	191.2	191.2
05-2	Coke.....	148.7	150.5	150.5	150.5	150.5	150.5	150.5	155.0	155.0	155.0	155.3	155.3	155.3	155.3
05-3	Gas fuels.....	108.0	107.7	107.2	108.4	108.8	108.8	107.9	110.0	110.2	110.9	112.5	113.0	112.9	113.2
05-4	Electric power.....	113.6	113.5	115.3	116.4	116.3	116.2	116.3	118.9	120.0	120.0	120.5	121.2	121.5	122.1
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	107.2	107.3	107.3	106.3	106.2	106.1	106.1	105.5	106.3	106.6	107.3	108.5	109.1
06	Chemicals and allied products.....	104.2	104.4	104.3	104.3	104.2	103.8	103.4	103.4	103.5	103.4	104.1	104.4	104.3	104.2
06-1	Industrial chemicals.....	102.0	102.4	102.4	102.4	102.4	101.7	101.1	101.4	101.4	101.0	101.5	101.4	101.4	101.5
06-21	Prepared paint.....	115.6	115.9	115.9	115.9	115.9	115.9	115.9	116.2	117.3	117.9	118.3	118.3	118.3	118.3
06-22	Paint materials.....	101.5	99.8	99.8	99.7	99.7	99.7	101.9	102.7	102.7	102.7	103.0	103.5	103.9	104.2
06-3	Drugs and pharmaceuticals.....	102.4	102.6	102.7	102.6	102.6	102.4	102.5	102.3	102.2	102.5	102.4	102.8	103.1	103.2
06-4	Fats and oils, inedible.....	133.5	130.8	134.2	132.9	129.0	125.3	115.9	111.3	110.7	103.5	112.2	116.0	115.9	113.2
06-5	Agricultural chemicals and chemical products.....	92.2	93.4	91.0	91.0	90.4	90.3	90.3	90.3	90.2	90.6	92.2	92.1	92.3	91.9
06-6	Plastic resins and materials.....	88.9	88.6	89.0	89.5	89.9	89.2	89.0	88.6	89.3	88.9	88.3	88.6	87.9	87.9
06-7	Other chemicals and allied products.....	112.1	112.5	112.4	112.4	112.5	112.5	112.4	112.4	112.5	112.7	113.5	114.1	113.8	113.3
07	Rubber and plastic products.....	109.2	109.7	109.8	109.7	109.5	109.5	109.4	109.5	109.2	108.9	108.7	108.8	108.9	109.2
07-1	Rubber and rubber products.....	112.2	113.2	113.7	113.7	113.3	113.3	113.4	113.4	113.0	112.9	112.9	113.0	113.3	113.8
07-11	Crude rubber.....	99.3	98.8	99.6	99.3	99.0	98.5	98.5	99.2	98.8	98.5	98.2	98.6	98.6	98.8
07-12	Tires and tubes.....	109.2	111.2	111.4	110.8	110.8	110.8	110.8	110.3	108.4	108.4	108.4	108.4	108.7	109.5
07-13	Miscellaneous rubber products.....	118.0	118.7	119.3	119.8	119.2	119.2	119.2	119.7	120.4	120.4	120.4	120.4	120.8	121.3
07-21	Plastic construction products ³	94.7	94.0	94.1	94.7	94.6	94.1	93.8	93.7	93.8	93.6	93.6	93.3	93.5	93.3
07-22	Unsupported plastic film and sheeting ⁴	101.1	100.6	100.1	100.0	100.0	100.1	100.0	100.0	99.9	98.9	98.4	98.5	98.1	98.2
07-23	Laminated plastic sheets, high pressure ⁴	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	98.3
08	Lumber and wood products.....	127.0	130.6	134.6	134.3	131.8	131.3	132.7	134.9	137.7	139.5	141.1	142.7	144.2	146.1
08-1	Lumber.....	135.5	142.5	146.7	146.8	142.7	141.9	143.8	146.9	150.4	152.4	155.1	157.0	159.0	161.6
08-2	Millwork.....	120.7	122.8	123.8	123.7										

