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In this issue:

WOMEN AT WORK

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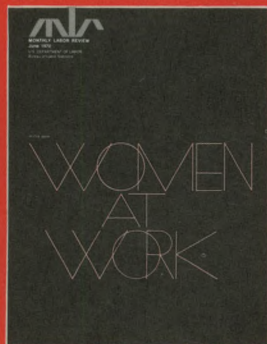

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MONTHLY LABOR REVIEW
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The Women's Bureau looks to the future

ELIZABETH DUNCAN KOONTZ

DURING the past 50 years, women have achieved greater freedom and opportunities, but they are still not recognized as truly equal with men in many facets of our society. Their dissatisfaction has increased and the ranks of a women's "liberation" movement, which goes by many names, are growing.

Fifty years ago a different type of protest movement led to winning the right to vote and the establishment of a Women's Bureau. Today, the movement is attacking the status quo through varied legal and social channels, and again dissident women are taking their grievances to picket lines, protest rallies, and marches on Congress. It is in this milieu that the Women's Bureau is redefining its objectives for its second half-century.

It is clear that women's renewed discontent with a secondary position in our society and their urgent demands for reforms will direct future activities of the Bureau toward new areas of concern.

Women in various situations—as workers, as students, as members of the community—and women at all economic levels face discrimination and are concerned, not only for themselves, as individuals, but for all women. Our responsibility, as a Federal agency, is to coordinate those concerns to help women recognize and utilize the means available to them so that they can make an orderly, rather than a disruptive, approach to the problems of discrimination.

Many people are inclined to discredit the entire women's movement. There is danger of repeating the mistake we made in our efforts to eliminate racial discrimination—that is, ignoring the need for changes in attitude so that people will open their minds and hear what these women are saying about how discrimination affects them in their daily lives.

Mrs. Elizabeth Duncan Koontz is director of the Women's Bureau, Wage and Labor Standards Administration, U.S. Department of Labor.

The legal status of women

While the legal status of women has improved markedly in recent years, some problem areas still remain. For example, married women do not have the right to establish their own separate domicile except under limited circumstances in nearly all the States; many States still excuse women from jury service on bases not available to men; a few States still restrict the right of married women to enter into their own separate business or give the husband primary control over community property.

There are three general routes to removing legal obstacles to equal rights. One is the proposed Equal Rights Amendment to the Constitution. Its language, "Equality of rights under the law shall not be denied or abridged by the United States or by any State on account of sex," would make discriminatory laws unconstitutional.

Objections to such an amendment include the fear that it would financially endanger the social security system because equal benefits would have to be provided for husbands and widowers, fear that the institution of the family would be endangered, and concern that State protective labor legislation for women would be destroyed. The validity of the latter objection is in question since the Equal Employment Opportunity Commission has ruled that State protective laws applying only to women are in conflict with Title VII of the Civil Rights Act.

Proponents of the Amendment argue that the Constitution should contain a positive guarantee of equality under the law, regardless of sex, and that such an amendment would remove any stigma of inferiority and provide a standard by which

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policies and customs, not controlled by law, could be measured. They also contend that the amendment would give women control of their own lives and full opportunity to exercise their reponsibilities as citizens.

A second approach to equal legal rights for women is to establish by a Supreme Court decision that equality for women is inherent in the 5th and 14th Amendments to the Constitution. While this route has merit, very few cases make it to the Supreme Court and this body has yet to firmly establish the principle of women's equality of rights.

A third possibility is repeal of State laws that discriminate against women and, where necessary, enactment of laws giving men and women the same benefits. Here again there are objections to the length of time it would take, particularly in some States where opposition to change is strong.

All of these avenues are being explored. Hearings on the Equal Rights Amendment are being held in the Congress. Cases alleging that discriminatory laws are unconstitutional are in the courts. Women's organizations are standing by to appeal them to the Supreme Court, if necessary. And laws deemed discriminatory are under attack by women in their own States.

For the Women's Bureau the question is whether we can afford to allow the onus of gaining justice to rest upon the individual, or whether there are ways in which we can provide the kind of assistance that will make concerted effort possible and reduce the time, energy, and money required to achieve a common goal. We believe women should be encouraged to combine forces and work together, with the Bureau providing the needed information, counsel, and technical know-how.

Equal employment opportunities

In the area of equal employment opportunity' women have made some progress, but we do not feel that the responsibility of the Women's Bureau has been discharged simply because legislation to protect their employment rights is on the books.

It is true, we have the Equal Pay Act of 1963 and the Civil Rights Act of 1964 which contains a prohibition against sex discrimination. We also have Executive Order 11246 which, as amended, prohibits sex discrimination in employment by Federal contractors and subcontractors. And there is a Federal minimum wage law as well as State laws dealing with minimum wage, equal pay, and fair employment practices.

But these measures do not cover *all* women workers. In some instances the lowest paid, least skilled workers are left out—and a large proportion of such workers are women. One of the responsibilities of the Bureau is to bring to the attention of those who make policy at any level the lack of legislative protection for these workers and alternative methods of improving their employment situation.

The Bureau tries to translate the needs of women, collectively, into the needs of the individual woman who wants to exercise her right to choose what her contribution to society will be. Whatever services we perform must eventually reach that woman, who, in one way or another, is locked into a situation that limits her ability to choose.

She may be Mrs. A, mother of four. A high school graduate, she needs job training but none suitable for her is available in the community. Or she does not have a place to leave her preschool youngsters while she is away from home.

Women's liberation

As the United States approaches the 50th anniversary of the 19th amendment, the status of women is still equivocal, as the increasingly vocal and militant women's liberation movement frequently reminds us.

Here is a brief bibliography of recent periodical literature reporting on the women's liberation movement:

"In Pursuit of the American Woman, " *Harpers*, February 1970, pp. 47–58.

"New feminists: the revolt against sexism," *Time*, November 21, 1969, pp. 53–54.

"Sisterhood is powerful," *New York Times Magazine*, March 15, 1970, pp. 26–27.

"Spocklash: Age, Sex, Revolution," *Washington Monthly*, March 1970, pp. 30–43.

"The New Feminism," *Saturday Review*, February 21, 1970, pp. 27–30.

"Woman's Place: A Special Issue," *Atlantic*, March 1970, pp. 81–126.

"Women in Revolt," *Newsweek*, March 23, 1970, pp. 71–78.

"Women re Women: Symposium," *Mademoiselle*, February 1970, pp. 159–163.

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She may be Mrs. B, who has only a third-grade education and has been on public welfare since her first child was born—out of wedlock. She has several other children by a husband who has deserted her. She would like to go to work, but needs both remedial education and job training.

She may be Miss C, the college graduate, who was denied admission to graduate school although her grade average was superior to that of many men who were accepted. She ends up taking a mediocre job which neither uses her full capabilities nor fulfills her aspirations.

Cases like these could be documented over and over. The Women's Bureau must determine the extent to which they exist, publicize the situation, seek out possible solutions, and enlist the cooperation of government and private citizens in effecting those solutions.

Serving as a catalyst for action, the Bureau is moving toward other specific goals.

High on the priority list is helping women move out of poverty. Where the problem is lack of job training or supportive services to enable them to seek employment, we must see that these skills and services are available. This will not be easy, for immediately we come up against the argument that if unemployment figures for men are high, we should not push for employment of women.

It is important that as we generalize about unemployment we look at the risk in assuming that every unemployed male is the head of a family and that every unemployed female is married to a man capable of adequately supporting her as part of a family. This assumption, held by many who insist that "woman's place is in the home," completely ignores the fact that many single women and women who are divorced, separated, or widowed must support themselves and perhaps others. Neither does it take into account the fact that a great many husband-wife families depend upon the earnings of the wife to keep the family out of poverty.

One of the impediments women—particularly poor women—encounter when they try to seek job training or employment is the lack of day care facilities for their children. We plan to accelerate our efforts in the Bureau to stimulate interest in providing good day care arrangements that will be more than custodial care for the children of mothers who work or participate in job training programs. Through conferences, publication of new studies on day care, and consultations with those able to help, the Bureau will try to stimulate interest among employers, unions, and Federal, State, and community agencies to provide the needed services.

A large proportion of women who are poor engage in household employment. Few are protected by minimum wage laws or other social legislation, or standards for hours and working conditions. Nor do many enjoy paid vacations or sick leave.

We hope the groundwork laid by experimental and demonstration projects under the Manpower Development and Training Act will open the way for restructing the entire household industry. We envision expansion of home service businesses that hire household workers, provide for their training, and serve as the intermediary between workers and the householders requiring their services. These businesses could set performance standards, guarantee minimum wages and good working conditions, and provide the fringe benefits usually enjoyed by other American workers.

We plan to encourage the expansion of training for household employment and related occupations through regular manpower training programs, vocational education programs in the public schools, and the extension service of the U.S. Department of Agriculture.

We also see the development of career ladders and lattices based on the core of skills associated with household employment to provide such workers with lateral and vertical mobility. The present dead-end aspects of this occupation have led to a low level of confidence and aspiration for those employed in this field and have deterred new entrants.

Experience has shown that many girls drop out of school because there are few opportunities for them to acquire job skills in other than traditional "women's fields"—clerical work, nurses aides, beauty culture, and sales—fields that seldom provide high salaries or chance of advancement. We will promote expanding the choices of vocational courses girls can take and will urge opening to women apprenticeship training in the more lucrative trades.

The Women's Bureau has a special concern for certain groups of especially disadvantaged women and girls. We are working with prison officials to provide job counseling and training for women in

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Federal prisons, so they can find a more secure place in society when they are released. We are encouraging school systems and social agencies to make it possible for teenage mothers to continue their education and we are seeking the cooperation of government and voluntary agencies in providing basic education, child care facilities, health and homemaker education, and other needed services to migrant women and their families.

As the number of mature women desirous of entering or reentering the labor force increases, we will continue to encourage employers to hire these women, and will provide information as to their efficiency, stability, and productivity.

We know that many women in their middle years need to brush up their skills or learn new ones in order to enter the labor force, and we will continue to encourage them to get the training they need. At the same time, we will urge educational institutions, government, and private agencies to provide more opportunities for training and continuing education.

We know that many women suffer double discrimination because of their sex *and* color of their skin. The Women's Bureau will encourage educators, employers, and the public to remove remaining obstacles based on these factors of race and sex. While many of the problems of these women are related to the problems of poverty, there is a need over and above what must be done for the poor. Minority women who can well afford a college education still need affirmative action in their behalf to open opportunities for education and employment of their own choosing. Their right to participate in the community and in policymaking, and to receive recognition for their achievements, must also be assured.

Mobilizing volunteer effort

When we review Women's Bureau goals for the future we realize that during the past 50 years there have been some radical changes, not only in our aims, which are broader, but in methods and techniques, which we have had to tailor to the demands of the times.

The Bureau has long recognized the potentialities of voluntary organizations. It was such groups that lobbied for the establishment of a Women's Bureau, promoted better wages and working conditions for women, and rallied Congressional and public support for the Equal Pay Act.

But today we have a new concept of voluntary action. It has, on many fronts, joined forces with government to implement specific projects and accomplish specific goals. The fact that the majority of volunteers are women is significant. We have begun to evaluate their contribution to national progress and now assign it the same weight as paid employment.

Valuable sources of volunteer action are women's organizations and the commissions on the status of women which have been set up in nearly every State to study the problems of women in the State and to promote measures to solve them. Through its regional offices, the Bureau works closely with this vast network of volunteer effort to accomplish common goals and to plan for the future.

A matter of evolving culture

The Bureau's goals for the future are a natural outgrowth of all that has gone before. They are based on the thinking and the aspirations of women that have evolved over the past 50 years as our present day culture, itself, has evolved.

When the Congress created the Women's Bureau within the Department of Labor, the new agency interpreted its purpose as twofold: "To furnish accurate information that will serve those who desire to know the truth on matters of interest to employed women; and to establish standards based on such exact knowledge." [1] To accomplish its purpose the Bureau collected and analyzed data and published its findings. It also established standards for the employment of women and publicized these in guidelines available to unions, employers, workers, and concerned organizations.

Early guidelines contained such recommendations as adequate wages based on occupation rather than sex; an 8-hour work-day and a 6½-day workweek, to allow "time for recreation, self-development, leisure;" no night work; no industrial homework; clean, comfortable, safe work places, and more women in supervisory and executive positions.[2]

Two decades of peace

As times changed, new focus was given to the Bureau's activities. Two decades of peace brought changes in the Nation's industry and in the

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economy, affecting in turn, the role of women workers.

Throughout the 1920's the Bureau continued its concern with hours, working conditions, and health and safety problems. Recognizing the potential effectiveness of minimum wage laws as a means of raising women's earnings to match those of men, in 1928 the Bureau published an extensive study, "The Development of Minimum-Wage Laws in the United States, 1912 to 1927."

The depression years were difficult ones, and the Bureau concentrated much of its effort in investigating their effect on women. As unemployment rose, many of the gains in wages and working conditions were lost, for workers sacrificed rights and benefits for the chance to get a job—any job. Married women and older women were forced out of the job market. Young, inexperienced workers were unable to find work.

The Bureau was particularly interested in studying the effects on women workers of technological changes, the combining of companies or plants and the relocation of factories or operations. It also worked with the National Recovery Administration, advising on proposed codes. "No stone has been left unturned in the effort to have codes contain adequate labor provisions, especially affecting women," the Bureau's first director, Mary Anderson, stated in her annual report for fiscal 1934.[3]

In the decade preceding World War II, the Women's Bureau for the first time made a study of the civil and political status of women. As part of a world survey of women's status, requested by the League of Nations, the Bureau made and published State-by-State analyses of laws affecting such civil and political rights of women as voting, jury service, and family and property rights.

The war years

World War II again brought changes in focus and activities. Realizing that women would again be needed to replace men entering the Armed Forces, the Bureau actively recruited women workers with such leaflets as "Your Country Needs You" and "What Job Is Mine on the Victory Line?"

War industries were studied to determine what jobs women could do and what accommodations should be made to meet their needs: subdividing some processes, redesigning tools, and introducing lifting and conveying devices. However, in many instances women performed the same work as men, and equal pay became a prominent issue. Through their wartime powers, the National War Labor Board and the National Wage Stabilization Board required equal pay for equal work. However, this was just a temporary measure.

Anticipating the postwar period, the Bureau studied the problems of women in periods of demobilization and reconstruction, and urged women to prepare for a more competitive labor force by improving their skills and work habits. "Re-Tool Your Thinking," it exhorted in a popular leaflet.

New directions developed in the postwar period. A 1953 report, "The Status of Women in the United States," found significant two trends in women's employment: a growing proportion of married women in the labor force and the increasing employment of older women.

There were occupational shifts as well. The percent of women working in household employment dropped. The growth in the number of women in clerical jobs was spectacular. Operatives, primarily factory workers, became the second largest group of employed women. Although their number decreased after the war, it was still higher in 1953 than in 1940. Other occupations showing an increase were in the services—hospital attendents, beauticians, elevator operators, waitresses, and salesworkers. Although the number of women in professional and technical work increased, it was a smaller proportion of all women workers.

These changes plus a shortage of young women in the 18- to 34-year bracket, resulting from a declining birth rate during the depression, determined the emphasis of Women's Bureau programs. These programs encouraged training opportunities for women and promoted, particularly, the employment of mature women, urging them to secure the training needed for jobs in demand occupations.

Capable young women were advised to get a college degree and enter technical and professional fields where women lagged far behind men. Bureau publications promoted careers for women in the health service fields and in the sciences.

The Bureau continued to promote minimum wages, hours laws, and other protective legislation for women workers. The movement for equal pay heightened. Interest in day care for the children of

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working mothers began to develop, and proposals were made for tax deductions for child-care expenses.

A national status of women commission

The work and subsequent report of the President's Commission on the Status of Women profoundly affected the programs of the Women's Bureau in the decade of the 1960's.

The growth in the number of women in the Nation's work force following World War II and the increase in their participation in other facets of American life came much more rapidly than our society could be conditioned to the new and multiple roles women had assumed. Women still were receiving less pay than men doing identical or comparable work and were being passed over for executive training and promotion in favor of men. Their opportunities for higher education were often limited by discriminatory admission policies in colleges and universities, and their choice of occupations was inhibited by outmoded attitudes as to what work was suitable for women and what should be reserved for men. Even in the Federal Government, where the principle of equal pay had prevailed since adoption of the Classification Act of 1923, women were the victims of discriminatory practices in hiring and advancement.

At the same time, many women complained that protective labor laws, enacted in an earlier era to prevent exploitation of women workers, actually militated against them, particularly in such areas as night work and overtime. Nor did men and women have equal civil and political rights, and there were widespread demands for improvements in family and property laws and in laws pertaining to such civil rights as jury service.

The aggregate of these dissatisfactions and the fact that the Nation's growing economy demanded efficient use of all human resources prompted President John F. Kennedy to establish, in 1961, the President's Commission on the Status of Women. "In every time of crisis," he said, "women have served our country in difficult and hazardous ways. They will do so now in the home and at work. . . . Women should not be considered a marginal group to be employed periodically only to be denied opportunity to satisfy their needs and aspirations when unemployment rises or a war ends."[4]

The Women's Bureau, serving as secretariat for the Commission, and later for the Interdepartmental Committee and Citizens' Advisory Council on the Status of Women which succeeded it, was asked to provide background information for the committees set up to study the varying aspects of women's position in America life. Thus the Bureau expanded its concern for the educational and counseling needs of women and girls; the services needed by women who combined homemaking and jobholding, such as home services, child care arrangements, family counseling, and health services; and the impact of Federal social insurance programs and tax provisions on women's incomes.

"American Women"—a report

The recommendations of the President's Commission, in its 1963 report, "American Women," had a tremendous impact on the Nation. Many reforms have followed. Of particular significance to the Women's Bureau was the inclusion of prohibitions against sex discrimination in Title VII of the Civil Rights Act and Executive Order 11246. (The Equal Pay Act, advocated by the Commission, was adopted before the report was issued.)

While these measures were dramatic breakthroughs in securing equal opportunity in employment for women, they presented some thorny problems of interpretation and enforcement. Guidelines were needed, and the expertise of the Bureau was drawn upon by the Equal Employment Opportunity Commission, which administers Title VII, and the Office of Federal Contract Compliance, responsible for enforcement of the Executive order.

Efforts to implement the recommendations of the President's Commission gave new scope to the Bureau's concerns, which meant a broader interpretation of its mandate "to formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency and advance their opportunities for profitable employment." [5]

The Commission report made it clear that more and better education and counseling, child care facilities for the children of working mothers, community health and recreation facilities, consumer education, and instructions in family planning were all part of increasing the efficiency of women workers and advancing their oppor-

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tunities for employment. It also pointed out forcefully that promoting the welfare of wage-earning women and improving their opportunities were in large measure a matter of exploding the myths about women workers and dispelling the prejudices which employers, educators, lawmakers, and to some extent women themselves perpetuated.

New focus on poverty

The initiation of national programs to combat poverty also influenced Women's Bureau programs. Its concern for the disadvantaged was not, of course, new. It had early recognized the plight of the working poor, so many of whom were women in low-skilled, low-paid jobs, and the situation was a motivating factor in Bureau efforts toward enactment and extension of minimum wage laws. But passage of the Economic Opportunity Act opened new opportunities to help such women break out of the cycle of poverty.

The Bureau worked closely with the Office of Economic Opportunity and other agencies to assure that women were included in the Job Corps, the Neighborhood Youth Corps, and Work-Study, Adult Basic Education, Community Action, and similar programs.

At the same time, the Bureau sought the cooperation of the Office of Manpower, Automation and Training (now the Manpower Administration) in the Department of Labor in promoting job training opportunities for women.

Creating a climate of acceptance

Each decade in the 50-year history of the Women's Bureau has seen significant developments affecting the status of women. There have been changes of focus and a shifting of emphasis, but an overriding goal has been, and will continue to be, the creation of a climate of acceptance for women as participants in every phase of American life, with equal rights and responsibilities.

This involves changing attitudes and dispelling myths about women's capabilities, motivations, and potentialities. For if our society is permitted to assume that the goal of every woman and the subsequent fate of every woman is marriage to a man earning enough to support her and educate their children, then much of what happens to the economic and social development of the country will be based on a false assumption.

If we assume, however, that women have talents and a contribution to make, then we will rethink many of the cliches and generalizations that we have made a part of our tradition and we will come to realize that we have failed our country and ourselves when we have failed to recognize womanpower as a national resource that can be tapped for the betterment of this country, which needs the best each citizen has to offer. ☐

———*FOOTNOTES*———

[1] *Activities of the Women's Bureau of the United States* (U.S. Department of Labor, Women's Bureau, 1931), Bulletin 86, p. 13.

[2] Ibid. p. 4.

[3] *Annual Report of the Secretary of Labor: Fiscal Year Ended June 30, 1934* (U.S. Department of Labor, 1935), p. 99.

[4] Statement by the President on the Establishment of the President's Commission on the Status of Women, December 14, 1961, p. 1.

[5] An act to establish in the Department of Labor a Bureau to be known as the Women's Bureau, Public Law 259, 66th Cong.

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Women at work

Changes in the labor force activity of women

ELIZABETH WALDMAN

ONE OF THE MOST PRONOUNCED differences between the life patterns of women today and those of their grandmothers is the number and proportion of women who are in paid employment outside of their homes. Nearly 31 million or 42 percent of American women 16 years old and over were working or looking for work in January 1970. Roughly one-fourth that number (8.2 million, or 23 percent of working-age women) were in the labor force in January 1920, the same year that women gained the right to vote and the Women's Bureau was established in the U.S. Department of Labor "to formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance their opportunities for profitable employment." This article reviews the role of women in today's labor force and supplies some background information about their status in the past.[1]

Changes, 1920–70

A rich body of literature describes the advance of women in the American labor force from the "working class" women of colonial and pioneering days, who worked on farms, in cottage industries, and menial domestic work; to the factory women of the industrial revolution; and to the predominantly white-collar and professional women of today. World War I drew more women from the middle and upper social classes out of their homes and into nursing, teaching, and food services, in addition to volunteer work.

Each decade since 1920 has seen the proportion of working women increase in a variety of economic settings and amid many social and technological changes, frequently kaleidoscopic in nature.

If the door to more paid job opportunities for all classes of women opened slightly in the 1920's, World War II in the forties and the shift in employment concentration from goods production industries to the services in the fifties pushed the door open much wider. In 1956, white-collar jobs became more prevalent than blue-collar jobs and throughout this period, the movement from farm to city brought women to where job opportunities were developing. With the swelling demand for labor in the late 1960's, larger proportions of women, even those with young children, were drawn into the labor force, particularly into white-collar work. Plentiful job opportunities for women undoubtedly were a factor in the decisions of many young couples to postpone having their first child. By early 1970, working women represented 42 percent of all women 16 years old and over in the population, close to double the proportion for 1920.

Today, nearly 2 out of every 5 American workers are women. Most of these women are married, and half are over 39 years old. If asked why they work, there is a good chance they would say that they are supplementing family income to provide their children with a college education, or to help buy or furnish a new home, or to pay for an additional car.

In 1920, the typical working woman was single, about 28 years old, and from the working class. Esther Peterson has described her situation: "The young woman who entered the work force seldom had any intention of remaining long. As soon as 'Mr. Right' came along she handed in her resignation, put the finishing touches on her hope chest, and made plans for the wedding. After the honeymoon she settled down to devote her life to the physical, intellectual, and spiritual needs of her family. Only the tragedy of penniless widowhood

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or a broken marriage could drive her back into the labor market. The woman who did not marry was apt to be an object of pity." [2]

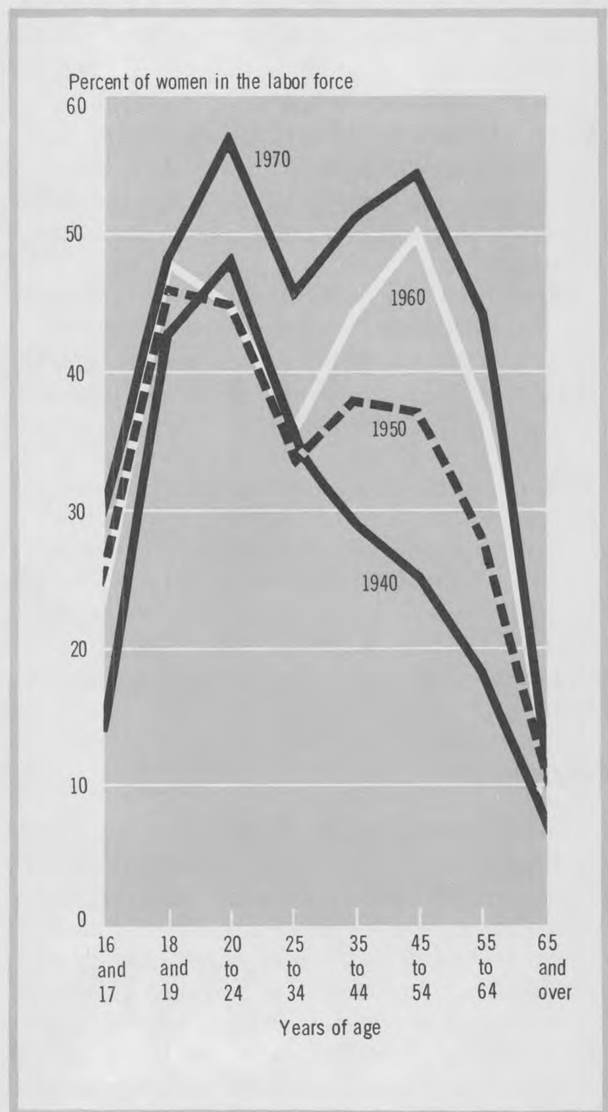
Nowadays a substantial proportion of total labor force growth is due to the continuous influx of married women. Since 1960, nearly half of the increase in the labor force was accounted for by married women. In early 1970, over 18 million married women were working or looking for work, representing about 60 percent of the female labor force. In 1940, these figures were only about 4.2 million, and 30 percent. The 30-year increase of about 320 percent in the number of working wives far outstrips the 50-percent increase in the size of their population.

The remarkable rise in labor force activity in just one generation is illustrated in chart 1. Single women predominated among women workers in 1940, reflecting the high labor force participation rate for teens just out of high school (43 percent), and the peak rate of 48 percent for the mostly single 20- to 24-year-olds. The rate for each older group successively declined since the older, mostly married women, were predominantly homemakers. In 1950, peak rates still obtained for women just out of school, but the rates for older women cause the chart line to bulge upward, partly because many women either continued to work after World War II or returned to work after leaving wartime jobs. By 1960, the contours of the line had changed to the now-familiar M-shape. Labor force participation rates among women 35 to 54 years old had shifted markedly upward so that they exceeded those for women 18 to 24 years old. These rates reflected mostly mothers returning to the work force when their children were older and homemaking responsibilities had lessened. In 1970, peak participation shifted back to young 20- to 24-year-old women, but the 45- to 54-year-olds took a close second place, with rates slightly higher than for girls 18 and 19.

There are several reasons for these recent changes in rates among young women.[3] First, the proportion of women 20 to 24 years old who are married has shown a small but perceptible decline in the last few years, partly because of the larger number of young men in the Armed Forces since the Viet Nam War started, and the so-called "marriage squeeze," the imbalance resulting from a larger number of women than of men in the prime marriage ages. Second, since the birth rate has fallen, a somewhat smaller proportion of married women in these ages have young children to care for.

Single women no longer predominate in the work force and the percentage of widows, divorcees, and separated working women is also comparatively small. Table 1 shows that married women whose husbands are present far outnumber all other groups of working women. Yet only 40 percent of all married women worked, clearly a significantly lower labor force participation rate than that for all other women except widows,

Chart 1. Labor force participation rates of women by age, 1940–70



Note: Data are from the Current Population Survey for the civilian noninstitutional population for March of each year.

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who are generally in a considerably older age group. Despite the enormous increases of the late 1960's, most wives and mothers do not work outside the home, especially if they have preschool age children, as shown in the following tabulation:

	Labor force participation rate, March 1969		
	Total	Under 35 years	35 years and over
Total wives	39.6	40.1	39.3
With no children under 18	41.0	66.8	35.7
With children 6 to 17 only	48.6	50.7	48.1
With children under 6	28.5	28.9	27.1

Historically, Negro wives have had a higher labor force participation rate than white wives. However, the current difference in rates is considerably smaller than in past decades when the Negro rate was as much as 20 percentage points higher. Through the 1960's, the gap declined at a slow, steady yearly pace. In March 1969, the labor force participation rate of 51 percent for Negro wives was 12 percentage points higher than that of white wives.

Negro wives are younger than white wives, a factor contributing to the different patterns of labor force participation. Whatever their age, the ages of their children, the ages of their husbands, or the income of their husbands, Negro wives are more likely to be in the labor force than white wives. For example, among families with preschool age children, 44 percent of Negro wives but only 27 percent of the white wives were in the work force in March 1969. Among families where the husband's yearly income was $10,000 or more, about half of the Negro wives compared with a third of the white wives were working or looking for work.

Employment

Three-quarters of all employed women hold full-time jobs, a proportion that has changed little over the years. Divorced and separated women are even more likely to hold full-time jobs. Historical changes in the occupational distributions of women are not nearly so striking as changes in the number of women working. Although women now work in virtually every job listed by the Bureau of the Census, the great majority of them are concentrated in occupations in which women employees predominate over men—domestic service, teaching, clerical work, nursing, and retail sales.[4] One of the largest single occupational groups among women today is still the clerical one—stenographers, typists, secretaries—a category that first gained prominence in the occupational distribution of women over a half century ago. Thus, despite the increased reliance of the American economy on women in the labor force, many jobs in new occupational fields have not opened to them. The broad category of professional jobs is a notorious example of a field divided along sexual lines. Here, about two-thirds of all women are employed as either nurses or teachers, and even as teachers, most women teach in the primary grades while most men teach in high school.

A further illustration of the concentration of women in certain types of employment is the fact that if the industrial-occupational composition of an area is known, it is possible to predict the relative labor force participation rate of women in that area. Several studies have shown that women's labor force participation rates are higher in areas where there is a relatively heavy concentration on nondurable goods manufacturing and service industries that require large proportions of operatives and white-collar and service workers.[5] One recent study provides a measure of the "femininity" mix of industries.[6] In brief, the index deals with 1960 census data to show what the ratio of female employment to total employment in a metropolitan area would have been in 1960 had this ratio depended solely on the ratio of female employment to total employment in each industry for the country as a whole, as well as the industry mix of the area. It was found, for example, that the service and white-collar town of Washington, D.C., has one of the highest female index values (38.2) and Pittsburgh, a heavy industry city, one of the lowest (29.3).

Table 1 shows that white-collar occupations predominate among women employed full time and, to a lesser extent, among married and single women with part-time jobs. Much larger proportions of part-time women workers, regardless of marital status, are employed in service jobs, including private household.

The proportion of Negro women in white-collar work in each marital category lags far behind that of white women. In recent years, a small shift toward more white-collar work has occurred among Negro women, while the occupational distribution among white women remained about the same. In March 1969, 63 percent of employed

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white women held white-collar jobs, compared with 34 percent of employed Negro women. A few years earlier, the proportions were 62 percent of white and only 26 percent of Negro women. However, the shifts were not strong enough to significantly bring closer together the general occupational patterns of white and Negro women.

Major differences in occupational distributions of Negro and white women persist, and relatively more Negro women in each marital category still work in jobs that generally pay lower wages and are the least secure in job tenure. Current disparities in the proportions of workers in white-collar jobs by race are shown in table 2.

Regardless of marital status, younger Negro women had a better occupational profile at the close of the 1960's—in part because of their stronger educational background—than older, less educated Negro women. Median years of school completed by women 18 to 34 years old in March 1969 were 12.5, white and 12.2, Negro; for women 35 years old and over they were 12.1 and only 8.8 respectively. The current occupational distribution of younger Negro women reflects the changed economic and social climate of recent years, which not only enabled them to obtain more educational and vocational training, but also helped them to get jobs at which they could utilize their skills.

Table 1. Selected characteristics of women in the labor force, by color, March 1969

[Number of women 16 years and over, in thousands]

Characteristics	All women							Negro and other races						
	Total	Never married	Married, husband present	Other marital status				Total	Never married	Married, husband present	Other marital status			
				Total	Widowed	Divorced	Husband absent				Total	Widowed	Divorced	Husband absent
Population	71,919	12,689	44,440	14,790	9,500	2,505	2,785	7,880	1,789	3,631	2,460	1,145	341	974
In labor force	29,898	6,501	17,595	5,802	2,504	1,793	1,505	3,797	817	1,853	1,127	345	227	555
As percent of population	41.6	51.2	39.6	39.2	26.4	71.6	54.0	48.2	45.7	51.0	45.8	30.1	66.6	57.0
Median age	40	22	41	50	59	44	37	37	23	39	45	56	41	39
Employed	28,613	6,093	16,947	5,573	2,427	1,734	1,412	3,517	701	1,747	1,069	334	214	521
Median age	39	22	41	50	58	43	37	37	23	39	45	55	40	39
Unemployed	1,285	408	648	229	77	59	93	280	116	106	58	11	13	34
As percent of labor force	4.3	6.3	3.7	3.9	3.1	3.3	6.2	7.4	14.2	5.7	5.1	3.2	5.7	6.1
Mean duration (in weeks)	8.0	8.1	8.2	3.0	3.2		2.6	8.7	9.1	7.9	(2)	(2)		(2)
Median age	26	19	32	41	55	(2)	27	23	20	29	(2)	(2)	(2)	(2)
	Labor force participation rate													
AGE														
16 to 19 years	37.2	37.1	35.4	51.8	(1)	(2)	50.6	30.4	29.3	36.2	(2)	(1)	(2)	(2)
20 to 24 years	56.6	69.4	47.9	62.9	(2)	73.6	60.1	58.2	64.0	51.7	58.7	(2)	(2)	56.4
25 to 34 years	43.4	80.9	36.9	63.5	46.7	81.9	53.2	56.7	62.8	53.7	60.6	(2)	77.4	55.7
35 to 44 years	49.3	72.3	45.4	66.4	54.7	79.7	59.9	57.5	57.4	57.9	56.8	49.5	61.9	58.0
45 to 54 years	52.9	72.8	48.2	68.5	67.1	78.3	58.7	57.5	(2)	55.2	60.4	52.2	(2)	63.2
55 to 64 years	42.7	62.8	35.4	55.0	51.3	70.7	56.4	47.7	(2)	41.2	54.9	46.4	(2)	72.6
65 years and over	10.0	18.4	7.6	10.2	9.7	18.4	16.0	12.8	(2)	15.4	11.9	10.8	(2)	(2)
	Percent distribution													
Employed: Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full time [3]	74.0	68.8	73.7	80.3	71.6	90.7	82.6	74.5	72.1	74.4	76.0	61.9	88.8	79.8
Part time [3]	26.0	31.2	26.3	19.7	28.4	9.3	17.4	25.5	27.9	25.6	24.0	38.1	11.2	20.2
Full time, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White-collar	61.5	73.2	61.1	51.8	50.1	61.3	41.4	37.7	47.1	42.1	24.7	17.5	37.9	22.2
Blue-collar	20.0	12.8	21.9	21.6	21.1	17.9	27.4	23.5	21.5	23.3	25.2	20.4	16.8	31.3
Service	17.4	13.8	15.5	26.0	27.8	20.5	30.9	38.1	30.4	34.1	49.5	60.2	45.2	46.3
Private household	3.0	3.0	1.9	6.1	8.4	3.6	6.0	11.2	9.7	8.4	16.6	27.2	16.3	11.6
Other	14.4	10.8	13.6	19.9	19.4	16.9	24.9	26.9	20.7	25.7	32.9	33.0	28.9	34.7
Farm	1.1	.3	1.5	.6	1.2	.3	.3	.6	1.0	.5	.6	1.9	(1)	.2
Part time, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	(2)	100.0
White-collar	53.3	54.8	57.2	34.9	34.8	46.3	27.8	23.2	46.7	21.1	9.0	6.3	--------	9.5
Blue-collar	7.0	3.4	7.9	9.2	10.0	10.5	6.1	6.0	3.1	7.6	5.5	5.5	--------	5.7
Service	37.0	40.8	31.2	54.3	53.0	43.2	65.3	69.3	49.2	69.7	83.6	85.8	--------	82.9
Private household	13.8	17.1	8.6	29.2	28.9	19.1	36.7	46.2	24.1	43.5	67.6	74.8	--------	61.9
Other	23.2	23.7	22.6	25.1	24.1	24.1	28.6	23.1	25.1	26.2	16.0	11.0	--------	21.0
Farm	2.7	1.0	3.7	1.6	2.2	(1)	.8	1.6	1.0	1.6	2.0	2.4	--------	1.9

[1] Less than 0.05 percent.

[2] Figures not shown where base is less than 75,000.

[3] Full-time workers are those who during the survey week worked 35 hours or more and those who usually work full time but worked 1 to 34 hours. Part-time workers are persons who usually work 1 to 34 hours and worked 1 to 34 hours during the survey week. Persons with a job but not at work during the survey week are classified according to whether they usually work full or part time.

NOTE: Sums of individual items may not add to totals due to rounding.

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Unemployment

For every 20 women with a job in 1969, another woman was a jobseeker. Unemployed women numbered 1.4 million and accounted for half of all unemployed persons in the Nation. Their unemployment rate was 4.7 percent, substantially higher than the 2.8 percent for men. Generally the gap between men's and women's rates widens when business activity is buoyant and narrows during more sluggish periods. To illustrate, when the adult unemployment rate was 3 percent or less from 1967 to 1969, the rate for women was at least 1.6 percentage points higher than that for men. During 1959–61, when the adult unemployment rates were about 5 to 6 percent, the women's rate was about half a percentage point higher than that for men.[7]

One reason the women's unemployment rate is usually much higher than that for men when economic conditions are good is that a greater proportion of women than of men enter or reenter the labor force. In 1969, 45 percent of the jobseeking women 20 years old and over had reentered the labor force, a proportion double that of men. At the same time, only 33 percent of the unemployed women compared with 58 percent of the jobless men were job losers, those whose employment had ended involuntarily and who immediately began looking for work, or those on layoff. Almost 60 percent of the unemployed adult women were looking for work for a month or less, a somewhat higher proportion than for adult men.

By marital status, single and separated women have the highest unemployment rates. Age is the overriding element in unemployment among single women, since two-thirds of those unemployed (in March 1969) were teenagers, many looking for their first jobs. A combination of factors may tend to produce a higher unemployment rate among separated women than among wives and divorcees. Because they are somewhat younger than wives and divorcees, and their children tend to be younger than those of other women, their conditions for taking a job may be more restrictive and difficult for employers to meet.

A year's work experience

Data on work experience over a calendar year provide one of the best measures of the strength of women's attachment to the labor force, because a larger number of them work at some time during a year than in any 1 month of the year. The 12-month record accounts for *all* women who were in the labor force at *any* time during the year by how many weeks they worked or looked for work and many other characteristics. For example, out of the 72 million women in the civilian population 16 years old and over in March 1969, 30 million, or 42 percent, were in the labor force in March, but 37 million (52 percent) had worked at one time or another in 1968. About 15 million women had worked year round at full-time jobs.[8] The extent of women's work experience in 1968 is shown as follows:

	Total, 16 years and over	*Single*	*Married, husband present*	*Other marital status*
Percent with work experience	52.0	68.0	49.7	45.7
Distribution of women with work experience in 1968 (percent):				
Total	100.0	100.0	100.0	100.0
Full-time jobs:				
50 to 52 weeks	41.4	36.2	40.2	52.3
27 to 49 weeks	13.6	9.8	14.5	15.2
1 to 26 weeks	15.4	19.3	15.2	10.8
Part-time jobs	29.7	34.7	30.1	21.7

The figures for single women are affected by the heavy weighting of teenagers and college-age women among them. Relatively more of the single women held a job during the year than other women, but greater proportions worked part time or for less than a half year at full-time jobs. Of 44.4 million wives in the population, half had worked in 1968 and 4 out of every 10 who worked did so full time year round.