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						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
INDUSTRIAL COMMODITIES—Continued															
09	Pulp, paper, and allied products	110.1	110.5	110.6	110.6	110.6	110.6	110.7	110.8	111.6	112.3	112.8	113.2	113.5	113.7
09-1	Pulp, paper, and products, excluding building paper and board	110.4	110.8	110.8	110.8	110.9	110.9	111.0	111.1	111.9	112.5	113.1	113.4	113.8	114.0
09-11	Woodpulp	112.0	112.4	112.4	111.5	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	111.8	112.8	114.5	117.2	117.2	124.6	124.9	126.6	129.3	131.0	130.5	137.7	137.7
09-13	Paper	114.1	114.6	114.7	114.7	114.7	114.7	114.7	114.9	115.3	115.7	115.9	115.9	116.2	116.7
09-14	Paperboard	102.4	102.8	102.8	102.8	102.9	102.9	102.7	102.7	103.5	103.6	105.6	105.8	106.0	106.0
09-15	Converted paper and paperboard products	109.7	110.1	110.1	110.2	110.1	110.1	110.1	110.3	111.4	112.2	112.7	113.3	113.5	113.7
09-2	Building paper and board	103.0	103.6	104.3	104.5	104.6	104.7	104.6	104.7	104.7	105.6	106.1	106.5	106.6	106.8
10	Metals and metal products	119.0	119.4	121.1	121.1	121.0	120.9	120.8	121.4	122.6	123.4	123.5	123.6	123.6	123.5
10-1	Iron and steel	121.8	121.9	125.3	125.6	125.5	125.3	125.3	126.8	128.2	128.3	128.3	128.3	128.1	128.3
10-13	Steel mill products	123.0	123.4	128.1	128.2	128.1	128.2	128.2	129.6	131.0	130.9	130.9	130.7	130.4	130.3
10-2	Nonferrous metals	116.0	116.9	117.1	116.5	116.3	116.0	114.9	114.4	115.0	117.2	117.6	117.8	117.6	116.8
10-3	Metal containers	121.7	123.0	124.2	124.2	124.2	124.2	124.2	124.2	127.1	127.1	127.3	127.3	128.8	129.9
10-4	Hardware	116.5	116.7	117.7	117.7	117.7	117.7	117.7	118.4	119.0	119.2	119.6	120.2	120.4	120.5
10-5	Plumbing fixtures and brass fittings	116.4	117.9	118.3	118.3	118.3	118.3	118.4	118.2	118.6	118.9	119.0	119.0	119.7	119.7
10-6	Heating equipment	115.5	115.9	116.8	116.7	116.3	116.5	116.3	115.9	116.2	117.0	117.9	118.1	118.6	119.0
10-7	Fabricated structural metal products	118.2	118.2	119.6	120.3	120.3	120.3	120.4	121.6	122.0	122.1	122.1	122.0	122.2	122.2
10-8	Miscellaneous metal products	119.0	119.3	119.8	119.9	119.7	119.7	119.7	120.9	121.3	123.2	124.1	124.3	124.4	124.2
11	Machinery and equipment	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	118.3
11-1	Agricultural machinery and equipment	117.2	117.4	117.5	117.5	117.5	117.5	118.6	119.9	121.5	122.0	122.1	122.3	122.7	122.7
11-2	Construction machinery and equipment	121.4	121.6	121.9	121.8	121.8	122.0	123.2	124.3	124.7	125.0	125.7	125.6	125.9	125.9
11-3	Metalworking machinery and equipment	117.3	117.7	118.1	118.0	118.1	118.2	118.4	118.5	118.9	119.4	119.7	120.0	120.2	120.5
11-4	General purpose machinery and equipment	119.1	119.8	120.3	120.2	120.2	120.2	120.5	120.8	121.2	121.5	121.9	122.2	122.7	122.9
11-6	Special industry machinery and equipment	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	123.9
11-7	Electrical machinery and equipment	109.5	109.5	109.9	109.7	109.6	109.3	109.3	109.5	110.0	110.1	110.2	110.5	110.6	110.7
11-9	Miscellaneous machinery	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	120.8
12	Furniture and household durables	109.9	110.0	110.2	110.2	110.2	110.2	110.2	110.2	110.8	110.9	111.0	111.1	111.2	111.4
12-1	Household furniture	114.8	115.3	115.5	115.6	115.6	115.4	115.5	116.0	116.7	116.8	116.9	117.1	117.2	117.4
12-2	Commercial furniture	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	119.8
12-3	Floor coverings	98.8	98.2	97.6	97.6	97.6	97.6	97.9	98.1	98.2	98.2	98.2	98.2	98.6	98.8
12-4	Household appliances	107.2	107.0	107.4	107.6	107.5	107.6	107.4	106.9	107.5	107.4	107.5	107.2	107.1	107.3
12-5	Home electronic equipment	93.8	93.9	94.0	93.8	93.8	93.4	93.4	93.4	92.9	93.0	92.8	92.8	92.6	92.4
12-6	Other household durable goods	120.9	121.6	122.1	122.1	121.9	122.0	122.1	122.3	124.1	124.5	124.5	125.0	125.4	126.4
13	Nonmetallic mineral products	122.4	123.3	124.2	124.2	124.1	124.0	124.2	124.3	124.6	124.8	125.6	125.9	125.8	126.2
13-11	Flat glass	123.9	122.5	124.3	124.3	124.3	123.1	123.6	123.6	123.6	122.4	121.1	121.5	121.1	121.8
13-2	Concrete ingredients	121.9	123.3	124.0	124.1	124.1	124.3	124.2	124.4	124.6	124.6	126.4	126.7	126.8	126.9
13-3	Concrete products	120.6	121.5	122.8	122.6	122.6	122.6	122.9	123.4	123.8	124.5	125.1	125.1	125.3	126.0
13-4	Structural clay products excluding refractories	114.2	114.5	114.9	114.9	114.9	114.9	114.9	114.8	116.1	116.2	117.2	117.2	117.4	117.5
13-5	Refractories	126.9	126.9	126.9	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1	127.1
13-6	Asphalt roofing	125.5	131.2	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	112.7	114.3	114.5	113.6	112.1	114.1	112.8	115.3	114.9	113.4	113.4	113.9	115.7
13-8	Glass containers	131.6	131.5	131.5	131.5	131.5	131.5	131.5	131.5	131.5	131.5	136.2	136.2	136.2	136.4
13-9	Other nonmetallic minerals	124.1	125.6	125.7	125.7	125.7	125.6	125.6	125.7	125.9	126.4	126.4	128.4	127.4	127.1
14	Transportation equipment³	110.3	110.3	110.5	109.6	110.7	110.8	112.9	113.4	113.6	113.7	113.8	113.8	114.2	114.1
14-1	Motor vehicles and equipment	114.7	114.7	114.9	113.8	115.2	115.3	117.5	117.9	118.0	118.0	118.0	118.1	118.5	118.4
14-4	Railroad equipment	121.1	121.5	122.5	122.5	122.5	122.5	122.6	123.7	123.9	127.3	128.4	129.6	129.6	130.2
15	Miscellaneous products	112.8	112.8	113.0	113.0	113.0	113.1	113.2	113.7	114.0	114.2	114.1	114.1	114.2	114.9
15-1	Toys, sporting goods, small arms, ammunition	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	114.5
15-2	Tobacco products	116.7	116.6	116.8	116.8	116.8	116.8	116.7	117.4	117.4	117.4	117.4	117.5	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	106.2	106.3	106.3	106.3	106.5	106.5	106.4	106.7	106.9	106.2	106.2	106.2	106.3
15-9	Other miscellaneous products	112.3	112.4	112.9	112.9	112.9	112.9	113.0	113.9	114.4	114.5	115.0	114.9	115.2	117.4

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 groupings ¹

[1967 = 100 unless otherwise specified] ²

Commodity group	Annual average 1971	1971						1972						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All commodities—less farm products.....	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	118.7
All foods.....	115.5	115.8	116.6	115.1	115.3	116.3	118.1	118.9	120.8	119.3	118.0	119.4	120.7	123.4
Processed foods.....	115.6	117.3	116.9	116.4	116.1	116.2	117.5	119.2	121.2	120.3	119.1	120.2	121.5	123.5
Textile products, excluding hard and bast fiber products.....	103.7	104.6	105.2	105.0	104.7	105.1	106.1	107.6	108.7	109.1	110.0	111.4	112.2	112.5
Hosiery.....	95.6	95.5	95.5	95.5	95.5	95.5	96.0	96.0	96.0	96.0	96.0	96.4	96.2	96.2
Underwear and nightwear.....	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	110.1
Refined petroleum products.....	106.8	107.2	107.3	107.3	106.3	106.2	106.1	106.1	105.5	106.3	106.6	107.3	108.5	109.1
East Coast.....	120.0	121.8	120.8	120.8	120.4	119.2	119.2	119.2	119.9	119.9	119.9	119.9	119.9	119.9
Mid-Continent.....	103.3	103.1	103.1	103.1	101.6	101.6	101.6	100.2	100.2	100.2	103.1	103.1	103.1	103.1
Gulf Coast.....	100.0	100.7	100.7	100.7	98.4	98.4	98.4	98.4	96.9	99.2	99.2	99.2	102.3	103.8
Pacific Coast.....	112.7	112.4	113.0	113.3	113.8	113.8	112.7	113.3	114.1	113.3	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	112.8	112.8	112.8	113.0	113.0
Chemicals and allied products, including synthetic rubber and manmade fibers and yarns ³	103.2	103.5	103.3	103.3	103.3	103.0	102.9	103.0	103.2	103.2	103.7	103.9	103.8	103.7
Pharmaceutical preparations.....	102.2	102.4	102.5	102.5	102.5	102.3	102.4	102.2	102.1	102.5	102.4	102.8	103.1	103.2
Lumber and wood products, excluding millwork and other wood products ⁴	130.1	134.7	140.0	139.7	135.9	135.3	137.2	140.1	143.9	146.4	148.4	150.2	152.1	154.3
Special metals and metal products ⁵	117.6	117.9	119.0	118.7	119.0	119.0	119.7	120.3	121.1	121.6	121.7	121.8	121.9	121.8
Fabricated metal products ⁶	118.4	118.8	119.7	120.0	119.9	119.9	120.4	121.0	122.2	122.7	122.8	122.9	123.2	123.3
Copper and copper products ⁷	116.6	118.4	117.8	117.0	116.7	116.0	114.0	115.0	116.3	120.1	119.9	119.4	118.8	116.9
Machinery and motive products.....	115.3	115.5	115.8	115.3	115.8	115.8	116.7	117.2	117.6	117.7	117.9	118.2	118.5	118.5
Machinery and equipment, except electrical.....	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	122.6
Agricultural machinery, including tractors.....	117.3	117.6	117.7	117.7	117.7	117.7	118.9	120.4	122.1	122.6	122.7	122.8	123.2	123.2
Metalworking machinery.....	118.6	119.2	119.4	119.2	119.3	119.5	119.8	119.9	120.3	120.8	121.2	121.5	121.6	121.9
Numerically controlled machine tools (Dec. 1971 = 100).....	120.7	120.8	120.8	120.8	120.8	120.8	122.5	124.1	124.6	125.0	125.4	125.6	125.7	125.7
Total tractors.....	116.3	118.1	118.6	118.6	118.6	119.1	119.1	119.1	120.2	120.2	120.2	120.5	121.3	121.3
Industrial valves.....	122.4	122.6	122.6	122.6	122.6	122.6	123.0	123.8	123.1	123.1	124.2	124.2	121.9	121.3
Industrial fittings.....	122.1	123.7	123.5	123.5	123.5	123.5	123.5	123.5	123.8	126.5	126.8	126.8	126.8	126.8
Abrasive grinding wheels.....	119.5	120.9	122.9	123.0	122.2	122.0	122.4	123.2	124.2	124.9	125.7	126.2	126.6	127.2

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 Introduced in July 72. See Wholesale Prices and Price Indexes, July 72 for a description.

⁷ 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						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All commodities.....	113.9	114.6	114.9	114.5	114.4	114.5	115.4	116.3	117.3	117.4	117.5	118.2	118.8	119.7
Total durable goods.....	117.0	117.5	118.4	118.2	118.2	118.1	118.6	119.2	120.0	120.4	120.7	121.0	121.2	121.4
Total nondurable goods.....	111.7	112.4	112.4	111.7	111.6	111.8	113.0	114.1	115.3	115.2	115.1	116.2	117.0	118.5
Total manufactures.....	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	118.3
Durable.....	117.0	117.5	118.5	118.3	118.3	118.3	118.8	119.3	120.0	120.4	120.8	121.0	121.3	121.5
Nondurable.....	110.5	111.4	111.2	111.0	110.6	110.7	111.3	112.0	112.8	112.9	112.9	113.6	114.3	115.1
Total raw or slightly processed goods.....	114.4	114.7	114.8	113.2	113.8	114.3	116.8	118.9	120.9	120.7	120.4	122.4	123.3	126.3
Durable.....	112.2	111.4	110.4	111.1	110.4	108.9	107.4	110.3	113.1	116.2	115.0	115.0	114.1	114.2
Nondurable.....	114.6	115.0	115.1	113.4	114.0	114.6	117.3	119.3	121.3	121.0	120.7	122.7	123.8	127.0