The difference between the proportion of wives working at some time during the year and in any selected month is far higher for mothers of young children than for other women:

		Percent of population	
	Population (In thousands)	*In labor force, March 1969*	*With work experience of 1 week or more in 1968*
Total, 16 years old and over	44,440	39.6	50.3
With no children under 18 years	19,173	41.0	49.2
With children under 18 years	25,267	38.6	51.1
With children 6 to 17 years	12,650	48.6	58.2
With some children under 6, none under 3 years	5,137	34.7	46.5
With some children under 3 years	7,480	24.2	41.9

For wives with children under 3, the differences represent to some extent their leaving the work force at the birth of a child. But for wives with children of nursery school age, 3 to 5 years, this might be some indication of the reserve of young

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Table 2. Occupations of employed women, by age, marital status, and color, March 1969

[Percent distribution]

Color and occupation	16 to 34 years old				35 years old and over			
	Total	Never married	Married, husband present	Other marital status	Total	Never married	Married, husband present	Other marital status
WHITE								
Employed, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White-collar occupations	67.2	69.1	67.2	58.8	60.0	74.1	60.5	54.2
Professional, technical	16.5	15.9	18.0	10.3	14.1	26.1	14.0	10.2
Managers, officials, proprietors, except farm	2.1	1.6	2.5	2.5	6.4	6.7	6.0	7.4
Clerical	42.5	44.2	41.3	42.3	31.2	38.1	31.5	28.3
Sales	6.1	7.4	5.4	3.7	8.3	3.2	9.0	8.3
All other occupations	32.8	30.9	32.8	41.2	40.0	25.9	39.5	45.8
NEGRO AND OTHER RACES								
Employed, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White-collar occupations	47.2	52.1	47.6	36 0	24.1	22.9	30.1	15.7
Professional, technical	10.6	10.2	11.8	8.7	10.1	11.5	12.2	6.9
Managers, officials, proprietors, except farm	1.1	.2	2.0	1.1	2.4	1.6	3.2	1.4
Clerical	33.3	39.3	31.5	24.7	10.2	9.8	12.8	6.6
Sales	2.2	2.4	2.3	1.5	1.4	------	1.9	.8
All other occupations	52.8	47.9	52.4	64.0	75.9	77.1	69.9	84.3

wives who can step into the American labor force. Because of their older age composition—half were at least 55 years old—the labor force rate among wives with no children under 18 was lower than that of wives with school-age children.

An interpretation of the earnings gap

Comparisons of women's earnings with those of men are subject to innumerable qualifications. What makes their overall annual earnings so ill-suited for valid comparison is that the contemporary female labor force consists overwhelmingly of married women whose extent of labor force activity during the year and occupational distributions differ radically from men's. Analysts try to control for the difference in length of work activity during the year by comparing the earnings of women and men who worked the entire year at full-time jobs, but it is also necessary to allow for the fact that married women have restricted freedom of occupational choice. They may have to put convenience of location or flexibility of hours above earnings. Married women may not be in a position to accept jobs with overtime pay or to accept a promotion to a job with heavier responsibilities. This may lead a wife to take a job which may not require her primary skill, or one in which she may not command the best salary.

This is not to overlook job discrimination, some of which exists today. But the overwhelming majority of statistical evidence available does not permit a valid comparison of men's and women's earnings that would reveal the extent of discrimination. In its latest Fact Sheet on the Earnings Gap, the Women's Bureau states that the figures for full-time year-round workers do not necessarily indicate that women are getting "unequal pay for equal work." [9] Within a broad occupational group, women are more likely than men to be employed in lower-skilled, lower-paying jobs. For example, in colleges, women are much less likely than men to be associate or full professors. In the technical field, women are usually in the lowest category of draftsmen or engineers.

A better understanding of the earnings gap is obtained by viewing the recent entry of large proportions of married women into the work force as a resumption of the function that women performed in the past as a part of the family economic unit; for example, in an agricultural setting or when much of the family's food and clothing was produced at home. During the early part of this century, wives gave up or were freed from this responsibility with husbands taking on the extra burden. As married women continue to meet labor market demands, their economic function in the family is being partially restored.

Boosting family income

More than half of all husband-wife families today are multi-earner families in an average month, primarily because wives, rather than sons and daughters, are out working. When a wife did not work during the year, median family income in 1968 was about $8,175. If she worked at all,

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median income was $10,485; or about $13,600 if she worked all year at a full-time job. Although the differences in family income are not entirely due to the wives' earnings, these recent income data provide a rough estimate of the importance of wives' earnings. In truth, a wife's earnings appear to be a family's vital link to the maintenance of the "good life," as opposed to one with fewer options other than life's basic necessities.

The relative contribution a wife makes to family income has been about the same through the 1960's. In 1968, the median proportion of family income contributed by the wife's earnings was 27 percent, reaching as high as 37 percent for wives who had worked full time the entire year, and as low as 13 percent for those who worked less than a full year or all year at part-time jobs. About 50 percent of all working wives supplied between 20 and 50 percent of their family's income, while only 2 percent supplied 75 percent or more. Families in which the wife was the principal breadwinner had median income of only $5,465, less than half the $11,600 of families in which women supplied between 20 and 50 percent of family income.

The contribution to family income made by Negro wives with some work experience in 1968 was not signficantly different from that of white wives—29 percent compared with 27 percent for white wives. This picture varies when the share of family income is examined by income level. Among families with less than $5,000 income, a larger proportion of white than Negro wives accounted for at least 50 percent of family income. However, when family income was $15,000 or more, 12 percent of the Negro wives earned at least half the family income compared with 5 percent among white wives. This indicates a greater role for Negro wives than for white wives in helping their families reach a middle-class income level.

Because of the close relationship between the husband's education and skill level and that of his wife, there is some correlation between their earnings. Generally, the lower the husband's earnings, the lower his wife's. For example, among husbands who earned under $3,000 in 1968, less than a third had wives who worked at some time during the year and earned $3,000 or more. But nearly half of the wives whose husbands earned $10,000 or more earned $3,000 or more. In fact, about a fourth of the wives of men with earnings in five figures earned $5,000 or more. The same type of relationship obtained whether the wives worked full time year round, full time part of the year, or part time. Median earnings among wives who worked full time all year were $6,600 for those whose husbands earned $10,000 or more, compared with $3,470 if their husbands earned $2,000 to $2,999.

Educational payoff

The more education women have, the more likely they are to be in the labor force. The more education they bring to their jobs, the higher their earnings. Among women who were high school graduates, 49 percent were in the labor force in 1969, compared with 30 percent for those who completed grade school only. This low rate reflects in part the higher proportion of the latter women in the older age groups. The labor force participation rate increased to 54 percent for college graduates and to 69 percent for those who had completed 5 years or more of college. Among the latter well-educated women, 83 percent are workers at ages 45 to 54. This high labor force participation rate indicates a very strong commitment to both marriage and a career, a far stronger one than prevailed among high school graduates the same ages (57 percent).

The following tabulation for married women (husband present) who worked full time year round in 1968 confirms that higher earnings generally reward higher educational attainment:

Years of school completed	*Median earnings, 1968*		
	Total	*White*	*Negro and other races*
Total	$4,415	$4,475	$3,895
8 years or less	3,520	3,630	2,585
High school:			
1 to 3 years	3,885	4,000	3,025
4 years	4,395	4,435	4,035
College:			
1 to 3 years	4,910	4,935	4,700
4 years or more	6,675	6,655	6,860

Differences in the earnings of white and Negro women are larger among the less educated, but do not differ significantly among those with some college training.

Among full-time year-round workers, the earnings pattern for widowed, divorced, and separated women with high school training or less was similar to that of wives. However, among women with some college, median earnings of widowed, divorced, and separated women were about $1,000 higher than the earnings among wives with similar education, bearing out the point made earlier about the limited work options that married women can exercise.

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Women as family heads

In March 1969, 5.4 million of the 50.5 million families in the United States were headed by women, the highest recorded. But the proportion of families so headed was the same throughout the 1960's; that is, about 1 out of every 10 families was headed by a widowed, divorced, separated, or (infrequently) single woman who was responsible for raising children in a fatherless family, or for supporting elderly parents or other family members.

In 1969, as throughout the 1960's, about half the women family heads were working or looking for work. Of the 2.8 million in the work force, 4 percent were unemployed, about the same proportion as for all women.

Labor force participation rates ranged from 36 percent among the 2.4 million widowed family heads to 65 percent among the 2.5 million divorced and separated women family heads. About 27 percent of the latter working women had preschool age children, and 50 percent had children 6 to 17 years old. Among working widows, these proportions were 5 and 35 percent, respectively, reflecting the older age composition of this group.

Median income in 1968 among all families headed by women was $4,550, half that of husband-wife families. In most families in which the woman head worked, the level of family income was determined by her earnings. Women family heads and wives who worked all year at full time jobs earned about the same amount—a median of $4,565. However, the median contribution to family income of women who were family heads was 72 percent, while the wives accounted for only 37 percent.

Approximately a fourth (1.4 million) of all Negro families were headed by women, and the median family income in 1968 was only $3,255. A smaller proportion of Negro than white family heads worked all year full time, and the earnings of these year-round workers were much lower for the Negroes than whites, $3,235 and $4,855, respectively.

Many elements already discussed in this article contribute to the white-Negro earnings differential, such as Negro women's lower educational attainment and their less skilled occupational composition. Recent articles have reported the plight of the dependent children in Negro as well as white families headed by women.[10]

The interaction of supply and demand

What are the implications of our comparison of the trends in the demand for female labor with the trends in the supply of the kind of women who provided the typical workers of the prewar period? As far as demand is concerned, we have seen that all three of our estimates indicate a rising demand for female labor, particularly since 1940 . . . .

All this lends weight to the argument that a greatly increased supply was not the dominant and initiating factor in the large postwar growth of the older married female labor force. It seems suspiciously fortuitous, after all, that just as the supply of the typical worker of 1940 and earlier was declining, the supply of older married women to the labor force was, for entirely different reasons, rising. A much more reasonable explanation is that the combination of the rising demand for female labor and the declining supply of the typical worker opened up job opportunities for married women and older women that had not previously existed. . . . If this reasoning is valid, then the great influx of older married women into the labor force, was, in good part, a *response* to increased job opportunities—not a creator of such opportunities. The greater availability of laborsaving products and services may have *facilitated* this response, but it did not initiate it.

—VALERIE KINCADE OPPENHEIMER, *The Female Labor Force in the United States* (Berkeley, University of California, Institute of International Studies, 1970), pp. 186–187.

Patterns

This article has reviewed some major elements affecting the work patterns of women such as marital status, presence and age of children, family income, race, education, and job opportunities. From the data, it is clear that women continue to respond to labor market needs for additional workers, and that they work for a variety of reasons, with economic necessity the most frequently cited. A recent analysis of the lifetime work expectancy of women shows that they typically take a job in their late teens or early 20's, leave the labor force after marriage, resume work when their child rearing responsibilities decrease, and retire from the job world in their late 50's or early 60's.[11] This information on work life expectancy, based on 1960 labor force patterns, shows that at 20 years old, working women who never marry can expect to work about 45 years.

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Working wives, 20 years old, who will never have children may expect a work life of 35 years. The work-life expectancies of wives with children are more mixed because of variability in the number of children they have and when they have them. For example, women who marry at age 20 and will have only one child have a work life expectancy of 25 years; with 2 children, 22 years, with 3 children, 20 years, and with 4 or more children, 17 years.

Since 1960, considerable changes have taken place. Labor force data discussed earlier indicate that younger adult wives are staying in the labor force longer before starting their families. Patterns in the spacing of child births appear to be changing. These are among the more influential elements that have an impact on work life expectancy and labor force participation, and as such, they bear close watching in the 1970's. □

———FOOTNOTES———

[1] Most of the data in this report are from the Current Population Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics. Data are subject to sampling variability, which may be relatively large for the smaller figures and for small differences between figures. Unless otherwise indicated, data relate to the population 16 years and over, including inmates of institutions and those members of the Armed Forces living off post or with their families on post.

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

[2] Esther Peterson, "Working Women," *Daedalus*, Spring 1964, p. 673.

[3] For greater detail on this subject, see U.S. Department of Labor, *Manpower Report of the President*, March 1970, pp. 46–48; and Elizabeth Waldman, "Marital and Family Characteristics of the U.S. Labor Force," *Monthly Labor Review*, May 1970, pp. 18–27.

[4] For example, see Carl Degler, "The Changing Place of Women in America," *Daedalus*, Spring 1964, pp. 653–670; or Gertrude Bancroft McNally, "Patterns of Female Labor Force Activity," *Industrial relations*, May 1968, pp. 204–218.

[5] See Jacob Schiffman, "Marital and Family Characteristics of Workers, March 1962," *Monthly Labor Review*, January 1963, reprinted as Special Labor Force Report No. 26.

[6] William G. Bowen and T. Aldrich Finegan, *The Economics of Labor Force Participation* (Princeton, N.J., Princeton University Press, 1969), appendix B and pp. 174–178.

[7] For additional information, see Paul M. Ryscavage, "Impact of higher unemployment on major labor force groups," *Monthly Labor Review*, March 1970, pp. 21–23.

[8] Additional information on work experience is available in Vera C. Perrella, "Work experience of the population in 1968," *Monthly Labor Review*, February 1970, pp. 54–61.

[9] Also see the article on the Equal Pay Act of 1963, pp. 30–34, this issue.

[10] Elizabeth Waldman, op. cit., table 4, and the discussion on children in families headed by men and by women.

[11] Stuart H. Garfinkle, "Work Life Expectancy and Training Needs of Women," published as Manpower Report No. 12, May 1967, by the U.S. Department of Labor, Manpower Administration.

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Women workers and manpower demands in the 1970's

JANICE NEIPERT HEDGES

MANY MORE WOMEN workers in the 1970's must prepare to enter work outside the traditional "women's occupations" if they are to find jobs in keeping with their abilities.

A major shift in the employment patterns of women will be required. The professional and technical occupations and the skilled trades are of critical importance in this shift, because of the lengthy periods of training needed in these fields.

The situation is simply stated. Manpower projections for 1968–80 made by the Bureau of Labor Statistics [1] indicate a large potential surplus of teachers, a profession that has been a major source of employment for women college graduates. At the same time, several professions in which women are now a small minority are expected to provide opportunities for additional college-trained women. New sources of employment for women without a college degree are expected in rapidly growing skilled trades, in which few women work at present.

In this article, the present job concentration of women is examined and contrasted with the opportunities expected in the 1970's in some of the professional and skilled occupations.

Job concentration

Although more than 250 distinct occupations are listed in Bureau of the Census tabulations, half of all women workers were employed in only 21 of them in 1969. About a fourth of all employed women were in five occupations—secretary-stenographer, household worker, bookkeeper, elementary school teacher, and waitress. Secretary and stenographer jobs alone accounted for 1 of every 10 women workers. Male workers were much more widely dispersed than women, with 50 percent in 65 occupations. (See chart 1.)

The high concentration of women workers is due to many factors. Some of them were valid at one time; few are valid today.

The limited kinds of jobs in which women are employed are, for the most part, extensions of the work women have done in the home. As work related to the care of the sick, the instruction of children, food preservation, preparation, and serving, textile weaving and sewing, cleaning, and correspondence developed in institutions, factories, and offices, women were employed to perform these tasks. Moreover, as the female labor force expanded, the growth rate in these occupations permitted the hiring of large numbers of women year after year.

The concentration of women in certain occupations resulted also from factors that discouraged their entry into others. Some jobs in the construction trades, for example, require lifting or carrying weights that are beyond the capability of most women. And some occupations require longer periods of preparation than many women are able or willing to undertake. Work that requires a professional degree or an M.A. or Ph. D., for example, is open to fewer women than men, since the proportion of women workers having 5 years of college or more (3 percent in 1969) is little more than half the rate for men.

But discrimination and, perhaps even more important, widely held prejudices that some jobs are feminine while others are masculine have artificially restricted women's jobs far beyond the limits set by job requirements or working conditions.

In a sense, the concentration of women in certain jobs is the result of the lack of men in them. Attitudes have played a part here, too. But low wages in many of the "women's occupations"

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have been an important reason.

Many factors today seem to encourage a wider dispersion of women workers. Physical requirements, for example, are declining in relative importance as white-collar jobs requiring little physical strength increase more rapidly than manual occupations, and as technological innovations lessen the strength requirements in operative and other jobs. In addition, widespread use of aptitude and interest tests is slowly effecting changes in attitudes regarding "appropriate" or "inappropriate" jobs for women—or men. Moreover, rising salaries in teaching and social work have attracted more men to these occupations, lessening the concentration of women.

Yet the concentration of women in a relatively few occupations persists. From 1960 to 1969, as in earlier periods, the pull of changing opportunities in individual occupations and in major occupational groups did not counteract the tendency of women workers to concentrate in a relatively narrow range of occupations.

A measure of the problem

Actual changes in the experienced female labor force in the major occupational groups from 1960 to 1969 deviated substantially from those that might have been expected on the basis of the increase in the total female labor force relative to the total civilian labor force and the growth in each occupation. For example, the increase in the female labor force in the professional and technical group, the skilled trades, and the salaried managers and officials group was disproportionately small in view of the gains in the total female labor force and in the total labor force in those occupations. In contrast, the large increase in the number of women clerical workers was out of proportion to the growth that might have been expected. (See table 1.)

Table 1. The actual and theoretical growth of the experienced female labor force, by occupation, 1960–69

[Numbers in thousands]

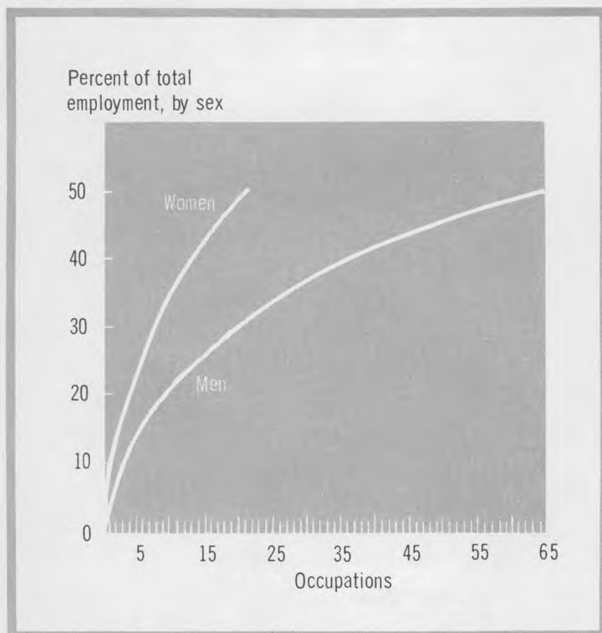
Occupation	Female labor force		
	Growth		Surplus or deficit by occupation
	Actual	Theoretical [1]	
All occupations	6,786	6,786	----------
Professional and technical	1,265	2,266	−1,001
Managers, officials, and proprietors	194	687	−493
Salaried	328	1,526	−1,198
Self-employed, retail	−108	−511	403
Clerical	3,292	2,360	932
Sales	186	60	126
Craftsmen	96	707	−611
Operatives	963	1,151	−188
Service workers	1,006	902	104
Household	−499	−333	−166
Other	1,505	1,236	269
Farmers and farm managers	−32	−668	636
Farm laborers	−227	−599	372
Laborers except farm	41	−82	123

[1] The theoretical growth of the female labor force in each occupation represents the growth that would have occurred if the change in the total number of persons in the occupation had been distributed between the sexes in the same proportion as the increase in the total labor force was distributed between the sexes. With this measure, it is possible for a theoretical decrease in either the female or male labor force in a given occupational group to be larger than the actual number of males or females in the group in 1960. The instances in which this occurs for the female labor force and the maximum possible decrease in each instance are as follows: farmers and farm managers, 122,000; self-employed proprietors in retail business, 353,000.

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

SOURCE: Calculations based on unpublished data for April.

Chart 1. Concentration of male and female employment, 1969



Workers who are women

In 1969, women made up about two-fifths of the civilian labor force, numbering 30.5 million compared with 50.2 million men. The history of the female labor force appears elsewhere in this issue.[2] Two observations, however, are relevant here, for they indicate that women will continue to constitute so large a share of the work force that their adjustment to changing occupational demands is a matter of primary consequence.

First, women's present position in the labor force has been achieved over a very long span of time. Although the growth has been most rapid in periods when the need for womanpower was

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especially strong (such as in wartime or years of substantial economic growth), the long term trend from the colonial era on has been unmistakably upward.

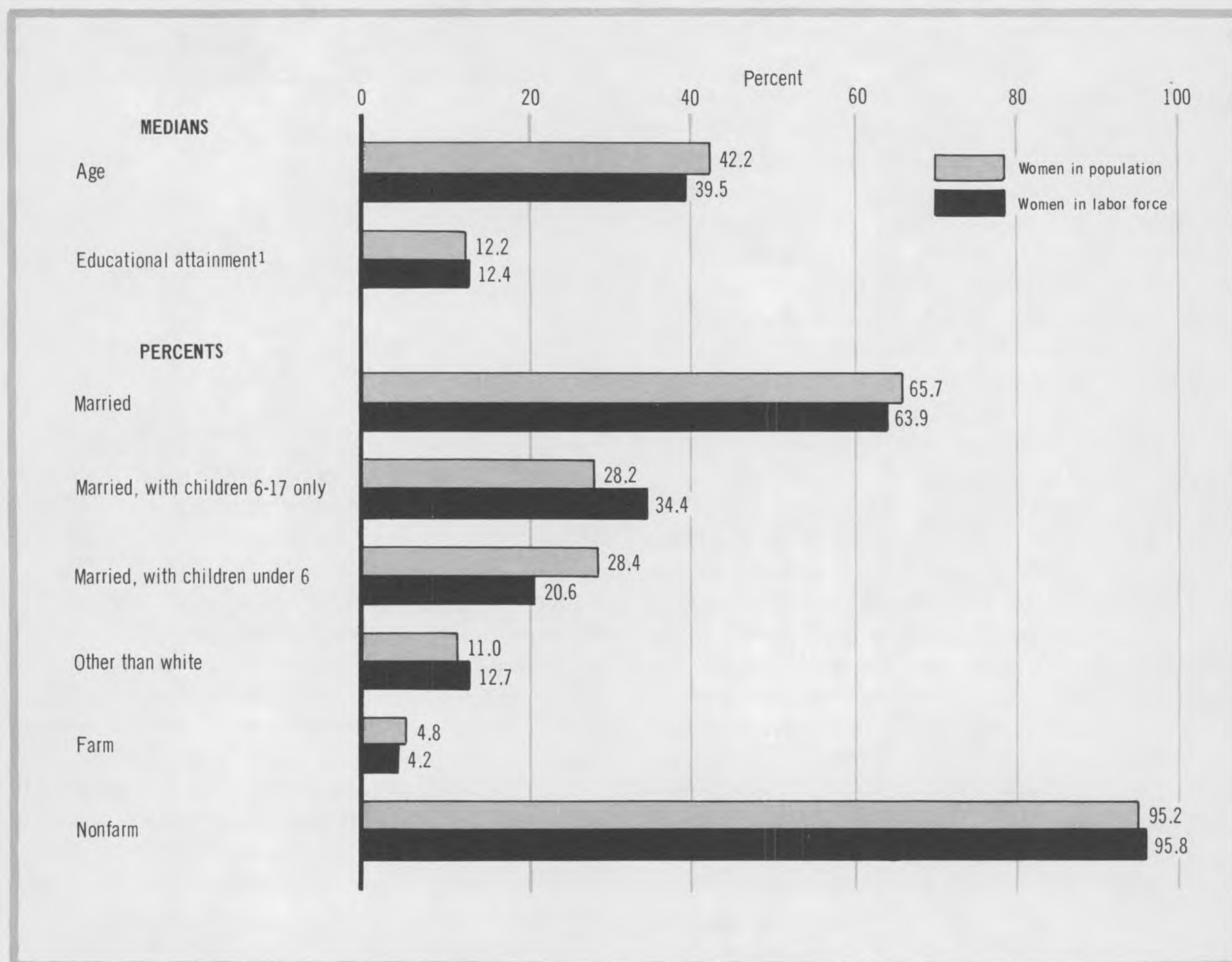
Second, as first one group of women then another entered (black women and immigrants were the pioneers, followed by young women and single women, then "mature women," and, currently, mothers of preschool children), every major group has been encompassed. In 1969, women who worked bore a marked resemblance to those who stayed at home as to marital status, age, education, and other characteristics. (See chart 2.) (At the same time, it is still true that race and educational attainment are prime determinants of female labor force participation.)

In brief, since the participation of women in the labor force has not been a response of women living in any one period, nor a response of women in any particular economic or social situation, the long term outlook is that women will continue to furnish a large share of the civilian labor force.

The Nation requires the labor that women can provide. But those requirements are becoming more and more specific. Needs are in individual occupations, not in the labor market. And those needs are dynamic, for at any one time some occupations are growing very rapidly, others are growing slowly, if at all, and some are declining numerically. These conditions require a labor force that is responsive to changing opportunities. The continued concentration of women in a narrow range of occupations runs counter to that concept.

What lies ahead for women workers between 1968 and 1980? As in earlier periods, growth rates and the number of job openings will vary greatly

Chart 2. Characteristics[1] of women in the population and in the civilian labor force, 1969



[1] Educational attainment describes women 18 years of age and over; all other characteristics apply to women 16 years of age and over.

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among the major occupational groups and individual occupations. Will women respond to changing opportunities? The professional, technical, and skilled trade occupations, some of which are discussed below, are of strategic importance because they require extended job preparation.

Professional and technical employment

The professional group of occupations has been a major employer of women. Over 4 million women were professional workers in 1969, an increase of 1.3 million since 1960. As in previous periods, this increase accompanied—and seemed to be dependent on—increasing demands in the "service professions," such as teaching and nursing, in which women predominate.

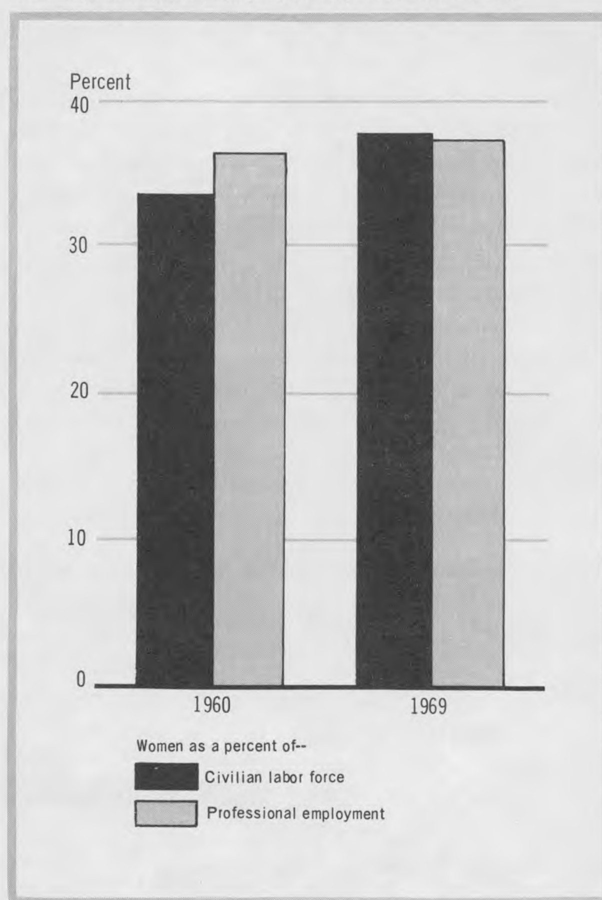
Employment of scientists and engineers increased at a faster rate than school teachers and nurses, but left little imprint on the employment of women. Nor did shortages of physicians and dentists have a discernible effect on the number of women in these professions.

As the decade neared an end, it was apparent that women workers, although ever increasing in number, had not shared commensurately in the growth of the professional group as a whole. For while women constituted a significantly higher proportion of the civilian labor force in 1969 than in 1960 (almost 38 percent, or 4.4 percentage points higher than in 1960), their proportion of professional employment had risen only 1 percentage point in that same period. (See chart 3.)

The extent of what might be called women's "foregone opportunities" for professional employment from 1960 to 1969 is indicated in table 1. The actual growth in the number of professional women from 1960 to 1969 was 1.3 million. However, the number of professional women could have been expected to increase by 2.3 million, based on the increase in the female labor force relative to the total civilian labor force and the growth of the professional and technical group.

To have reached the higher figure would have required, of course, that 1 million women who entered nonprofessional jobs between 1960 and 1969 could have met the educational qualifications for professional employment and would have been willing to meet other requirements, such as full-time work and travel. It would assume, also, that employers would have been willing to hire them.

Chart 3. Women as a proportion of the civilian labor force and of professional employment, 1960 and 1969



What are the prospects for women in the 1968–80 period in some of the professions in which they predominate and, in contrast, in some of those in which few women work?

Teaching has been the major source of professional employment for women for more than a half century. Over 1.4 million women, or 36 percent of all professional women, were teaching in elementary and secondary schools in 1969. About one-third of all women college students major in education (teacher preparation), a far higher proportion than in any other field of study.

The manpower projections of the Bureau of Labor Statistics for the years from 1968 to 1980 indicate that the number of persons seeking to enter elementary and secondary school teaching during the period could be nearly three-fourths above the projected requirements, based on past patterns of entry.[3]

To young people choosing a career, and to many others, the demand for teachers in recent

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years had seemed insatiable. Through the 1960's, school boards across the Nation hired about one-fourth of all new college graduates. For every two new graduates hired as teachers, they also engaged one former teacher who was returning to the profession. Still, teacher shortages were so severe in some localities that school boards resorted to double shifts, or hired uncertified "emergency teachers." But as the end of the decade neared, more and more schools began to report by midsummer "all positions filled." Behind the changing situation in teacher manpower are declining birth rates that have slowed the growth in the number of school-age children, and record numbers of would-be teachers graduating from colleges as the post-World War II "baby boom generation" comes of age and college enrollment rates set new records.

College teaching is not expected to offer alternative employment in the 1968–80 period to a substantial proportion of the women graduates who might have become secondary school teachers under a different demand-supply situation. The demographic changes already affecting teaching requirements at the secondary level shortly will reach higher education. There, too, the supply of potential teachers (in this case, holders of advanced degrees) will grow more rapidly than the college population.

The rapidly expanding supply of Ph. D.'s is of special significance for the employment of women in higher education, for women earned only 13 percent of the doctorates conferred in 1967–68. About half of the college faculty in 4-year institutions had a doctorate in 1968–69. However, the Commission on Human Resources and Advanced Education predicts that "In all fields, demands for college teachers with less than a Ph. D. degree will decline sharply after 1970." [4] Some additional opportunities for teachers without a doctorate will be available in expanding nondegree programs in 4-year institutions and in junior and community colleges.

Professional nursing has ranked in importance after elementary and secondary teaching as a source of professional employment for women. Almost 720,000 women, or about 18 percent of all women in professional and technical occupations, were employed as professional (registered) nurses in 1969. About 15 percent of the professional nurses in 1967 were college graduates. The remainder were graduates of 3-year hospital "diploma programs" or 2-year programs in junior colleges. The proportion of professional nurses having a 4-year college degree has increased rapidly in recent years.

Job opportunities in nursing will be good, but the profession cannot absorb sufficient numbers of the substantial increase in the expected number of women graduates to compensate for the leveling off in the demand for teachers.

The greatly increasing number of women college graduates is an important element in the expanding supply of nursing personnel. Other contributing factors have been grants and low-interest loans to nursing students provided under the Nurse Training Act of 1964, free refresher training for older nurses, and rising salaries in nursing. On the demand side, new staffing patterns in hospitals are slowing the increase in the demand for nurses.

Social work employed about 97,000 women in 1968. Women held about three-fifths of all social worker positions in that year, considerably less than in earlier periods.

Demands for social workers are expected to continue to increase during the 1970's, in the wake of rapid social changes that impose pressures on individuals and families and of technological advances that create problems for unskilled workers or those with a single skill. The supply of new social work graduates is expected to fall short of demand, based on past patterns of study and entry to the professions. But social work is not expected to provide a major outlet for the number of college-trained women who are expected to seek employment in the period ahead.

Library work employed over 95,000 professional women in 1968. This number constituted about 90 percent of all librarians.

An increasing number of library users and the growth of special libraries is expected to increase demands beyond the expected supply of library school graduates, based on recent trends in graduates. But the gap between demand and normal supplies could be bridged (and the long-term nationwide shortage of librarians ended) by an additional several hundred new graduates annually.

Home economists, nutritionists, and dietitians together numbered 100,000 workers in 1968, almost all of them women.

Rising concern about hunger and malnutrition within the United States is expected to stimulate demands for these workers in the 1968–80 period.

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Increasing requirements for home economists, however, will be counteracted to some extent by slowing enrollments in secondary schools, which employ about two-fifths of all home economists. Normal supplies, that is, the proportion of college women that generally enters these occupations, will be largely adequate to fill the expected openings from 1968 to 1980.

Medical laboratory work employed about 85,000 women in 1968, about 85 percent of all medical laboratory workers. The proportion of men in this field has increased in recent years and may increase more rapidly as Viet Nam veterans trained in health occupations return to civilian employment.

Opportunities in medical laboratories are expected to be excellent in the 1968–80 period. Increases in population and in the proportion covered by medical insurance, together with the increasing use of laboratory tests in both diagnosis and routine examinations, will lead to rapid growth in the demand for medical laboratory workers. However, normal supplies (given the large increase in the student population and recent trends in the number of persons who receive training for medical laboratory work) are expected to be largely adequate to meet demands, provided that past patterns of entry to the profession continue.

The professions discussed above are the largest of the "women's professions." Together they accounted for almost two-thirds of all professional women in 1969. A number of smaller professions predominantly filled by women are expected to grow rapidly from 1968 to 1980. But the "women's professions" together do not offer sufficient opportunities for the number of college educated women who are expected to seek employment in the 1970's.

Fortunately, several large professions in which few women have worked need additional sources of personnel. What are these professions? Do they offer employment possibilities for women?

Professions in search of workers

The list of professions outside the accustomed "women's sphere" that offer opportunities for more women is long. Among them are medicine, dentistry, and engineering, which are discussed in the following pages. The singling out of these few occupations is not a suggestion that women should reconcentrate in another small range of occupations. For example, other professions for which very rapid growth is expected, and the present proportion of women in them, are architect, 4 percent; draftsman, 4 percent; lawyer, 3 percent; science and engineering technician, 11 percent; and veterinarian, 2 percent.

PHYSICIANS. National shortages and substantial dependence on foreign-trained personnel have characterized the supply-demand situation of physicians for many years. The current shortage may be as high as 50,000, according to the U.S. Public Health Service.

Physicians numbered about 295,000 in 1968, including 40,000 graduates of foreign medical schools. The demand is expected to rise to 450,000 by 1980, a 50-percent increase over the 1968 level. The new supply of physicians in this 12-year period is expected to average little more than 10,000 annually, half the number required for growth and replacement. Even this very inadequate supply assumes that about 1,000 graduates of foreign schools will continue to enter annually.

Women are a source of physician supply that has been barely tapped in the United States. In 1968, only 21,000 physicians (including foreign graduates) were women. The proportion of physicians who are women has remained at about 7 percent for many years. Of 29 countries reporting to the 10th Congress of the Medical Women's International Association, in only three (South Viet Nam, Madagascar, and Spain) were women a smaller proportion of all physicians than in the United States. In Finland, Israel, and the Philippines about 24 percent of all physicians in 1965 were women; in Germany, 20 percent; in England and Wales, 16 percent; in France, 13 percent.[5]

To increase the number of women physicians will require preparing more women for the profession and keeping them active in medicine. Recognition of the problems can lead to solutions.

Counseling for medical careers is important early in life so that girls having the necessary aptitudes can consider medicine as a career and can acquire the science and other credits necessary for a premedical major. The lack of women in medical schools reflects a lack of women applicants, according to the Association of American Medical Colleges, which reports that women are admitted

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to medical school in about the same proportion to applications as men.[6] It is important that the woman medical student have access to counseling at the time she selects a specialty. Such fields as dermatology, ophthalmology, pathology, radiology, or psychiatry, for example, which usually offer regular working hours, are easier for a woman with a family to manage than—at the other extreme—obstetrics. In addition, the advantages and disadvantages of group practice and of opportunities in medical administration, public health medicine, research, and teaching should be made known.[7]

Part-time residencies, for example, would lessen what has been called the foremost problem for many women physicians—the fact that the care of young children and residency training tend to occur at the same time. Support for part-time residencies seems to be increasing. Most specialty boards consider such an arrangement in individual cases. However, regular arrangements for part-time residency training are still almost nonexistent except in psychiatry.[8]

Retraining programs should be made widely available to any physician, man or woman, who must drop out of the profession for more than a very limited period. At present, physicians who, whether for reasons of personal health or family responsibilities, experience an interruption in their practice find it difficult to resume practice.

The financial burden of medical training, which may extend 9 years or more beyond high school graduation, is being lessened by the Health Professions Educational Assistance Act of 1963 (HPEAA) as amended. Under this act, loans and scholarships of up to $2,500 a year are available to students pursuing full-time medical study who need this financial assistance.

The number of medical graduates is expected to rise from 8,200 in 1968 to 9,700 in 1980, according to projections made by the U.S. Office of Education that take into consideration funds appropriated under the HPEAA for the expansion of medical schools or the establishment of additional schools. Still more medical school facilities, however, are essential to graduate the 20,000 physicians necessary each year to provide an adequate level of medical care.

DENTISTS. The ratio of dentists to population has been declining in recent years. Dentists have increasingly utilized dental assistants, dental hygienists, receptionists, and dental laboratory services, in an effort to provide adequate dental care to an expanding population. There is a pressing need, however, for additional dentists.

About 100,000 dentists, most of them graduates of U.S. dental schools, were practicing in 1968. Occupational requirements for this profession are expected to rise to about 131,000 by 1980, an increase of 30 percent over 1968. To meet these requirements, an average of 4,900 new dentists would have to graduate each year. But based on recent trends, new graduates from 1968 to 1980 are expected to average only 3,800 annually.

Women dentists numbered only 2,000 in 1968, about 2 percent of all dentists in the United States. The small number of women in the profession is not typical of many other countries. In France and the Scandinavian countries, 23 to 30 percent of the dentists are women; in Greece, 50 percent; and in Finland, Lithuania, and Russia, 80 percent.[9]

The practice of dentistry is more easily adapted to individual needs, including those of married women, than most occupations. Many dentists, for example, establish their offices in their homes. In addition, part-time, group or clinic practice, or employment in a government agency are alternatives open to dentists.

Loans and scholarships of up to $2,500 a year are available under the HPEAA to dental students in the final 4 years of professional training now qualify for such assistance. A dental education generally requires a total of 6 to 7 years of training beyond high school, including 2 to 3 years of predental work.

Training sufficient numbers of dentists to fill demand will require expansion of present dental schools and perhaps the establishment of new schools. Expansion already under way under the HPEAA is expected to increase the number of dental graduates from 3,400 in 1968 to 4,700 in 1980. However, an additional 1,100 graduates will be required on the average each year during the 12-year period.

ENGINEERS AND SCIENTISTS. The long term outlook in engineering and science is for rapid growth, despite short-term fluctuations in employment. Among the deepening national problems that require scientific and engineering solutions are environmental pollution, urban deterioration, and the depletion of natural resources. Increasing demands for engineers also will be forthcoming

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as a result of the trend toward automation in all sectors of the economy and the growing complexity of processes and products. Projections of the demand and supply for engineers and scientists indicate the need for an additional source of supply.

Engineers in all fields totaled 1.1 million in 1968, of whom only about 8,000, or less than 1 percent, were women. Requirements for engineers are expected to reach 1.5 million by 1980, an increase of about 40 percent over 1968 employment. In the face of this very rapid increase in demand, the supply of engineers is expected to be affected by the declining proportion of male college graduates who obtain degrees in engineering (down from 15 percent in 1958 to 10 percent in 1968) and the increasing difficulty of upgrading technicians to professional engineer because of the growing importance of a thorough grounding in scientific principles. In sum, an average of approximately 45,000 new graduates in engineering will be needed annually to meet demands in the 1968–80 period,[10] whereas the expected number of new graduate engineers annually is only 41,000.

Two-thirds as many women as men (8 and 12 percent of the population, respectively) have engineering aptitude, according to a study of 11th grade students made by the U.S. Department of Labor.[11] The continuing shortage of male engineering students, the aptitude of women for the profession, and the changing character of engineering work (planning, designing, and estimating characterize a large and growing proportion of all engineering jobs) led to the active recruitment of women students by several engineering schools beginning in the late 1960's.

A recent slowdown in the growth rate in scientific research and development and in corporate profits has affected the short-term demand for scientists in some fields, including physicists and chemists. The long term prospects, however, are excellent. By 1980, for example, the demand for chemists is expected to reach 200,000, or almost 56 percent higher than employment in 1968, as a result of increasing production of plastics, manmade fibers, drugs, fertilizers and high energy and nuclear fuels. By 1980, the demand for physicists is expected to rise to 75,000, a 64-percent increase over 1968 employment. Women, who constituted only 10 percent of all chemists in 1968 and only 4 percent of all physicists, should find wider opportunities open to them in these sciences in the future.

In science fields that include geology and geophysics, demands remain strong, with the supply of professionally trained personnel expected to fall short of requirements. During the 1968–80 period, the demand for geologists is expected to increase to 23,000, 19 percent above 1968 employment, while the demand for geophysicists is expected to rise to 7,300, or 26 percent over 1968 employment. Ecologists are in growing demand as the environment becomes a leading concern. Few women were employed in any of these sciences in 1968.

The skilled trades

No major occupational group illustrates as well as the skilled trades the effect of the concept of "masculine" and "feminine" occupations, an image based in large part on erroneous assumptions of wide differences in the aptitudes of men and women.

The basic requirements that run throughout the skilled trades are finger and hand dexterity and eye-hand coordination (abilities required in typing and many other clerical occupations customarily performed by women), together with aptitude for form and space perception.

The particular combination of aptitudes required for a number of crafts, including office machine repairman, radio and television repairman, automobile mechanic, aircraft mechanic, and household appliance repairman are found as frequently among female as male students, according to aptitude tests of students in the 11th grade.[12] Yet only 3 percent of the craftsmen in 1968 were women.

Nor do strength requirements in the trades generally exclude women. Many of these occupations require "light strength," defined as the ability to lift a maximum of 20 pounds and lift-carry of less than 10 pounds, or even less strength, a level termed "sedentary." [13] It should be noted, moreover, that although men on the average are stronger than women, there is considerable overlapping, with some women stronger than some men. Some women have successfully worked in almost every trade, including those that require medium (defined as involving frequent lift-carry of less than 25 pounds and occasional lifts up to 50 pounds) or even heavy strength.

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Interest in skilled trades for women seems to be increasing. The U.S. Air Force has conducted for several years an apprenticeship program that has trained women as electronic auto pilot mechanics, aircraft instrument and control systems inspectors, aircraft flightline mechanics, aircraft sheet metal repairers, radar repairers, and many other skilled trades. Women are enrolled in public vocational and technical schools in many trade and industrial programs. Selected curricula and the number of women students in them in fiscal year 1968 were air conditioning, 37; aircraft maintenance, 539; appliance repair, 171; auto mechanics, 906; automotive specialization, 142; business machine maintenance, 22; industrial electrician, 158; instruments maintenance and repair, 103; and radio-television repairman, 977.[14]

The skilled trades or crafts offer many advantages. The employment outlook in these occupations generally is excellent. Requirements are expected to rise from about 10.0 million workers to nearly 12.2 million, or more than one-fifth, between 1968 and 1980. The number of mechanics and repairmen is expected to grow more rapidly than the skilled work force as a whole, reflecting the rapid increase in the amount and complexity of equipment used in homes, offices, stores, and factories.

Earnings in the skilled trades usually are higher than in operative, sales, or service occupations, and training costs generally are low. Many craftsmen acquire their skills on the job, learning as they earn, either in apprentice or informal training programs. Moreover, training is widely available in vocational, trade, or technical schools. Programs operated under the Manpower Development and Training Act are preparing trainees in many communities for entry level positions in the crafts.

A particular advantage for women workers, whose residence generally is determined by their husband's employment opportunities rather than their own, is that jobs in the skilled trades exist in almost every community.

Working conditions in many trades are acceptable to women. The work often is performed indoors, in surroundings that are well ventilated and free of unusual extremes of temperature.

Several mechanic and repairmen jobs are discussed below.

APPLIANCE SERVICEMEN. About 205,000 repairmen were employed in servicing household appliances in 1968. Demand for these workers is expected to increase very rapidly as a result of growing population, rising levels of disposable income, and new types of appliances. Employment requirements are expected to reach 275,000 workers by 1980, an increase of one-third over the number employed in 1968.

Some servicemen specialize in the repair of small appliances, such as coffeemakers, food blenders, and hair dryers. The repair of these and other appliances that do not require "heavy strength" offer many opportunities for the large number of women who possess the necessary aptitudes.

BUSINESS MACHINE SERVICEMEN. About 115,000 workers were business machine servicemen in 1968. The demand in 1980 is expected to reach 225,000 workers, almost double the number in 1968.

A multiplicity of female labor markets

. . . Women operate in several labor markets which roughly coincide with major occupational groupings—labor markets where skill and education are major factors. . . . Most of the female labor force with an eighth grade education or less was concentrated in manual occupations in 1960, while the majority of women with 4 years of high school or more were in nonmanual jobs. . . . It is clear . . . that although there was some overlap, women with very different educational attainments were generally not operating in the same labor markets.

. . . The occupational differentiation of the female labor force, labor mobility patterns, and the uneven occupational distribution of women with different educational attainments all indicate that a multiplicity of female labor markets are in operation. The main reason on the demand side for this proliferation of female labor markets is that employers have varied desires regarding the skill, education, and social status of female workers for different jobs. On the supply side, it is that lower-class women generally do not qualify for white-collar jobs, while middle-class women do qualify. Since middle-class women have a pronounced distaste for manual labor outside the home, except under very special circumstances, they tend to concentrate in white-collar work.

—VALERIE KINCADE OPPENHEIMER, *The Female Labor Force in the United States* (Berkeley, University of California, Institute of International Studies, 1970), pp. 123, 139.

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Servicing electronic business machines will offer particularly favorable employment opportunities.

Business machine servicemen do much of their work in the offices where the machines are used. They inspect, clean, and oil machines and make minor adjustments or repairs. Defective machines also are checked and repaired.

The combination of aptitudes for this trade (which includes motor coordination, finger and hand dexterity, and eye-hand coordination) are at least as common among women as among men, according to the study of aptitudes previously cited. Specialties in which the physical demands are light include the servicing and repair of electronic computers, various types of electronic calculators, statistical machines, and dictating-transcribing equipment.

Automotive mechanic. In 1968 automotive mechanics totaled 825,000 or an average of one mechanic for every 122 vehicles. In 1960, when cars were less complicated, the ratio was one trained mechanic for every 108 cars on the road. Increases in the driving-age population and in multicar ownership are expected to raise requirements for automotive mechanics to 1 million in 1980, or one-fifth higher than employment in 1968.

The aptitudes required in this occupation are prevalent among women. Specializations in which the physical strength requirements are light include tuneup-man, bonder, brake mechanic, automatic window-seat and top-lift repairman, and automotive electrician.

Summary and implications

We have outlined the concentration of women in a comparatively few occupations and their relative absence from some professions and skilled trades that are characterized by shortages and rapid growth in demand. And we have observed that manpower projections of the Bureau of Labor Statistics for the period 1968–80 indicate the need for many more women to seek jobs outside the "women's occupations" in the 1970's.

Prospects are that the employment of women will accommodate to manpower needs in the 1970's better than in the past. First, what has been called the "framework" for improved use of women's abilities is in place.[15] Equality for women in employment, training, advancement, and pay are legally required by the Civil Rights Act of 1964 and the Equal Pay Act of 1963.

Second, the need for highly skilled workers in the professions and trades, together with the growing acceptance of full occupational equality for women, is encouraging employers to recruit from as broad a base as possible. Reports from more than 100 business and industrial firms surveyed in late 1969, for example, indicated that they planned to hire one-fifth more women college graduates from the class of 1970 than from the previous class. Two-fifths or more of the firms indicated that more women would be hired in engineering, data processing, or accounting positions if qualified women could be found.[16] In addition, women graduates recently have been reported to be getting entry-level executive jobs that were closed to their predecessors.[17]

Third, the indications that women will strive to make the necessary occupational adjustments may be even more significant than public laws and employer attitudes. Women's attachment to the labor force seems strong as the 1970's open. The lengthening worklife of women; the increasing percent of women working full time, and year round; rising labor force participation rates for mothers of young children even in the face of inadequate child-care facilities; and the significant contribution working women are making to family income—all described elsewhere in this issue—testify to the strength of that attachment. Work is becoming an ongoing way of life for a growing proportion of women in the United States.

And finally, the increasing capacity of women to adjust to changing manpower needs, as well as their determination, is evidenced by the growing proportion of advanced degrees earned by women since 1960 and the growing number of women enrolled in continuing education.

For women, the initial result of continued concentration in the period ahead would be increasing competition in the "women's occupations" (particularly, perhaps, between young women and older women seeking to reenter employment) and rising unemployment. Depressed wage rates in occupations overcrowded by women and a decline in women's labor force participation rates might follow.

For the Nation, the results could include a lower standard of living and continued shortages in a number of occupations in which men predominate,

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with attendant pressures on costs and prices.

The diversity in women's employment that is necessary to achieve a balance between the supply and demand for labor in the years ahead will not be accomplished without improvements in the counseling and in the occupational preparation of women. Individual aptitudes and interests (not outmoded attitudes), together with changing manpower needs, must be the guiding factors in occupational choice. Furthermore, at every level of education and training, and in every educational and occupational curriculum, women applicants should be admitted without regard to sex. In addition, it is important that women fully use existing opportunities.

In sum, the occupational dispersion of women, long desirable on the score of improving skill levels and earnings, has become urgent in view of the manpower outlook for individual occupations in the 1970's. The strong attachment of women to the labor force and the pressures for a new source of manpower in certain professional occupations and skilled trades augur well. But a satisfactory outcome depends on improved counseling and occupational preparation of women, and on the will of women themselves. □

———*FOOTNOTES*———

[1] For the report on the manpower projections for the 1968–80 period, see "The United States economy in 1980," *Monthly Labor Review*, April 1970, pp. 3–34.

[2] See pp. 10–18.

[3] These projections are based on the continuation of recent trends in birth rates, college graduates, and reentrants, and pupil-teacher ratios. They are an estimate of "effective demand," that is, the number of teachers required to fill and keep filled the number of teaching jobs needed for moderate advances in education. A larger number of teachers would be required to meet educational goals such as providing high quality education to all children, compensatory education for disadvantaged children, or specialized education for additional handicapped children.

[4] Commission on Human Resources and Advanced Education, Human Resources and Higher Education (New York, Russell Sage Foundation, in press).

[5] *The Fuller Utilization of the Woman Physician, Report of a Conference on Meeting Medical Manpower Needs: January 12–13, 1968, Washington, D.C.*, sponsored by the American Medical Women's Association, The President's Study Group on Careers for Women, and the Women's Bureau, U.S. Department of Labor. (Data compiled from questionnaires to member organizations and presented at the 10th Congress of Medical Women's International Association, Rochester, N.Y., July 9–15, 1966.)

[6] "Women in Medical School," Datagram of the Association of American Medical Colleges, February 1966.

[7] Patricia H. Beshiri, *The Woman Doctor* (New York, Cowles Book Co., Inc., 1969), pp. 36–64.

[8] *Journal of the American Medical Association*, November 24, 1969, pp. 1435–1437.

[9] Beshiri, op. cit., p. 43.

[10] The average number of new entrants from all sources needed annually would total 74,000. The estimate of 45,000 new graduate engineers required is derived by estimating the additions to engineering supply from immigrant engineers, college graduates in mathematics and other nonengineering fields, and engineering technicians; deducting the number of engineering graduates who will not enter the field; and subtracting from the total of 74,000.

[11] U.S. Department of Labor, Manpower Administration, unpublished data from the Longitudinal Maturation Study, 1958.

[12] Ibid.

[13] *Dictionary of Occupational Titles, 1965: Volume II, Occupational Classification* (U.S. Department of Labor, Manpower Administration), pp. 654–655.

[14] Unpublished data, U.S. Office of Education, Division of Vocational and Technical Education.

[15] Helen B. Schleman, "Women Might Have Helped: Some Problems Ahead," *Vital Speeches of the Day*, August 15, 1969, pp. 663–668.

[16] Frank S. Endicott, *Trends in Employment of College and University Graduates in Business and Industry* (Evanston, Ill., Northwestern University, 1970), p. 7.

[17] "For Women, A Difficult Climb to the Top," *Business Week*, August 2, 1969, pp. 42–44.

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Reducing discrimination: role of the Equal Pay Act

ROBERT D. MORAN

SIGNIFICANT STEPS have been taken in recent years in an attempt to end discrimination against women in employment. Laws and regulations have been placed on the books requiring that women be paid at the same rate as men for equal work and that equality of job opportunity be available to all, regardless of race, color, religion, sex, national origin, and age.

Although much has been accomplished in this field at the State level, this article is limited to actions taken by the Federal Government and concentrates on the activity under the Equal Pay Act of 1963.

Federal measures to bar discrimination in employment, which are of particular interest to women, include the following: (1) The Equal Pay Act of 1963, which requires equal pay for equal work, regardless of sex;[1] (2) Title VII of the Civil Rights Act of 1964, which states that discrimination on the basis of race, color, religion, sex or national origin is an unlawful employment practice;[2] (3) Executive Order 11246, as amended by Executive Order 11375 of October 13, 1967, which bars discrimination on the basis of race, color, religion, sex, or national origin by Federal contractors;[3] and (4) The Age Discrimination in Employment Act of 1967, which protects most individuals over age 40 until they reach the 65th birthday, regardless of sex.[4]

Since its scope is limited to sex-based wage differentials, passage of the Equal Pay Act in 1963 was regarded by many as only the beginning of a long battle to achieve equality in employment between the sexes. Nevertheless, when the equal pay provisions became law, the action marked the culmination of persistent efforts to establish the principle of equal pay that began soon after the Civil War. In 1868, the National Labor Union Convention was the first organized group to demand equal pay for government workers. Subsequently, the Congress passed an appropriation bill to give "female employees in the Departments the same compensation as male clerks when they perform similar service." However, equality of the sexes with respect to pay did not become a legal requirement in all Federal employment until the Classification Act of 1923 established the present day system, under which the salary for each job is determined solely according to the duties and responsibilities involved. Thus, the Federal Government was the first among major employers to establish the principle of equal pay for equal work.

The early campaigns

Efforts to apply the equal pay concept to jobs in the private sector also occurred in the 19th century. In 1868, the Knights of Labor made equal pay for both sexes one of their major objectives. The first serious implementation of the principle, however, had to await the wartime economies during the first half of the 20th century. The National War Labor Boards in World War I and World War II, and the Wage Stabilization Board in the Korean War, adopted the equal pay principle as guiding policy during the periods when they had the power to set labor standards for American business and industry. In 1919, Michigan and Montana enacted equal pay legislation, but it was not until almost 25 years later that equal pay laws began to appear on the books of other States, during and following World War II.

Chief among the early supporters of the equal pay principle was the Women's Bureau of the U.S. Department of Labor which, since its establishment in 1920, consistently promoted the concept of "a rate for the job" regardless of sex. In one of its first publications, issued in 1920, the

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Women's Bureau set forth the provision that "[w]ages should be established on the basis of occupation and not on the basis of sex."

As the number of women in the labor force substantially increased, the major women's organizations, joined by employer, labor, and civic groups, continued to press for adoption of a Federal equal pay standard. In the year 1952, some of these organizations grouped together at the national level to establish the National Committee for Equal Pay, for the purposes of conducting a concerted campaign for Federal equal pay legislation.

The first comprehensive equal pay bill was introduced in the 79th Congress in 1945. Neither this nor the many similar measures proposed in each Congress during the next 18 years received favorable action, despite the efforts of their bipartisan proponents and the support from both the public and the Government. Success came in 1963, when the 88th Congress incorporated the provisions of the Kennedy Administration's equal pay proposal into the Fair Labor Standards Act as the Equal Pay Act of 1963.

The act of 1963

However, in making the equal pay bill a part of the Fair Labor Standards Act, the congressional action also had the effect of making equal-pay coverage generally coextensive with the minimum wage coverage. As a result, today equal pay is required for only about half of the jobs in the United States. The major exclusions from the equal pay coverage include numerous jobs in State and local governments, domestic employment, outside salespersons, and all of the higher paying jobs that are exempted from the wage and hour law as bona fide executive, administrative, and professional positions. Recently bills have been proposed to close the gap for the high paying jobs and make it possible to equate them for equal pay purposes. At least three such bills are currently pending in Congress.[5]

In brief, the Equal Pay Act provides that where men and women are doing "equal" work on jobs which require equal skill, effort, and responsibility, and which are performed under similar working conditions in the same establishment, they must receive equal pay. The jobs under comparison must be of a closely related character, but the Congress made it clear that they do not have to be identical; as Senator McNamara, one of the bill's sponsors, put it, "such a conclusion would be obviously ridiculous." Certain exceptions are permitted where differences in pay are found to be based on any "factor other than sex," such as a bona fide seniority or merit system or payment of wages under a piecework plan.

In enacting the 1963 equal pay amendment, Congress also took the precaution of preventing pay reductions by employers in order to effect compliance with the equal pay requirements. It specifically prohibited the reduction of the wages of any employee for the purpose of eliminating an improper wage differential. The law also prohibits a labor organization from causing or attempting to cause an employer to discriminate against an employee in violation of the statute.

The language of the Equal Pay Act was drafted so as to require the elimination of wage discrimination on the basis of sex, regardless of whether a man or a woman worker is the victim. The vast majority of lower pay workers are women but, in rare cases where a woman may be paid more for equal work than a man, the protection of the act is available to the man. In one case, 11 men employees of a bank in San Francisco benefited by obtaining overtime compensation which had been paid only to women pursuant to the requirements of a California State law.

The scope of Title VII of the Civil Rights Act of 1964 and of Executive Order 11246, as amended, is in many respects broader than that of the equal pay provisions of the Fair Labor Standards Act. Their provisions bar sex discrimination in most aspects of employment, not simply in compensation. Their scope is, in fact, broad enough to bar discriminatory pay practices based on sex even in the higher-pay executive, administrative, and professional jobs.

Enforcement

Offsetting the more restricted scope of the Equal Pay Act, however, is the considerable advantage of the much stronger administrative and enforcement procedures of the Fair Labor Standards Act which were made applicable to the equal pay amendment. Also, complaints under the Equal Pay Act are treated in strict confidence and, unless court action ultimately becomes necessary, the name of an aggrieved employee need not be revealed.

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The Wage and Hour Division of the Department of Labor, which administers the law, has uncovered substantial violations of the Equal Pay Act to date. By the end of April 1970, over $17 million in underpayments had been found owed to more than 50,000 employees, nearly all of them women. During the same period, the Department of Labor's legal staff filed over 140 equal pay cases in court; about one-third of these have been decided. Even a cursory glance at the decisions so far rendered reveals that legal actions under the act are rapidly developing a body of principles that may have far-reaching effect on job structuring and pay practices throughout the country.

Jobs that never before were thought to be equal within the meaning of the Equal Pay Act are now being closely scrutinized. A Federal district court in Dallas, for example, has held [6] that the traditionally all-male job of orderly in a hospital was equal to the all-female job of nurse's aide. Courts elsewhere have followed this principle, causing hospitals in many parts of the United States to begin paying their nurse's aides at a rate equal to that of their orderlies.

As the body of equal pay laws continues to grow, it is probable that many other jobs will be found to be equal under the act. Investigations have been conducted to determine whether the work of tellers and clerks in banks, insurance companies, and similar institutions is equal. Similar questions arise in manufacturing regarding inspectors, assemblers, and other types of production line jobs; in retail trade, concerning sales clerks and cashiers, tailors and fitters; in food service establishments, regarding cooks, chefs, and a number of other jobs; and in various other types of establishments, as regards custodians, janitors, and security agents. The list could be extended much further.

Violations too costly

Employers cannot afford to take these equal pay developments lightly, for the cost of inequality in compensation practices for jobs held to be equal under the act can be high. It is estimated that as the result of a single court decision,[7] a glass container manufacturer in New Jersey may have to pay more than a quarter million dollars in back wages to 230 women selector-packers in the bottle inspection department for the period during which they were paid less per hour than were male employees doing work which, the court found, was equal. In addition, each of these women will have to be paid a 21.5-cent-an-hour increase in wages,

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to bring them to their male counterparts' level of compensation.

In this particular case, Chief Judge Abraham Freedman, speaking on behalf of the appellate court, observed that the Equal Pay Act was intended "as a broad charter of women's rights in the economic field" and "sought to overcome the age-old belief in women's inferiority and to eliminate the depressing effects on living standards of reduced wages for female workers and the economic and social consequences which flow from it."

Among the principles established by *Wheaton Glass* are these: Jobs must be only "substantially equal," not "identical," to permit job comparisons under the act; there must be a rational explanation for the amount of a wage differential, and it is the employer's burden to provide it; and the employer's past history, if any, of unequal pay practices is an important factor in determining whether there is a violation of the act.

Another important principle, established by an earlier court ruling,[8] is that job comparisons under the Equal Pay Act may not be made on a group sex basis, that is, that wage differentials based on alleged differences between the average cost of employing women as a group and that of employing men as a group do not qualify as a "factor other than sex" within the meaning of the statute. In that situation, the employer had paid all his women employees 10 cents an hour less than he paid the men, claiming higher costs for women on the basis of certain selected fringe benefits.

A particularly difficult question to resolve under the Equal Pay Act has been the extent to which lifting of heavy objects ("heavy-lifting") on the job might be used to justify a wage differential. An early court decision [9] established a rule that occasional or sporadic performance of a function requiring such lifting would not render unequal the jobs that were otherwise equal. In that situation, men and women employees were doing essentially the same work but the men, from time to time, had to lift much heavier glass plates than any of their women coworkers were able to lift. Of course, where male employees are actually engaged in heavy-lifting for a considerable portion of their worktime, and such lifting is not done by their women coworkers, the jobs cannot be equated for equal pay purposes.

The heavy-lifting claim has been used more frequently than any other reason, by unions and employers alike, for the perpetuation of a lower wage rate for women workers who are otherwise doing substantially the same work as men. Investigations have revealed, however, that although some male employees in an establishment seldom, if ever, do any heavy-lifting, they still are paid at the same wage rate as those who actually do a good deal of it. Situations of this kind indicate that the heavy-lifting is not the reason for the higher rate.

Another pretext often used to justify sex-based wage discrimination are alleged training programs. A number of banks and department stores maintain a so-called trainee system which is invariably restricted to men as a basis for paying a higher rate to the male employees. The employer will claim, for example, that he is paying women bank tellers less money because the male tellers are being primed for eventual promotion to positions of bank officers. But a closer investigation often reveals that, in fact, there is no training being given to the men. This phenomenon can probably

Age of the "working girl" of 1888

The fact is clearly shown . . . that the working women in our great cities are practically girls. The average age in all the cities comprehended is 22 years and 7 months. . . . The concentration is greatest at the age of 18, . . . while in the range from 14 to 25, inclusive, are found nearly 75 percent of the whole number of women included in the survey. After 25 the number drops rapidly, and decreases quite regularly, . . . there being only 267 over 48 years of age. . . . Practically, it is seen, then, that the working women of the cities named are entitled to their popular designation of "working girls." A deeper study than that possible to be carried on here might show that this rapid decrease of numbers employed after 25 years of age is due to the encouragement which employment gives to marriage. A woman who is willing to work honestly and faithfully, even at low wages, that she may be able to support herself, has certainly a better chance of securing a home suited to her station in life than the one who prefers to be supported by her friends. The observations of the agents of the Department certainly indicate that such is the case, but it cannot be stated as a statistical fact.

—*Working Women in Large Cities*, Fourth Annual Report of the U.S. Commissioner of Labor, 1888, p. 62.

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be traced to the employer's stereotyped view that bank officers are traditionally men, hence, male tellers have promotional potential and should be paid more in order to keep them from going elsewhere. In the absence of any visible ongoing training program which is open to both sexes, this practice cannot be justified and is considered a violation of the Equal Pay Act. This position of the Wage and Hour Division has recently been upheld by a Federal court of appeals, which ruled[10] that the exclusion of women from a training program was based on "subjective assumptions and stereotyped misconceptions regarding the value of women's work."

There are a number of other methods employed in covered establishments to frustrate the purposes of the Equal Pay Act. They are rapidly being examined and exposed. Of course, it isn't always easy to arrive at a determination as to whether certain jobs are "equal" within the meaning of the statute, particularly in large plants or firms employing hundreds or thousands of workers.

The cost of enforcement

The cost in man-hours of investigating and determining equal pay questions can be exceedingly high. Litigation is equally—if not even more—expensive. Since this type of court action is becoming increasingly necessary to penetrate the long-standing discriminatory pay systems, larger appropriations for the equal pay program will most certainly be necessary in the future. The results to date, however, have been well worth the expense. Discernible progress is being achieved. The mandate of a pay rate for the job regardless of sex is beginning to be fulfilled.

While Government enforcement activities have played an important role in securing equal pay for women over the past several years, many employers have voluntarily adjusted their practices to comply with the Equal Pay Act. Many labor unions also have contributed to that result. Nevertheless, in a wide variety of establishments, women continue to be paid less than men, even while working on jobs that are "equal" within the meaning of the statute. One may only hope the situation will change soon. □

FOOTNOTES

[1] 77 Stat. 56, 29 U.S.C. section 206 (1963). This statute is an amendment to the Fair Labor Standards Act and is administered and enforced by the Wage and Hour Division, U.S. Department of Labor.

[2] 78 Stat. 253, 42 U.S.C. section 2000(e) (1964). Title VII is administered by the Equal Employment Opportunity Commission.

[3] Executive Order 11375 (32 Fed. Reg., 14303, October 13, 1967), amending Executive Order 11246 (3 C.F.R., 1964–65 Comp., p. 339, 1965). Action under the Executive Order is the responsibility of the Office of Federal Contract Compliance, U.S. Department of Labor.

[4] 81 Stat. 602, 29 U.S.C. section 620 (1967). The law is administered and enforced by the Wage and Hour Division, U.S. Department of Labor.

[5] H.R. 15971 and H.R. 16098, introduced by Representative Edith Green on February 17 and 19, respectively, 1970; and S. 3612, introduced by Senator Philip A. Hart on March 19, 1970.

[6] *Shultz* v. *Brookhaven General Hospital* (D.C., N.D.-Tex., October 8, 1969), 305 F. Supp. 424.

[7] *Shultz* v. *Wheaton Glass Co.* (C.A. 3, January 13, 1970), 421 F. 2d 259; see *Monthly Labor Review*, April 1970, pp. 74–75.

[8] *Wirtz* v. *Midwest Manufacturing Corp.* (D.C., S.D.-Ill., 1968), 18 WH Cases 556, 58 Labor Cases, para. 32070.

[9] *Wirtz* v. *Meade Manufacturing, Inc.* (D.C., Kans., 1967), 285 F. Supp. 812.

[10] *Shultz* v. *First Victoria National Bank* (C.A. 5, November 28, 1969), 420 F. 2d 648.

Additional information about the Equal Pay Act of 1963 may be obtained from the Wage and Hour Division, U.S. Department of Labor, Washington, D.C. 20210, or from any of the Division's field offices located throughout the United States.

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Working women in urban poverty neighborhoods

HAZEL M. WILLACY AND HARVEY J. HILASKI

WOMEN make up a large and growing segment of the Nation's labor force and contribute significantly to family income whether in a supplementary or primary role. For families living in urban poverty neighborhoods of the Nation's 100 largest cities, the role of working women is particularly critical.[1] About 1 out of 4 families in these neighborhoods had incomes below the poverty level in 1967, compared with about 1 in 14 families in other urban neighborhoods.[2] Despite the much higher proportion of families with low incomes, families in poverty neighborhoods tended to be larger on average than families in other urban neighborhoods. The employment prospects and problems of women in urban poverty neighborhoods—the focus of this article—are made more urgent by the relatively lower family incomes, larger families, and greater proportion of families headed by women, which are prevalent in these areas.

Regardless of race, women in these urban poverty neighborhoods were more handicapped in the job search than women in other urban neighborhoods. The employment problems of black women,[3] however, were more severe than those of their white counterparts, reflecting much the same kind of situation experienced by blacks in the Nation as a whole. Moreover, much of the overall disadvantage that characterizes poverty residents stems from the large proportion of disadvantaged blacks in these areas.

Those who seek work

In 1969, 6.0 million women, 16 years old and over, resided in the urban poverty neighborhoods of the Nation's 100 largest cities (table 1). Although the majority (3 out of 5) of these women were white, the proportion of black women was about 5 times that of black women in the other urban neighborhoods.

Although women in poverty neighborhoods might be expected out of economic necessity to be in the labor force to a greater extent than women in other urban areas, their actual overall participation rate was virtually the same. Approximately 2.6 million—42.5 percent of the women (16 years and over) not in institutions—were either employed or seeking work. Pressing household responsibilities resulting from larger families, lower educational attainment, and a potential earnings capacity often insufficient to defray child care costs may have held down the proportion working or seeking work.

Labor force participation among women in various age groups differed greatly in the two types of neighborhoods, generally reflecting adjustments to the women's different economic and family status. For example, poverty area young women (20 to 24 years) were less likely to be in the work force than women of the same age in other urban areas. They were more likely to be at home with household responsibilities. (See table 2.) Young women in urban poverty neighborhoods were, however, somewhat less likely than their counterparts in other urban areas to be outside the labor force because of school attendance.

By contrast, women of prime working age (25–54) in urban poverty neighborhoods were more likely to be in the labor force than comparable women in other urban areas, despite the fact that black women in other urban neighborhoods participated in the labor force to a greater extent than those in urban poverty areas. Two major factors contributed to this. First, relatively more poverty area women were household heads—one-third compared to one-fifth in other urban areas—and were, therefore, the main source of

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Table 1. Labor force status of women, 16 years and over, in urban neighborhoods, by race, 1969
[Numbers in thousands]

Group or characteristic	Urban poverty neighborhoods [1]			Other urban neighborhoods [1]		
	All races	White	Black	All races	White	Black
Civilian noninstitutional population	6,030	3,563	2,467	34,034	31,445	2,588
Civilian labor force	2,565	1,399	1,166	14,669	13,253	1,416
Employed	2,393	1,328	1,064	14,057	12,721	1,336
Unemployed	172	70	102	612	532	80
Unemployment rate	6.7	5.0	8.7	4.2	4.0	5.6

[1] Data refer only to Standard Metropolitan Statistical Areas (SMSA's) with 250,000 inhabitants or more.

family income. Second, Negro women, who made up about half of the women in this age group in poverty areas compared with fewer than a tenth of the women in other urban areas, have substantially higher participation rates than whites in both areas. Thus, their overall impact was more pronounced in poverty neighborhoods than in other urban neighborhoods.

Low status jobs

Many of the economic problems of women in urban poverty areas were related to the kinds of jobs they held. In 1969, women in urban poverty neighborhoods were very heavily concentrated in the less skilled, intermittent and often low-paying jobs. Over half—55 percent—held operative and service jobs, while less than a third (30 percent) of the women in other urban areas were in these occupations. (See table 3.) Moreover, one-tenth of the women in urban poverty areas were private household workers, a proportion almost 3 times that in other areas. These jobs, which generally entail long hours of work and low pay, undoubtedly contributed greatly to the disadvantaged situation of many women in urban poverty neighborhoods, particularly the situation among household heads. Of all families headed by women who were employed as private household workers, almost 3 out of 5 had incomes below the poverty level in 1968.[4]

Similarly, poverty area women were less likely to hold clerical and sales positions than their counterparts in other areas. Only a third of women in poor neighborhoods held these jobs compared to about one-half of their counterparts in other areas. Moreover, relatively fewer women in poverty neighborhoods held the higher-paying professional and managerial occupations—about 12 percent compared with 20 percent in other urban neighborhoods—which require more education and training.

The concentration of poverty neighborhood residents at the bottom of the occupational ladder results in part from the disproportionately large number of blacks, who tend to be clustered on the lower occupational rungs, in these areas. As expected, black women in urban poverty areas had an occupational configuration more skewed toward the low-status, low-paying jobs than that for white women in the same areas. However, white women in these areas were also worse off than their counterparts in other areas. (See table 3.) Almost one-fifth of the Negro women in poor neighborhoods were private household workers, compared with less than one-thirtieth (3 percent) of the white women. Moreover, while only one-fifth of the white women worked in service jobs, almost half (47 percent) of the black women held such jobs. Correspondingly, black women in poverty neighborhoods were considerably less likely than their white counterparts to hold higher skilled professional jobs.

Economic part timers

Many women in urban poverty areas do not work full time, resulting in another serious problem in terms of family income and welfare.[5] In 1969, the proportion of poverty area women who wanted full-time work but were able to find only part-time employment was about twice that of women in other urban areas. (See table 4.) By contrast, women in other urban areas were more likely to work part time voluntarily, probably because they were more likely to be working to supplement family income rather than constituting the main source of income.

Table 2. Labor force participation rates of women, 16 years and over, in urban neighborhoods, by age and race, 1969

Age group	Urban poverty neighborhoods [1]			Other urban neighborhoods [1]		
	All races	White	Black	All races	White	Black
Total, 16 years and over	42.5	39.3	47.3	43.1	42.1	54.7
16–19 years	39.2	41.9	36.2	45.9	46.9	36.0
20–24 years	54.3	53.2	55.8	59.8	59.5	62.0
25–54 years	50.9	47.3	55.2	47.9	46.5	62.0
55 years and over	25.7	23.4	30.5	25.6	25.2	33.2

[1] See footnote, table 1.

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High unemployment

Among other factors, relatively low educational attainment and lack of appropriate skills and experience placed women in urban poverty neighborhoods at a greater disadvantage in seeking employment than women in other areas. The poverty area unemployment rate averaged 6.7 percent in 1969, about 1.6 times that in other urban areas. (See table 5.) Overall, about 1 in 5 of the poverty area women had some unemployment during the year, compared to about 1 in 7 of the women in other areas.[6] Moreover, poverty area women were more likely to have several spells of unemployment; about one-sixth had two spells or more during 1967, compared to one-eighth of the women in other areas.

Teenage girls and young women in the poverty areas were particularly disadvantaged vis-a-vis their counterparts in other urban areas. Their unemployment rates were about double those in other urban neighborhoods, reflecting to some extent their lack of training and experience relative to their age-group counterparts in other neighborhoods.

Unemployment was also more widespread among poverty area women over 25 than among their counterparts in other urban neighborhoods. Women in the 25 to 64 age group, for instance, were about 1½ times as likely to be jobless if they resided in urban poverty areas.

Black women, particularly teenagers and young women, in urban poverty neighborhoods had higher unemployment rates than whites in most age categories. Black youth were twice as likely as their white counterparts to be unemployed—30.7 percent compared with 15.3 percent for teenagers, and 13.9 compared with 6.2 percent for young women.

Table 3. Employed women, 16 years and over, in urban neighborhoods, by occupation and race, 1969
[Percent distribution]

Occupational group	Urban poverty neighborhoods [1]			Other urban neighborhoods [1]		
	All races	White	Black	All races	White	Black
White-collar workers	43.1	52.8	30.9	69.4	71.5	48.8
Professional and managerial	11.9	14.5	8.6	20.3	20.7	15.8
Clerical	26.9	32.1	20.4	41.6	42.9	30.0
Sales	4.3	6.2	1.9	7.5	8.0	2.9
Blue-collar workers	24.5	26.7	21.8	13.6	13.2	17.6
Craftsmen and formen	1.2	1.4	0.9	1.1	1.1	1.1
Operatives	22.7	24.9	20.0	12.1	11.7	15.8
Nonfarm laborers	0.7	0.5	0.9	0.4	0.3	0.6
Service workers	32.0	19.9	47.0	16.7	15.0	33.1
Private household	10.0	3.0	18.7	3.6	2.9	11.0
Other service	22.0	17.0	28.3	13.1	12.2	22.1
Farm workers	0.4	0.5	0.3	0.3	0.3	0.5

[1] See footnote, table 1.

Table 4. Average weekly hours of work of women, 16 years and over, 1969

Hours of work	Urban [1] poverty neighborhoods	Other urban [1] neighborhoods
Total at work (thousands)	2,240,000	13,145,000
Percent distribution	100.0	100.0
1 to 34 hours	22.7	25.4
Part time for economic reasons	4.4	2.3
Part time for noneconomic reasons	18.3	23.1
35 to 40 hours	65.7	62.0
41 hours or more	11.7	12.6
Average weekly hours	35.3	34.6

[1] See footnote, table 1.

Women household heads

The economic problems of women in general in urban poverty neighborhoods were intensified by the large proportion of broken familes in these areas, which caused many women to assume the role of household head. About 3 out of 10 of the women in these areas were widowed, divorced, or separated, while about 1 in 5 of the women in other urban areas were in this category. Similarly, one-third of the women in the poverty neighborhoods were household heads and, therefore, the primary source of income to their families, compared with about one-fifth in other urban areas.