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						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All commodities.....	113.9	114.6	114.9	114.5	114.4	114.5	115.4	116.3	117.3	117.4	117.5	118.2	118.8	119.7
Crude materials for further processing.....	115.0	116.6	115.2	113.9	114.3	114.3	117.0	120.2	123.1	123.1	123.0	125.5	127.2	130.1
RAW MATERIALS														
Foodstuffs and feedstuffs.....	114.2	116.6	114.5	112.1	112.6	112.7	115.8	119.3	122.9	122.0	121.0	124.0	126.7	131.2
Nonfood materials except fuel.....	110.5	110.4	110.2	111.1	111.1	111.1	112.8	115.4	117.3	119.5	121.3	123.2	122.7	122.6
Manufacturing.....	109.7	109.5	109.3	110.3	110.3	110.2	112.2	115.1	117.1	119.5	121.5	123.5	123.0	122.8
Construction.....	119.1	119.6	120.1	120.3	120.3	120.5	120.4	120.7	120.9	121.0	121.2	121.5	121.5	121.5
Crude fuel.....	138.5	139.7	139.3	140.3	140.6	140.6	142.7	145.4	145.6	146.2	146.9	147.3	147.2	147.5
Manufacturing industries.....	129.6	130.7	130.2	131.4	131.8	131.8	132.8	135.5	135.7	136.5	137.6	138.1	138.0	138.4
Nonmanufacturing industries.....	150.4	151.5	151.2	152.0	152.2	152.2	155.7	158.4	158.6	159.0	159.1	159.4	159.4	159.6
INTERMEDIATE MATERIALS														
Intermediate materials: Supplies and components.....	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	118.8
Materials and components for manufacturing.....	113.0	113.6	114.6	114.4	114.2	114.2	114.4	114.9	115.7	115.9	116.4	116.9	117.1	117.3
Materials for food manufacturing.....	116.2	117.5	118.3	117.1	116.6	116.8	117.3	117.9	119.4	118.6	117.8	118.5	119.2	120.1
Materials for nondurable manufacturing.....	105.6	106.1	106.3	106.2	105.9	105.9	106.3	107.0	107.4	107.5	108.7	109.3	109.6	109.7
Materials for durable manufacturing.....	118.8	119.6	121.7	121.6	121.4	121.2	121.0	121.5	122.7	123.3	123.7	123.9	123.8	123.8
Components for manufacturing.....	114.7	114.9	115.5	115.6	115.4	115.6	115.8	116.0	116.5	116.6	117.0	117.6	118.0	118.1
Materials and components for construction.....	119.5	120.8	122.5	122.5	121.9	121.8	122.3	123.1	124.2	124.9	125.5	125.9	126.3	126.7
Processed fuels and lubricants.....	113.4	113.4	114.6	115.3	114.6	114.4	114.3	116.0	116.8	116.9	117.3	118.1	118.7	119.3
Manufacturing industries.....	115.2	115.1	116.6	117.5	117.2	117.0	117.0	119.2	120.4	120.4	120.8	121.7	122.0	122.5
Nonmanufacturing industries.....	110.6	110.9	111.5	111.9	110.6	110.4	110.1	111.0	111.1	111.5	111.9	112.6	113.7	114.4
Containers.....	116.6	117.2	117.5	117.6	117.6	117.6	117.6	117.8	119.5	120.0	121.2	121.3	122.0	122.4
Supplies.....	110.9	111.9	111.3	110.3	109.6	110.1	111.1	111.0	111.4	112.8	113.0	113.3	113.4	114.4
Manufacturing industries.....	113.1	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.9	114.2	114.5	114.8	114.9	115.0
Nonmanufacturing industries.....	109.9	111.3	110.4	109.0	107.9	108.6	110.2	110.1	110.3	112.3	112.4	112.8	112.8	114.2
Manufactured animal feeds.....	104.3	107.2	104.6	100.8	97.9	99.8	104.4	103.6	103.3	108.3	108.1	108.1	107.3	110.7
Other supplies.....	112.6	113.2	113.2	113.0	113.0	113.0	113.0	113.2	113.8	114.1	114.3	115.0	115.5	115.8
FINISHED GOODS														
Finished goods (including raw foods and fuels)....	113.5	113.8	114.1	113.6	113.8	114.0	115.0	115.5	116.3	116.1	115.8	116.4	116.9	117.8
Consumer goods.....	112.7	113.0	113.3	112.7	112.9	113.1	114.2	114.7	115.6	115.2	114.8	115.5	116.1	117.3
Foods.....	115.2	115.6	116.1	114.9	115.0	115.7	117.7	118.7	120.6	119.4	118.0	119.5	120.7	123.3
Crude.....	115.8	109.0	115.8	109.6	112.2	116.1	121.5	117.4	117.9	115.7	113.4	115.1	115.6	121.2
Processed.....	115.0	116.7	116.1	115.8	115.5	115.6	117.0	118.8	121.0	120.0	118.7	120.2	121.6	123.6
Other nondurable goods.....	111.3	111.6	111.8	111.9	111.7	111.7	111.8	112.0	112.1	112.4	112.7	113.1	113.5	113.8
Durable goods.....	110.9	111.0	111.1	110.4	111.3	111.3	112.6	112.9	113.2	113.1	113.2	113.1	113.2	113.5
Producer finished goods.....	116.6	116.8	117.1	116.9	117.1	117.0	117.8	118.4	118.8	119.0	119.3	119.4	119.6	119.7
Manufacturing industries.....	117.3	117.7	117.9	117.8	117.9	117.8	118.2	118.7	119.1	119.2	119.5	119.6	119.8	120.0
Nonmanufacturing industries.....	116.0	116.1	116.4	116.0	116.3	116.3	117.4	118.1	118.4	118.8	118.9	119.1	119.4	119.4
SPECIAL GROUPINGS														
Crude materials for further processing, excluding crude foodstuffs and feedstuffs, plant and animal fibers oilseeds, and leaf tobacco.....	122.7	122.7	122.3	123.0	122.9	122.6	123.4	125.6	127.0	129.1	129.3	129.9	129.8	130.2
Intermediate materials, supplies and components excluding intermediate materials for food manufacturing and manufactured animal feeds.....	114.3	114.9	115.9	115.9	115.7	115.6	115.8	116.4	117.2	117.6	118.2	118.6	119.0	119.2
Consumer finished goods, excluding consumer foods....	111.2	111.4	111.5	111.3	111.6	111.6	112.1	112.3	112.5	112.7	112.9	113.1	113.4	113.7