The number and ages of children in families are, of course, important determinants of family welfare and living standards. It is a well recognized fact that families in poverty areas have, on the average, relatively more dependent children than families outside of poverty areas, which means that money has to be spread more widely. The situation held true for families headed by women in urban poverty areas. There were more children per family than among their counterparts in other urban neighborhoods.[7] Moreover, half of the families headed by women in poverty areas had incomes below the poverty level in 1967, a proportion over twice that in other urban neighborhoods. Looked at another way, nearly half (45 percent) of the poor female-headed households resided in these poverty areas.[8]

Relatively more of the poverty area household heads were not in the labor force because of household responsibilities than those in other urban

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areas (55.1 percent compared with 47.2), a factor contributing further to low family income. Because of the low pay in jobs available to them, many of these women probably do not look for work. Moreover, they would be unable to afford the costs of child care even if they found employment. (See table 6.) However, black women in poverty neighborhoods, who were household heads, were more likely to be in the labor force than their white counterparts, despite a greater number of dependent children. (One reason for this is that they are relatively younger than their white counterparts.) Black women accounted for over 7 out of 10 of the female-headed families in these areas with incomes below the poverty level.[9] In addition, 53 percent of the black families in these neighborhoods with poverty level incomes were headed by women.[10]

In jobseeking efforts, women household heads in poverty areas were also at a greater disadvantage vis-a-vis their counterparts in other urban areas. Their unemployment rate averaged 5.2 percent in 1969, or over 1.7 times the comparable rate in other areas. For these women, inability to find employment undoubtedly meant greater difficulty in providing adequately for their families. □

Table 5. Unemployment rates for women, 16 years and over, in urban neighborhoods, by race and age, 1969

Age group	Urban poverty neighborhoods [1]			Other urban neighborhoods [1]		
	All races	White	Black	All races	White	Black
Total, 16 years and over	6.7	5.0	8.7	4.2	4.0	5.6
16–19 years	22.1	15.3	30.7	11.4	10.6	22.5
20–24 years	9.6	6.2	13.9	4.8	4.6	6.7
25–44 years	5.3	4.1	6.6	3.7	3.6	4.3
45–54 years	3.6	3.3	3.8	2.4	2.3	2.9
55–64 years	2.4	1.9	3.3	2.0	2.0	2.0
65 years and over	3.5	4.9	0.7	3.0	3.1	1.7
Women household heads, 16 years and over	5.2	4.1	6.1	3.0	2.9	4.5

[1] See footnote, table 1.

Table 6. Employment status of female household heads in urban neighborhoods, 1969

Group or characteristic	Urban poverty neighborhoods [1]			Other urban neighborhoods [1]		
	All races	White	Black	All races	White	Black
Civilian noninstitutional population (thousands)	1,821	952	869	6,043	5,474	569
Labor force participation rate	44.9	40.9	49.2	52.8	52.0	60.8
Not in labor force (percent)	55.1	59.1	50.8	47.2	48.0	39.2
By reason not in labor force:						
Household duties	48.4	51.9	44.5	41.2	42.0	33.7
Unable to work	2.5	2.5	2.4	1.6	1.6	1.6
Other reasons (including school attendance)	4.2	4.7	3.9	4.4	4.4	3.9

[1] See footnote, table 1.

FOOTNOTES

[1] The poverty area classification system used in this article was developed by the Bureau of the Census for the Office of Economic Opportunity. Poverty areas were identified by ranking census tracts with populations of 250,000 or more on the basis of 1960 data on income, education, skills, housing, and proportion of broken families. The data were then updated for subsequent urban renewal activities. These data pertain to the geographic area and not to be confused with data on *persons* with incomes below the poverty level unless so designated.

Several articles have appeared in the *Monthly Labor Review* describing conditions in these neighborhoods. See, for example, Paul M. Ryscavage and Hazel M. Willacy, "Employment of the Nation's Urban Poor," August 1968, pp. 15–21; Paul M. Ryscavage, "Employment developments in urban poverty neighborhoods," June 1969, pp. 51–56; and Hazel M. Willacy, "Men in poverty neighborhoods: a status report," February 1969, pp. 23–27.

[2] *Characteristics of Families and Persons Living in Metropolitan Poverty Areas, 1967,* Current Population Reports: Consumer Income, Series P–60, No. 61 (Washington, U.S. Department of Commerce, Bureau of the Census, 1969). A definition of the poverty level is also given.

[3] Throughout this article, "black" is used to refer to the category "Races other than white" or "Negro and other races." In 1969, in SMSA's of 250,000 inhabitants or more 91 percent of the women in this racial category were black or Negro.

[4] *Poverty in the United States 1959 to 1968,* Current Population Reports: Consumer Income, Series P–60, No. 68 (Washington, U.S. Department of Commerce, Bureau of the Census, 1969), p. 42.

[5] For further discussion of the curtailment in earnings as a result of economic part-time work, see the 1969 *Manpower Report of the President* (Washington, U.S. Department of Labor, 1969), p. 45.

[6] Forrest A. Bogan, "Work experience of the population: spotlight on women and youths," *Monthly Labor Review,* June 1969, p. 48.

[7] *Socioeconomic trends in poverty areas 1960 to 1968,* Current Population Reports: Consumer Income, Series P–60, No. 67 (Washington, U.S. Department of Commerce, Bureau of the Census, 1969), p. 13.

[8] See table 1, page 12 of the Current Population Report cited in footnote 2.

[9] See page 12 of the Current Population Report cited in footnote 6.

[10] See page 12 of the Current Population Report cited in footnote 2.

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The status of women in the U.S.S.R.

EDMUND NASH

IT IS CUSTOMARY for journalists and some economists in the Soviet Union to claim that theirs is the first country in the world to have established complete equality for women.[1] But a study of Soviet economic and political sources has indicated that, generally, women have not yet achieved the full equality with men provided by the Soviet Constitution. Article 122 of that fundamental law adopted in 1936 reads: "Women in the U.S.S.R. are accorded equal rights with men in all spheres of economic, government, cultural, political, and public activity."

Soviet women appear to have moved a long way toward equality with men since the time the promising in Article 122 was adopted. In the past 15 years alone they have made remarkable progress in this direction, as will appear evident to anyone who may compare the current data presented here with those published in this magazine about 15 years ago.[2]

Women are still far from being equal with men in the field of politics. In the Supreme Soviet of the U.S.S.R., the country's highest legislative body, only 28 percent of the elected members are women; in the supreme soviets of the 15 republics, they constitute 34 percent. They are nearer equality in the village, city, regional, and territorial soviets, where they account for 45 percent of the members.[3] Women are conspicuously absent from top posts in the Communist Party, and relatively few are in high government positions. At lower levels, including those in research institutions, men usually occupy the key positions. In 1961, only 10 women were members of the Central Committee of the Communist Party of the Soviet Union, a mere 3 percent of the entire body.[4] At the beginning of 1967, women constituted 20.9 percent of the Party's membership.[5]

Nor have women achieved equality in jobs at the higher levels in economic and cultural fields. In 1965, they were not to be found in the highest stratum of scholarly achievement—the direction of the Academy of Sciences of the U.S.S.R.[6] In the field of education, where the proportion of women among professionals in the 1968–69 school year was 71 percent, they accounted for only 26 percent of the 8-year-school directors and 23 percent of the secondary school directors.[7]

Despite the evident inequality of women at the higher job levels, the Soviet doctrine of political, economic, and social equality has proved very useful for certain purposes. It has been effectively used to encourage housewives into paid employment outside the home, and to justify the utilization of women in some heavy and hazardous work—of the type restricted by law or custom to men in the United States. (See section on working conditions.)

Increasing employment of women

All able-bodied Soviet women without family obligations or other justified excuses are under a legal and moral obligation to work. But even housewives with children have always been under economic pressure to seek jobs outside the home. The government's emphasis on high investments in heavy industry—rather than the consumer goods industry—since the introduction of the 5-year economic plans in 1928, has made it impossible for most married male workers to support their families adequately with their own earnings. (See section on living conditions.)

Large-scale employment of housewives in the Soviet economy has been facilitated in recent years through the widespread introduction of mechanization and automation of production processes. Women now can easily cope physically

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with the new jobs, and the establishment of various conveniences for women workers also has encouraged women to seek paid employment.

The number of Soviet women wage and salary earners has increased from an annual average of 2.8 million (24 percent of all earners) in 1928 to 44.3 million (50 percent of all earners) in 1969.[8] The census of January 15, 1970, reported that there were 53.9 females to every 46.1 males, or 19.1 million more females than males, in a population of 241.7 million.[9] The proportion of females to males was highest (55 to 45) in the republics invaded during World War II (Russia, Ukraine, Belorussia, Estonia, and Latvia) and lowest (50 to 50 or 51 to 49) in the Central Asian republic.[10] The average life expectancy of Soviet women is 74 years; of men, 66 years. Since women now constitute 50 percent of all wage and salary earners, the Soviets appear to be justified in claiming that "the problem of the mass drawing in of women into social production is solved." [11]

The proportion of women wage and salary earners in the various economic sectors for selected years between 1928 and 1968 is shown in table 1. In 1928, more women than men were employed in education and health services; by 1950, the number of women exceeded that of men also in communications, trade (including restaurants), and credit and insurance establishments; and by 1960, women outnumbered men also in state administrative jobs. In industry at the beginning of 1969, the proportion of women ranged from 36 percent in the production of cement and 41 percent in

Table 1. Percent of women wage and salary earners [1] in U.S.S.R., by sector of economy,[2] selected years, 1928–68

Sector of the national economy	1928	1940	1950	1960	1968
Total	24	39	47	47	50
Industry [3] (industrial-production personnel)	26	38	46	45	84
Construction (construction-installation personnel)	6	23	33	29	28
Agriculture	24	30	42	41	43
State and industrial enterprise farms	45	34	49	43	43
Transport	7	21	28	24	24
Communications	28	48	59	64	67
Trade, procurement, material-technical supply and sales, and public dining	19	44	57	66	74
Health services	63	76	84	85	85
Educational and cultural-enlightenment institutions	55	59	69	70	72
Science	40	42	43	42	46
Credit and insurance	38	41	58	68	76
Administrative organs (state and cooperative institutions)	19	34	43	51	58

[1] The minimum employment age is 15 years for apprentices and 16 years for others.
[2] Excludes the self-employed; includes wage and salary earners on collective farms but not collective farmers who share in net farm income.
[3] Includes manufacturing, mining, logging, fishing, current repair of plants and installations, current and capital repair of equipment, and electric power generation.

SOURCE: Vestnik Statistiki (Statistical Herald, a monthly published by the Central Statistical Administration of the U.S.S.R. Council of Ministers, Moscow), January 1970, p. 89.

machine-building and metal-working to 72 percent in textiles and 84 percent in garment making. Although women accounted for only 43 percent of the wage and salary earners in agriculture, they made up a majority of agricultural workers if we include collective farm workers who are not wage or salary earners but share in net farm income. The census of 1959 showed women to be 58 percent of the total number engaged in agriculture.[12] At that time women were about 41 percent of the wage and salary earners in agriculture.

In 1967, the proportion of women earners was highest in the western parts of the U.S.S.R. where consumer industries and services are better developed than in the other parts. In the Estonian Republic it was 53 women to 47 men; in the Russian and Latvian Republics, 52 to 48; in the Belorussian Republic, 51 to 49. In the underdeveloped central parts of the U.S.S.R., the lowest proportions were in the Tajik Republic (38 to 62), the Armenian, Azerbaijan, and Turkmen Republics (40 to 60 in all), and the Uzbek Republic (41 to 59).[13]

Lenin on the status of women

It is said that the level of culture is best characterized by the legal status of women. There is a grain of profound truth in this saying. . . .

The working women's movement has for its object the fight for the economic and social, and not merely formal, equality of women. The main task is to draw the women into socially productive labor, extricate them from "domestic slavery," free them of their stultifying and humiliating resignation to the perpetual and exclusive atmosphere of the kitchen and nursery.

— V. I. Lenin, *Women and Society* quoted in *The Woman Question—Selections From the Writings of Marx, Engels, Lenin, Stalin*— (New York, International Publishers Co., Inc., Little New World Paperbacks, 1969), p. 63.

Professionals and technicians

For some time now women in the Soviet Union have had more than equal access to professional and technical training. The 1959 census showed that women accounted for 54 percent of all persons with full secondary or higher school specialized education. By the end of 1967, women with such

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educational attainment represented 58 percent of all professionals and technicians in the country.[14]

At present, women constitute about 52 percent of all college trained specialists, about 70 percent of the medical doctors, and about 70 percent of the teachers.[15] In mid-November of 1968, they made up 64 percent of the economists, 40 percent of the agronomists and veterinarians, 31 percent of the engineers, and 63 percent of all specialists with secondary school training. At the end of 1968, there were 318,700 women scientific workers, 2,500 of them with Doctor of Science degrees.[16] The proportion of women students at the college level in the school year 1967–68 was 46 percent, and in secondary specialized schools, 52 percent.[17]

Working conditions

Like men, Soviet women workers must engage—as individuals or groups—in "socialist competition," that is, they must strive to surpass their coworkers in overfulfilling prescribed work quotas. Women must be paid the same wage rates as men doing similar work.

Although growing mechanization and automation of production methods have been easing the work for them, Soviet women workers are still found in certain arduous and hazardous occupations. Westerners are often struck by the sight of women in their 60's, even in the winter time, sweeping streets and scrubbing with steaming water the steps of street underpasses.[18] Women have also been seen frequently in road maintenance gangs and on construction jobs. However, the law forbids women workers to carry loads of more than 20 kilograms (44 pounds) or to transport more than 50 kilograms (110 pounds) by a single-wheel wheelbarrow. They also are forbidden to work in specific jobs which are especially arduous or hazardous. A list of these jobs was published in a 1932 decree, and it has been expanded from time to time. For example, in 1957, underground mining and underground construction jobs (but not personal service jobs, such as bringing drinking water and selling snacks) were added to the list; in 1960, jobs on boats of the fishing fleet (except on crab and fish canning boats and on certain boats with refrigeration) were included.[19]

Although many thousands of women in the rural areas have completed courses in the operation of farm machines, including tractors, only a few are now actually operating such machines. The main reasons given for this are: First, the need for women to attend to the traditional household chores—including the care of children, the private vegetable garden, the cow, and poultry; second, the failure of state (and collective) farm administrations to introduce new laboreasing techniques, shorter work shifts, and special work clothing for women.[20] Recently, however, following a resolution of the U.S.S.R. Council of Ministers on the greater use of women in skilled jobs in agriculture, programs are being set up to train women to operate agricultural machines. It has been reported that a woman tractor operator (Anna Dmitriyevna Leonova) of 30 years' experience, and honored for this work with the title of "Hero of Socialist Labor," had become an ardent promoter of training women as agricultural machine operators.[21]

The limits of female employment

The dual nature of woman's role has also been recognized in the U.S.S.R. There, however, the limits of potential female employment seem to be set higher than in other countries. The authors of a recently published collective work on demographic aspects of employment . . . suggest that woman's presence at home is needed for not more than 1.5 to 2 years after pregnancy. On this basis they calculate that not more than 7 to 9.5 million women of working age need be left outside the labor force. In other words the activity rate of women age 16 to 54, which rose from 63 percent in 1958 to 79 percent in 1965, could increase further to some 86–90 percent.

Both the feasibility and the desirability of such a development could be questioned, and it may be expected that, largely because of demographic implications, the future policies governing the employment of women in the various countries of the area will be more flexible than has been the case in the past.

— Jerzy Berent, "Some Demographic Aspects of Female Employment in Eastern Europe and the USSR," *International Labor Review*, February 1970, p. 192.

Women's attitude toward work

A recent survey of 3,000 women workers in Kostroma, a town on the Volga about 200 miles northeast of Moscow, showed that 80.2 percent of them were completely satisfied with their work, 11 percent were undecided, and 8.8 percent were not happy about it. What the women liked

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most about their work was being in a fine collective of congenial workers; second, the convenient working shift; third, the opportunity to display initiative; fourth, proximity to their homes; fifth, day-care centers for their preschool children; and sixth, the wages received.

Seventy percent of the women answered "yes" and 22 percent "no" to the question of whether they would continue working if their husbands started earning as much as both were earning now. The timing of work shifts, especially to avoid night work, was important because "the brunt of running a household, bringing up children, and undertaking other domestic responsibilities is still borne by women." [22] Professor Norton T. Dodge has pointed out that "too much equality can become a burden to women. . . . Soviet time-use studies show clearly that the total burden of employment in the labor force and in the home falls much more heavily upon women than upon men." [23]

Women workers' privileges

In views of the burdensome demands on women workers, the Soviet Government has taken certain measures designed to safeguard their health and welfare. The stated objective is to enable women "to combine happy motherhood with a more active and creative participation in public work and public activity." [24]

Every year on International Women's Day, March 8, selected women receive special awards in recognition of their achievements in the ranks of labor and their contribution to the cause of communism. Between 1918 and 1970 about a million and a half women have been awarded decorations and medals for outstanding work and wartime activities. Of these, 3,925 had been awarded the title of Hero of Socialist Labor, and 91, the title of Hero of the Soviet Union. In this year's proclamation on the occasion of Women's Day, the Central Committee of the Communist Party, besides praising Soviet women for their contributions to Soviet achievements, called upon them to serve as worthy examples of the communist attitude toward work and self-discipline and to respond eagerly to the Party's call to promote a nationwide struggle for economy in the use of materials, equipment, and labor.[25]

Soviet women are entitled to retire on old age pensions 5 years earlier than men. Women may retire at age 55 after 20 years of credited work, and men at 60 after 25 years of work. Women in specified arduous jobs may retire at 50 after 20 years of employment, and men in such jobs, at 55 after 25 years.[26]

Measures have been taken to reduce nightwork by women. For example, in the textile industry, where women predominate, their nightwork was limited in 1963 to two shifts a month, with a 5-day, 40.6-hour workweek (instead of the standard Soviet workweek of 41 hours).[27]

Pregnant women (beginning with the fifth month) and nursing mothers are exempt from overtime and night shift work and have the right to lower work quotas or an assistant; in case a doctor certifies that they are unable physically to cope with their job, they must be transferred to lighter work at the same pay and with the same annual vacation (for which they will not have to meet the standard requirement of working at least 11 months). They may not be sent, without consent, on field trips. Employers may not refuse employment to, or dismiss, pregnant or nursing women.

Women get paid leave of absence from work 56 days before and 56 days after childbirth. In cases

Employment of women in Eastern Europe

As in western countries, the extent of female employment in industry varies considerably between branches, women workers predominating in such traditional female domains as textiles, clothing, food processing, and in some other consumer industries. But . . . the role of women is by no means negligible even in heavy industry and in energy.

In the late 1950's and early 1960's demand for female labor was intensified by the arrival at working age of the reduced wartime birth cohorts. Lately, the supply of young people has increased in most countries, but the steep decline in births that set in around 1955 everywhere will reverse the trend in the 1970's. At the same time there has been in most countries a noticeable slowing down in the rate at which labor has been shifting from agriculture to other sectors, as the supply of young and able-bodied rural workers has been drying up. Thus the demand for female labor in the towns is not likely to lessen in the near future.

—Jerzy Berent, "Some Demographic Aspects of Female Employment in Eastern Europe and the USSR." *International Labor Review,* February 1970, pp. 179–180.

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of multiple or abnormal births, the postnatal leave is 70 calendar days. Under a decree of July 5, 1968, a woman worker is entitled to additional unpaid leave until her child is 1 year old. Should a worker return to work before her child is 1 year old, she must be given (upon a doctor's certification) paid time off for breastfeeding (usually 30 minutes after no more than 3½ hours of work). All maternity leave is counted as part of the time required to receive an old age pension.[28]

Living conditions

The living conditions of the average Soviet woman worker are not very satisfactory, and the Party as well as the Government reportedly have taken measures to improve them by freeing women from many household chores, so that they may have more opportunities for satisfying their cultural and spiritual needs.[29] The Kostroma survey, cited earlier, showed that women workers had, on the average, 2 hours of leisure on a workday and 5 hours on their days off, compared with 4 hours and nearly 9 hours, respectively, for men. Most of the women's leisure time was spent in watching TV; 95 percent of the women workers went to see motion pictures at least twice a month. Over 90 percent read fiction, but only 15 percent read the newspapers several times a week.[30]

Soviet surveys in industrial centers have shown that the working mother spends on the average about 4 to 5 hours a day taking care of her children and her household tasks.[31] Their problems have been eased by lengthening the school day for children, by the expansion of the system of preschool day care centers (which now take care of over 9 million children), and by the continuous improvement at the enterprise level of working conditions and consumer services (so that there has been a reduction in the time spent standing in queues at food and other stores and in the preparation of meals at home).[32] Of the families with children of preschool age, 80 percent used day care centers and nursery schools; only 7 percent are waiting for a place in a child care center. In many cities, it is claimed, there is no need for a waiting list.[33]

Housewives with some unavoidable family obligations have been entitled since 1964 to a shorter workday, with pay according to production or time actually worked, in enterprises offering services directly to the public.[34] Many of them have been glad to accept part-time jobs especially if their husbands were among the low earners. In 1969, the average earnings of all wage and salary earners were only 117 rubles ($129) a month, which did not leave the worker very much after he paid for his necessities.[35]

The annual economic report for 1969 published by the Central Statistical Administration of the U.S.S.R. Council of Ministers stated that even though the annual growth in output of consumer goods had continued, and rose 7.2 percent in 1969, the demand for some basic goods, including meat, vegetables, woolen fabrics, clothing, footwear, building materials, and certain household goods "was not fully satisfied." Moreover, the plan for housing construction was not fulfilled.[36] In Moscow and in other industrial centers it is still common for a family to live in only one room and to share a bathroom and kitchen with other families.[37]

The shortage of housing in cities and the necessity for women to work are factors that limit the number of children per family. A survey of women workers at several enterprises in Moscow showed that in instances where there were two children or more in the family, practically all undesired pregnancies ended in abortions.[38] A survey in Estonia revealed that nearly a third of the respondents attributed decreasing birth rates to women's employment.[39] The Government, however, continues its program of encouraging mothers to have larger families. Every mother receives a one-time monetary grant on the birth of her third and all subsequent living children, and a monthly state allowance for her fourth and all subsequent living children until the age of 5. Mothers who have given birth to 10 children and are raising them are granted the honorary title—and the order—of "Mother-Heroine." Mothers who have given birth to and are raising seven, eight, or nine children are granted the order of "Glory of Motherhood," and mothers who have given birth to and are raising five or six children are granted the "Medal of Motherhood."[40] Women workers who have given birth to five children and have raised them to the eighth year may retire at the age of 50 after 15 years of work.[41] □

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——FOOTNOTES——

[1] This claim was recently reiterated by an economist in *Moscow News* (an English language magazine), February 7–14, 1970, p. 14.

[2] Edmund Nash, "Women Workers in the Soviet Union," *Monthly Labor Review*, September 1955, p. 1008.

[3] *Vestnik Statistiki* (Statistical Herald, a monthly published by the Central Statistical Administration of the U.S.S.R. Council of Ministers), Moscow, January 1970, p. 88.

[4] For detailed discussion, see Norton T. Dodge, *Women in the Soviet Economy* (Baltimore, The Johns Hopkins Press, 1966), pp. 213–214.

[5] *Kommunist* (a monthly of the Communist Party), Moscow, October 1967, p. 97.

[6] Dodge, op. cit., pp. 236–237.

[7] *Vestnik Statistiki*, January 1970, p. 92.

[8] Ibid., p. 89.

[9] *Pravda*, April 19, 1970.

[10] *Vestnik Statistiki*, January 1969, p. 82.

[11] *Sotsialisticheski Trud* (Socialist Labor, a monthly), Moscow, November 1968, p. 12.

[12] Dodge, op. cit., p. 293.

[13] *Vestnik Statistiki*, January 1969, p. 86.

[14] *Zhenshchiny i Deti v SSSR* (Women and Children in the U.S.S.R., a statistical book published by the Central Statistical Administraiton of the U.S.S.R. Council of Ministers), Moscow, 1969, p. 97.

[15] *Moscow News*, March 14–21, 1970, p. 3.

[16] *Vestnik Statistiki*, January 1970, pp. 91 and 93.

[17] Ibid., January 1969, pp. 90–93.

[18] *New York Times*, March 9, 1970.

[19] *Sbornik zakonodatelnykh aktov o trude* (Collection of Legislative Acts on Labor), Moscow, 1965, pp. 523, 524–527, and 529.

[20] *Trud* (Labor, a Moscow trade union daily), March 4, 1970.

[21] Ibid., March 22, 1970.

[22] *Moscow News*, February 7–14, 1970, p. 14.

[23] Dodge, op. cit., p. 247.

[24] M. Pankin, "Privileges of Women Wage and Salary Earners," *Sotsialisticheski Trud*, March 1969, p. 135.

[25] *Pravda*, March 7, 1970.

[26] *Sbornik zakonodatelnykh aktov o trude*, p. 709.

[27] Pankin, op. cit., p. 136.

[28] R. G. Aslanyan, "Action to Ensure that Soviet Citizens Enjoy Equal Rights and Opportunities," *International Labor Review*, December 1969, pp. 578–579; Pankin, op. cit., pp. 138–139; and A. Yarkho, "Okhrana truda zenshchin" (Protection of Women at Work), *Sovetskie Profsoyuzy* (Soviet Trade Unions), May 1967, pp. 44–45.

[29] *Pravda*, March 7, 1940.

[30] *Moscow News*, February 21–28, 1970, p. 14.

[31] *Sotsialisticheski Trud*, November 1968, p. 15.

[32] *Pravda*, March 7, 1970.

[33] *Moscow News*, February 7–14, 1970, p. 14.

[34] Pankin, op. cit., p. 138.

[35] *New York Times*, March 26, 1970. For U.S.S.R. work-time requirements for consumer purchases, see *Monthly Labor Review*, July 1966, pp. 772–773.

[36] *Pravda*, January 25, 1970.

[37] *Wall Street Journal*, August 14, 1969.

[38] *Vestnik Statistiki*, August 1968, p. 33. For families with two children, it was 99.8 percent; for families with three children, 100 percent.

[39] *Moscow News*, February 28–March 7, 1970, p. 14.

[40] *Vestnik Statistiki*, January 1970, p. 87.

[41] *Zhenshchiny i deti v SSSR*, p. 23.

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An analysis of changes in wages and benefits during 1969

Large first-year wage increases characterized most major agreements during a year of relatively light collective bargaining

JOSEPH E. TALBOT, JR.

THE YEAR 1969 was the fourth successive year of relatively low unemployment and rapid increases in consumer prices. These factors contributed greatly to the large settlements negotiated under major collective bargaining agreements during the year.[1] Settlements were higher, on the average, than in any year for which comparable data are available. (See chart 1.) The relatively small number of workers covered by settlements (2.8 million), however, held down the overall average change going into effect during the year. In 1969, some 7.5 million workers received deferred increases under contracts negotiated during earlier years, when the level of settlements was lower.

Large numbers of workers were affected by delays in the conclusion of new contracts in 1969. Settlements had not been reached by the end of 1969 for about 475,000 workers covered by agreements that expired during the year, including more than 200,000 workers in the electrical products industry. An additional 150,000 workers were covered by agreements negotiated in earlier years which specified that wages would not change during 1969.

Seventy-five percent of all workers covered by major collective bargaining settlements concluded in 1969 were affected by the liberalization or establishment of supplementary benefits. The proportion of workers under major collective bargaining agreements who were covered by cost-of-living clauses remained at about the same level as in 1968; about 1 worker in 4 was covered by an escalator clause.

Various measures of change in wages and benefits are presented in this article. Three that reflect primarily the pace of current bargaining activity are: (1) The estimated annual rate of change in wage and benefit costs over the life of contracts negotiated in 1969; (2) the annual rate of wage change over the life of the contracts, also negotiated during the year; and (3) wage increases negotiated during the year and going into effect during the first year of the contracts. While all three measures are likely to move in the same direction, they may be affected differently by factors such as the change in consumer prices and the amount of unemployment. A rapid rise in prices, as in 1969, shifts bargaining emphasis from income security benefits to wages and usually to relatively large first-year gains at the expense of those in subsequent years. Often, when large amounts of overtime are worked, the emphasis on large immediate wage increases may be reduced. Pressure is also likely to shift away from immediate wage increases towards income and job security

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Table 1. Estimated annual rates of increase in hourly cost of wages and benefits negotiated in 1969 [1]

Annual rate of increase	Percent of workers affected	
	Equal timing [2]	Time weighted (actual timing) [3]
All actions	100	100
Under 5 percent	7	4
5 and under 5½ percent	13	9
5½ and under 6 percent	4	8
6 and under 6½ percent	6	8
6½ and under 7 percent	6	4
7 and under 7½ percent	15	9
7½ and under 8 percent	2	3
8 and under 8½ percent	2	4
8½ and under 9 percent	9	9
9 and under 9½ percent	3	1
9½ and under 10 percent	9	6
10 and under 11 percent	1	12
11 and under 12 percent	8	11
12 and under 13 percent	5	3
13 percent and over	6	5
Not specified [4]	4	4
Number of workers (in thousands)	1,557	1,557
Median increase (in percent)	7.4	8.3
Mean increase (in percent)	8.2	8.6

[1] In collective bargaining settlements covering 5,000 workers or more.
[2] Based on the estimated increase in hourly costs at the end of the contract period and assumes equal spacing of wage and benefit changes over the life of the contract.
[3] Takes account of the actual effective dates in wage and benefit changes during the contract period.
[4] Insufficient information to compute amount of increase.

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measures as a result of uncertainty in the business outlook or relative price stability.

Package estimates

Estimates were made of the package cost (wages and benefits combined) of settlements affecting 5,000 workers or more. (See table 1.) These key contracts affected over half of the workers covered by all major settlements concluded during the year. Assuming that changes went into effect at equal intervals during the life of the contract, they provided a median annual package increase of 7.4 percent. Comparable figures were 6.0 percent for 1968 and 5.2 percent for 1967. [2]

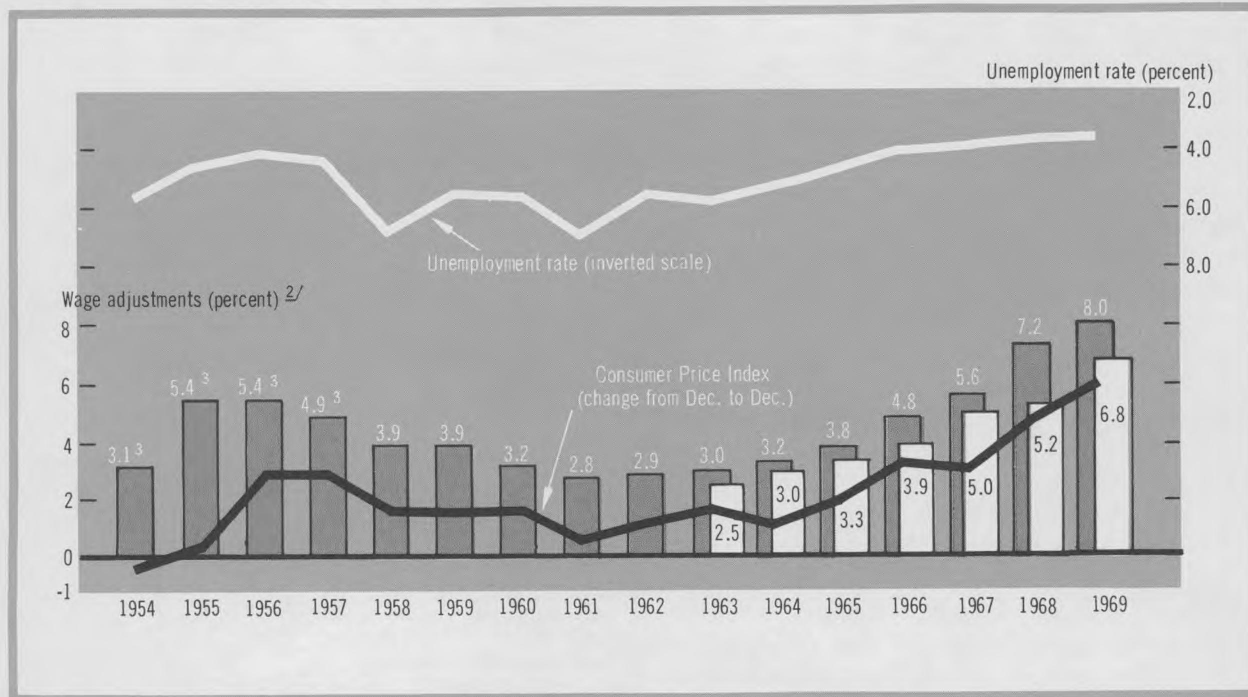
Most of the settlements in both 1968 and 1969 were heavily front-loaded—that is, a disproportionate share of the increase was concentrated in the first year of the contract. Consequently, taking into account time weighting or actual timing rather than assuming an equal spacing of changes, the median annual rate of increase in wage and benefit costs was 8.3 percent. Comparable figures were 6.6 percent for 1968 and 5.5 percent for 1967.

Still another measure of wage and benefit changes shows the first-year increases in these key settlements averaging 10.9 percent. This compares with an 8.1-percent increase for 1968 and 7.3 percent for 1967.

Wage increases

When wages are considered separately, both first-year negotiated wage increases and general wage changes averaged over the life of the contract were larger in 1969 than in preceding years. As in the measurement of wage and benefit changes combined, front loading was evident in wage changes alone. The first-year wage rate adjustment averaged 8.0 percent, compared with 7.2 percent in 1968 and 5.6 percent in 1967. (See table 2.) For manufacturing alone, the first year negotiated adjustment averaged 7.0 percent, up only slightly from the 6.9-percent increase recorded for 1968

Chart 1. Negotiated wage-rate adjustments,[1] unemployment rate, and change in the Consumer Price Index, 1954–69



[1] Median adjustments include no wage changes, decreases in wages, and increases in wages, but exclude the cost of fringe benefits.
[2] Percent of average hourly earnings, adjusted to exclude the effect of premium pay for overtime work.
[3] Estimated.

Note: The shaded bars represent the median first contract year wage adjustment resulting from collective bargaining settlements affecting 1,000 workers or more in all industries except government. The white insert bars for 1963 through 1969 represent the total percentage wage increase during the life of each contract, converted to an annual rate. For years prior to 1966, the construction, service, finance, insurance, and real estate industries were excluded.

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Table 2. First-year changes in wage rates negotiated during 1969 [1]

Type and amount of wage-rate action	Percent of workers affected by wage decisions		
	All industries	Manufacturing	Nonmanufacturing
Total	100	100	100
No wage change	1	(2)	1
Decreases in wages			
Increases in wages	99	100	99
IN CENTS PER HOUR			
Under 9	1	1	1
9 and under 13	4	5	3
13 and under 17	12	19	5
17 and under 21	15	21	9
21 and under 25	12	19	5
25 and under 29	13	12	14
29 and under 33	4	5	4
33 and under 37	8	8	8
37 and over	26	7	46
Not specified [3]	3	2	5
IN PERCENT [4]			
Under 3	1	1	1
3 and under 4	2	2	2
4 and under 5	3	3	2
5 and under 6	13	18	8
6 and under 7	17	21	12
7 and under 8	13	17	9
8 and under 9	7	7	6
9 and under 10	6	6	6
10 and under 11	9	7	12
11 and under 12	7	11	4
12 and under 13	4	2	6
13 and over	16	5	28
Not specified [3]	4	2	5
Number of workers (in thousands)	2,836	1,459	1,377
Median adjustment:			
In percent	8.0	7.0	10.0
In cents	25.0	21.4	36.8
Median increase:			
In percent	8.0	7.0	10.0
In cents	25.0	21.5	36.8
Mean adjustment:			
In percent	9.2	7.9	10.8
In cents	32.5	23.0	43.0
Mean increase:			
In percent	9.3	7.9	10.9
In cents	32.7	23.0	43.4

[1] Changes negotiated during the year and going into effect during the first 12 months following the expiration of the old contract, in collective bargaining settlements covering 1,000 workers or more.
[2] Less than 0.5 percent.
[3] Insufficient information to compute amount of increase.
[4] Percent of estimated average hourly earnings, excluding overtime.

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

and 6.4 percent for 1967. However, in the nonmanufacturing sector, the first year negotiated adjustment averaged 10 percent, up considerably from the 7.5-percent change in contracts negotiated in 1968 and 5.0 percent in 1967.

Wage increases averaged over the life of contracts negotiated in 1969 also accelerated greatly. They averaged 6.8 percent a year, compared with 5.2 percent for 1968 and 5.0 percent for 1967, as shown in table 3. In manufacturing alone, increases averaged 5.8 percent a year, compared with 4.9 percent in 1968 and 5.1 percent in 1967. In the nonmanufacturing sector, wages averaged over the life of the contract amounted to 8.5 percent, compared with 5.9 percent in 1968 and 5.0 percent for 1967. Settlements in the transportation, lumber, petroleum, and apparel industries were among those that provided for substantially higher wage increases in the first than in the second or third contract years.

Construction industry settlements

When the construction industry was considered separately, settlements continued to accelerate in size, although they generally were not front-loaded. The median annual package increase in

Table 3. Annual rate of increase in wage rates to go into effect during life of contracts negotiated in 1969 [1]

Type and amount of wage-rate action	Percent of workers affected by wage decisions		
	All industries	Manufacturing	Nonmanufacturing
Total	100	100	100
No wage change	(2)	(2)	------------
Decreases in wages	------------	------------	------------
Increases in wages	100	100	100
IN CENTS PER HOUR			
Under 9	4	4	3
9 and under 13	8	13	3
13 and under 17	22	35	7
17 and under 21	14	16	13
21 and under 25	10	12	9
25 and under 29	10	11	8
29 and under 33	6	3	8
33 and under 37	4	1	7
37 cents and over	20	3	37
Not specified [3]	4	2	5
IN PERCENT [4]			
Under 3	3	2	3
3 and under 4	4	6	2
4 and under 5	10	16	4
5 and under 6	19	29	8
6 and under 7	15	17	14
7 and under 8	14	19	8
8 and under 9	9	3	16
9 and under 10	7	4	11
10 and under 11	3	1	5
11 and under 12	3	1	6
12 and under 13	1	------------	2
13 percent and over	9	1	17
Not specified [3]	4	2	5
Number of workers (in thousands)	2,836	1,459	1,377
Median adjustment:			
In percent	6.8	5.8	8.5
In cents	21.2	15.8	32.6
Median increase:			
In percent	6.8	5.8	8.5
In cents	21.2	15.8	32.6
Mean adjustment:			
In percent	7.6	6.0	9.3
In cents	30.1	18.6	42.8
Mean increase:			
In percent	7.6	6.0	9.3
In cents	30.2	18.6	42.8

[1] In collective bargaining settlements covering 1,000 workers or more.
[2] Less than 0.5 percent.
[3] Insufficient information to compute amount of increase.
[4] Percent of estimated average hourly earnings, excluding overtime.

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

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Table 4. Annual rate of increase in wages and benefits in construction settlements negotiated during 1969 [1]

Annual rate	Percent of workers affected			
	Wages and benefits		Wages	
	Equal timing	Time weighted (actual timing)	First-year's negotiated increase	Increases averaged over life of contract
All actions	100	100	100	100
No wage changes			3	
Decreases				
Increases	100	100	97	100
Under 8 percent	3	3	18	8
8 and under 9 percent	4	4	4	4
9 and under 10 percent	7	8	4	15
10 and under 11 percent	6	9	4	3
11 and under 12 percent	10	26	4	12
12 and under 13 percent	20	9	9	6
13 and under 14 percent	10	8	8	8
14 and under 15 percent	9	4	9	13
15 and under 16 percent	11	8	2	7
16 and under 17 percent	4	6	10	6
17 and under 18 percent	2	2	6	5
18 and under 19 percent	3	4	3	2
19 and under 20 percent	1	1	3	2
20 percent and over	7	5	11	7
Not specified [2]	4	4	4	4
Number of workers (in thousands)	460	460	460	460
Median adjustment:				
In percent	12.9	11.7	13.4	13.0
In cents			68.0	75.0
Median increase:				
In percent	12.9	11.7	13.7	13.0
In cents			68.0	75.0
Mean adjustment:				
In percent	13.6	13.0	13.1	13.1
In cents			66.5	76.1
Mean increase:				
In percent	13.6	13.0	13.5	13.1
In cents			68.4	76.1

[1] This table is based on construction settlements affecting 1,000 workers or more.
[2] Insufficient information to compute amount of increase.