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						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
MINING															
1111	Anthracite.....	144.9	144.7	144.7	145.6	144.7	144.7	144.7	146.4	146.4	146.4	146.4	146.4	146.4	146.4
1211	Bituminous coal.....	185.0	186.1	186.1	186.1	186.2	186.2	194.1	196.6	196.6	196.6	195.0	195.0	195.0	
1311	Crude petroleum and natural gas.....	113.0	113.3	113.1	113.5	113.6	113.6	113.3	113.9	114.0	114.2	114.6	114.8	114.8	
1421	Crushed and broken stone.....	117.7	118.5	118.5	118.5	118.5	118.8	118.8	119.1	119.4	119.4	119.7	120.1	120.1	
1442	Construction sand and gravel.....	120.6	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	
1476	Rock salt.....	118.3	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	
MANUFACTURING															
2011	Meat slaughtering plants.....	115.6	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	111.6	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	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	113.4	113.5	113.6	113.6	114.2	113.9	114.0	113.8	113.7	113.5	113.6	
2033	Canned fruits and vegetables.....	111.7	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	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	100.5	100.5	100.5	100.5	103.1	103.1	103.1	
2052	Biscuits, crackers and cookies.....	119.3	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	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	119.5	119.8	119.4	119.4	119.6	120.0	120.9	123.0	123.6	123.6	124.9	125.1	
2063	Beet sugar.....	116.8	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	126.2	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	110.9	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	94.2	94.2	94.2	94.2	94.2	94.2	94.2	
2084	Wines and brandy.....	117.0	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	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	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	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	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	106.5	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	117.3	118.2	118.2	118.2	118.2	118.2	118.2	
2121	Cigars.....	108.1	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	125.8	125.8	
2254	Knit underwear mills.....	107.8	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	95.2	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	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	112.2	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	110.6	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	110.7	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	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	111.8	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	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	117.9	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	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	117.3	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	119.6	119.6	120.1	121.1	121.1	
2654	Sanitary food containers.....	106.0	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	101.5	
2822	Synthetic rubber.....	99.9	99.9	99.9	99.9	99.9	99.7	99.7	99.7	99.7	99.7	99.7	99.9	100.0	
2823	Cellulosic man-made fibers.....	102.5	102.5	102.8	102.8	102.9	102.7	103.7	104.3	104.8	105.6	105.5	106.0	106.0	
2824	Organic fibers, noncellulosic.....	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.1	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	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 industries¹[1967 = 100 unless otherwise indicated]²