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

construction was 12.9 percent when equal spacing of changes over the life of the contract was assumed, compared with 8.6 percent in 1968 and 7.2 percent in 1967. (See table 4.) When time weighting or actual timing of wage and benefit changes was taken into account, the median increase amounted to 11.7 percent, compared with 8.5 percent in 1968 and 7.1 percent for 1967.[3]

The negotiated first-year wage-rate increase in these settlements averaged 13.7 percent in 1969, up considerably from the 7.8-percent advances for both 1968 and 1967. Wage increases averaged over the life of the agreement amounted to 13.0 percent in 1969, compared with 7.9 percent in 1968 and 6.9 percent in 1967.

Supplementary benefits

The proportion of workers who were covered by major collective bargaining settlements in 1969 and who received some improvement in supplementary benefits declined considerably during 1969, as shown in chart 2. Only 75 percent of the workers covered by settlements concluded during the year were employed where some benefit change was made.[4] This compares with 93 percent in 1968 and 90 percent in 1967. The most frequently improved benefits were health and welfare plans, pensions, paid vacations, and holidays, in that order. Shift differentials and paid funeral leave provisions also were frequently changed.

At least one type of health and welfare benefit was changed in contracts covering 1.75 million workers. The most frequent improvements, affecting 634,000 workers, were increased hospital or medical and surgical benefits. Additional company payments into funds to finance unspecified changes in benefits affected 608,000. Life insurance

Table 5. General wage changes effective in 1969 [1]

Type and amount of wage-rate action	Percent of workers affected		
	All industries	Manufacturing	Nonmanufacturing
Total	100	100	100
No wage change	7	6	7
Decreases in wages			
Increases in wages	93	94	93
IN CENTS PER HOUR			
Under 9	2	2	2
9 and under 13	11	12	11
13 and under 17	20	26	15
17 and under 21	25	33	18
21 and under 25	7	8	5
25 and under 29	6	5	7
29 and over	20	7	33
Not specified [2]	2	1	2
IN PERCENT [3]			
Under 1	(4)	(4)	
1 and under 2	1	(4)	1
2 and under 3	1	2	1
3 and under 4	11	16	5
4 and under 5	18	18	18
5 and under 6	25	27	23
6 and under 7	10	11	8
7 and under 8	6	6	5
8 and under 9	4	3	4
9 and under 10	2	2	3
10 and over	15	7	23
Not specified [2]	2	1	2
Number of workers (in thousands)	10,810	5,349	5,461
Median adjustment:			
In percent	5.1	5.0	5.2
In cents	19.0	17.5	20.0
Median increase:			
In percent	5.1	5.0	5.6
In cents	19.1	18.0	20.0
Mean adjustment:			
In percent	6.5	5.4	7.7
In cents	23.4	17.5	29.4
Mean increase:			
In percent	7.0	5.7	8.3
In cents	25.1	18.6	31.6

[1] In collective bargaining agreements covering 1,000 workers or more.
[2] Insufficient information to compute amount of increase.
[3] Percent of estimated average hourly earnings, excluding overtime.
[4] Less than 0.5 percent.

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

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was increased for 520,000. Sickness and accident benefits were liberalized for 285,000, and major medical benefits were improved for 234,000 workers.

Pension plans were improved or established for slightly over 1.4 million workers. Normal retirement benefits were improved for 667,000 workers. Increased company payments into funds to finance unspecified changes affected 616,000 workers. Early and disability retirement improvements affected 129,000 and 103,000 workers were affected by changes in vesting provisions.

Paid vacations were liberalized in settlements affecting 1.1 million workers. A reduction in the number of years of service required for 2 or 3 weeks of vacation affected 245,000 workers and 187,000 were affected by a reduction in years of service required for 4 weeks of vacation. Increased employer payments into funds to finance unspecified improvements affected 146,000 workers. A fifth week of vacation was established for 129,000 and a sixth week for 110,000 workers. The remaining workers whose vacation benefits were improved were affected by a variety of other changes.

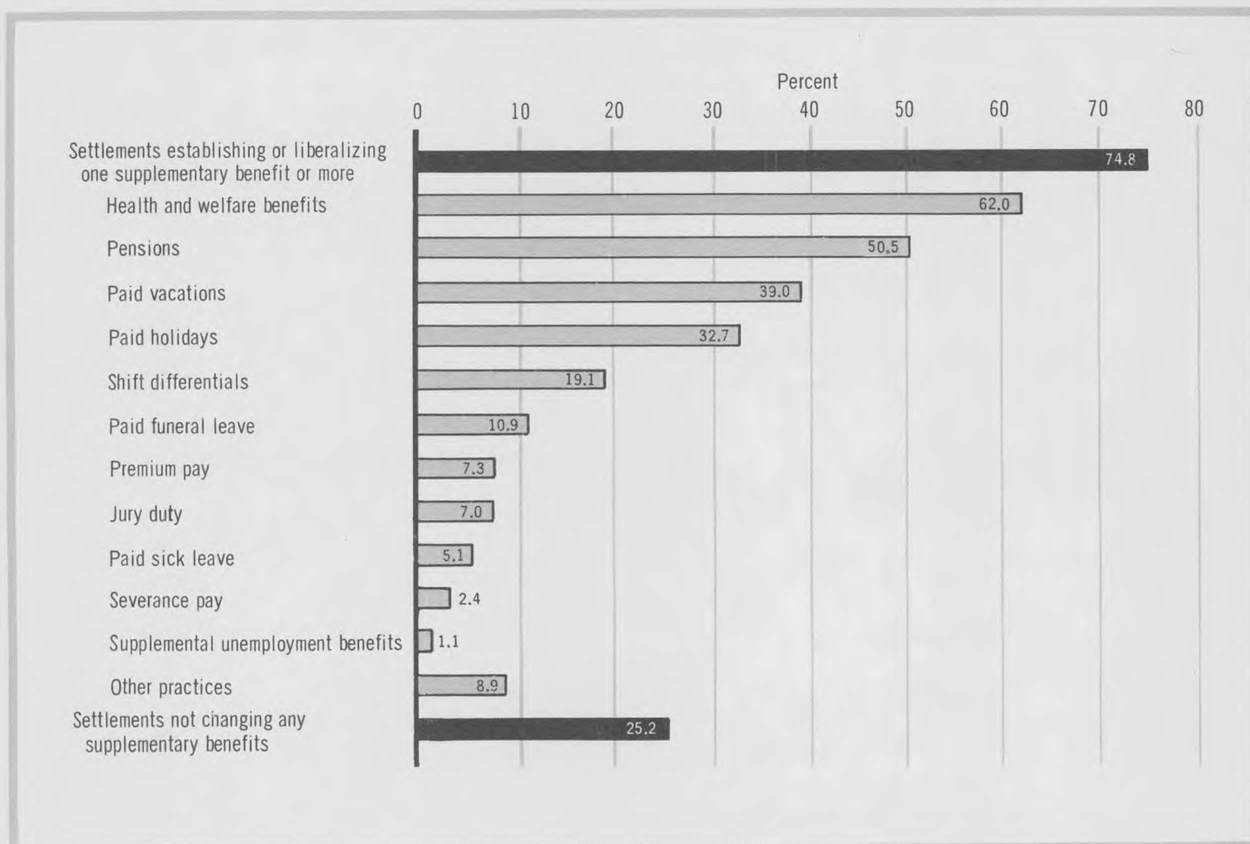
Holiday provisions were improved for 928,000 workers. A 9th paid holiday was provided for 287,000 workers, an 8th for 247,000, a 10th for 166,000, and an 11th for 71,000 workers. Increased premium pay for holiday work affected 34,000 workers, and 20,000 received an additional paid half-holiday. The remaining workers whose holiday benefits were improved were affected by other changes.

Cost-of-living escalation

By the end of 1969, the wages of 2.64 million workers under major collective bargaining agreements were subject to automatic escalation tied to changes in the BLS Consumer Price Index. [5]

These clauses are prevalent in the automobile, farm and construction equipment, and aerospace, trucking, meatpacking and tobacco industries.

Chart 2. Changes in supplementary practices negotiated in major collective bargaining settlements, by percent of workers covered, 1969 [1]



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In 1969, some settlements in the airlines industry and in several metalworking industries provided for adoption of escalator clauses.

Two million of the workers covered by cost-of-living provisions have their reviews on an annual basis; only 375,000 had quarterly reviews, 175,000 semiannual, and 40,000 monthly. Most contracts provided minimum guarantees or maximum limits, or both, on the escalator adjustments. Some type of ceiling was provided in clauses covering 1.8 million workers. For this study, the minimum guarantees which workers receive under these clauses have been treated as deferred increases, as they are guaranteed regardless of the movement in consumer prices. The additional amounts, reflecting the rise in prices, are recorded as cost-of living increases.

Nearly all escalator clauses (covering 96 percent of the workers) are tied to the BLS national Consumer Price Index. Only 95,000 workers come under clauses tied to individual city indexes.

The most common increases in cost-of-living allowances effective during 1969 were 5 cents for most workers in the automobile and farm and construction equipment industries,[6] 4 cents in the trucking industry, 8 to 17 cents in the aerospace industry, depending on the company, and 16 cents in the meatpacking industry.

Wage changes effective during 1969

The unusually large number of workers receiving deferred wage increases during 1969 held the overall average adjustment effective during the year considerably below the first-year wage changes resulting from 1969 settlements. The median effective adjustment for 1969 amounted to 5.1 percent, down from the 5.5 percent for 1968, when a larger proportion of workers were affected by settlements. (See table 5.) Deferred increases predominated in the automobile, farm and construction equipment, trucking, steel, and communications industries during 1969.

Altogether, workers whose pay structure was raised during the year, either as a result of current negotiations or as a result of earlier settlements, accounted for 93 percent of all workers under major collective bargaining agreements, the same proportion as in 1968. □

———FOOTNOTES———

[1] Except where otherwise indicated, this study is based on collective bargaining settlements covering 1,000 workers or more. The data are derived from the Bureau's monthly report, *Current Wage Developments,* which presents detailed accounts of individual settlements. For a version of this study that contains historical tables, see *Current Wage Developments,* April 1, 1970.

[2] Throughout the discussion, only medians are used, although both means and medians are presented in the tables.

[3] Unlike the all-industry package cost estimates, those for the construction industry apply to settlements affecting 1,000 workers or more.

[4] Three reasons for this decline are: (1) contracts negotiated in the apparel industry under cost-of-living reopeners that changed only wages; (2) some construction industry settlements that provided for wage increases only, but included an option to divert some of the wage gains to benefits at some future date (for this study, the entire amount was treated as wage increases); and (3) several contracts that permitted reopenings on wages only.

[5] An additional 200,000 workers in the electrical products industry, whose contracts expired in late 1969, but were not renegotiated by the end of the year, have been excluded from the total number of workers covered under cost-of-living escalators for 1969. Agreements for these workers have subsequently been signed and they do contain automatic escalator clauses.

[6] An additional 3-cent guaranteed cost-of-living increase in 1969 was considered a deferred rather than an escalator increase, as explained in the text.

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A survey of employer attitudes toward training the disadvantaged

Employers in Greater Cleveland want government to conduct remedial training for disadvantaged, but to leave the teaching of specific skills to industry

JOHN L. IACOBELLI

SIGNIFICANT GAPS exist in our knowledge of both the supply side and the demand side of the manpower ledger.[1] Most training takes place within private industry, where information about manpower planning and training is most fragmentary—and most needed. This article focuses upon the attitudes of Greater Cleveland employers toward conducting training, financing training, and the proper roles of governments and industry in these activities for regular and "disadvantaged" labor.[2] These issues are viewed from the employers' frame of reference; the attitudes and opinions expressed in this article are mainly those of top management in private industry in one major metropolitan area.

The Greater Cleveland area contains a great diversity of socioeconomic conditions which can be easily sampled and investigated simultaneously: Industry of all sizes and types with industry employment very close to the national pattern; considerable flow of migrants from other countries, counties, and States; a large Negro population in the inner city; a strong trade union movement; and similarity to most large urban areas, especially in the northeastern and north central areas of the United States. The information came from personal interviews conducted in 1968 by the author, using a structured questionnaire among a stratified sample of 131 employers in the Greater Cleveland area. Stratification was by percentage of employment in major industry groups in Cleveland, with adjustments for the few establishments employing disproportionately large numbers of workers.[3] Employment per establishment ranged from 6 to 65,000, and interviews were conducted at various management levels ranging from the president of an establishment to the personnel director.

John L. Iacobelli is assistant professor in the College of Business Administration, the Cleveland State University. This article is based on part of his unpublished doctoral dissertation in economics for the University of Texas at Austin, June 1969, entitled "Training Programs of Private Industry in the Greater Cleveland Area." The research project was sponsored by the U.S. Department of Labor under Title I of the Manpower Training and Development Act of 1962, as amended.

Key questions

Do employers have different attitudes toward training their regular work force compared with training disadvantaged persons? If so, what are the differences with regard to conducting actual training and bearing training costs; and what do employers specify as the proper roles of industry and different levels of government in coordinating these two functions? What view does industry hold about long-range consequences of hiring and promoting disadvantaged workers? Who should receive Federal financial aid for training, and do employers have any one preferred form of this assistance? Would this Federal financial aid for training (1) allow employers to lower overall labor costs, (2) relieve the financial burden from employers already training the disadvantaged, (3) motivate employers to train more disadvantaged workers, or (4) cause employers to create more jobs for the disadvantaged? These questions are discussed in the order mentioned.

CONDUCTING TRAINING AND BEARING TRAINING COSTS. Private industry does not have the same attitude toward the training of disadvantaged workers as toward training their regular work force. The most significant differences are in regard to government's role, paying for training, promotability of trainees, and conducting training. Table 1 shows the results of interviews with 131 employers who were asked to specify the appropriate roles for private industry and Federal, State, and local governments in conducting and

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bearing the cost of training for both types of workers.

Most employers asserted that there should be no government interference—especially from the Federal Government—with their prerogative to train regular labor for specific needs. Industry is generally willing to pay all the costs of this type of training, since in most cases workers are being trained to perform specific jobs that are vital for a specific company to earn a profit. Under these circumstances, training is considered profitable. Once the workers are trained for a specific job and company, the best qualified among them tend to be promoted through the ranks, and some eventually become supervisory or managerial personnel.

With respect to disadvantaged persons, however, most employers held that the Federal Government has a definite role to perform. They prefer to have the Federal Government become the focal point for (1) collection and dissemination of training information, (2) financial assistance, (3) overall coordination of nationwide manpower training activities, and (4) the setting of broad training policies. Money and policies, filtering down to the State and local levels, would then be tailored to the specific needs of different geographic areas but would still remain within the very broad policies set by the Federal Government. In other words, employers prefer that broad policies be set at the Federal level but administered and specifically molded locally so that specific community needs would be met without being at cross purposes with an entire national program.

Most of the employers interviewed thought that the Federal Government should pay a large share of the cost of training disadvantaged persons. This share was generally set between one-half to three-fourths of the cost of training. Four-fifths of the respondents felt that private industry should should pay at least a small part of such costs. Employers reasoned that whereas the Federal Government should bear no more than a small part of the cost of training regular labor, it should bear a large share of the cost of training disadvantaged labor. The cost formulas prescribed by private industry for training the two types of labor are almost opposite.

The major explanation given for shifting the cost of training the disadvantaged to the Federal Government was that industry does not consider such training to be profitable. The economic benefits of training, of course, are almost impossible to measure in the short run and still very difficult to measure in the long run. Management sees training as another cost which lowers profits, which in turn affects stock prices and stockholder reactions to management's performance. Managers also asserted that they could barely justify training of even the regular work force, except where a manpower shortage or rapid growth creates a crisis situation. Training disadvantaged labor would be even more difficult to justify. Employers believed that stockholders would replace the top management of any firm devoting a large share of its resources to such unprofitable areas. The only exceptions to this were employers in ghetto areas who said that riots had "scared and motivated" them into training disadvantaged workers in preference to more riots and destruction of their facilities.

Before many firms and stockholders will voluntarily commit themselves to major efforts in training the disadvantaged, it will be necessary for some leading firms to demonstrate the specific benefits. The JOBS programs of the National Alliance of Businessmen seems to be a small step in this direction.

Private industry is also afraid of the long-range consequences of flooding its ranks with disadvantaged persons at entry-level jobs. Although the

Table 1. Appropriate roles for private industry and different levels of government in conducting training and bearing training costs—as viewed by Cleveland area employers

Level of government or industry	Number of employers responding	Appropriate proportion [1]				
		All	Large share	Part	Small part	None
COST OF TRAINING						
Regular labor	127					
Federal Government		0	0	8	22	97
Private industry		96	22	8	0	1
Other		1	0	0	0	0
Disadvantaged labor	125					
Federal Government		23	34	46	8	15
Private industry		13	8	46	31	25
Other		4	0	0	0	0
ACTUAL CONDUCT OF TRAINING						
Regular labor	123					
Local government—education system		0	3	8	17	91
State government—education system		0	0	6	17	93
Federal Government		0	0	22	8	100
Private industry		90	21	9	1	1
Other		1	0	0	0	0
Disadvantaged labor	125					
Local government—education system		0	7	43	19	40
State government—education system		0	6	30	20	51
Federal Government		0	4	22	18	59
Private industry		36	16	49	8	8
Other		0	1	1	0	0

[1] Employers generally equated large share with 75 percent, part with 50 percent, and small part with 25 percent; employers would vary these percentages, however, and therefore distribution does not always equal the total.

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disadvantaged can learn to perform the entry-level jobs as well as other beginners, they have—according to employers—much less potential for promotion to a higher level position. Employers reason that the greater the number of disadvantaged persons a firm hires today, the smaller will be its potential pool of promotable workers in the near future. While employers admit that some disadvantaged persons can be promoted into higher levels of a firm, they hold that a much larger percentage of promotable persons can be drawn from the regular work force, and that eventually, a firm will suffer a competitive disadvantage if it is forced to fill foreman, supervisory, and possibly managerial positions from its own ranks with what the firm considers to be persons who are less than the best it could have hired originally. Industry is reluctant to gamble its future unless it is forced to do so by socioeconomic or political constraints.

When it comes to the actual training, private employers argue that they should conduct the teaching of specific skills, in order to meet their very specialized needs. Employers give two reasons for this attitude. First, industry does a better job of teaching skills applicable to today's job requirements. Second, few companies perform the same job in exactly the same way, and most employers believe that they have a slight competitive edge because their work methods are better than those of other firms. They also assert that it is imperative to teach "correct company attitudes" from the first day that employees start learning specific job skills. This indoctrination includes learning "correct attitudes" toward working, tools and equipment, supervisors, fellow employees, the union, and the company. In the eyes of industry, learning such attitudes and learning a specific job are inseparable.

Private industry is reluctant, however, to conduct any remedial training for disadvantaged persons. According to respondents in this study, industry believes that government and the public education system can best perform the latter task. Industry's first reaction was to let the education system and government tackle these areas where industry has little experience. A small but outspoken segment of industry, on the other hand, feels that industry should now move into remedial activities because, in their opinion, the Federal Government has had poor results from the considerable sums of tax money it has spent on manpower programs for the disadvantaged.

Who should receive Federal financial assistance. Of the 123 respondents, 69 percent thought that Federal financial aid should be given to the employer or channeled through the employer in order to have a responsible party handling the funds. The employers' main concern seemed to be to get maximum efficiency for every dollar spent on training. Most employers hold that they, as a group, are basically honest and concerned about preventing waste of Federal funds earmarked for training. If the Federal Government is going to provide financial aid for training disadvantaged persons, the employer believed that he should assume the responsibility of assuring that this money is not misused. Employers argued that if they can forward Federal aid to employees in the form of wages or a training subsidy, they can supervise training and make sure that the employee is exerting training effort for the money he receives. In addition, employers thought that they should be at least partially reimbursed for engaging in such a low-profit venture as training. While table 2 shows a strong preference for channeling funds through employers, there is considerable divergence of opinion about the form of this assistance.

Of the 123 respondents, 18 percent objected to any kind of Federal financial aid for training, with

Table 2. Attitudes of Cleveland area employers concerning Federal financial assistance for training

Form of assistance	Number of employers responding	Total times mentioned	Recommended recipient			
			Employer	Employee	Both	Neither
To whom is it best to give Federal financial assistance for training?	123		57	16	28	22
Recommended forms of assistance for employers and employees	101					
Direct subsidy		38	27	11		
Indirect payment		7	2	5		
Tax rebate		32	27	5		
Wage supplement		32	20	12		
Other and not sure		30	17	13		

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one-third of these preferring instead to have the aid go directly to the public education system; 23 percent preferred having Federal aid for training going both to employers and employees, and 13 percent favored the aid going only to employees in order to teach them how to handle money and gain some financial responsibility. Even the respondents favoring aid only to employers realized that eventually this money would reach employees in the form of wages. Very few employers voiced direct concern or optimism about rapidly increasing the total income of disadvantaged persons enough to relieve them of the burdens of poverty. The main concern of employers was the low productivity they believed to be typical of the disadvantaged whom they might train.

Most employers believed that Federal financial aid might have merit if it could help lower their labor costs, which they claim have become much too high in the last few years. Of the 77 employers who responded to a question about using Federal financial aid for training as a supplement to wages in order to lower their overall labor costs, 12 percent were not sure, 32 percent gave negative answers, and 56 percent gave emphatic positive responses, as if this were an overdue area of Federal intervention. Employers explained that although they consider disadvantaged workers very unproductive, these workers still start at normal entry-level wages, which are often set by union contract. Most employers thought that even after receiving Federal aid for training the disadvantaged, their firms would still have a net loss due to high labor costs in general and in particular with the disadvantaged.

These answers suggest that high labor costs may be preventing some community-minded employers from training disadvantaged workers. Although employers resent Federal intervention into their business activities, they have some willingness to accept Federal aid for training because they see it as a possible way of lowering their labor costs. Yet most employers feel that they would still suffer at least a small net loss from training the disadvantaged. Whether their calculations are correct is difficult to determine—as noted above, measurement of training costs and benefits is difficult, and many judgments are subjective—but their views are unmistakable: they are convinced that training disadvantaged workers is a very unprofitable activity for private industry.

Motivating employers with Federal financial assistance. The majority of employers (55 percent) answered "no" when asked if their firm would do more to train disadvantaged labor if Federal financial assistance were provided; 40 percent answered "yes," and 5 percent were not sure. The most common reason was that their firm did not have any more jobs for disadvantaged workers. Most respondents—even some who answered "yes"—felt that their firms (1) were not interested in hiring any disadvantaged labor, (2) had already trained enough for their needs, and (3) would train disadvantaged workers in the future, with or without Federal financial assistance, if they had the job openings where the disadvantaged could be employed and trained. Numerous employers stated that the disadvantaged could not be trained for the existing jobs in their companies because the high skill requirements would necessitate an impossible leap for a disadvantaged person. As skill requirements rise, throughout the economy, employers claim that this gap between job requirements and the disadvantaged person's qualifications is widening. Most employers are not willing to gamble on what they consider to be an unrealistic leap.

Although employers thought that the disadvantaged should be trained, they stated that their firms were in no position to do more training even if the Federal Government provided financial assistance. Numerous employers were either unaware of existing Federal financial assistance for training or were not accepting it—only 25 percent of the employers were participating in Government training programs, and most of this was minimum involvement. It seems clear that Federal financial assistance is not a very strong motivating factor and does very little to overcome the reluctance of an employer to hire disadvantaged labor instead of more highly qualified persons with better potential for promotion.

A more important factor is the existence of the appropriate kind of jobs for the disadvantaged. The individual employer does not visualize the disadvantaged worker as being able to qualify for many of his firm's existing jobs. He feels either that a different firm or industry can use disadvantaged labor or that the Federal Government should create or find some kind of a suitable job for the disadvantaged.

The above responses indicate that increased Federal financial assistance is not a cure-all for

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motivating employers to train more disadvantaged labor. The creation of more jobs at the lowest skill levels or all levels would be greater stimulus for employers to train these workers. The employers focus their attention on matching existing men and jobs, not upgrading men to meet the job requirements. They believe that jobs can be found or created to match the low skill levels of the disadvantaged faster than the disadvantaged can be trained, and employers in this study tended to prefer fast solutions and solutions which did not involve their own establishments.

Summary

Insofar as one can generalize from a study in one metropolitan area, it would appear that employers' attitudes are at polar extremes with regard to training the regular work force and training disadvantaged persons. For the regular work force, industry is willing to bear all the costs, or at least the largest share, and to conduct its own training without government interference. With respect to disadvantaged workers, industry prefers to have the Federal Government (1) bear one-half to three-fourths of the training costs, (2) collect and disseminate training information, (3) coordinate nationwide manpower training activities, and (4) set broad manpower policies at the Federal level, but have them specifically molded and administered at the local level.

Employers want Federal, State, and local governments and the public education system to conduct remedial training for the disadvantaged but to leave the teaching of specific skills to private employers.

Industry fears the long-range consequences of a competitive disadvantage for future promotions if it floods its entry level jobs with disadvantaged workers.

Employers prefer to have Federal financial assistance for training channeled through them; but they have no one preferred form for this assistance, such as tax rebates. This financial aid would be used by employers to (1) offset employers' high labor costs, especially the costs of hiring and training disadvantaged workers, and (2) relieve some of the financial burden from employers already training the disadvantaged; it would have little effect on (3) motivating employers to train more disadvantaged persons, or (4) causing employers to create more jobs for the disadvantaged. □

FOOTNOTES

[1] U.S. Department of Labor, *Manpower Report of the President,* April 1967, pp. 162–163; Ibid., April 1968, pp. 75–76; Ibid., January 1969, pp. 89–95, 155–165.

[2] "Disadvantaged" labor is identified by employers as labor which does not even meet the employers' minimum requirements for entry level jobs. However, there is no sharp dichotomy between disadvantaged and regular labor. If all labor were arranged along a continuum, ranging from very highly qualified to very unqualified for any job, it would be difficult to know where to draw the dividing line between regular and disadvantaged labor because there is an area where the two shade into each other; yet it is necessary to distinguish between the two.

[3] Stratification was based upon percentage of nonagricultural employment in the Cleveland SMSA in 1965, which was as follows: 4.0 in contract construction, 38.4 in manufacturing, 6.2 in transportation and public utilities, 20.6 in wholesale and retail trade, 4.7 in finance, insurance, and real estate, 14.0 in service and miscellaneous, and 11.9 in government.

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Prospects for a social report—a review article

Studies by the Russell Sage group and National Science Foundation help prepare the way for local and Federal action

EWAN CLAGUE

THE GREAT DEPRESSION of the 1930's was an economic disaster to millions of Americans, but it had a brighter side in that it generated a nationwide social security and welfare system; a reorganized financial system, including the insurance of bank deposits; the establishment of a comprehensive system of economic statistics; a basic shift in economic thinking; and a new philosophy of government in relation to the performance of the private economy. It is not just an accident that in the quarter century since the end of World War II there has been no major depression in the United States.

In my judgment, an important factor in the performance of the American economy over these past decades has been the establishment of a statistical system as a foundation for economic policy. The statistical revolution began with a controversy over the unemployment statistics produced by the Bureau of the Census in the 1930 Census of Population. The controversy led to the creation of the Committee on Government Statistics and Information Services, on which some three score statisticians, economists, sociologists, political scientists, and other professionals served for a 2-year period, 1933–34. On recommendation of that committee, the Central Statistical Board was set up in the Office of the President to oversee the coordination and improvement of the statistical services of the Federal Government agencies. The Bureau of Labor Statistics and other major general-purpose statistical agencies were represented on the Board, which was provided with an operating staff. Some years later, the Board was eliminated and the agency became the Office of Statistical Standards in the Bureau of the Budget.

The development of social programs to deal with unemployment and destitution in the 1930's provided a means for obtaining crucial statistics on the performance of the economy. The social security program, with its vast recordkeeping, provided a source of valuable data on the labor market. The needs of the Works Projects Administration led to the creation of sample population surveys, which have been expanded to produce the current statistics of labor force, employment, and unemployment. The revision of the Consumer Price Index at that time provided still another tool for economic policy, as the Bureau of Labor Statistics discovered during World War II when the CPI was used as a guide for stabilization action.

When Congress passed the Employment Act of 1946 and created the Council of Economic Advisers to administer it, there were already available many continuing series of economic statistics to serve as guides to policy. There has been immense improvement since, both in the quantity and the quality of the economic indicators.

By the early 1960's it had become evident that, despite the increasing affluence of the American people and the rising standards of living of most families, there still remained pockets of unemployment, destitution, and poverty which were creating massive social problems. The rural wastelands, the urban ghettos, and the suburban blight all contributed to increasing social conflicts, rising crime rates, riots, and rapidly growing welfare dependency.

It was then that public attention was focused on these social problems and on ways to measure them. Within the Executive Branch, Secretary of

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Ewan Clague was Commissioner of Labor Statistics from 1946 to 1965 and served as a member of the Panel on Social Indicators appointed by the Secretary of Health, Education, and Welfare in 1966.

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Health, Education, and Welfare, John W. Gardner invited "a distinguished group of social scientists to advise the Department on the measurement of social change and the possible preparation of a Social Report." The subject matter considered by this panel on social indicators ranged widely—health and illness; social mobility; physical environment; income and poverty; public order and safety; learning, science, and art; participation and alienation. The range was so broad, the submitted materials so voluminous, and the time so short that a decision was made to summarize the results. Under instruction from HEW Secretary Wilbur Cohen, Assistant Secretary Alice Rivlin and her deputy, Mancur Olson, wrote the document *Toward a Social Report*, published by the Department late in 1968.[1]

The theme which pervaded the discussions of the panel is succinctly stated in the introduction to the report:

> The Nation has no comprehensive set of statistics reflecting social progress or retrogression. There is no Government procedure for periodic stocktaking of the social health of the Nation. The Government makes no Social Report.

And the appendix is directed to the question "How can we do better social reporting in the future?"

The Russell Sage study

This history brings us to the massive and comprehensive volume on *Indicators of Social Change*, edited by Eleanor B. Sheldon and Wilbert E. Moore of the Russell Sage Foundation.[2] In one sense this is an outgrowth of the work of the HEW panel, although there is only a small overlapping of authors. Eleanor Sheldon was a member of the panel, of which Daniel Bell was the chairman; several others worked with the panel at one time or another.

However, the important point is that the authors in the Russell Sage volume write in the same tradition and with emphasis on the same overall goal. In the introduction, Sheldon and Moore suggest that the revival of public interest in the charting and study of social change may have been provoked by strictly practical concerns—in reducing the costs of change, in social intervention, and in the program evaluation. Social indicators "would give a reading . . . on past and future trends, whether progressive or regressive, according to some normative criteria."

The two editors go on to say that "the indicators explored in this volume are *not* designed for program evaluation. . . . The volume is heavily weighted toward the scholarly, or analytic, side of the balance between theoretical concerns focusing on large-scale structural changes."

This limitation of objectives leaves the authors open to the criticism expressed by the Special Commission on the Social Sciences of the National Science Foundation in speaking of the profession in general[3]—"social scientists must share the blame for the failure to apply social science more broadly . . . social science work . . . often produces fragments of knowledge that need to be joined with other fragments to present a program of action." The Russell Sage book does sound a call for action, but it is action to improve our statistics and our knowledge of social change, not to suggest policies for the solution of our social problems.

The Special Commission notes further that social scientists have been ineffective as consultants on social policy because they often "speak in a jargon incomprehensible to the layman." No such charge can be laid at the door of contributors to the Russell Sage book. There are scores of tables and diagrams, but the text is in plain English and can be understood by any layman who takes the trouble to read carefully.

In fact, the objectives of the authors of the Russell Sage volume are in complete agreement with the analysis of the Special Commission that "many important areas of American life proceed either without record, or with inadequate or too-infrequent statistical description. Planned social improvement can hardly be optimally effective when the planners have no information on either social trends, or the probable consequences of a new Federal social policy."

Conrad Taeuber, writing on the subject of population in the Russell Sage study, notes the growing demand for a population policy for the United States, but comments that the statistics for such a policy are inadequate; for example, "the demographic effects of guaranteed family incomes can only be guessed at."

The range of analyses and perspectives in the study is immense. Daniel Bell, writing on knowledge and technology, cites the tremendous poten-

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tial of the future. His diagram on the speed trend curve shows that in 200 years we have come from the pony express to the escape velocity (from the earth) of the moon rocket. In the same period the efficiency of the combustion engine has multiplied 10 times. The prospect is for a knowledge explosion during the remaining decades of the century.

Yet, Bell states that the rate of productivity gains through technology has not increased significantly over the long run trend, while A. W. Sametz in his paper on "Production of Goods and Services" asserts that our statistics of the Nation's output do not make sufficient allowance for some burgeoning social costs. There are the costs of urbanization, of industrialization, of traffic congestion, and of the varied forms of pollution—air, rivers, lakes, and oceans. It has been estimated that it will require hundreds of billions of dollars to clean up our environment, and these billions will have to be charged as a cost against our output of goods and services.

Sametz states that Federal "Government services to society at large (including defense or war expenditures on men and equipment)" amounted to three-quarters of Government spending in 1966, leaving only one-quarter available for collective consumption. This sharply restricts the Government spending available for welfare. From this point of view, military production whould be treated as a deduction from GNP. For the past 4 years millions of workers have been engaged in producing weapons and equipment which are being used up in Viet Nam. But these workers have earned billions of dollars in wages and salaries which have been spent on consumer goods produced by the rest of the economy. The Consumer Price Index is going up because there is too much consumer money seeking too few consumer goods.

This discussion of government brings up the subject of politics. Joyce M. and William C. Mitchell discuss the "Changing Politics of American Life." The Mitchells also provide us with a diagram on the growth of government activity. In 1789, local government dominated, with State government next, and the Federal the least. By 1900 the Federal had surpassed the State, and by 1935 it surpassed the local. At the present time the Federal completely dominates both State and local, and its rate of expansion is climbing faster than ever.

Furthermore, the outlook is for more and more government. In achieving our remarkable economic progress we have relied primarily on the initiative and productivity of private enterprise. Government has confined its activities largely to regulation and guidance. But the solution of social problems will require a greater degree of government participation and control. The continuing concentration of population in giant metropolitan areas inevitably generates more government activity. Cleaning up the environment will require more taxes, plus the imposition of government standards on industry. The previous balance between private enterprise and government will shift—there will be more government, not less.

Milton Moss, in the chapter on Consumption, addresses himself to the question as to whether our economic growth can ever bring about a significant reduction in the number of poor people. He refers to the attempts by L. E. Galloway to measure that effect—"he projected a decline in the incidence of poverty from around one-fifth of all families in the mid-1960's to 4 percent by 1980." Moss points out that some of the factors producing poverty may not be eradicated by economic growth. One important factor is the rise in the standard of living. In 1939, a radio and a telephone in the home were luxuries, while a TV was unknown. In 1970 the welfare family demands a radio, a TV, and a telephone—everyone else has them.

Moss urges the need for more information on family finances, such as the Bureau of Labor Statistics Survey of Consumer Expenditures, the Federal Reserve Board Surveys of Financial Characteristics of Consumers, and the Surveys of Consumer Finances of the Survey Research Center of the University of Michigan.

Ida Merriam, in the concluding chapter of *Indicators of Social Change*, brings us back to the underlying fundamental problem—the general welfare. The central measurement here is the distribution of income. Poverty is defined as income below a certain standard (adjusted to the size of the household unit). The bulk of family income comes from employment, even among the moderately poor; but over the years the growth of public welfare expenditures has been a vital factor in lifting families out of poverty. Expenditures which have a broad social welfare purpose "now amount

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to more than $100 billion a year or more than 13 percent of the GNP." Merriam concludes that "an organized system of income maintenance for the nonearning segment of the population is an economic necessity in modern society."

Indicators of progress

So—where do we go from here? One central theme which runs throughout the volume is the need for data of many kinds in order to define the problems and to measure our success (or failure) in dealing with them. The need has been well stated by Mancur Olson: "For a social report we need information about the condition of our society; about how much children have learned, not about the time and money used for schooling; about health, not about the number of licensed doctors; about crime, not about the number of policemen; about pollution, not about the agencies that deal with it." [4]

The National Science Foundation Special Commission poses the question "What practical steps can be taken now to provide better information about the state of the Nation?" It makes three recommendations: (1) Increasing the range of social indicators; (2) providing data linkages; and (3) protecting privacy. We should "develop new, more frequent, and better social statistics to record the important aspects of American life as yet relatively unstudied."

In my judgment, the major responsibility for the expansion of research and statistics lies with the Federal Government, although State and local governments, universities, and private foundations can be expected to play some part. The Federal Government must furnish the leadership and provide for coordination and synthesis. During recent years many Federal agencies have made grants to support State and local studies of specific problems. The value of such studies has been greatly limited by the failure to link them up with national series and samples so as to multiply their impact on the problems. Nevertheless, there exists a wealth of information in local research studies which has not been tapped for national purposes. The public has come to understand and support research and development in the military and in private industry. There is an urgent need to develop "R and D" in social welfare.

Congress has shown some interest in this aspect of the situation. In 1968, the Government Operations Committee held hearings on the Mondale bill to establish a Council of Social Advisers with responsibility for coordinating the activities of government agencies as well as for advising the Congress on policy issues. The social scientists who testified in the hearings generally agreed on the need for action, but they differed widely as to the methods. Some favored enlarging the Council of Economic Advisers and assigning both economic and social responsibilities there for the sake of unity of policy. Others felt that a separate council with adequate representation of professional and political interests was preferable. Still others thought that a Social Report should be on a par with the Manpower Report, for which the Department of Labor has been assigned primary responsibility.

The National Science Foundation Special Commission notes that the President's Science Advisory Committee has been primarily concerned with physics and the natural sciences, with some broadening to include social scientists in recent years. The Federal Council on Science and Technology, composed of scientific officers of Federal agencies, has had few social science members. However, the Special Commission recommends against a Council of Social Advisers in the White House comparable to the Council of Economic Advisers.

"Although we strongly agree that social science data should be fully and effectively transmitted to the administration. . . . we have become convinced that this goal can be achieved more efficiently . . . by the inclusion of appropriate social scientists in such key advisory groups as the President's Science Advisory Committee and the Office of Science and Technology." In the meantime, the Commission urges the Council of Economic Advisers to include in its professional staff and consultants (1) social scientists outside economics and (2) natural scientists and engineers.

It is quite possible that the intensified public concern about the environment will be the catalyst which will unite the natural and the social scientists. The U.S. National Commission on UNESCO (Department of State) held a national conference on the environment in San Francisco in November 1969, which was a product of the Commission's natural science and social science committees. A similar world conference on the environment is to

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be held in Stockholm in 1972 under the auspices of UNESCO. The Nixon Administration's announced concern with environmental problems should stimulate the moves toward cooperation among all scientists, both within the government and outside.