1963 SIC code	Industry	Annual average 1971	1971						1972						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
MANUFACTURING—Continued															
2872	Fertilizers, mixing only.....	102.5	102.8	102.3	102.4	102.5	102.4	102.3	102.3	101.5	102.9	103.3	103.1	103.3	103.3
2892	Explosives.....	112.8	112.9	112.8	112.8	112.8	112.8	112.7	112.7	112.7	112.7	113.1	114.6	114.9	114.4
2911	Petroleum refining.....	105.7	106.2	106.2	106.3	105.3	105.2	105.0	105.1	104.5	105.2	105.6	105.9	107.1	107.7
3021	Rubber footwear (12/71=100).....								102.9	106.7	106.7	106.8	106.8	106.9	106.9
3111	Leather tanning and finishing.....	113.0	114.7	114.7	113.9	114.0	114.0	117.5	120.4	121.1	129.0	139.0	138.7	139.5	138.9
3121	Industrial leather belting.....	125.5	125.5	126.0	125.6	125.6	126.3	126.3	125.6	126.6	125.8	126.9	127.0	136.8	136.2
3141	Shoes, except rubber (12/71=100).....								100.7	101.1	102.6	104.7	106.7	107.6	108.2
3211	Flat glass (12/71=100).....								100.0	100.0	99.5	99.0	98.9	98.8	98.9
3221	Glass containers.....	131.5	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	136.1	136.1	136.1	136.3
3241	Cement, hydraulic.....	124.6	126.7	127.6	127.8	127.8	127.8	127.8	127.8	128.1	128.1	131.5	131.8	131.9	132.1
3251	Brick and structural clay tile.....	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	123.5
3255	Clay refractories.....	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	128.9
3259	Structural clay products nec.....	109.2	109.9	109.9	110.0	110.0	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	110.5
3261	Vitreous plumbing fixtures.....	112.1	114.0	114.3	114.6	114.8	114.4	114.7	113.9	114.4	114.9	115.3	115.3	116.0	116.2
3262	Vitreous china food utensils.....	132.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	135.8	137.9	137.9	137.9	137.9	140.2
3263	Fine earthenware food utensils.....	125.5	129.7	131.1	131.1	131.1	131.1	131.1	134.6	134.8	140.3	140.3	140.3	140.3	140.4
3271	Concrete block and brick.....	118.4	118.4	118.9	119.1	119.1	119.1	119.1	120.0	120.5	120.8	122.0	122.5	122.9	123.8
3273	Ready mixed concrete.....	122.5	123.3	124.8	124.6	124.6	124.6	124.9	125.3	125.8	126.7	127.3	127.3	127.4	128.1
3275	Gypsum products.....	107.0	112.7	114.4	114.5	113.7	112.3	114.1	113.4	113.0	113.6	114.9	113.6	114.0	115.7
3291	Abrasive products (12/71=100).....								100.0	100.3	101.3	101.9	102.1	102.2	102.5
3312	Blast furnace and steel mills.....	123.4	124.0	128.2	128.3	128.3	128.3	128.3	129.6	130.9	130.9	130.9	131.0	130.6	130.6
3315	Steel wire drawing, etc.....	120.2	119.2	124.3	125.3	125.2	125.7	125.7	127.6	127.7	127.6	127.9	127.9	128.2	128.2
3316	Cold finishing of steel shapes.....	124.1	126.2	128.5	128.9	128.9	128.9	128.9	127.9	132.4	132.4	132.1	130.7	129.9	129.9
3317	Steel pipe and tube.....	121.9	120.7	128.4	128.4	128.2	128.2	128.2	128.2	128.5	128.5	129.2	129.2	129.2	129.4
3321	Gray iron foundries (12/68=100).....	115.1	116.0	116.1	116.2	116.3	116.4	116.4	116.1	116.7	116.9	116.8	116.9	117.7	117.9
3333	Primary zinc.....	113.3	112.8	118.8	118.8	118.8	118.8	118.8	119.0	119.1	119.2	122.3	126.1	126.0	126.1
3334	Primary aluminum.....	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	96.3
3339	Primary nonferrous metals, nec.....	112.8	111.2	111.8	106.5	104.9	105.1	107.2	110.4	112.2	114.2	115.4	117.8	120.4	123.6
3341	Secondary nonferrous metals (12/71=100).....								96.3	96.0	99.7	100.0	100.0	99.1	99.6
3351	Copper rolling and drawing.....	119.0	120.5	120.5	120.0	120.0	119.7	118.3	120.3	122.2	125.6	125.4	125.6	125.5	123.6
3352	Aluminum rolling and drawing (12/68=100).....	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	108.8
3356	Nonferrous rolling and drawing, nec. (12/71=100).....								100.1	101.1	101.3	101.8	102.2	102.1	102.1
3411	Metal cans.....	121.9	124.0	124.0	124.0	124.0	124.0	124.0	124.0	127.5	127.6	127.6	127.6	129.3	130.0
3423	Hand and edge tools (12/67=100).....	120.8	121.3	123.1	123.1	123.0	123.2	123.2	124.4	125.0	125.0	125.9	126.0	126.4	126.7
3431	Metal plumbing fixtures.....	114.0	116.2	117.7	117.7	117.6	117.8	117.8	116.9	116.9	117.5	117.9	118.0	119.3	119.4
3493	Steel springs.....	111.9	110.2	111.5	113.3	113.1	114.3	115.9	116.6	118.7	118.9	119.0	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	100.8
3496	Collapsible tubes.....	118.4	119.9	120.0	120.0	119.9	119.9	119.9	119.9	120.5	120.7	120.8	120.9	120.8	120.8
3498	Fabricated pipe and fittings.....	133.0	135.6	135.6	136.7	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	116.8	118.4	118.5	118.5	118.5	119.3	120.2	120.9	121.1	121.1	121.5	121.4	121.1
3533	Oil field machinery.....	123.3	123.8	124.0	123.9	123.9	123.9	123.9	125.3	125.6	125.6	126.5	128.4	128.7	129.6
3534	Elevators and moving stairways.....	121.0	102.6	122.2	122.2	122.2	122.2	122.2	122.3	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	102.1
3537	Industrial trucks and tractors.....	120.4	121.6	123.5	121.7	121.7	121.7	124.2	124.2	123.3	123.1	123.5	123.5	123.3	123.6
3541	Machine tools, metal cutting types (12/71=100).....								100.2	100.7	100.9	101.4	102.0	102.1	102.2
3542	Machine tools, metal forming types (12/71=100).....								100.3	100.7	101.4	101.4	101.4	101.4	101.6
3552	Textile machinery (12/69=100).....	108.9	109.7	109.8	110.1	110.4	110.4	110.4	111.0	111.3	111.3	111.4	111.4	111.1	111.2
3562	Ball and roller bearings.....	114.2	114.0	114.6	114.6	114.6	114.6	114.6	115.0	115.7	116.2	116.8	117.6	117.6	117.6
3572	Typewriters.....	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	104.7
3576	Scales and balances.....	114.3	114.1	114.1	114.1	114.5	114.5	114.5	116.5	116.5	117.6	117.8	118.5	118.6	119.0
3611	Electric measuring instruments (12/71=100).....								100.5	100.7	101.2	101.2	100.2	100.3	100.3
3612	Transformers.....	97.3	96.7	95.6	95.5	94.8	92.4	93.0	94.4	94.1	94.3	95.5	95.4	95.1	95.3
3613	Switchgear and switchboards.....	113.3	113.1	113.1	112.7	113.0	112.5	112.3	112.0	112.1	112.4	111.7	111.0	111.5	111.5
3624	Carbon and graphite products (12/67=100).....	113.1	113.3	113.3	113.3	113.3	113.3	113.3	113.4	113.4	113.4	113.4	113.6	114.3	114.1
3634	Electric housewares and fans (12/71=100).....								99.7	99.9	100.1	99.8	99.4	99.4	99.4
3635	Household vacuum cleaners.....	100.4	100.5	100.5	100.5	100.5	100.5	100.4	100.4	100.4	101.8	101.8	101.8	101.8	102.0
3641	Electric lamps.....	113.6	113.3	113.8	113.8	114.3	114.0	114.2	114.2	114.5	116.3	117.4	117.7	117.6	117.6
3642	Lighting fixtures (12/71=100).....								100.3	101.1	101.1	101.5	101.8	101.8	102.1
3652	Phonograph records.....	106.8	105.4	105.4	105.4	105.4	105.4	105.4	113.2	113.2	113.2	113.2	111.2	111.2	111.2
3671	Electron tubes, receiving type.....	132.0	132.2	132.2	132.2	132.2	132.2	132.2	132.1	139.8	139.9	139.9	144.1	144.1	144.1
3672	Cathode ray picture tubes.....	86.4	87.7	87.7	83.3	83.0	83.0	83.0	83.0	82.9	83.1	82.8	83.7	83.7	84.1
3673	Electron tubes, transmitting.....	111.4	111.7	111.7	111.6	111.6	111.6	111.4	111.4	111.2	111.2	112.4	114.1	114.1	114.1
3674	Semiconductors.....	93.9	93.3	93.7	93.5	93.5	93.5	93.0	93.0	93.1	92.5	92.3	92.5	92.5	92.6
3692	Primary batteries, dry and wet.....	118.9	121.8	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.1	123.1	123.2
3693	X-ray apparatus and tubes (12/67=100).....	128.5	129.5	129.5	129.5	129.5	129.5	129.5	132.1	132.1	132.1	132.1	132.1	131.9	132.1
3861	Photographic equipment (12/71=100).....								100.0	100.3	100.5	99.9	99.9	99.9	100.0
3941	Games and toys.....	112.9	113.0	113.0	113.0	113.0	113.0	113.1	113.3	114.3	115.5	115.7	115.7	115.8	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

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	726.9	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 ^r	310	470	80	155	2,303	.15
February ^r	320	480	61	140	1,618	.11
March ^r	400	580	127	165	1,544	.09
April ^r	440	640	146	217	2,031	.14
MAY ^r	510	720	126	203	2,139	.13
June ^p	425	670	311	388	3,513	.21

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.

^r = revised.