In any case, the Federal, State, and local agencies concerned with social welfare problems and policies will soon have to take steps to improve their social reporting. Whether or not the administration's Family Assistance Plan is enacted into law at this session of Congress, there will be increasing demands from Congress and the public for more information to guide welfare policies. This pressure will eventually produce a social report by some agency of government. □

———*FOOTNOTES*———

[1] Eleanor B. Sheldon and Wilbert E. Moore, *Indicators of Social Change* (New York, Russell Sage Foundation, 1968).

[2] U.S. Department of Health, Education, and Welfare, *Toward a Social Report* (Washington, 1969).

[3] *Knowledge into Action: Improving the Nation's Use of the Social Sciences*, Report of the Special Commission on the Social Sciences of the National Science Board (Washington, National Science Foundation, 1969).

[4] Mancur Olson, "The Plan and Purpose of a Social Report," *The Public Interest*, spring 1969.

Requisites for a social report

Directly or indirectly, a social report should indicate the kinds of governmental and private actions that would ameliorate a condition, achieve a particular goal, or secure a desired future. Given our present knowledge of society and of the impact of public policies, this function has been minimized. A social report would indicate the general direction of public policy, rather than provide the details of remedial action. For example, a discussion of the relationship between increased police activities and the rates of violent crimes may suggest that it is impossible for the police to suppress such acts and that crime rates are more responsive to changes in family structure, employment, and income. Such a suggestion would have clear, but nevertheless quite general, policy implications.

It has been eminently clear that our present base of social information and analysis severely limits the fulfillment of the above functions. Many have argued that the process of developing a system of social accounts and regular social reporting by the President is required to overcome these limitations. Through this process, some degree of central control (and perhaps more congressional support) can be achieved in our Federal statistical establishment. It has also been suggested that such a process could provide criteria for the allocation of Federal social science support and spell out some key questions for academic researchers. Some have argued that this would be about the only function of social reporting in the short run. Others, more optimistic, believe that the other four functions can be achieved, in part, in a few years.

—MICHAEL SPRINGER,
The Annals of the American Academy of Political and Social Science, March 1970.

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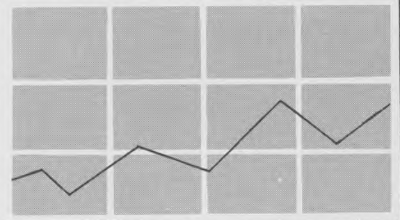
The Anatomy of Price Change



THE FIRST QUARTER, 1970

THE IMPLICIT PRICE DEFLATOR for private Gross National Product continued its sharp increase in the first quarter of 1970, but the rate of increase remained the same as the 1969 high of 5.2 percent in the second quarter. (See table 1.)

Restrictive fiscal and monetary policies during the past year have led to a gradual slowdown in business activity and to a leveling in the rate of increase in the Implicit Price Deflator. In the first quarter of 1970, real output declined perceptibly for the first time since late 1960. Employment rose slightly after leveling out in the fourth quarter, but the average workweek continued to decline. Since the decrease in man-hours was less than the decline in private output, there was little change in output per man-hour. The rise in unit labor costs reflected the sizable increase in compensation per man-hour.

Constrained by the slowdown in business activity, prices did not increase as fast as unit labor costs, with the result that the labor compensation share of private GNP continued to rise as it usually does when output is slowing or begins to decline. Although the slowdown in business activity has resulted in smaller price rises in selected areas, strong upward pressures remained in others. Among major components of the Implicit Price Deflator, the rate of advance since mid-1969 has slowed significantly for construction and moderately for government purchases (excluding compensation for government employees), but speeded up for producers' durable equipment. The deflator for personal consumption expenditures, much of which is derived from the Consumer Price Index, continued to advance at a rapid rate.

Upward movement of the Consumer Price Index (seasonally adjusted) accelerated in the first quarter of 1970 to an annual rate of 6.9 percent. Table 2 shows the rate of change in prices of consumer items from one calendar quarter to the next, as well as the rate of change in the monthly series over recent 3-month spans. Analysis of changes over 3-month spans provides information about the pattern of changes during a quarter. For example, the percent changes for 3-month periods ending in January, February, and March show that the rate of advance of the CPI was somewhat slower toward the end of the first quarter than at the beginning. In addition, the percent changes over such spans are useful in appraising developments in a quarter before it ends. Thus, percent changes for spans ending in April and May give an early indication of developments in the second quarter.

The rise in the CPI accelerated in the first quarter chiefly because of price increases for food and services. Price changes for these two components can be less sensitive and slower to reflect changes in the economic environment than prices of nonfood commodities. Food prices, which are affected significantly by crop supply, livestock production and marketings, as well as government price support programs, advanced substantially from the second quarter of 1969 through the first quarter of this year. However, the upward trend in wholesale food prices moderated by the end of the first quarter as farm prices declined (seasonally adjusted percent changes over 3-month span) for poultry, eggs, and most fresh fruits and vegetables, and rose more slowly for hogs. Since retail food prices generally follow the trend at the wholesale level, there may be some easing of these prices by midyear.

Prepared by Toshiko Nakayama of the Division of Price and Index Number Research, Bureau of Labor Statistics.

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Table 1. The anatomy of price change, 1969 and 1970

[Annual rates, compounded]

Item	Percent change from previous quarter				
	1969				1970
	I	II	III	IV	I
PRODUCT DEFLATORS					
Private GNP deflator	4.8	5.2	4.6	4.5	5.2
Personal consumption expenditures	3.4	5.0	4.6	4.9	5.2
Private construction	10.7	7.0	7.2	1.7	3.7
Residential	9.1	5.4	5.1	.9	3.5
Nonresidential	12.4	7.6	9.6	3.2	4.0
Producers' durable equipment	1.8	1.4	3.6	4.2	6.3
Government purchases of goods and services [1]	5.6	7.4	4.6	5.2	5.1
UNIT COSTS (ALL PERSONS)					
Private GNP deflator	4.8	5.2	4.6	4.5	5.2
Unit labor costs	7.6	6.8	6.5	6.6	8.4
Compensation per man-hour	6.4	5.4	7.4	8.3	7.7
Output per man-hour	−1.2	−1.3	.8	1.6	−.6
Unit nonlabor costs	.2	2.5	1.4	1.1	−.5

[1] Excludes services of government employees.

The large advance in the CPI services component reflects a combination of factors. The rise in mortgage interest rates—at an annual rate of 14 percent in the first quarter of 1970—was in large part the result of policies to reduce inflationary pressures. In addition, local transit fares, notably in New York City, auto repairs, and hospital costs increased steeply, while charges for most other services continued to advance rapidly. Service prices generally react slowly or not at all to changes in economic conditions because many, such as transit fares and insurance rates, are established under public authority. Other services, such as home and auto repairs and hospital services, require large labor inputs and are less subject to mechanization. Productivity improvements, therefore, are hard to attain and increases in wages show up more directly in prices.

For commodities other than food, price rises for both nondurables and durable goods slowed in the first quarter of 1970. Increases in apparel prices, which were sizable in the second half of 1969—in the third quarter at wholesale and in the fourth quarter at retail—slowed appreciably in the first quarter of this year, indicating consumer resistance to high prices and probably some uncertainty over style changes in women's clothes. Nevertheless, upward pressures on apparel prices remain strong, partly in view of major wage negotiations taking place this spring and in early summer. Gasoline prices declined steadily from mid-1969 through the first quarter

Table 2. Percent change in prices for consumer goods and services, 1969 and 1970

[Seasonally adjusted, annual rates, compounded]

Item	December 1969			Quarters 1969				1970	3-month span ending—				
									1970				
	CPI	WPI		1	2	3	4	1	January	February	March	April	May[P]
Personal Consumption Expenditures–Deflator				3.4	5.0	4.6	4.9	5.2	(1)	(1)	(1)	(1)	(1)
Consumer Price Index–All items				5.6	6.5	5.2	6.0	6.9	7.6	7.2	6.3	6.0	(1)
Consumer goods	100.0		CPI	4.4	5.8	4.6	5.5	5.0	6.0	5.6	3.3	4.5	(1)
		100.0	WPI	3.5	5.3	3.2	6.1	5.0	7.5	3.5	3.5	0	−0.7
Nondurables	73.4		CPI	4.1	6.0	5.2	6.2	5.5	7.1	6.4	3.5	4.4	(1)
		76.7	WPI	4.4	6.8	4.2	5.9	5.9	9.9	3.4	3.9	−1.4	(1)
Food	35.6		CPI	3.9	7.1	6.5	7.5	9.1	12.4	9.7	5.3	4.9	(1)
		39.5	WPI	6.8	9.2	4.0	10.0	8.8	16.7	4.5	5.6	−3.1	−6.2
Nondurables except food	37.8		CPI	4.1	5.2	4.3	4.4	2.9	2.7	3.4	2.5	4.6	(1)
		37.2	WPI	2.7	3.1	3.5	4.1	2.7	2.8	3.2	2.1	2.1	3.9
Apparel	14.6		CPI	5.0	5.4	4.4	6.1	1.9	2.9	2.0	1.3	2.2	(1)
		10.0	WPI	3.3	2.0	7.3	5.1	2.8	2.4	2.8	3.1	3.1	3.4
Gasoline	4.6		CPI	6.4	7.4	−1.0	−.4	−3.2	−3.4	.8	−5.4	7.0	(1)
		3.8	WPI	2.2	16.1	−3.3	−1.1	−7.8	−9.0	−4.2	−10.4	0	7.1
Durables	26.6		CPI	5.3	5.2	2.0	4.4	3.0	3.0	3.2	3.0	3.1	(1)
		23.0	WPI	1.0	1.8	1.8	3.4	2.3	1.9	2.3	2.6	2.3	2.3
New cars	3.6		CPI	1.6	.8	1.2	2.4	4.1	4.8	4.8	2.5	1.2	(1)
		10.3	WPI	−.6	1.9	−.4	5.7	1.1	1.2	.8	1.2	1.6	2.7
Furniture	2.2		CPI	5.3	8.4	4.4	4.6	3.0	2.0	2.8	4.2	5.0	(1)
		2.7	WPI	6.5	3.4	4.8	.9	3.8	1.6	4.5	5.2	4.7	2.3
Appliances, including radio and TV	2.5		CPI	.2	1.0	1.6	1.4	1.8	1.4	1.8	1.9	2.3	(1)
		3.5	WPI	−3.2	0	.7	.2	2.2	2.8	1.8	1.9	0	0
Services	100.0	(1)	CPI	7.2	7.6	6.8	6.5	10.1	8.4	10.0	11.2	10.0	(1)
Household, except rent	40.9	(1)	CPI	8.4	11.1	8.5	9.5	10.5	9.0	10.7	15.1	15.4	(1)
Transportation	14.4	(1)	CPI	11.0	6.9	5.2	9.2	18.9	19.4	21.9	15.6	7.8	(1)
Medical care	14.6	(1)	CPI	9.6	9.6	7.5	2.3	7.3	6.6	7.3	8.3	9.7	(1)

[1] Not available.
P = preliminary.

NOTE: Relative importances are for consumer goods portions of CPI and WPI. For all items in the CPI, consumer goods represent 63.8 percent and services represent 36.2 percent. CPI durables also includes home purchase and used cars which are not included in WPI. For WPI, consumer goods represent 33.9 percent of all commodities.

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of this year; but increases in late March for tank-wagon prices could affect wholesale refinery and retail prices in the second quarter.

The slower rise for consumer durables at retail was due chiefly to price changes for used cars and furniture. Used car prices declined in the first quarter although new car prices showed unusual strength—particularly in January and February—in the face of sharply lower sales. The rise in furniture prices, which decelerated after mid-1969, eased further. However, a more rapid advance in the second quarter is indicated by wholesale price rises in the first quarter although these increases were smaller than in the first quarter of last year when sales were at a peak. In contrast, appliance prices at retail and wholesale rose at a faster pace than in 1969, due in part to increased prices for steel and copper. □

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.

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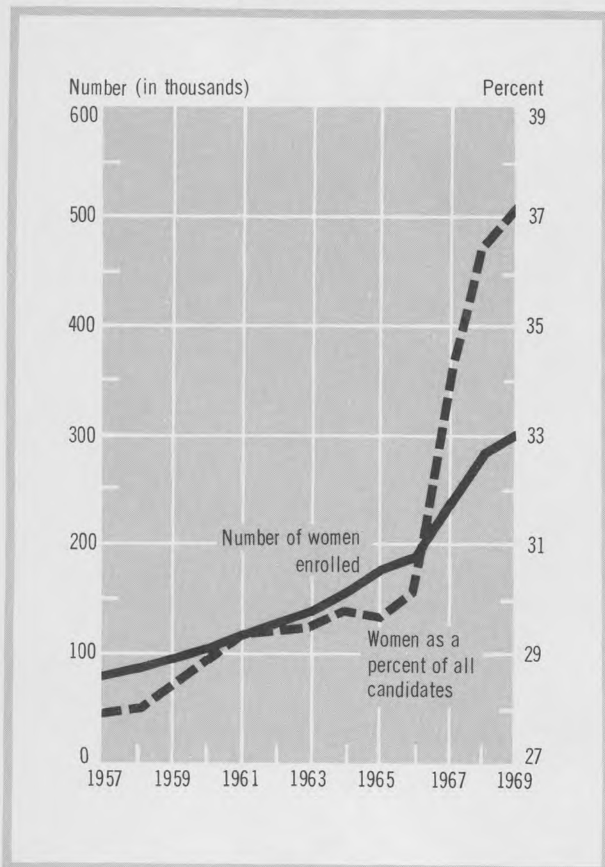
Research Summaries

INCREASE IN PROPORTION OF WOMEN AMONG THOSE ENROLLED IN COLLEGE

BETWEEN 1964 and 1969, the number of women working toward college degrees increased from 1.9 million to 2.9 million, according to data from the U.S. Office of Education. The rate of increase was 51 percent, more than one-third faster than the rate of growth among men. The proportion of women enrolled for advance degrees also rose sharply, as shown in chart 1.

Chart 1. Women enrolled in graduate degree programs in 4-year institutions, 1957–69



Source: U.S. Office of Education.

In 1968, more than 4 of every 5 college graduates in the labor force were employed in professional and managerial occupations. This proportion increased slightly during the 1964–68 period and was slightly higher than the proportion for men during both years. In 1964, nearly 1.9 million women college graduates were employed in professional and managerial cocupations. By 1968, this number had risen to nearly 2.5 million, an increase of about 32 percent. This compares with a 17-percent increase in the number of male college graduates employed in these occupations during the same period. □

WOMEN AS ENGINEERS AND SCIENTISTS

WHY DO so few women participate in the U.S. labor force as scientists and engineers? In 1960, for example, women constituted only 4.2 percent of physicists, 8.6 percent of chemists, 26.4 percent of mathematicians, 26.7 percent of biological scientists, and less than 1 percent of engineers. Notwithstanding the economy's increased demand for educated workers in these fields, the proportion of women continues low.

A study of women graduates in engineering and science of a large Midwestern university attempts an answer to this question by comparing career and noncareer men and women trained in these fields. Comparisons cover such characteristics as socioeconomic background, educational experience, marital status, work settings, career rewards, and attitudes toward work.

The Female Engineer and Scientist: Factors Associated with the Pursuit of a Professional Career reports that of all women engineering and science

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graduates in the survey, only 38 percent were currently employed. A greater proportion of women than men worked in nonindustrial settings, especially educational institutions; performed in preprofessional or teaching capacities; and worked in scientific rather than engineering fields. These factors account to some extent for the significantly lower income of women than men at the same level of technical and supervisory responsibility.

Another consideration which compounds the problem of women in these careers is their rapid rate of development and thus the obsolescence of training and experience. An extended period of absence from the labor force, such as that required for childbearing, may seriously decrease the likelihood of return to a professional career.

The Female Engineer and Scientist, by Carolyn Cummings Perrucci, is available from the Clearinghouse for Federal Scientific and Technical Information, U.S. Department of Commerce, Springfield, Va. 22151, for $3 (65 cents for microfiche). When ordering, cite document PB 182149. □

WOMEN WORKING FOR THE FEDERAL GOVERNMENT

A PROFILE of the Federal Government's work force reveals that the total number of women employed is increasing, but that heavy concentrations of women are in lower grade levels and clerical positions. A recent Civil Service Commission study shows that women who work as Federal employees are most often found in the occupational groupings of personnel management, general administration, medical, dental, hospital, and public health, and library and archives.

Study of Employment of Women in the Federal Government—1968 provides statistics for evaluating the status of women as a part of the total full-time white-collar Federal work force for the years 1966 and 1968. The study includes breakdowns of data for comparison by geographic area, agency, grade, and occupational group. The 237-page pamphlet, SM 62–04, is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at $2 a copy. □

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PENSIONS FOR DEFENSE WORKERS

DEFENSE EMPLOYMENT is highly unstable, and the question is, how to safeguard a defense worker's interests when he loses his job?

The Institute of Labor and Industrial Relations, University of Illinois, has made a study of the problem for the U.S. Arms Control and Disarmament Agency. Professors Hugh Folk and Paul Hartman, who directed the project and wrote the report, reached the conclusion that defense employees, most of them "younger than average and relatively few [with] long tenure," should be at least partially compensated for losses sustained as a result of displacement due to unexpected changes in defense expenditures. The authors spell out these additional conclusions:

The principle of compensation for the loss of a defense job should exist alongside the current policy of providing "adjustment benefits for veterans, displaced Department of Defense civilian employees, and aid for areas affected by military base closing." Besides severance pay and—possibly—supplemental unemployment benefit plans, the compensation should derive primarily from "better [pension] vesting provisions for displaced defense workers;" and there must be certainty "that government funds paid to provide fringe benefits to defense workers are used to that end." As for the financing, "the losses that grow out of the working of the defense contracting process could be budgeted as part of normal defense costs."

In the past, the losses suffered by defense workers as a result of displacement were not too oppressive. (Such losses are expressed as the difference between what a worker would have earned had he continued to work and the unemployment benefits subsequently received plus the severance pay.) Those caused by the 1962–64 cutbacks amounted to $700 or less for half the workers affected who were under 25 and $1,250 for those 55 and over. About 8 percent of workers 45 and over lost $3,000 or more. These damages were "relatively small" and the displaced workers' unemployment "relatively short" compared with those produced by mass layoffs in civilian industry, largely because unemployment during that period was declining while defense requirements remained high. But it is "questionable"

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whether the losses would remain small in a case of "an arms cutback of substantial magnitude."

More serious losses to displaced defense workers arise in the area of pensions. For "vesting requirements of defense firms, while relatively generous, mean that relatively few defense workers have vested pensions because of [their] generally short tenure. . . ." Early retirement might provide a solution, but the benefits it can yield are too meager for the needs of the retired workers. Federal provisions for an early retirement of defense workers are not wholly advantageous.

For various reasons, general legislation for the protection of pension rights would not significantly improve the existing pension funds' capacity to facilitate the adjustment of displaced defense workers. "Intervention on behalf [of such workers] in mass cutbacks appears to be possible through [appropriate] legislation," the study concluded. "[T]he private pension and benefit system is ill-suited to provide significant adjustment benefits." These must be sought through the improvement of Federal-State unemployment insurance system. Such a course, however, might necessitate additional Federal taxation.

Copies of the report, *Pensions and Severance Pay for Displaced Defense Workers* (prepared for the U.S. Arms Control and Disarmament Agency by the Institute of Labor and Industrial Relations, University of Illinois; ACDA/E–138, Washington, U.S. Government Printing Office, June 1969) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The price is $1.50. □

A REPORT ON THE DECLINE OF UNION BENEFIT PLANS

In recent years, benefit systems administered by national trade unions have decreased in number and importance, according to a new study by the Department of Labor's Labor-Management Services Administration.

Union benefit plans—designed to provide funeral, disability, and pension benefits—began as early as 1880 and became widespread before the establishment of the social security system in this country. They were often the only aid a union member and his family received. Since World War II, however, welfare and pension plans negotiated through collective bargaining and financed by employer contributions have provided benefits at a far higher level than national union benefit plans.

The Labor Department study, *National Union Benefit Plans, 1947–67*, traces the development of national benefit systems in the United States and explores in detail the changes in union benefit plans over the 20-year period. The study points out that organizational and financial problems have plagued union benefit plans as a result of mergers and inadequate financial support by members; some benefit systems have been forced to dissolve. In 1967, however, 37 national unions maintained 55 welfare and pension benefit plans financed for and by members, but almost 4 out of 5 of these plans provided death benefits only.

National Union Benefit Plans, 1947–67 is available on request from the Labor Department's Office of Labor-Management Policy Development, Division of Research and Analysis. □

TREND IN COLLEGE FACULTY SALARIES

Salaries of college and university faculty increased almost 15 percent over the past 2 years, in 4-year institutions granting the bachelor's or higher degree, according to the National Education Association. The increase was highest among public colleges and universities. (See table 1.)

In these schools, faculty salaries are highest in the Far West and lowest in the Southeast:

Region	Median salary	Percent increase over 2 years
New England	$12,029	14.3
Mid-East	12,147	16.6
Southeast	11,133	16.6
Great Lakes	11,742	13.2
Plains	11,227	12.9
Southwest	11,712	12.9
Rocky Mountain	11,380	10.7
Far West	12,366	14.2

This preliminary information on the academic-year salaries of 221,452 full-time faculty in 1,191 4-year institutions was released by the NEA Research Division, 1202—16th Street, NW., Washington, D.C. 20036, prior to publication of its ninth biennial study of salaries in higher education.

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Table 1. Salaries paid to faculty in 4-year institutions, by type of institution, 1969–70

Category	All institutions		Public		Nonpublic	
	Median	Percent increase[1]	Median	Percent increase[1]	Median	Percent increase[1]
All faculty	$11,745	14.8	$12,078	15.4	$10,908	12.4
Professors	16,799	14.2	17,082	15.0	15,978	11.3
Associate professors	12,985	14.0	13,267	14.3	12,131	11.3
Assistant professors	10,698	12.9	10,948	13.0	10,040	11.1
Instructors	8,357	12.1	8,475	12.1	8,120	11.4

[1] Over the median 2 years earlier.

Source: National Education Association Research Division.

Similiar information about salaries of faculty in 2-year institutions and of administrators in both 4-year and 2-year institutions will be released later this year. □

UPGRADING PRACTICES IN AMERICAN INDUSTRY

INDUSTRY has remained cool to Federal efforts to subsidize upgrading through Labor Department manpower training contracts and workers either "are not very interested in moving up or they have not clearly articulated the idea." These are among the major finding in *Climbing the Job Ladder*, a study of 11 major industries made by the consulting firm of E. F. Shelley and Co.

The report, prepared for the American Foundation on Automation and Employment, points to certain danger signs that indicate more emphasis on upgrading is necessary. For example, 34 percent of the nonsupervisory jobs in the industries studied fell into the "dead-end" category. The report also cites evidence that as job dissatisfaction by workers at the lower level of the job ladder increases, the stability of the work force will increase. The study proposes that the government attempt to solve these problems through national manpower policy and suggests that the labor movement will find upgrading an appealing objective to pursue. When unions have become interested in upgrading programs as a bargaining issue, as in the steel and hotel industries, "there has been real movement to institute such programs," the report states.

The 273-page analysis of upgrading contained in *Climbing the Job Ladder, A Study of Employee Advancement in Eleven Industries*, by William J Grinker, Donald D. Cooke, and Arthur W. Kirsch, is available from E. F. Shelley and Co., Inc., 415 Madison Avenue, New York, N.Y. 10017. ($6.50.) □

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Foreign Labor Briefs

Latin America

Woman's status as a member of society in Latin American countries has been of special concern during the past several decades to two international organizations, the Inter-American Commission of Women, which is a branch of the Organization of American States, and the Overseas Education Fund of the League of Women Voters. The considerable advance of women's rights in that part of the world must be attributed to the activities of these two groups.

The Inter-American Commission of Women has been active since 1928, persuading governments to create women's bureaus and studying labor codes and legislative proposals in an effort to prevent discriminatory laws. It has sought improvement of working conditions for women and attempted, through educational means, to bring about a favorable change in men's attitudes toward involvement of Latin American women in civic and economic development activities.

The Overseas Education Fund, formed in 1947, works through women's civic organizations, community action groups, and professional groups in the individual countries to bring about awareness of and interest in economic and political matters at local, regional, and national levels. Outstanding Latin American women leaders are trained in the United States; in their own countries, women are brought together in national and regional workshops, and local women's groups receive counsel and some financial assistance for civic development from field representatives of the Fund.

The workshops are held by local women's groups, with international participation, to plan programs for individual countries and to present papers on local problems and their solution. Some of them are designed to teach local leaders how to handle the matters of organization, form local committees, and prepare programs of meetings so as to assure full discussion of issues by participants with varied backgrounds. A very important result of the workshops is heightened interest of farm women, small town women, and those with lesser education among the urban women, and their desire to participate, in the solution of social and economic problems that arise around them.

Women groups in the individual countries usually organize the workshops. An example is the Federation of Women's Organizations in Bolivia, which is working hard to encourage women of that country toward greater participation in civic and economic affairs. It now has 13 local chapters. Some of them hold separate workshops for women of the Quechua Indian tribe in the Cochabamba valley; these represent the first involvement of rural women in civic activities, and thus a unique first in the Bolivian history.

(Activities of the two international organizations are described in greater detail in *Labor Developments Abroad*, June 1970, published by the Division of Foreign Labor Conditions, Bureau of Labor Statistics. Copies are for sale at the Bureau's regional offices and the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Price 25 cents.)

Japan

The growth of Japan's labor force slowed sharply in 1969. According to the annual survey prepared by the Statistics Bureau of the Prime Minister's Office, the labor force (persons aged 15 years or more, including the unemployed) increased by 0.7 percent over 1968 to a total 50,980,000. The rate of increase was the lowest in the past 10 years: it was 2.2 percent in 1966, 1.9 percent in 1967, and 1.6 percent in 1968. The labor force in 1969 was 65.5 percent of the total population 15 years and over, a little below the average of the past 5 years.

Prepared in the Division of Foreign Labor Conditions, Bureau of Labor Statistics, on the basis of material available in early April.

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The sharp drop in the rate of increase in the labor force is attributed mainly to the decrease in birth rate after the so-called "baby boom," which occurred immediately after World War II. This drop in birthrate and the tendency of young people to complete high school and go on to higher education has resulted in a sharp decline in new entrants into the labor force. There was a decrease of 14.6 percent over the previous year among young workers aged 15 to 19 years, while workers in the middle-aged and elderly group (40–64 years) increased by 2.9 percent.

The persons fully employed in 1969 numbered 50,400,000, up only 0.8 percent compared with 1.7 percent the previous year. The working population in primary industries (including agriculture and forestry), which has been declining steadily in recent years, decreased by 3.7 percent to 8,990,000; in nonagricultural industries it increased by 1.8 percent to 41,410,000, registering the lowest rate of increase in 10 years. Of the total labor force in 1969, the primary industries accounted for 18.8 percent, secondary industries (manufacturing and construction) for 34.5 percent, and tertiary (service) industries, for 46.6 percent. In 1968, these proportions were 19.8, 34.0, and 46.1.

U.S.S.R.

According to reports in the trade union daily *Trud*, workers' collectives in factories and plants throughout the country pledged themselves to work without pay on a "Communist subbotnik" (Communist Saturday), April 11, in commemoration of the 100th anniversary of Lenin's birthday April 22. The "subbotniks," or payless Saturdays, were introduced during the early period of the Communist regime before Lenin's death in 1924. The money earned on April 11 reportedly was to be contributed to the "Fund of the 5-Year Plan."

Czechoslovakia

Because manpower shortages and excessive labor turnover in the important branches of industry and in agriculture are seriously retarding the growth of the Czechoslovak economy, Premier Lubomir Strougal announced new controls might be imposed to prevent job quitting and to direct manpower to the priority tasks determined by the state. The number of additional workers requested by state enterprises appears to exceed the natural increase in the labor force. Requests of state enterprises for 148,000 additional workers in 1970 were cut to 93,000, and the enterprises were told to try to meet their needs for additional workers by rationalizing their methods of production and administration.

Young people appear to be shying away from arduous and rural employment. According to the Czechoslovak press, the Ministry of Labor and Social Affairs fell 13.8 percent short of its 1969 goal in recruiting young apprentices for work in mining and 50.7 percent short in agriculture.

North Viet Nam

The regime apparently is moving to cope with shortages of labor and consumer goods. In two major provinces, the North Vietnamese radio has announced substantial shifts of manpower from "indirect" to "direct" production, or from white-collar to blue-collar tasks. Also announced were reforms in the organization of, and planning for, the handicrafts sector, which accounts for most consumer goods and which, according to the Hanoi radio, has been at a standstill since 1965.

North Viet Nam's labor problems also complicate the already difficult transport situation. The Hanoi radio has complained that (1) the system of work assignments has been "not well defined," (2) too many persons were not directly engaged in production (30 percent is the figure cited for nonproduction workers), (3) absenteeism, (4) corruption, and (5) waste, as well as the lack of adequate worktime, result in low output. In addition, transfers of workers to overcome shortages also has proved "cumbersome."

Burma

The National Housing Board has started a low-cost housing project designed to provide duplex apartment houses for 20,000 families in Rangoon. Each apartment of 20 by 23 feet in area will cost $840 (4,000 kyats). Occupants may pay either the full amount in cash and a monthly payment of $1.89 for maintenance and upkeep of the building, or half the price in cash and a monthly installment of $3.78 for 25 years plus $1.89 for upkeep. Applicants for the new apartments are limited to those earning a maximum of $73.50 a month. Higher income families with a large number of dependents also may be eligible.

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Elsewhere on the labor front, the Government has recently established a committee, composed of its representatives and those from the Central Workers' Council, to deal with student unrest caused in part by substantial unemployment among university graduates. Its goal is to place 5,000 jobless college graduates in public jobs. Successful applicants will be appointed as "probationers" with a salary of K125 ($25.98) per month. After indoctrination in socialist tenets of the regime, and after on-the-job training, the "probationers" will be given an examination for permanent placement.

Honduras

The nation's concern over the ownership and utilization of land was recently accentuated by a special assembly of delegates from national and international organizations, called by the National Agrarian Institute (INA) to Tegucigalpa to discuss agrarian reform. Government, business, and labor were represented.

Director Regoberto Sandoval of the Institute, an autonomous government agency, announced that the agency would begin imposing progressive taxes on idle or ill-used land unless the Congress amends the Agrarian Reform Law of 1962 to substitute a simple increase in taxes on all rural land as the INA has recommended. The 1962 law authorizes such progressive taxation. Mr. Sandoval said that the agrarian institute will clarify land titles and give valid titles to campesinos who live on and work the land. He also gave assurance that the INA would respect legitimate private property while striving for an orderly change.

Despite criticism by the U.S. fruit companies and some Honduran agricultural entrepreneurs, the assembly voted three recommendations. It condemned invasion of private lands by campesinos, at the same time disapproving their forceful eviction if they have cultivated the land a long time. The assembly also endorsed the INA's plan for a cadastral survey, and called for assignment of at least 30 percent of the national budget to projects beneficial to the rural sector, which represents over 70 percent of the country's population.

Among the participants in the assembly were representatives of the National Federation of Agriculturists and Ranchers, the National Confederation of Honduran Workers, and two Honduran campesino organizations—one affiliated with the Inter-American Regional Organization of Labor, the other an affiliate of the Latin American Confederation of Christian Trade Unions. Other groups attending were the National Economic Planning Council, the National Development Bank, the Ministry of Natural Resources, and the National University. Represented by observers were the United Fruit Co., the Standard Fruit Co., the U.S. Agency for International Development, the Roman Catholic Church, and various professional and commercial associations.

Brazil

Combined efforts of 38 labor unions to cope with the acute shortage of housing in the State of São Paulo have resulted in a project designed to provide living quarters for 432 middle-income families of union members. The Villa Samuel Gompers project was officially inaugurated last January.

The action, for which the unions had formed a special organization called Popular Cooperative for Housing in the State of São Paulo, received support from the Brazilian National Housing Bank, the American Institute for Free Labor Development and the U.S. Agency for International Development. The total cost of 8.56 million new cruzeiros was financed by the bank, which provided 32.2 percent of the funding, and the cooperative, which contributed the remainder. (In November 1969, 4,280 new cruzeiros equaled $1.) Villa Samuel Gompers is the only cooperative housing project in Brazil that has a community center controlled by the tenants. □

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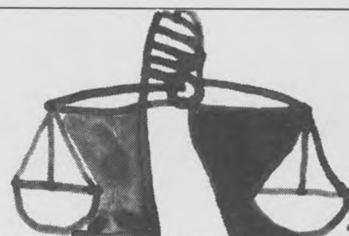
Significant Decisions in Labor Cases



'Whipsawing' the railroads

The latest dispute of shopcraft unions with the Nation's railroads led to injunctive litigation that brought before a Federal district court the issues of—

> 1. Whether the shopcraft unions, having engaged in national handling of the dispute and upon failure of the national handling to produce an agreement, may strike an individual carrier; and if so,
> 2. Whether the carriers under the circumstances may retaliate by way of a nationwide lockout. (The court's language.)

The court answered "no" to the first question but gave no clear reply to the second. (*Machinists* v. *Railway Labor Conference*.[1])

When four shopcraft unions[2] gave identical notices to the 128 Class I railroads in question, proposing wage adjustments for the employees they represented, they also suggested that the carriers form an employers' committee to bargain with a joint representation of the unions in the event the individual lines and their employees' unions fail to reach separate agreements. Individual agreements were not reached, and a joint employer committee was formed. Negotiations then proceeded on the multiemployer, multiunion basis. The arrangement was not new, it was merely a recurrence of a collective bargaining practice that had become a tradition in the railroad industry.

The mass bargaining did not produce any agreement either. Subsequent proposals of a Presidential emergency board were accepted by the railroads but not by the unions: and a memorandum of understanding concluded through the intercession of the Secretary of Labor was not ratified by the members of one union and, therefore, was rejected by all the unions.

Thus, after exhausting the dispute settlement procedure under the Railway Labor Act, the parties found themselves at the point of self-help. The unions decided on a strike against one of the carriers, and the railroads retaliated by calling for a national lockout. Of course, each party attributed unlawfulness to its opponent's type of self-help and sought court injunction to prevent it. The suits were consolidated, and the court disposed of them in one decision.

The court stressed three elements relevant to the situation: First, the fact that "there is no express language in the Railway Labor Act that compels national handling" of bargaining and disputes; second, the judicial opinion that, under certain circumstances, national handling is "obligatory"; and third, the fact that national handling in the railroad industry is traditional.

LANGUAGE. The act's provisions on bargaining and dispute settlement are not quite precise. The law (section 2 First) merely lays "the duty [upon] all carriers [and their] employees . . . to maintain agreements . . . and to settle all disputes . . . in order to avoid any interruption to commerce." The somewhat more explicit section 2 Second requires that "all disputes between a carrier or carriers and its or their employees shall be considered, and if possible decided . . . in conference between representatives designated . . . by the carrier or carriers and by the employees [involved]."

POSSIBLE OBLIGATION. In the face of the law's linguistic ambiguity, the court deferred to the appellate opinion in *Railroad Trainmen* v. *Atlantic Coast Line*[3] that bargaining on multiemployer, national basis may be obligatory under some circumstances. The court there said, "Whether it is obligatory will depend on an issue-by-issue evaluation of the practical appropriateness of mass bargaining on that point and of the historical experience in handling any similar national movements."

Prepared by Eugene Skotzko of the Office of Publications, Bureau of Labor Statistics, in cooperation with the Office of the Solicitor of Labor.

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TRADITION. Applying the principles of "practical appropriateness" and "historical experience" of multiemployer, multiunion bargaining to the present situation, the court observed:

> The practicality of handling wage disputes between the shopcraft unions and the carriers on a national level is readily apparent. Obviously if wage adjustments were to be handled on an individual carrier basis, each carrier would be deterred from settling because of a possibility that a competing carrier might obtain better terms; and, by the same token, union members would be dissatisfied if employees on other railroads doing the same job received higher salaries. The unions have themselves recognized the appropriateness of multiemployer bargaining as indicated by their . . . notices which gave rise to the national handling.

Regarding the experience of the past, the court said:

> In the railroad industry, national handling or multiemployer bargaining with the shopcraft unions has a long history reaching back to World War I. Those unions in past years have agreed that national handling was the best means of achieving meaningful bargaining; and every national movement, whether for wages or rules changes, had been handled and disposed of on a national basis. [Changes in wage agreements shop shopcraft union were made on a national level during the period from 1937 to 1966.] There is thus a history and a pattern of national handling in the industry. And in the present dispute negotiations have been proceeding on a national multiemployer, multiunion basis. . . .

The above analysis led the court to the conclusion that, "[u]nder the circumstances it would appear to this court that both the 'practical appropriateness' of mass bargaining and 'historical experience' in handling the issue in the past make continued national handling obligatory."

Since national handling is obligatory, the court went on, "any action taken to defeat national handling violates the [act]." Did either party take any action to defeat national handling?

Ambiguous though it is, the act's language is clear enough for the court's conclusion that in this case the unions did not live up to their obligation under the law:

> . . . By initiating and negotiating the dispute on an obligatory national basis and then striking the carriers on an individual basis, it seems clear that the unions have violated their duty to 'exert every reasonable effort to make . . . agreements . . . and [to] settle [all] disputes. Having begun on a national level, it is incumbent upon the parties to continue to deal on a national level even after the procedures of the [act] have been exhausted. To act otherwise would take on the character of bad faith bargaining.

Good-faith bargaining in the railroad industry is one that is consistent with past practice; and the past practice was mass bargaining.

In conclusion, the court announced this principle:

> The court interprets section 2 Second as well [as First] to mean that once negotiations have begun on an obligatory national basis the negotiations must continue until the dispute is settled on that basis. To hold otherwise would work an unreasonable burden on the carriers and the entire concept of collective bargaining.

The court observed that whipsaw strikes following multiemployer bargaining have been found by courts to be illegal also under the National Labor Relations Act.

Coming to the matter of the requested injunctions, the court did not feel constrained by the Norris-LaGuardia Act's ban (section 4) on injunctive relief in labor disputes. It cited the U.S. Supreme Court's dictum that "specific provisions of the Railway Labor Act take precedence over the more general provisions of the Norris-LaGuardia Act." [4] In issuing a preliminary injunction against the strike, the court pointed out that section 4 of Norris-LaGuardia "is lifted when a disputant violates some provision of the Railway Labor Act," as did the unions in the present instance by whipsawing a single railroad.

Furthermore, the court cited the "clean hands" doctrine of the Norris-LaGuardia Act, which says that no injunction may be issued against a labor organization upon request of a party who has violated the labor law involved—in this case the Railway Labor Act. And the carriers who had requested the injunction in this case had not violated the act as the unions charged. Their threat of a lockout was not a violation, but "professedly and admittedly a defensive, retaliatory measure which will not materialize once the whipsaw strike is thwarted," the court said refusing to enjoin the lockout.

The Philadelphia Plan

The controversial Philadelphia Plan designed to eliminate racial discrimination in construction employment in a particular area seems to have received a powerful judicial boost. A Federal district court found the plan to be neither unconstitutional nor in violation of any law, but only

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an Executive measure to effectuate public policy and the will of Congress (*Contractors of Eastern Pennsylvania* [5]).