33. Indexes of output per man-hour, hourly compensation, unit costs, and prices, private economy, seasonally adjusted

[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.....	107.3	107.4	103.4	104.0	103.7	103.2	112.5	111.9	104.9	104.2	108.5	108.3	102.6	102.6	106.2	106.2
2d.....	107.7	108.1	104.2	104.9	103.4	103.0	114.5	113.7	104.9	104.2	110.7	110.4	102.8	102.6	107.6	107.4
3d.....	108.2	108.5	104.5	105.4	103.6	103.0	116.7	115.6	105.5	104.5	112.7	112.3	103.0	103.0	108.9	108.8
4th.....	107.5	107.9	104.0	105.2	103.3	102.5	119.5	118.0	106.5	105.2	115.6	115.1	102.1	101.8	110.4	110.1
Annual average.....	107.7	108.0	104.0	104.9	103.5	102.9	115.8	114.8	105.5	104.5	111.9	111.6	102.6	102.5	108.3	108.1
1970: 1st.....	106.8	107.0	103.7	104.9	103.0	102.0	121.5	119.9	106.6	105.2	117.9	117.5	102.1	101.6	111.8	111.5
2d.....	107.3	107.3	103.1	104.0	104.0	103.2	123.1	121.9	106.4	105.3	118.3	118.1	104.2	104.1	112.8	112.8
3d.....	107.9	108.1	102.0	103.1	105.8	104.9	126.0	124.5	107.6	106.4	119.1	118.7	105.7	105.8	113.9	113.9
4th.....	106.5	106.5	100.8	102.0	105.6	104.4	127.7	126.1	107.7	106.3	120.9	120.7	107.4	107.9	115.6	115.9
Annual average.....	107.1	107.2	102.4	103.5	104.6	103.6	124.5	123.1	107.0	105.8	119.0	118.8	104.9	104.9	113.5	113.5
1971: 1st.....	108.7	108.7	101.3	102.5	107.3	106.1	130.1	128.4	108.8	107.5	121.2	121.1	110.3	110.6	117.0	117.1
2d.....	107.7	109.8	101.7	102.8	107.8	106.9	132.0	130.7	109.3	108.2	122.4	122.3	111.6	111.7	118.2	118.3
3d.....	110.4	110.5	101.4	102.6	108.8	107.6	134.1	132.5	109.9	108.6	123.2	123.1	112.5	112.5	119.0	119.1
4th.....	112.3	112.7	102.2	103.3	109.9	109.1	135.9	134.4	110.8	109.6	123.6	123.3	112.6	112.3	119.3	119.1
Annual average.....	110.3	110.4	101.7	102.8	108.5	107.4	133.0	131.5	109.6	108.4	122.6	122.4	111.8	111.8	118.4	118.4
1972: 1st.....	114.3	114.9	103.1	104.2	110.8	110.3	138.6	137.3	112.0	110.9	125.1	124.5	113.5	113.1	120.6	120.2
2d.....	117.0	117.7	104.0	105.4	112.5	111.6	140.5	138.9	112.7	111.4	124.9	124.4	115.2	114.7	121.2	120.7
Percent change over previous quarter at annual rate ⁴																
1969: 1st.....	3.6	3.2	3.4	4.2	0.2	-1.0	6.1	5.6	1.1	0.6	5.9	6.7	1.5	0.7	4.2	4.4
2d.....	1.8	2.5	3.3	3.6	-1.5	-1.1	7.0	6.6	.1	-3	8.6	7.7	.6	.1	5.5	4.9
3d.....	1.7	1.8	.9	1.9	.8	.0	8.2	7.0	2.2	1.1	7.3	7.1	1.0	1.5	4.9	5.0
4th.....	-2.5	-2.5	-1.6	-7	-1.0	-1.8	9.8	8.6	3.8	2.7	10.8	10.6	-3.6	-4.6	5.4	4.9
1970: 1st.....	-2.6	-3.0	-1.4	-1.2	-1.2	-1.8	-6.9	6.5	0.6	0.2	8.2	8.4	0.2	0.5	5.2	5.2
2d.....	1.7	1.1	-2.2	-3.6	4.0	4.8	5.4	7.1	-1.0	.5	1.4	2.2	8.2	10.2	3.8	4.9
3d.....	2.3	2.9	-4.3	-3.5	7.0	6.6	9.6	8.9	4.9	4.1	2.5	2.1	6.2	6.7	3.8	3.7
4th.....	-5.1	-5.7	-4.5	-4.0	-6	-1.7	5.6	4.9	.2	-4	6.3	6.8	6.4	8.1	6.3	7.2
1971: 1st.....	8.7	8.6	2.1	2.1	6.5	6.4	7.7	7.8	4.3	4.4	1.1	1.3	11.3	10.5	4.7	4.5
2d.....	8.7	4.1	1.7	1.0	2.0	3.1	6.1	7.2	1.6	2.7	4.0	4.0	4.9	4.0	4.3	4.0
3d.....	2.5	2.4	-1.2	-0.5	3.8	2.9	6.4	5.6	2.3	1.5	2.5	2.7	3.2	2.7	2.8	2.7
4th.....	7.2	8.1	3.0	2.6	4.1	5.4	5.6	6.0	3.3	3.6	1.5	0.5	0.2	-0.6	1.0	0.1
1972: 1st.....	7.0	8.1	3.6	3.5	3.3	4.5	8.1	8.7	4.6	5.1	4.7	4.0	3.5	3.0	4.2	3.7
2d.....	9.7	10.0	3.5	4.8	6.0	5.0	5.6	4.7	2.4	1.6	-0.4	-0.2	6.1	5.6	2.0	1.8
Percent change of previous year ⁵																
1st.....	1.8	1.6	-2.3	-2.3	4.2	4.0	7.1	7.2	2.1	2.1	2.8	3.1	8.0	8.8	4.7	5.1
2d.....	2.3	2.3	-1.3	-1.2	3.7	3.5	7.2	7.2	2.7	2.7	3.4	3.5	7.2	7.3	4.8	4.9
3d.....	2.3	2.2	-0.5	-0.4	2.9	2.6	6.4	6.4	2.1	2.0	3.4	3.7	6.4	6.3	4.5	4.6
4th.....	5.5	5.8	1.4	1.3	4.1	4.4	6.4	6.7	2.9	3.1	2.3	2.1	4.8	4.1	3.2	2.8
1972: 1st.....	5.1	5.6	1.8	1.6	3.3	4.0	6.6	6.9	2.9	3.2	3.2	2.8	2.9	2.3	3.1	2.6
2d.....	6.6	7.1	2.2	2.6	4.3	4.4	6.4	6.2	3.1	2.9	2.1	1.7	3.2	2.6	2.5	2.1