A contractors' association in Pennsylvania sought to prevent the Department of Labor from putting the plan into effect. It challenged the legal basis of the plan and the President's power to issue Executive Order 11246 instituting the plan. The salient point of the challenge was that, while in quest of nondiscrimination, the order in effect compelled the contractors doing business with the Government to commit "reverse discrimination"—that is, to discriminate against white persons in order to hire minority applicants—by imposing upon them a racial quota in hiring, which is prohibited by the Civil Rights Act of 1964 (Title VII).

The contractors further argued that since the plan was designed for application in one area, it violated the constitutional due process and equal protection provisions; and that it was contrary to the public policy and the "expressed or implied" will of Congress, and for this reason the executive branch of the Government lacked power to impose it upon the contractors.

To these charges the court replied:

> The plan does not require the contractors to hire a definite percentage of a minority group. It merely requires that he make every good faith effort to meet his commitment to attain certain goals. If he is unable to meet the goals but has exhibited good faith, then the imposition of sanctions would be improper and subject to judicial review.

And it added that, "Both the Civil Rights Act . . . and Executive Order 11246 have a common purpose to assure to all an equal chance of employment."

Further, Congress has the power to "limit its attention to the geographic areas where immediate action seems necessary," and it must be presumed that the executive branch can also limit its measures to particular areas. Regarding the alleged violations of the equal protection clause of the Constitution, the court cited the U.S. Supreme Court's decision in *Salisbury* v. *Maryland* [6] that the clause "relates to equality between persons rather than between areas" (district court's language).

Nor is the plan arbitrary and capricious as the contractors maintained. It may have directed its force against them, even though they are not responsible for the evil of discrimination, rather than against labor unions; but unless restrained by law, the executive branch has "unrestricted power to fix terms and conditions on those with whom it will deal."

As for the contention that the Executive lacks power to impose the plan on the contractors because it allegedly is against public policy and the will of Congress, the court simply pointed out that "[t]he announced policy is to assure nondiscriminatory employment practices, and the plant complements this standard."

The court stressed that no special delegation of power by Congress was necessary before the controversial Executive Order could be issued. It said: "Thirty years of executive mandates relative to discriminatory practices has stemmed from subsections (a) and (c) of section 205 of the Federal Property and Administrative Services Act of 1949."

Barbers in a Federal union

The National Labor Relations Board recently found the American Federation of Government Employees competent to represent barbers privately employed on military installations, and ordered a representation election among the barbers (*Gino Morena* [7]). Thus the union, which was formed to represent government employees, seems to have extended its jurisdiction into the area of bargaining for nongovernment workers.

When the federation's Local 1085 in California sought to organize and to become the bargaining agent for a unit of barbers employed in privately operated barbershops on military installations, the employer protested that the union was not a bona fide, "competent" labor organization within the meaning of the Labor Management Relations Act.[8] He argued that it is "a specially constituted union" (the Board's language), restricted by its constitution to "all civil employees of the United States Government and the District of Columbia," and the barbers in question were not such employees. Nor was the federation a labor organization in which the barbers would "participate"—a requirement of the law.

While conceding that certain provisions of the union's constitution indicated that its membership should consist of government employees, the NLRB was of the opinion that "the impact of those provisions does not restrict membership exclu-

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sively to such [employees]." The controlling factor in the situation was the union's "willingness to function as a bargaining agent under the act apart from its constitutional provisions. . . ."

Although the barbers did not formally "participate" in the Federal employees' union (though many of them belonged to the local, attended its meetings, and paid dues), the Board accepted the federation's promise that if they selected it as their bargaining representative, they would be "entitled to all of the rights and prerogatives of full membership status." Should it eventually be shown that the union had failed to comply with its "statutory duties relating to representation and membership rights in behalf of the . . . employees," its certification would be revoked. □

FOOTNOTES

[1] *International Association of Machinists* v. *National Railway Labor Conference* (D.C.–D.C., March 2, 1970).

[2] The other unions involved in the dispute were Sheet Metal Workers' International Association, International Brotherhood of Electrical Workers, and International Brotherhood of Boilermakers.

[3] 383 F.2d 225, 229.

[4] *Brotherhood of Railroad Trainmen* v. *Chicago River and Indian R. Co.*, 353 U.S. 30, 42 (1956).

[5] *Contractors Association of Eastern Pennsylvania* v. *Shultz* (D.C.–E. Pa., March 13, 1970).

[6] 346 U.S. 545 (1954).

[7] *Gino Morena* and *American Federation of Government Employees, Local 1085*, 181 NLRB No. 128, March 25, 1970.

[8] "Labor organization" is defined in the LMRA (section 2(5)) as "any organization of any kind, or any agency or employee representation committee or plan, in which employees participate and which exists for the purpose, in whole or in part, of dealing with employers concerning grievances, labor disputes, wages, rates of pay, hours of employment, or conditions of work."

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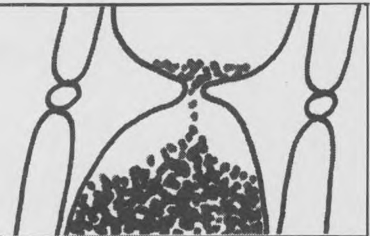
Major Agreements Expiring Next Month



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

Company and location	Industry	Union[1]	Number of workers
Aerodex, Inc. (Miami, Fla.)	Transportation equipment	Teamsters (Ind.)	4,100
Associated General Contractors of America, Inc., Arizona Chapter	Construction	Iron Workers	1,000
Association of Knitted Fabrics Manufacturers, Inc. (New York, N.Y.)	Textiles	Ladies' Garment Workers	2,000
Association of Rain Apparel Contractors, Inc. (New York and New Jersey)	Apparel	Ladies' Garment Workers	4,900
Belle City Malleable Iron Co., and Racine Steel Castings Co. (Racine, Wis.)	Primary metals	Auto Workers (Ind.)	1,200
Bermite Powder Co. (Saugus, Calif.)	Ordnance	Machinists	1,000
Bowaters Southern Paper Corp. (Calhoun, Tenn.)	Paper	Pulp and Sulphite Workers; Papermakers and Paperworkers; and Electrical Workers (IBEW).	1,000
Bunker Hill Co. (Kellogg, Idaho)	Mining	Northwest Metal Workers Union (Ind.)	1,500
California Sportswear and Dress Association, Inc. (Los Angeles, Calif.)	Apparel	Ladies' Garment Workers	2,000
Crown Zellerbach Corp. (Bogalusa, La.)	Paper	Papermakers and Paperworkers	1,200
Diamond Alkali Co. (Painesville, Ohio)	Chemicals	District 50, Allied and Technical (Ind.)	1,550
Fairchild Hiller Corp., Republic Aviation Division (Farmingdale, N.Y.)	Transportation equipment	Machinists	2,100
Federal Cartridge Corp., Twin Cities Army Ammunition Plant (New Brighton, Minn.).	Ordnance	Machinists	3,500
Fisher Governor Co. (Marshalltown, Iowa)	Fabricated Metal products	Auto Workers (Ind.)	1,300
Floor Covering Association of Southern California, Inc., and 3 other Associations (California).	Construction	Painters	2,050
General Contractors (Tennessee)	Construction	Carpenters	1,900
General Telephone Co. of California, Plant and Traffic Departments (California)	Communications	Communications Workers	15,700
Glass Glazing & Mirror Contractors of Los Angeles[2] (California)	Construction	Painters	1,500
Greater St. Louis Automotive Association, Inc. (St. Louis, Mo.)	Retail trade	Machinists	1,400
Hamilton Manufacturing Co. (Two Rivers, Wis.)	Furniture	Carpenters	1,900
Iron League of Philadelphia and Vicinity (Philadelphia, Pa.)	Fabricated metal products	Iron Workers	1,000
Johns-Mansville Products Corp. (Manville and Finderne, N.J.)	Stone, clay, and glass products	Papermakers and Paperworkers	2,800
Laclede Gas Co. (St. Louis, Mo.)	Utilities	Oil, Chemical and Atomic Workers	1,600
League of New York Theatres, Shubert Theatrical Interests (New York)	Amusements	Stage Employees	1,200
Major Shoe Chain Stores[2] covering 6 Cos. (New York, N.Y.)	Retail trade	Retail, Wholesale, and Department Store Union.	1,500
Master Dairy Agreement[2] (St. Louis, Mo.)	Food products	Teamsters (Ind.)	1,500
Milk Tank Haul Agreement[2] Eastern Conference, Zone 2 (Interstate)	Trucking	Teamsters (Ind.)	6,000
Milk Tank Haul Agreement[2] Eastern Conference, Zone 3 (Interstate)	Trucking	Teamsters (Ind.)	2,500
Missouri River Basin Employers[2] (Interstate)	Construction	Boilermakers	5,500
Monsanto Co. (Springfield, Mass.)	Chemicals	Electrical Workers (IUE)	1,500
New Jersey Laundry and Dry Cleaning Institute (Morristown, N.J.)	Services	Laundry and Dry Cleaning Union	2,500
Oregon Draymen and Warehousemen's Association (Interstate)	Trucking	Teamsters (Ind.)	2,000
Oregon Food & Beverage President's Council, covering 6 Associations (Portland, Oreg.).	Restaurants	Hotel and Restaurant Employees	5,000
A. E. Staley Manufacturing Co. (Decatur, Ill.)	Food products	Allied Industrial Workers	1,850
Standard Brands Inc., Clinton Corn Processing Co. Division (Clinton, Iowa)	Food products	Grain Millers	1,000
Thilmany Pulp & Paper Co. (Kaukauna, Wis.)	Paper	Pulp and Sulphite Workers	1,200
TRW Inc. (Harrisburg, Pa.)	Transportation equipment	Jet Aircraft Workers of Pennsylvania (Ind.).	1,500
United Knitwear Manufacturers League, Inc. (New York, N.Y.)	Textiles	Ladies' Garment Workers	11,500
United Parcel Service, Inc., Atlantic Area Agreement (Interstate).	Trucking	Teamsters (Ind.)	1,000
Utah-Idaho Sugar Co. (Utah, Idaho, and Washington)	Food products	Grain Millers	2,000
Wagner Electric Corp., Tung-Sol Division (Weatherly and Hazelton, Pa.)	Electrical products	Electrical Workers (IBEW)	1,000
West Virginia Pulp and Paper Co., H & D Division (Interstate)	Paper	Papermakers and Paperworkers	1,350
Weyerhaeuser Co., Paper Division (Fitchburg, Mass.)	Paper	Papermakers and Paperworkers	1,000
Weyerhaeuser Co. (Plymouth, N.C.)	Paper	Pulp and Sulphite Workers	1,150
Whirlpool Corp. (St. Paul, Minn.)	Machinery	Teamsters (Ind.)	1,300

[1] Union affiliated with AFL-CIO except where noted as Independent (Ind.).

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

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Developments in Industrial Relations

WALTER P. REUTHER, 62, one of the most dynamic and innovative leaders in American labor annals, died in a plane crash on May 9. His death came just 2 weeks after his reelection to a 13th consecutive term as president of the 1.6 million member United Auto Workers union (UAW) and increased the possibility of turbulence in the fall bargaining between the union and the major auto and agricultural implement companies.

President Nixon called Mr. Reuther's death "a deep loss not only for organized labor, but also for the cause of collective bargaining and the entire American process." The loss may have a profound effect on the future direction of the American labor movement, particularly the Alliance for Labor Action (ALA), founded by Mr. Reuther and Teamsters' Acting President Frank E. Fitzsimmons to "revitalize" the movement. (The ALA was formed in July 1968 shortly after the UAW "formally disaffiliated" from the AFL-CIO and held its founding convention in May 1969.)

Walter Reuther left behind him a trailblazing set of collective bargaining innovations. He was one of the first major labor leaders to demand that company increases in profits and productivity be translated into increased wages and to insist that higher wages do not justify price increases. He was concerned with overall economic planning as well as bread-and-butter unionism, voicing equal consideration for productivity, pricing, profits, consumer interests, and wages. He felt that labor unions should be an active force for community betterment in civil rights, minimum wages, and similar areas—rather than conveying the image of a self-centered power bloc.

Collective bargaining firsts often associated with Mr. Reuther include cost-of-living escalator clauses, annual improvement factors (deferred wage increases based on productivity), Supplemental Unemployment Benefits, fully funded pension plans, profit sharing (at American Motors Corp.), and the guaranteed annual wage—won in 1967 and providing SUB payments of 95 percent of take-home pay, when combined with State unemployment benefits.

Although sometimes accused of a political philosophy that matched his hair color, the "fiery redhead" was instrumental in purging the UAW executive board of communist elements when he assumed the UAW presidency and later in expelling CIO affiliates for alleged communist leanings.

Shortly after Mr. Reuther's death, the UAW international officers appointed secretary-treasurer Emil Mazey acting president. The union's 25-member international executive board met on Friday, May 22 to select a permanent successor to Mr. Reuther. Besides Mr. Mazey, strong candidates for the job had included vice-presidents Douglas Fraser, 53, director of the union's Chrysler and skilled trades departments; chief organizer Duane (Pat) Greathouse, 54; and Leonard Woodcock, 59, head of the General Motors department. Mr. Fraser is one of 5 new vice-presidents voted in on the Reuther slate at the UAW's recent convention. (Mr. Reuther was eligible for only one more 2-year term under the UAW constitution—which prohibits a man from running for the presidency after reaching age 65—and backed the plan to boost the number of vice-presidents from 2 to 7. Observers felt this indicated his desire to provide for an orderly transition for his eventual successor.) The board chose Mr. Woodcock.

The upcoming negotiations are expected to be particularly difficult, and Mr. Reuther's absence may make the bargaining even harder. The auto companies have suffered increased costs and declining sales and are expected to take a "tough" bargaining approach. The Auto Workers want to offset the rise in the cost of living, and convention delegates approved a bargaining demand for "substantial" wage hikes. (See p. 78.)

Prepared by Leon Bornstein and other members of the staff of the Division of Trends in Employee Compensation, Bureau of Labor Statistics, and based on information from secondary sources available in April.

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Federal pay increase

On April 15, President Nixon signed into law a 6-percent salary increase for 5.2 million Federal employees. The pay raise resulted from negotiations between the Administration and seven postal unions, ending the historic postal walkout.[1]

By April 2, the parties had settled on a two-stage pay increase, subject to Congressional approval, and agreed to continue working on a proposal for postal reorganization. After technical and procedural delays, Congress passed a bill granting the first-stage salary increase, and the President signed it. The increase, retroactive to December 27, 1969, applied to postal, classified, foreign service, and military personnel and legislative aides. (Wage-board employees were not included, because their scales are set by local comparisons with rates paid for the same skills in the private sector.)

The second-stage increase, which will apply only to postal workers, will be effective when postal reorganization becomes effective. On April 16, the President sent to Congress the reorganization proposal drawn up by the postal officials and union officers. Under the proposal, the employees would receive an 8-percent general increase, and the time required for progression from the minimum to the maximum of each salary grade would be reduced to 8 years, from 21. According to postal officials, this compression would be equivalent to another 2-percent wage increase. Most postal workers are in Postal Field Service Grade 5, which ranged from $6,176 to $8,442 before the 6-percent increase. The unions had sought the adoption of area wage differentials to offset the variations in the cost of living throughout the country; the agreement, however, provided for retention of uniform national pay scales.

Air traffic controllers

The "sick out" by air traffic controllers, represented by the Professional Air Traffic Controllers Organization [2] (PATCO), ended in mid-April, following a series of court orders directing the controllers to return to work. The union was found guilty of contempt for "instigating, triggering, or signaling" an illegal strike against the Government. The contempt citations, issued by judges in several cities, generally asked that the Federal Aviation Administration (FAA) allow PATCO controllers to return without "harassment" and "without imposing any conditions."

Officials of PATCO in encouraging the back-to-work movement, cited requests by various Federal district courts that returning controllers be medically examined to determine the validity of their "illness" claims. (PATCO has been charging that air traffic controllers are suffering from illness due to overwork and job tension.) John H. Shaffer, FAA Administrator, repeated the Government's determination to discharge leaders of the sick out.

Shortly after the controllers' return, PATCO held its third annual convention, April 21–23, in Las Vegas, Nev. John Leyden, a 35-year-old radar instructor in the New York air route travel center, was elected to the presidency of PATCO, succeeding James Hayes. Mr. Leyden said that the attitudes of PATCO "have been tempered," explaining that "a lot of us feel a different course must be pursued for future relief of our problems." An immediate result of this new tempered attitude, according to Mr. Leyden, was the abolition of the post of executive director, held by attorney F. Lee Bailey since PATCO's inception. The new president explained that the elimination of the position removed "the possibility of a personal conflict overriding the conflict of controllers."

Trucking

The Teamsters and Trucking Employers, Inc., negotiated a national master freight agreement [3] on April 2. The accord was endangered when selective strikes in Chicago resulted in some contracts that exceeded the national agreement.[4] The Chicago settlements reportedly stipulated that the additional gains become effective only if the national agreement were revised upward to the same level. The parties to the national contract insisted they would not comply. In the 1967 bargaining, the Chicago locals used similar tactics and gained a better contract, forcing the parties to the national contract to improve their settlement.

The national settlement also proved unsatisfactory to steel haulers. They struck, asserting that Teamster negotiators had not adequately represented their interests. The steel haulers, who own their own rigs, are members of the Fraternal Association of Steel Haulers, but most of them are also members of the Teamsters union, which represents them.

The national settlement provided for total wage increases of $1.10 an hour or 2¼ cents a mile over

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UAW SETS COLLECTIVE BARGAINING GOALS FOR 1970

DELEGATES TO THE 22d Constitutional Convention of the United Auto Workers union (UAW) met in Atlantic City, N.J., April 20–24, to set their union's 1970 bargaining goals at Chrysler, Ford, and General Motors. Contracts covering about 700,000 workers employed by the "Big 3" expire on September 15.

The following items won top priority as bargaining proposals: (1) A substantial wage increase and a year-end cash bonus; (2) revision of the cost-of-living adjustments from an annual to a quarterly basis, with the remainder of the 1967 contract cost-of-living bonus paid in cash; (3) improvements in the pension plan to provide a minimum of $500 a month after 30 years; and (4) optional overtime.

In calling for a substantial wage increase, the UAW leadership rejected pleas for wage restraint to help curb inflation. Some indication of their wage demand was given in a constitutional amendment ratified by the delegates to raise the salary of officers and staff members by 8 percent, including fringe benefits, after completion of the 1970 auto negotiations, and by 7 percent effective August 1971. President Walter P. Reuther warned newsmen that these increases should not be taken as a guide to the UAW demands and commented that "we expect to do a lot better than that for the guy in the shop." A year-end cash bonus, similar to compensation for corporation executives, will also receive priority.

During the 1967 auto negotiations, the UAW agreed to change the cost-of-living formula from quarterly increases to a minimum of 8 cents, based on a yearly review for 1968 and 1969. Current bargaining proposals call for the restoration of unlimited quarterly increases along with an improvement in the ratio of adjustment—one cent for each 0.3 rise in the Consumer Price Index, instead of the current 1 cent for each 0.4 rise.

Under the 1967 contract, the UAW members have received 17 cents in cost-of-living adjustments. On September 15, 1970, the contract expiration date, an additional allowance becomes due, an amount which represents the difference between the 17 cents already received and the adjustment that would have been received under the formula in existence prior to 1967. Whether UAW members will receive the amount, 21–26 cents (depending on the level of the Consumer Price Index by September), in wages, in fringe benefits, or in some combination of the two was left open for discussion in 1970. Representatives of the Auto National Councils have decided that the entire amount ought to be paid in wages. This payment, the UAW maintains, is due under the contract and has nothing to do with bargaining demands.

Delegates voiced strong support for pension revisions. Currently, the pension plans with the auto companies provide for a $400-a-month minimum at age 60 with 30 years of service. The new proposal would eliminate the age requirement and raise the minimum by $100. At the UAW Skilled Trades meeting in March, Mr. Reuther had been reluctant to commit himself to the "30 and out" proposal, preferring to remain flexible at the bargaining table. Membership sentiment, however, swayed Mr. Reuther to make it a top priority item.

Enthusiastically supported by the delegates and made part of the package proposal is what the union calls a "Bill of Rights" for workers. Based on the premise that when a worker contracts to work for a company he does so for 8 hours a day and 40 hours a week, the UAW would give each worker the choice of accepting or rejecting overtime work.

Other bargaining proposals ratified by the delegates include inverse seniority at local option, improvement of supplementary unemployment benefits for low seniority workers, higher insurance benefits (including a dental program), restriction of subcontracting, group auto insurance, and longer vacations with a vacation bonus.

Mr. Reuther emphasized that collective bargaining would play a role in ending pollution in the environment and in auto plants.

In an effort to establish sufficient funds during a work stoppage, the convention adopted a constitutional change granting a local union or intra-corporation council—with executive board authorization—the right to double monthly dues up to 4 months preceding the termination of a contract or following ratification of a new agreement. Each local authorized to double its monthly dues will be required to place half of the payment in trust. The additional dues would be applied against future dues or refunded to each member. This process will insure dues collection if a company refuses to continue dues checkoff after a contract expires.

For the first time since 1949, Mr. Reuther was challenged for the presidency. An opposition group, the United National Caucus, presented a full slate of candidates and a collective bargaining program. Included in the opposition's proposals were a call for the establishment of a 30-hour workweek, a minimum hourly rate of $5 and a 50-percent wage increase in 1970, payment of $1,000 lost under the 1967 cost-of-living gap, 25 years and out retirement, and referendum vote for election of officers. Art Fox, a member of the bargaining committee of Local 600, Dearborn, Mich., was the caucus nominee for the international presidency. At the completion of the roll call of delegates, no United National Caucus candidate received as many as 300 votes. Just 2 weeks after being reelected to his 13th term, Mr. Reuther was killed in a plane crash.

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the 39-month term. In addition, the 450,000 workers[5] will receive cost-of-living escalator increases of up to 8 cents an hour in each of the final 2 years of the contract, compared with a 4-cent maximum for each of the final 2 years of the previous contract. The carriers also agreed to changes in supplementary benefits, including $2-a-week increases in the financing of both pension and health and welfare benefits.

Shopcraft dispute

The 18-month railroad shopcraft dispute ended when President Nixon signed a bill imposing on the four unions the December 1969 settlement[6] that had been ratified by the Machinists, Boilermakers, and Electrical Workers (IBEW) but rejected by the Sheet Metal Workers. Under a unit rule, this rejection was binding on all four unions. The Sheet Metal Workers did not object to the wage provisions but to a work-rule change which permits the crafts to cross skill lines and do some "incidental" work ordinarily done by other crafts. The Sheet Metal Workers said that this threatened their job security.

The President's action came on April 10, only 1 day before a 37-day prohibition of any work stoppage, enacted by Congress, would have expired.[7] Congress had approved that moratorium in March, after the negotiators had reached an impasse and the unions were preparing for a March 5 strike.

The 2-year imposed settlement provided for retroactive general wage increases of 2 percent on January 1, 1969, 3 percent on July 1, 1969, 10 cents on September 1, 1969, 5 percent on January 1, 1970, 4 cents on April 1, 1970, and a 4-cent increase effective August 1, 1970. Journeymen, who make up about 85 percent of the 48,000 workers, received an additional 5 cents retroactive to July 1, 1969, and 7 cents retroactive to February 19, 1970. The dispute could erupt again late this year, when the parties will be free to open bargaining.

National Airlines accord

National Airlines and the Machinists reached agreement in April, ending their 14-month dispute. The dispute began in January 1969, when National locked out the 1,000 workers for staging a wildcat strike to protest a company decision cutting taxiing crews for the Boeing 727 to two machinists, from three. National later fired the strikers and hired replacements.

The Machinists' settlement was expected to lead to a settlement for 3,500 ticket agents and related workers represented by the Air Line Employees Association, an affiliate of the Air Line Pilots Association. This would end the Employees Association walkout that began January 31, 1970, and permit the Machinists to resume work.

Under the settlement, the workers were rehired at the seniority levels they had when they were locked out. At the time of settlement, a Federal court was considering whether the employees should also receive full pay for the period they were locked out.

The parties agreed to a 3-year contract to replace the one that expired December 31, 1968. Wages were increased by 15 percent effective January 1, 1969, 7 percent effective February 1, 1970, 4 percent on August 1, 1970, and 5.68 percent on May 1, 1971. These increases will bring the mechanic's rate to $5.65 an hour. License and line premiums were increased, and improvements were made in the escalator clause and in supplementary benefits.

Meatpacking

In a settlement expected to set a pattern for the meatpacking industry, the Meat Cutters and Swift & Co. reached agreement on a 41-month contract to replace their contract scheduled to expire August 31. Later in April, the union negotiated similar contracts with Armour and Co. and Wilson & Co. This paralleled the 1967 round of bargaining in the industry, when Armour and Co. settled 6 months early and the other major firms negotiated similar terms prior to the industry's contract termination date.

The Swift settlement, which covered 9,000 workers at 56 plants in 28 States, provided for 82 cents in wage increases—32 cents effective immediately and 25 cents in September of both 1971 and 1972. There were some additional wage and benefit changes for workers in the South and Southwest, and mechanical trades received an additional 5- to 10-cent wage increase. The 32-cent increase included an amount granted in anticipation of the cost-of-living adjustment that would have been due in July 1970 under the superseded agreement. The 25-cent deferred increases

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also included amounts granted to offset the anticipated rise in the Consumer Price Index. If the CPI rises faster than anticipated, the workers will receive additional amounts. In September 1971, they will receive an additional cent for each 0.4-point rise in the index above 142.0; and in September 1972 and August 1973 (the last month of the agreement), they will receive an additional cent for each 0.4-point rise in excess of 5.7 during the preceding 12 months. Under the previous contract, the workers received a total of 37 cents in semiannual cost-of-living adjustments.

Benefit changes included 2 weeks of vacation after 2 instead of 3 years of service; a $6-a-month pension rate for each year of service after January 1, 1971, increasing to $6.50 in 1972 (the rate was $5); a $200 increase in the surgical schedule; and other insurance improvements.

The bitter 227-day strike at the Iowa Beef Processors plant at Dakota City, Nebr., ended on April 9, when the Meat Cutters ratified a 3-year contract. The pact provided for an immediate 58-cent-an-hour wage increase and 15-cent increases in the second and third years, bringing the minimum rates to $3.31 for slaughtering operations and $2.70 for processing. The company had initially offered a 30-cent increase, and the union had demanded that all employees be paid the slaughtering scale. The company said that the specialized work performed by processing workers did not warrant the higher scale. This was the main issue in the dispute, which was marred by acts of violence. Other contract terms included adoption of a cost-of-living escalator clause, a $3-a-month increase in the firm's financing of sick and accident benefits, and a 117-percent increase in hospital insurance benefits. All of the 1,100 strikers returned to their jobs, subject to an arbiter's decision on whether the company acted correctly in firing some of them for alleged misconduct. The pact also provided for termination of most of the workers hired to maintain production during the walkout.

Earnings index

The Bureau's index of manufacturing production workers average hourly earnings (excluding overtime premium pay and the effects of interindustry employment shifts) rose 0.9 in January, to 152.9. Data for prior periods are shown below.

1969	*Index (1957–59 =100)*	*1970*	*Index (1957–59 =100)*
January	144.4	January	152.9
February	144.9		
March	145.2	Annual averages:	
April	146.0	1968	139.5
May	146.6	1969	147.7
June	146.9		
July	147.8		
August	148.4		
September	149.5		
October	150.2		
November	151.0		
December	152.0		

Monthly data from 1947–68 and data for selected periods from 1939 to 1947 are contained in *Summary of Manufacturing Production Workers Earnings Series*, 1939–68 (BLS Bulletin 1616, 1969).

Grape boycott

After 4½ years of a nationwide boycott against California table grapes, the United Farm Workers Organizing Committee (AFL–CIO) negotiated 3-year contracts with five growers [8] in the Coachella Valley. Previously, the committee had only been successful in negotiating pacts with growers of wine grapes. Although the contracts covered 1,000 of the union's 22,000 members, Cesar Chavez, its leader, said that he hoped the breakthrough would lead to settlements with six other growers in the Coachella Valley and with growers in the San Joaquin Valley—the Nations' primary sources of table grapes.

The contracts provided for an immediate 10-percent, minimum 6-cent-an-hour wage increase, a picking bonus of 25 cents a box, and $1.75 minimum hourly rate. In addition, the agreements are subject to reopening on wages in the second and the third years, and the employers will contribute 10 cents an hour for health and welfare benefits and 2 cents to a fund for workers losing their jobs through mechanization or illness. The contracts also prohibit the use of six "hard" pesticides.

Construction settlements

The pace of bargaining in construction was beginning its seasonal upturn in March and April, when a number of settlements were reported. In the Baltimore area, the Laborers and the Associated General Contractors agreed on a 3-year package of about $3.14 for 6,000 workers. In Connecticut, the Laborers and the New England

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Road Builders Association agreed on a 3-year package including $3.40 in general wage increases, an additional 25 to 74 cents for workers in higher classifications, adoption of 8 paid holidays (with triple time pay if worked), in place of the previous 7 unpaid holidays; and other improvements. About 5,000 workers were affected.

In Massachusetts, the Operating Engineers and the New England Road Builders Association agreed on a 3-year package of at least $3.30 for 2,000 workers. The Operating Engineers and the Builders Association of Chicago signed a 41-month contract providing wage and fringe benefit increases ranging from $2.25 to $4.50 an hour for 1,500 equipment operators in Cook and DuPage Counties, Ill.

AFL–CIO staff pay award

A contract dispute between Local 35 of the Newspaper Guild and the AFL–CIO headquarters in Washington, D.C., ended when arbiter William C. Dougherty awarded 75 professional staff members an 11-percent salary increase retroactive to January 1, 1970, in a 15-month contract. Mr. Dougherty was called in because the parties were unable to agree on a contract to replace one that expired December 31. The Federation had offered a 7-percent salary increase over a 1-year term; the Newspaper Guild had demanded a total of 27 percent in wage increases over 2 years plus 4 weeks instead of 2 weeks of vacation after 1 year of service. Previous rates ranged from $171 a week to $362.50.

Convention

On April 9, delegates to the third constitutional convention of District 50, United Mine Workers of America, voted to change the union's name to The International Union of District 50, Allied and Technical Workers of the United States and Canada. The new name was a compromise between names suggested by incumbent President Elwood Moffett and Vice-president Angelo Cefalo, who was scheduled to challenge Mr. Moffett in a May presidential election. Both agreed on elimination of the reference to the United Mine Workers.

District 50, which has 180,000 members, was founded by UMW President John L. Lewis to organize workers outside of coal mining. In 1966, the United Mine Workers ousted District 50 for advocating the use of atomic energy as a power source. After the ouster, the UMW obtained court orders requiring the deletion of "United Mine Workers" from District 50's name and repayment of $8 million in "loans." Both decisions were being appealed at the time of the convention. In other business at the convention, the 1,300 delegates elected a new executive board and established a strike fund.

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Union affairs

A fourth union, the National Council of Distributive Workers, has joined the Alliance for Labor Action (ALA), a partnership formed in May 1969 by the United Auto Workers and the Teamsters. The National Council of Distributive Workers itself is a comparatively new organization. It was formed in June 1969 from breakaway segments of the Retail, Wholesale and Department Store Union[9] and represents 50,000 workers. The 110,000-member Chemical Workers Union is also a member of the ALA. (It joined the Alliance in August 1969 and was consequently expelled by the AFL–CIO.[10])

Statistical summaries

The following tabulation summarizes various preliminary measures of compensation during the first 3 months of 1970 and during earlier periods. Unlike prior summaries, which contained

Type of measure	Annual rate of increase in percent			
	First 3 months		Full year	
	1970	1969	1969	1968
Major collective bargaining settlements:				
First-year wage rate adjustment [1]	10.8	7.6	9.2	7.4
Wage rate changes over life of contract [1]	8.0	6.1	7.6	5.9
Wages and benefits combined (equal timing) [2]	8.0	6.7	8.2	6.5
Wages and benefits combined (time weighted) [2]	8.6	7.1	8.6	6.8
Aggregate measures: [3]				
Total compensation per man hour, all employees, private nonfarm economy	6.7	6.0	6.3	8.1
Average hourly earnings, production or nonsupervisory workers, private nonfarm economy	4.3	6.0	6.9	7.0

[1] Covers settlements affecting 1,000 workers or more.

[2] Limited to settlements for 5,000 workers or more. Equal timing assumes a uniform spacing of wage and benefit changes over the life of the contract; time-weighted weights each change by the time it will be in effect during the contract term.

[3] Data for full years measure changes from fourth quarter of prior year to fourth quarter of current year. All changes are computed from seasonally adjusted data.

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medians, mean adjustments are used as the average measure of change.

March strike idleness totaled 2,230,000 man-days, or 0.14 percent of the estimated total working time. In comparison, idleness was 0.14 percent in March 1969,[11] and 0.26 percent the prior March. The week-long postal walkout accounted for a significant portion of the March idleness.

FOOTNOTES

[1] See *Monthly Labor Review*, May 1970, p. 77–78.

[2] See *Monthly Labor Review*, May 1970, p. 78–79.

[3] Trucking Employers, Inc., is the bargaining arm of the industry, representing 1,100 of the largest carriers of the 12,000 covered by the national agreement. This agreement is primarily limited to for-hire carriers of general freight and does not cover employees of dairies, bakeries, and other similar service industries.

[4] The 50,000 truckers in Chicago are represented by the Chicago Truck Drivers Union, which is not part of the Teamsters, and several Teamster locals.

[5] Includes over 100,000 over-the-road drivers who are paid on a mileage basis and almost 350,000 local drivers and other hourly rated employees.

[6] See *Monthly Labor Review*, February 1970, p. 72.

[7] See *Monthly Labor Review*, May 1970, p. 81.

[8] David Freedman and Co., the Wonder Palms Ranch, the Travertine Ranch, Kalvin K. Larson, and Cecil C. Larson.

[9] See *Monthly Labor Review*, August 1969, p. 77, and June 1969, p. 68.

[10] See *Monthly Labor Review*, October 1969 and December 1969.

[11] Data for 1969 and 1970 are preliminary.

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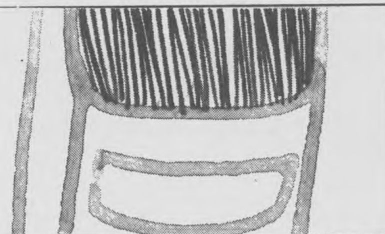
Book Reviews and Notes



Setting new stages

A Theory of Economic History. By John R. Hicks. New York, Oxford University Press, 1969. 181 pp. $5, clothbound; $1.95, paperbound.

Professor Sir John Hicks owes his position as Nobel Prize contender in economics to his numerous contributions to the analytical aspects of the subject; these have been spread over a period of some 40 years; Hicks' contributions to economic history have, at least by contrast, been negligible. This volume based on lectures at the University of Wales (Aberystwyth) in 1967, may be looked upon as an attempt to redress the balance. They suggest that, however marked may be Hicks' comparative advantage in theoretical analysis (over the common or garden economist), he also possesses a marked absolute advantage in economic history as well.

After lifting itself out of the dusty archives of its primary sources, economic history has lent itself with dangerous ease to the grand sweep of *histoire raisonnée*. The various "stage theories" of the German historical school are typical results. What Hicks has attempted in this volume is nothing less than the development of a new, original, and positively different stage theory of economic institutions.

The vast majority of his predecessors have concentrated, like Adam Smith and Karl Marx, upon stages in the modes and techniques of physical production. Hicks concentrates instead upon the characteristically economic institution of the market. His initial stage is therefore neither hunting and fishing nor primitive communism, but a premarket (premercantile) economy dominated by the irrationalities of custom (as imposed from below) and command (as imposed from above). The market arises with the development of a specialized trading class, which includes the bulk of the artisanate or handicraftsmen. Customary and authoritarian restrictions chafe them. They can escape from custom and command, and incidentally organize formal markets and fairs, through the convenient device of the independent city state, whose importance Hicks believes to be underestimated in conventional economic history.

Once founded, the more successful city states expand to send out colonies and furnish economic bases for new national states in their own hinterlands. At the same time, early mercantile society develops such functional institutions as money, credit, and codes of commercial law. A separate chapter (the sixth) is devoted to the reactions of the market upon the public finances of the new national states or expanded city states, and particularly to the question of why these states did not carry the device of currency debasement further than they generally did, or indeed as far as their contemporary successors are doing. (Hicks finds his explanation largely in the prevalence of revenue sources fixed in terms of money.)

The last four chapters deal with the expansion of the market economy from trade and finance in the limited sense to such fundamentals as agriculture, the labor market, and manufacturing of the modern type. In agriculture, the insertion of the cash nexus into the preexisting lord-and-peasant relation seems to Hicks essential. Chapter 8 seems bedazzled by the side issue, why a market for labor-power (wage labor) arose rather than a market for laborers as such (serfs and particularly slaves). Hicks' surmise is that, with relatively free movement between the countryside and the towns or city states, there develops an urban proletariat which is likely to be cheaper (in efficiency-units) than slaves, who must be caught in the first instance, watched more carefully, and maintained in slack times. To Hicks, the abolition of the international slave trade is more important, in explaining the triumph of the modern labor market, than the abolition of slavery as such.

Chapter 9 is devoted to the Industrial Revolu-

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tion proper, with attention concentrated upon two problems: (1) What constitutes the *differentia specifica* of "modern industry" from handicraft "barely distinguishable economically from trade?" and (2) Was the living standard of the laborer improved by the widespread and continuing substitution of the one for the other? Modern industry, Hicks surmises, is marked chiefly by the predominance of fixed over circulating capital, i.e., of machinery over inventories. The argument as to labor and its welfare follows along the lines of Ricardo's famous chapter "On Machinery." Machinery increases the demand for labor during its own gestation period, but may lower it overall when it is complete and can substitute for human beings. It cannot be proved that the initial effect must overcome the later one, although the history of Western industrialization since the 18th century suggests that it eventually did so in that important instance.

Hicks' tenth and final chapter is less a conclusion than an expression of concern for the future of the market economy which has, in his view, dominated economic history through the centuries. He identifies and dates (from World War I) an administrative revolution, which may replace the market with a modernized version of premercantile custom and command, enforced by modern technology from the telegraph through the electronic computer.

It is understandably difficult to evaluate so brief a volume which attempts so much. This reviewer's own feeling is that Hicks provides more prolegomena, notes, and queries for existing theories than any full-fledged theory of his own. This is not to discount the truly Marxian or Toynbeean range of scholarship he seems to have at his fingertips. Perhaps, indeed, anything more than Hicks has done would have been incompatible with the scale of the volume under review, based on a few public lectures. But one is left wondering about the relative importance of those elements which Hicks has omitted, about the reasons for discarding earlier stage theories for this one, and about the possiblity of useful combinations, linear and otherwise, between Hicks' work and the alternatives which he does not mention.