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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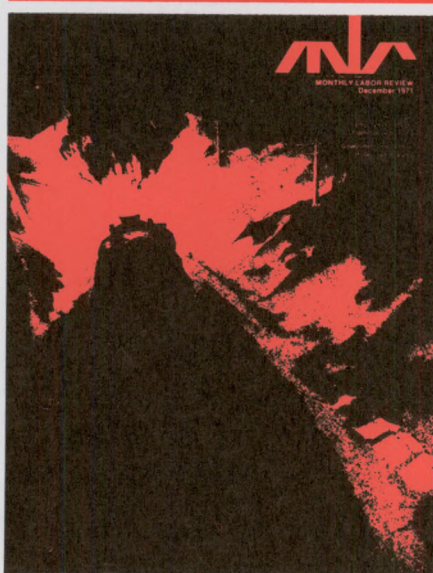
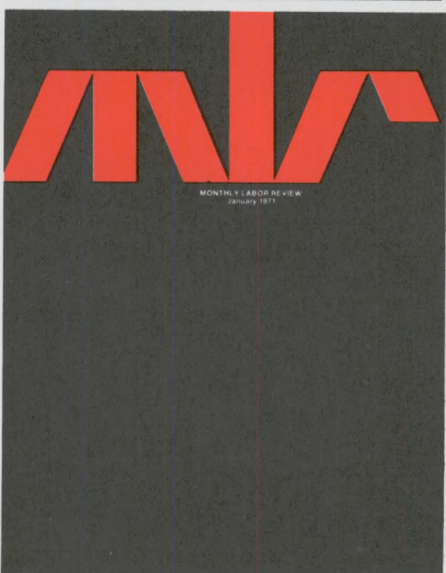
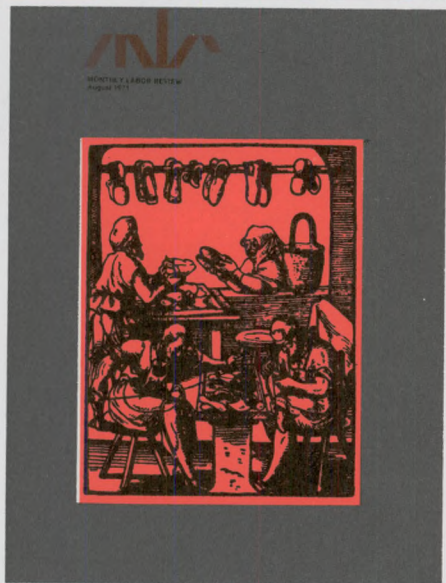
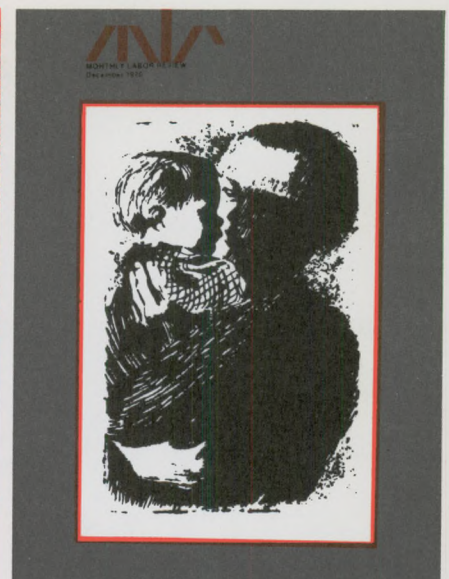
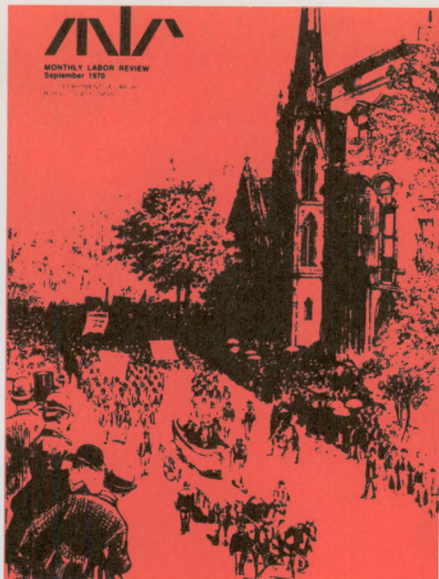
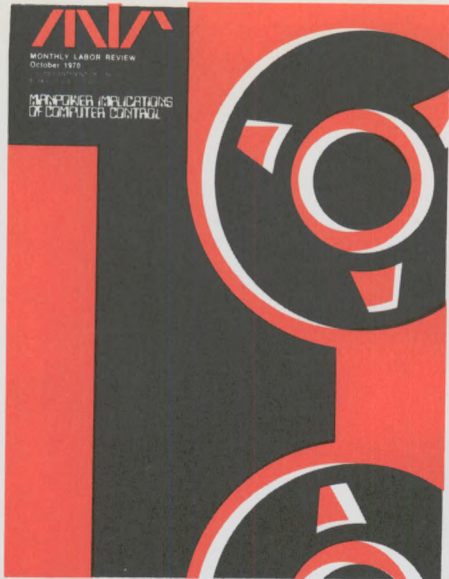
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Die erste Division besteht aus Gewerkschaften von Brooklyn, Jersey City und New York bis unterhalb Canal Str., und versammelt sich im City Hall Park.

Die zweite Division umfasst alle Gewerkschaften der Ostseite oberhalb Canal Str. Diese Division versammelt sich beim Cooper Institut.

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Präzis 10 Uhr Vormittags

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Das Committee.

Hängt dies an einer auffallenden Stelle auf.