On three minor points, a few quibbles may perhaps be permitted: (1) Hicks' data, and examples both ancient and medieval, are largely Mediterranean (Greek and Italian). May they not thereby exaggerate both the importance and the mercantile basis of the early city and city state? Would Loyang and Chang-an in ancient China, or Nara and Kyoto in premodern Japan, not provide land-based counterexamples to Hicks' "maritime" generalizations based on Genoa and Venice? (2) Hicks may underestimate the economic efficiency of slavery, following the cutting off of the intercontinental slave trade. I wish he had found room to comment on the American system, which (according to Meyer and Conrad, at any rate) came to provide its own efficient internal slave trade between breeding grounds in the upper south and labor camps in the lower south. (3) The importance assigned to the market, with its sensitive and flexible prices, seems hardly consistent with Hicks' preference for what he calls "fixprice" growth models in his earlier *Capital and Growth*. But of course Hicks has assured us, in the earlier book, that growth theory and growth models have little to do with the historical development of historical societies. It is surely enough for any economist to make significant contributions to these disparate fields, without requiring that these contributions be completely consistent with each other.

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Prospects for pluralism

Marshall, Marx and Modern Times: The Multi-Dimensional Society. By Clark Kerr. New York, Cambridge University Press, 1969. 138 pp. $4.95.

The pattern of modern society assumes different hues, depending upon the beholder, and there has been no dearth of beholders in recent years who have been willing to transfer their visions to writing. The bulk of attention has usually gone to those whose reports are more or less alarming. Thus, a decade or two ago the late sociologist, C. Wright Mills, trained a blazing spotlight on "the power elite," a combine of government, military, and business leaders whom he viewed as exercising the strategic controls in public decisions. More recently, John Kenneth Galbraith has explored at length the pervasive influence of an industrial culture, promoted by a few hundred giant corporations, on the Nation's objectives, work habits, and social attitudes. Herbert Marcuse has recoiled

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from the vision of a dominating technocracy relentlessly eating away the "inner freedom" of man. Clark Kerr, in this slender volume, adopts a gentler and also much more popular view of a pluralistic society slowly evolving under the pressure of numerous competing but reconcilable interests.

This book contains the series of 10 Marshall lectures which Kerr delivered in April 1968 at London's Cambridge University. Gracefully and leisurely, they start with the opposing prognostications of Karl Marx and Alfred Marshall and end with Kerr's own analysis of present society and its prospects. As a noted labor economist, and also a former President of the turbulent University of California, Kerr's comments on students and unions, and their roles in present society, are perhaps of greatest interest.

Kerr's view, in a sense, reverses Marx. He sees the working class in general, and unions in particular, as a conservative element in society, operating as one of a multitude of competing groups in consonance with, and as defenders of, existing institutions. Outside of the main body of society, and in opposition to it, stand the students, a few associated intellectuals, and an "underclass" consisting of the unskilled, the unemployables, and the racially estranged.

Concerning students, Kerr recognizes that the "political activists" among them are a minority but adds that they "may set the general tone of students as a whole." He sees their problem as residing in "a sense of powerlessness, with influence in the family lying in the past, influence on the campus historically rejected, and influence in the inner-society not yet clearly in sight—in sum a reaction to pyschological deprivation which is the new facet of 'increasing misery'." The result, abetted by "some of the teaching staff," has been to thrust the campus to the fore as a center of dissent with students developing "a muted anarchism toward the surrounding society." Like the frustrated underclass, they turn to "dramatic approaches" to "get the attention of the system," including "confrontation and the use of violence."

In contrast, in the multi-dimensional society, unions and workers in general dispense with class consciousness and tend to "become like everybody else on most issues of the time." Kerr adds:

> On some issues, however, they tend to become a relatively conservative element within the inner-society. They often oppose technological change. On issues like race relations and international affairs, they also count among the less progressive elements. Blue-collar workers come to be among the less tolerant strata of society and there may even develop a "lower-class fundamentalism and authoritarianism."

Virtually all the problems of modern society, from inflation to youth alienation, are discussed by Kerr, and I think it is fair to say that he does not underestimate their importance. Yet, in contrast with the predictions of Marx, and with some of the submerged fears of Marshall, he does not consider that any of them is fatal or even nearly so. The resiliency and flexibility of a pluralistic society, he says, has proved its ability to find tolerable, pragmatic solutions for such social ills as giant depressions, monopoly, and economic insecurity, and such past performances fortify his optimism for the future.

As in nearly all lectures series presented in book form, repetitions and recapitulations abound in this volume, and while these may be useful for an audience they remain distracting for a reader. The very breadth of the topic dealt with virtually insures that some of Kerr's assertions may be subject to serious challenge. Even so, as compensation, his book provides much wise analysis and many instructive insights.

—Melville J. Ulmer
Professor of Economics
University of Maryland

Telling it like it was

The Political Economy of Prosperity. By Arthur M. Okun. Washington, Brookings Institution, 1970. 152 pp., bibliography. $4.95.

Dr. Okun's slim volume belongs to a well-defined literary genre. Like many other departing government officials, including chairmen and members of the President's Council of Economic Advisers, he pauses just beyond the turnstile for a voluntary debriefing, for a summing-up that tells it like it was or how it seemed and felt. Although he was chairman of the Council for less than a year, he had become a member right after the 1964 election; and, still earlier, he had spent some time on the professional staff. Accordingly, his book reflects the experience of someone who not only served in every Council rank but also had longer continuous tenure as a Presidential appointee than all but four other members in the Council's history.

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The book includes four chapters. There is also an appendix reprinting a technical paper of 1962 (on the measurement and significance of the potential gross national product), and a brief bibliography suggesting that Professor Milton Friedman alone finds "no relationship between the demand for money and the rate of interest."

The first chapter, "Consensus and Controversy in Political Economy," is also the weakest. It offers some brittle generalizations regarding roles, practices, and beliefs of economists while it also advances some unspectacular propositions: that economists are relevant to public policy, that they are more likely to disagree on ideology than on technique, and that those serving the President cannot comfortably try to represent the profession, too. It ends with an unconvincing proposal for a "Supreme Court" of outside experts that might counterbalance or reinforce Council positions by "defining the scope of bipartisan professional agreement."

Chapter 2, "Achieving Sustained Prosperity," is notable for more than a prideful tally of the number of months of "unparalleled, unprecedented, and uninterrupted economic expansion" since February 1961. It energetically presses the "activist" claim that recession and stagnation are "fundamentally preventable" by a "more vigorous and more consistent application of the tools of economic policy." It characterizes the changed Council posture of the 1960's as a shift of emphasis from the achievement of economic advance within a cyclical context to the continual closing of the gap between actual and potential output. Stimulative measures for closing the gap are cited—the revision of depreciation guidelines, the enactment of an investment tax credit, and, most important of all, the reduction of income taxes in 1964. Unfortunately, in subsequent years, the activist Council ran out of gas or simply lacked the clout to deliver restraining measures when these were needed, so inflation has to be acknowledged by Okun as one of the "serious blemishes" in the record. He candidly concedes "errors of analysis and prediction," but he insists that "errors of omission in failing to implement the activist strategy" were really decisive. These concessions by Okun amount, of course, to a euphemistic statement of the practical limitations of the "new economics"—in both professional wisdom and political power.

The next chapter, "The Challenges of Defense and High Employment," is the best. It deals with the economy-inflating and economist-deflating events of the period since mid-1965. The reality of Viet Nam broke into the dreams of professionals, who had hoped to determine the feasibility of an unemployment rate of 4 percent and a 2-percent annual rise of prices: "But the defense spurt ruined that experiment." Alas, the Federal Reserve Governors and Council members did not see eye-to-eye on monetary policy, so "regular luncheons" were instituted in 1966 to improve at least visual communication. Still worse, "the economists in the administration watched with pain and frustration as fiscal policy veered off course." As a restraining instrument, the "jawbone" could only be reckoned as "second-best." And more technical woe is reported: The "boom fever" of 1968 was "misdiagnosed," the signals given by economic indicators were "misread."

A summary section of chapter 3 considers the "flaws of the performance" and notes a need for teaching the public the "economics of restraint." Three sources of the inflationary experience are cited: the unexpected upsurge and magnitude of defense spending, "political resistance to the unpleasant medicine of economic restraint," and "limitations and errors of technical economic analysis." A fourth source, however, goes unmentioned: the Federal Government's failure to act with counterinflationary vigor as the Nation's dominant employer and as a formidable monopsonist (e.g., in the massive purchase of health services under Medicare). As for teaching restraint, the exercise could well begin with the designation of any Administration as the first reluctant pupil and with attentive listening by any Council to its own lectures. Incidentally, despite his refreshing candor, Okun fails in this summary to disclaim the credit inappropriately assigned to activist economics in chapter 2 for the months of war-fed "prosperity" from mid-1965.

The final chapter, "The Agenda for Stabilization Policy," deals sketchily with the puzzle of reconciling prosperity with price stability. Achievement of 4-percent unemployment and a 2-percent annual price rise requires improvement of the "institutional framework," and Okun talks of a program of "voluntary restraint" that benefits from the experience and mistakes of the 1960's and that allows for a public "umpire." One sentence admits that the government "cannot reasonably ask private workers to restrain their wage demands

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if the pay scales of public employees are shooting ahead." Rejecting "fine-tuning" as a pretentious term, he nevertheless calls for total activism—in restraint as well as stimulation. The budget, he believes, should focus on the full-employment surplus as the key to fiscal policy, with the Federal Reserve assuming an accommodating role.

A summary at the end of chapter 4 bravely asserts that "prosperity" has been achieved "as the normal state of affairs," that it can provide a "sufficiently durable" base for the next task of achieving reasonable price stability too (through institutional change as well as fiscal and monetary policy). The Nixon Council, however, quickly decided that the flawed "prosperity" was not secure, that it even had to be jeopardized in the interest of any serious quest for stability. In retrospect, the legacy of slack inherited in the early 1960's seems to have afforded an excellent foundation for the simultaneous pursuit of both full employment and a reasonably stable price level—but the opportunity, as Okun's account so well describes, was fumbled in the second half of the decade.

The book is not only a valuable personal history but a powerful argument for pragmatic reformism. After the collegians finish their antipollution rage, it would still seem premature to rally them around a banner such as "All Power to the Council"—or to economists in general, or to any other single group of professionals or experts.

—Irving H. Siegel
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The W. E. Upjohn Institute
for Employment Research

Planning aid

Technological Growth and Social Changes: Achieving Modernization. By Stanley A. Hetzler. New York, Frederick A. Praeger, Publishers, 1969. 302 pp. $7.50.

This volume on developmental planning presents the thesis, supported by a series of hypotheses, that the development of industrialism is not the result of response to economic incentive, though it may appear that way from study of some of the more industrialized societies and their histories, but the results of particular relationships that develop between men and machines. To illustrate, after a fortuitous combination of inventions, including a unique combination of certain machines, power sources, and congruent social changes, today's most materially productive societies evolved toward technologies which now have considerable ability to sustain and feed themselves and thereby evolve toward a condition of total automation.

Professor Hetzler states that conventional economic institutions (private property, reliance on economic incentives, advertising, and marketing) are not important forces for the development of advanced and underdeveloped societies, and in fact they may retard that development. Moreover, according to the author, the sequence of industrial development has been misunderstood. Agriculture is not the prime industry; the development of agriculture follows the development of the heavy industries. If anything, agriculture, *per se*, perpetuates a rural way of living and thinking which must be destroyed by a production-oriented cosmopolitanism, certain features of which must themselves be acquired by agriculturalists even though this destroys a certain way of life.

Because the author's reflection on the past and present reveals that development in the advanced societies has not been properly interpreted, his prescription for the underdeveloped countries as well as the developed societies is clear. According to the author, development is a function of interrelated production capabilities which at some critical point achieved social acceptance as well as self-contained ability to grow. Installation of the most efficient technology, automation, is appropriate for both types of societies. If such technological change is introduced appropriately, necessary social change will follow as a matter of course.

The major limitations of the volume are: (1) the efficiency of economic incentives is dismissed with too little regard to what appears to be evidence to the contrary; (2) too little attention is paid to the psychological consequences of change induced by rapid, extensive technological change; and (3) the volume moves back and forth between discussion of development between highly and less developed societies in a somewhat confusing manner. Despite these shortcomings, which probably are unavoidable, the volume achieves the goals of being imaginative and usefully innovative. Unfortunately, it probably will not be understood by professionals unfamiliar with concepts employed in both sociology and economics or who are not

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used to departing from the traditional views of both. This, of course, is not a criticism of the author. Indeed, it may be his triumph. He successfully demonstrates the broad dimensions of the disciplines and the extent to which they are bound to specific societies.

—Frederick A. Zeller
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Center for Human Resource Research
Ohio State University

Reinterpretation of a radical union

Bread and Roses Too: Studies of the Wobblies. By Joseph Robert Conlin. Westport, Conn., Greenwood Publishing Corp., 1970. 165 pp. $8.50.

Under the able editorship of Stanley I. Kutler of the University of Wisconsin, Greenwood Press is publishing a series of historical studies. This volume is one of them. Professor Conlin's thesis is that the Wobblies deviated far less from American traditions than has been supposed. The Industrial Workers of the World did not, for example, eschew all electoral politics, and the organization championed freedom of speech and assembly, used procedures within the judicial system, rejected violence in theory and practice, and was the precursor of industrial unionism later developed by the Congress of Industrial Organization (CIO).

In Conlin's view, the IWW had little in common with European syndicalists except for the final objective of destruction of capitalism through direct action by the workers. The two groups differed considerably in their organizational structure, their theories of rank-and-file participation in union governance, and in their tactics. In discussing these contrasts, Conlin illustrates what is essential to know about the IWW: It was an indigenous, radical union responding to certain conditions in an increasingly industrialized and centralized American economy. Foreign influences were not crucial to this development. Indeed, according to the author, if there was any significant international influence, it came from the IWW rather than the other way around.

These analytical essays are valuable in disclaiming the old idea that the Wobbly was a bearded anarchist from abroad, bearing club and bomb. Conlin's thesis is not altogether convincing when he develops his argument that the IWW was involved in politics. He makes the extra point that the Socialist Party of the United States hurt itself when it disowned IWW constituents in adopting a more expedient, reformist election strategy. The Socialists may well have damaged their principles and politics in the process, but as Conlin notes, the IWW vote was hardly large enough to produce such a decline in Socialist fortunes. Moreover, Conlin undermines this assertion earlier in the book when he insists, without real evidence, that the apparent lack of interest of IWW members in political action "derived less from any alienation from American traditions than from the simple reality that most western Wobblies could not vote." He then cites those same western Wobblies in an effort to substantiate his subsequent analysis of Socialist election statistics.

More important, it seems, is Conlin's confusion about the general place of the Wobblies in American history. After all, he does admit that the IWW and the syndicalists shared revolutionary goals and that fact dramatically set the American radical unionists apart from their "more conventional contemporaries." They were, as the writer tells us, "true blue revolutionaries," and it was precisely because they opposed capitalism as a system and never yielded their vision of a Socialist commonwealth that the Wobblies were regarded as "un-American." The fact that they fought for immediate gains and occasionally used American political institutions did not invalidate their claim to revolutionary goals.

The events of World War I mortally wounded the IWW and, except for the mythmakers who praise and damn the Wobblies, nothing remains of the once vigorous, colorful organization. Professor Conlin's reinterpretation of the older views about the IWW is an appropriate effort to understand better what the Wobblies were about. It is clear that he raises more issues than he resolves—an important historical contribution in itself.

—Henry W. Berger
Assistant Professor of History
Washington University at St. Louis

The need to forecast

Economic Forecasts and Expectations: Analyses of Forecasting Behavior and Performance. Edited by Jacob Mincer. New York, National Bureau of Economic Research, 1969. 272 pp. $10, Columbia University Press, New York.

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With accurate forecasts of output, prices, wage rates, employment and other indicators of economic activity, business firms can achieve lower costs and greater profitability and governments can attain higher and more stable real standards of living for their constituents. Consequently, the need to forecast is pervasive and, in turn, the impact of forecasts on business behavior and government policy strongly affects the future course of the economy.

Therefore, it is paradoxical that there has been little systematic analysis about how forecasts are generated, about the absolute and relative accuracy of different forecasting techniques (including the superiority of sophisticated or judgmental forecasts over more naive extrapolative devices), and about the effect of errors in data or use of preliminary statistics on predictive accuracy. The related subjects of the formation of expectations, their dependence on extrapolations of past experience or forecasts, and their effect on economic behavior have been examined in greater depth, but definitive conclusions have not been reached.

These topics, especially the former, have concerned the National Bureau of Economic Research in recent years. This volume of five essays on economic forecasts and expectations is the fourth in a series of on-going National Bureau studies on short-term economic forecasting.

In the first paper, Jacob Mincer and Victor Zarnowitz present a method of assessing the accuracy of forecasts by comparing the mean square error of predictions to those of autoregressive extrapolations of recent past experience. Similar to the work of Henri Theil (*Economic Forecasts and Policy*, 1961, Amsterdam), the errors are separated into bias, efficiency, and random components. This is done by fitting linear, least squares regressions of actual on predicted values. Because extrapolations themselves are ingredients in forecasts, the errors are further decomposed into extrapolative and nonextrapolative (autonomous) subsets. The analysis is extended to multiperiod forecasting and applied to a small sample (three forecasts, for four variables, over 11 years) of predictions compiled by the National Bureau. It is found that, while these few forecasts generally underestimate growth, they are superior to predictions from simple extrapolation of recent movements in the economy. On the other hand, as the forecast period is extended, this superiority tends to diminish.

To some extent, the comparison of business forecasts with naive or extrapolative models is clouded by errors in data. In the second essay Rosanne Cole applies the Mincer-Zarnowitz error decomposition methods and finds that the use of preliminary rather than revised GNP data reduces the accuracy of naive model projections of GNP and its components by about 30 percent and that of business forecasts of the same variables by nearly 40 percent. In part, these reductions are due to bias; but in seven of the sixteen forecasts analyzed, data errors accounted for 50 to 70 percent of the variance of prediction errors. Another test, on consumption forecasts, led to a doubling of prediction errors from use of preliminary rather than revised 1965 data. The direct effect accounted for 70 percent of the increase; the remaining 30 percent was due to the indirect effect on parameter estimates. (Data errors also explain anomalies in some earlier published tests of consumption functions.) Thus, there is considerable scope for increasing predictive ability by improving the accuracy of preliminary data.

The next two studies by Jacob Mincer and Stanley Diller, respectively, are devoted to models designed to test how expectations are generated. Mincer develops the methodology which is then applied by Diller in an analysis of the term structure of interest rates. Diller finds support for the Hicks-Meiselman-Kessel formulation of the expectations hypothesis which makes forward rates an extrapolative function of past spot rates. The models tested are of an adaptive, convex extrapolative type, which make forecasts dependent on autoregressive projections of past experiences, return of future values toward normal trend levels (the property known as regressivity), and revisions of future forecasts based on a fraction of the discrepancies between past forecasts and current realizations (adaptivity).

In the last essay, F. Thomas Juster examines the predictive performance of surveys on consumer attitudes of optimism or pessimism regarding near-term economic prospects and intentions to buy automobiles and other durables. He explains the previously found paradox that intentions data were good predictors of future purchases by different consumer groups (cross sections) but of little use in forecasting national purchases over time; the reverse was true for attitudes. By appropriate revisions in sample size and segmentation of responses into intenders and nonintenders, and by

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modified specifications for forecasting equations, Juster is able (in conjunction with income and income change variables) successfully to employ both attitudes and intentions data, simultaneously, to predict durable consumption outlays. He finds that these yield more accurate predictions than autoregressive extrapolations of past expenditures.

This series of studies is another outstanding contribution of the National Bureau staff to the analysis of forecasting methodology and the comparison of relative forecasting accuracy. There are a few minor errors; if any major fault can be found, it is the insufficient use of structural hypotheses in formulating the predictive tests. There are nonlinear interactions between extrapolations and structural variables. Thus, simply comparing predictions to extrapolations may yield biased and inconsistent estimates of predictive ability and of the usefulness of autonomous information.

The volume is of limited general interest but is recommended reading for practitioners in the forecasting field and analysts of expectations behavior.

—Gary Fromm
Economist, Brookings Institution
and Data Resources, Inc.
Washington, D.C.

In search of a perfect mix

Public-Private Manpower Policies. Edited by Arnold R. Weber, Frank H. Cassell, and Woodrow L. Ginsburg. Madison, Wis., Industrial Relations Research Association, 1969. 210 pp. $4.50.

The eight articles in this volume deal with finding the appropriate mix between public and private manpower efforts—the role of the Federal Government vis-a-vis individuals and enterprises in the private sector. The issue has more than academic interest. Large sums of public monies and the lives of thousands of individuals are affected directly by manpower policies and programs. As Assistant Secretary of Labor Arnold Weber points out in his introduction, over one million individuals participated in training and work experience programs costing approximately $2 billion in 1969.

In the introduction Mr. Weber summarizes what he considers to be the appropriate role of government in the manpower area. He points out that many manpower programs have been oversold and that they "should not be viewed as a form of social penicillin with the capacity to cure all social and economic ailments from unemployment to juvenile delinquency and the deficiencies of family structure." He suggests that manpower policies should have limited objectives—improving the employability of individuals and promoting efficient operation of the labor market.

The editors offer a "smorgasbord" of eight articles ranging from a discussion of the methodologies of evaluating manpower programs to the proper role of vocational education in the transition from school to work. As would be expected, the articles demonstrate that we still have no final answers concerning the proper mix between public and private manpower programs.

This reviewer found two articles of particular interest. The first by Glen G. Cain and Robinson G. Hollister of the University of Wisconsin offers a timely discussion of the methods of evaluating social action programs. The authors discuss the types of evaluation and the problems in designing evaluation studies. Rather than small-scale, carefully controlled evaluation programs, the authors suggest that large-scale action programs be designed for experiment. In this way, alternative concepts can be tested simultaneously and the authors suggest that we may find out not only what particular concepts are incorrect, but also why.

An article by Arthur W. Saltzman of the Ford Motor Co. offers an interesting view of manpower programs and planning in private industry. The essay is especially useful because of the paucity of data given on manpower planning in private industry. Mr. Saltzman points out how private firms had to reexamine and modify traditional manpower practices regarding entry-level skilled and clerical jobs in order to employ disadvantaged workers. The most interesting and stimulating part of Mr. Saltzman's article, I think, is a section entitled "Observations About the Partnership—The Views from the Home Office." In this section, Mr. Saltzman maintains that two fundamental hypotheses concerning the hardcore unemployed have not yet been established. "The first is that they [hardcore unemployed] are all qualitatively different from other groups in the work force. The second is that they all need special training to become employable." The article goes on to suggest how public manpower policies can be extended to "take better advantage of the new public-private partnership," placing a greater

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emphasis on local manpower planning and reducing nationwide programs "based on questionable hypotheses."

Other articles in this welcome addition to the Industrial Relations Research Association's growing list of credits include: Manpower Policies and Job Market Information, Joseph C. Ullman; Private Involvement in Federal Manpower Programs, Arnold L. Memore and Garth L. Mangum; On-The-Job Training of Disadvantaged Workers, Michael J. Piore; The Welfare System as a Manpower and Rehabilitation System, Leonard J. Hausman; Public Policies and Womanpower, Eli Ginzberg; and The Role of Vocational Education in the Transition From School to Work, Jacob J. Kaufman.

—Michael F. Crowley
Coordinator, Technical Manpower Studies
Division of Manpower and
Occupational Outlook
Bureau of Labor Statistics

Provision for the poor

Programs in Aid of the Poor for the 1970's. By Sar A. Levitan. Baltimore, Johns Hopkins Press, 1969. 112 pp. $6.

This book is one of a series on Policy Studies in Employment and Welfare; Sar A. Levitan and Garth L. Mangum are the editors. The purpose of this volume is "to review and appraise existing programs in aid of the poor and to explore feasible approaches to the alleviation of poverty that are likely to be achieved before the 200th anniversary of the Nation."

The title indicates that the book gives more attention to the second purpose of examining feasible approaches for the 1970's. It does not. The whole question of goals and priorities for the 1970's receives very brief treatment in a scant six pages of the last chapter. Nearly all of the book treats past policies and current posture toward poverty, discussing where we've been rather than where we're going.

Chapter 1 deals with the definition of poverty, characteristics of the poor, and a summary of past policies to assist the poor. The next three chapters take up the bulk of the book and discuss policies toward the poor under three classifications: Cash Support Programs (OASDI, Public Assistance, Veterans Assistance, Unemployment Insurance, and proposals for direct income payments to the poor); Programs for the Employable Poor (manpower and area development programs); and Provision of Services and Goods (food, housing, medical care, and education). The final chapter, Goals and Priorities for 1976, touches briefly on the question of future policy direction.

The core chapters are marked by presentation of facts and figures, which may make the book wearisome reading for the lay reader. If the chapters were intended as background to real policy suggestions, they could have been improved by more emphasis on gaps and unmet goals.

As the author points out, many programs ostensibly aimed at the poor in fact yield benefits for those who are not poor. Further, the status of the poor is affected by the totality of public policy, not merely by those measures aimed at the poor—but the book restricts its treatment to "poverty" policy only. A book oriented more toward total policy impact on the status of the poor would have to look at such "nonpoverty" issues as regressive tax structures, import quotas, and transportation policy, to name a few.

Perhaps because the title gave rise to great expectations for policy guidance, the last brief chapter on goals and priorities is a disappointment. But it is a small book and it does competently describe certain aspects of the landscape already traversed.

—Kenneth O. Alexander
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Michigan Technological University

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1. Employment status of the noninstitutional population, 16 years and over, 1947 to date

[In thousands]

Year	Total noninstitutional population	Total labor force		Civilian labor force						
		Number	Percent of population	Total	Employed			Unemployed		Not in labor force
					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	73,442	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

2. Employment status, by color, sex and age, seasonally adjusted,[1] quarterly averages

[In thousands]

Characteristic	1970	1969				1968				1967				Annual average	
	1st	4th	3d	2d	1st	4th	3d	2d	1st	4th	3d	2d	1st	1969	1968
WHITE															
Civilian labor force	73,316	72,475	71,942	71,466	71,285	70,392	70,045	69,851	69,587	69,440	68,944	68,210	68,226	71,778	69,975
Men, 20 years and over	42,245	41,956	41,842	41,639	41,656	41,423	41,373	41,235	41,230	41,175	40,972	40,673	40,607	41,772	41,317
Women, 20 years and over	24,513	24,156	23,949	23,684	23,566	23,122	22,843	22,741	22,565	22,632	22,276	21,775	21,709	23,838	22,820
Both sexes, 16–19 years	6,558	6,363	6,151	6,143	6,036	5,847	5,829	5,875	5,792	5,633	5,696	5,762	5,910	6,168	5,838
Employed	70,527	70,096	69,575	69,260	69,135	68,267	67,804	67,617	67,311	67,032	66,576	65,888	65,970	69,518	67,750
Men, 20 years and over	41,180	41,091	40,995	40,871	40,926	40,677	40,553	40,405	40,376	40,300	40,101	39,772	39,775	40,978	40,503
Women, 20 years and over	23,587	23,327	23,120	22,891	22,794	22,372	22,066	21,987	21,777	21,766	21,416	20,963	20,902	23,032	22,052
Both sexes, 16–19 years	5,760	5,678	5,460	5,498	5,415	5,218	5,185	5,225	5,158	4,966	5,059	5,153	5,293	5,508	5,195
Unemployed	2,789	2,379	2,367	2,206	2,150	2,125	2,241	2,234	2,276	2,408	2,368	2,322	2,256	2,260	2,225
Men, 20 years and over	1,065	865	847	768	730	746	820	830	854	875	871	901	832	794	814
Women, 20 years and over	926	829	829	793	772	750	777	754	788	866	860	812	807	806	768
Both sexes, 16–19 years	798	685	691	645	648	629	644	650	634	667	637	609	617	660	643
Unemployment rate	3.8	3.3	3.3	3.1	3.0	3.0	3.2	3.2	3.3	3.5	3.4	3.4	3.3	3.1	3.2
Men, 20 years and over	2.5	2.1	2.0	1.8	1.8	1.8	2.0	2.0	2.1	2.1	2.1	2.2	2.0	1.9	2.0
Women, 20 years and over	3.8	3.4	3.5	3.3	3.3	3.2	3.4	3.3	3.5	3.8	3.9	3.7	3.7	3.4	3.4
Both sexes, 16–19 years	12.2	10.8	11.2	10.5	10.7	10.8	11.0	11.1	10.9	11.8	11.2	10.6	10.4	10.7	11.0
NEGRO AND OTHER															
Civilian labor force	9,224	9,056	8,979	8,867	8,914	8,737	8,700	8,828	8,762	8,733	8,632	8,632	8,599	8,954	8,759
Men, 20 years and over	4,700	4,622	4,593	4,549	4,554	4,513	4,517	4,562	4,543	4,496	4,507	4,505	4,500	4,579	4,535
Women, 20 years and over	3,682	3,616	3,595	3,535	3,550	3,468	3,414	3,467	3,433	3,444	3,348	3,347	3,362	3,574	3,446
Both sexes, 16–19 years	842	818	791	783	810	756	769	799	786	793	777	780	737	801	778
Employed	8,598	8,500	8,394	8,271	8,371	8,164	8,132	8,233	8,147	8,073	8,006	7,986	7,974	8,384	8,169
Men, 20 years and over	4,498	4,445	4,416	4,382	4,397	4,335	4,349	4,388	4,351	4,305	4,328	4,303	4,299	4,410	4,356
Women, 20 years and over	3,468	3,429	3,372	3,307	3,352	3,264	3,205	3,246	3,200	3,191	3,112	3,115	3,118	3,365	3,229
Both sexes, 16–19 years	632	626	606	582	622	565	578	599	596	577	566	568	557	609	584
Unemployed	626	556	585	596	543	573	568	595	615	660	626	646	625	570	590
Men, 20 years and over	201	177	177	167	157	178	168	174	192	191	179	202	201	169	179
Women, 20 years and over	215	187	223	228	198	204	209	221	233	253	236	232	244	209	217
Both sexes, 16–19 years	210	192	185	201	188	191	191	200	190	216	211	212	180	192	194
Unemployment rate	6.8	6.1	6.5	6.7	6.1	6.6	6.5	6.7	7.0	7.6	7.3	7.5	7.3	6.4	6.7
Men, 20 years and over	4.3	3.8	3.9	3.7	3.4	3.9	3.7	3.8	4.2	4.2	4.0	4.5	4.5	3.7	3.9
Women, 20 years and over	5.8	5.2	6.2	6.4	5.6	5.9	6.1	6.4	6.8	7.3	7.0	6.9	7.3	5.8	6.3
Both sexes, 16–19 years	24.9	23.5	23.4	25.7	23.2	25.3	24.8	25.0	24.2	27.2	27.2	27.2	24.4	24.0	24.9

[1] These data have been adjusted to reflect the experience through December 1969. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1970 issue of **Employment and Earnings.**

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3. Full- and part-time status of the civilian labor force

[In thousands—not seasonally adjusted]

Employment status	1970				1969									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
FULL TIME															
Civilian labor force	69,255	69,116	69,018	68,869	69,204	69,296	69,491	70,350	73,713	73,514	72,365	67,818	67,921	69,700	68,332
Employed:															
Full-time schedules [1]	64,166	64,108	63,997	64,155	65,302	65,517	65,594	66,206	68,854	68,471	67,011	64,346	64,244	65,503	64,225
Part-time for economic reasons	2,301	2,139	2,117	2,135	1,998	1,916	1,955	2,069	2,607	2,456	2,522	1,672	1,704	2,055	1,970
Unemployed, looking for full-time work	2,787	2,869	2,904	2,579	1,904	1,864	1,942	2,075	2,251	2,587	2,831	1,799	1,973	2,142	2,138
Unemployment rate	4.0	4.2	4.2	3.7	2.8	2.7	2.8	2.9	3.1	3.5	3.9	2.7	2.9	3.1	3.1
PART TIME															
Civilian labor force	12,706	12,574	12,266	11,850	12,212	12,131	12,019	10,634	8,803	9,283	9,991	11,745	11,699	11,032	10,405
Employed (voluntary part-time)	11,940	11,711	11,375	11,023	11,488	11,284	11,122	9,751	8,185	8,688	9,422	11,245	11,130	10,343	9,726
Unemployed, looking for part-time work	765	863	890	827	724	847	898	883	618	594	568	500	569	689	679
Unemployment rate	6.0	6.9	7.3	7.0	5.9	7.0	7.5	8.3	7.0	6.4	5.7	4.3	4.9	6.2	6.5

[1] Employed persons with a job but not at work are distributed proportionately among the full- and part-time employed categories.

4. Employment and unemployment, by age and sex, seasonally adjusted [1]

[In thousands]

Employment status	1970				1969									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
TOTAL															
Total labor force	86,143	86,087	85,590	85,599	85,023	84,872	85,051	84,868	84,517	84,310	84,028	83,652	83,950	84,239	82,272
Civilian labor force	82,872	82,769	82,249	82,213	81,583	81,379	81,523	81,325	80,987	80,789	80,504	80,130	80,434	80,733	78,737
Employed	78,924	79,112	78,822	79,041	78,737	78,528	78,445	78,194	78,142	77,931	77,741	77,321	77,589	77,902	75,920
Agriculture	3,586	3,550	3,499	3,426	3,435	3,434	3,446	3,498	3,614	3,561	3,683	3,777	3,661	3,606	3,817
Nonagriculture	75,338	75,562	75,323	75,615	75,302	75,094	74,999	74,696	74,528	74,370	74,058	73,544	73,928	74,296	72,103
Unemployed	3,948	3,657	3,427	3,172	2,846	2,851	3,078	3,131	2,845	2,858	2,763	2,809	2,845	2,831	2,817
MEN, 20 YEARS AND OVER															
Total labor force	50,032	49,920	49,707	49,736	49,534	49,544	49,642	49,642	49,488	49,405	49,334	49,290	49,294	49,406	48,834
Civilian labor force	47,199	47,060	46,836	46,826	46,578	46,531	46,599	46,586	46,443	46,338	46,236	46,194	46,203	46,351	45,852
Employed	45,667	45,709	45,534	45,674	45,553	45,533	45,511	45,465	45,485	45,335	45,303	45,251	45,282	45,388	44,859
Agriculture	2,602	2,537	2,479	2,473	2,499	2,482	2,575	2,593	2,670	2,646	2 676	2,713	2,678	2,636	2,816
Nonagriculture	43,065	43,172	43,055	43,201	43,054	43,051	42,936	42,872	42,815	42,689	42,627	42,538	42,604	42,752	42,043
Unemployed	1,532	1,351	1,302	1,152	1,025	998	1,088	1,121	958	1,003	933	943	921	963	993
WOMEN, 20 YEARS AND OVER															
Civilian labor force	28,274	28,295	28,066	28,073	27,875	27,671	27,767	27,634	27,664	27,524	27,341	27,055	27,227	27,413	26,266
Employed	27,022	27,016	26,925	27,060	26,897	26,663	26,699	26,543	26 626	26,512	26 322	26,041	26,193	26,397	25,281
Agriculture	571	583	630	586	585	555	554	535	582	547	610	622	607	593	606
Nonagriculture	26,451	26,433	26,295	26,474	26,312	26,108	26,145	26,008	26,044	25,965	25,712	25,419	25,586	25,804	24,675
Unemployed	1,252	1,279	1,114	1,013	978	1,008	1,068	1,091	1,038	1,012	1,019	1,014	1,034	1,015	985
BOTH SEXES, 16-19 YEARS															
Civilian labor force	7,399	7,414	7,347	7,314	7,130	7,177	7,157	7,105	6,880	6,927	6,927	6,881	7,004	6,970	6,618
Employed	6,235	6,387	6,363	6,307	6,287	6,332	6,235	6,186	6,031	6,084	6,116	6,029	6,114	6,117	5,780
Agriculture	413	430	390	367	351	397	317	370	362	368	397	442	376	377	394
Nonagriculture	5,822	5,957	5,973	5,940	5,936	5,935	5,918	5,816	5,669	5,716	5,719	5,587	5,738	5,739	5,385
Unemployed	1,164	1,027	984	1,007	843	845	922	919	849	843	811	852	890	853	839

[1] These data have been adjusted to reflect the experience through December 1969. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1970 issue of **Employment and Earnings**.

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5. Employment totals, by occupation, with unemployment rates, seasonally adjusted,[1] quarterly averages

Characteristic	1970	1969				1968				1967				Annual average	
	1st	4th	3d	2d	1st	4th	3d	2d	1st	4th	3d	2d	1st	1969	1968
EMPLOYMENT (in thousands)	78,992	78,570	78,090	77,550	77,418	76,409	76,017	75,898	75,392	75,121	74,630	73,911	73,862	77,902	75,921
White-collar workers	37,938	37,509	36,923	36,677	36,264	35,906	35,732	35,419	35,140	34,888	34,456	33,943	33,635	36,845	35,551
Professional and technical	11,026	10,936	10,764	10,740	10,638	10,473	10,392	10,295	10,142	10,067	9,952	9,761	9,734	10,769	10,325
Managers, officials, and proprietors	8,215	8,141	7,970	7,993	7,841	7,897	7,827	7,661	7,716	7,633	7,630	7,453	7,261	7,987	7,776
Clerical workers	13,906	13,655	13,478	13,281	13,171	12,876	12,823	12,816	12,694	12,624	12,343	12,250	12,115	13,397	12,803
Sales workers	4,791	4,777	4,711	4,663	4,614	4,660	4,690	4,647	4,588	4,564	4,531	4,479	4,525	4,692	4,647
Blue-collar workers	28,236	28,389	28,425	27,931	28,202	27,774	27,491	27,513	27,297	27,279	27,343	27,175	27,240	28,237	27,525
Craftsmen and foremen	10,264	10,265	10,174	10,044	10,298	10,147	9,972	10,003	9,936	9,827	9,790	9,853	9,918	10,193	10,015
Operatives	14,168	14,412	14,589	14,208	14,264	14,051	13,911	13,956	13,896	13,918	13,999	13,787	13,822	14,372	13,955
Nonfarm laborers	3,804	3,712	3,662	3,679	3,640	3,576	3,608	3,554	3,465	3,534	3,554	3,535	3,500	3,672	3,555
Service workers	9,673	9,589	9,493	9,467	9,558	9,411	9,385	9,395	9,337	9,330	9,277	9,276	9,418	9,528	9,381
Farmworkers	3,153	3,089	3,231	3,417	3,438	3,346	3,400	3,507	3,649	3,654	3,556	3,448	3,584	3,292	3,464
Unemployment rate	401	3.6	3.6	3.5	3.4	3.4	3.6	3.6	3.7	3.9	3.9	3.9	3.8	3.5	3.6
White-collar workers	2.4	2.2	2.2	2.0	2.0	1.9	2.0	2.0	2.0	2.2	2.2	2.0	2.1	2.1	2.0
Professional and technical	1.9	1.5	1.4	1.3	1.1	1.2	1.3	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.2
Managers, officials, and proprietors	1.0	.9	1.0	.9	.9	1.0	1.1	.9	.9	1.0	.9	.9	.9	.9	1.0
Clerical workers	3.3	3.2	3.2	2.8	2.9	2.8	2.9	3.0	3.1	3.4	3.3	2.8	3.0	3.0	3.0
Sales workers	3.2	2.8	3.0	2.9	2.9	2.8	2.6	2.7	3.0	3.2	3.6	2.9	3.2	2.9	2.8
Blue-collar workers	4.9	4.3	4.0	3.8	3.7	3.8	4.2	4.0	4.4	4.5	4.5	4.6	4.2	3.9	4.1
Craftsmen and foremen	2.6	2.2	2.2	2.1	2.1	2.2	2.4	2.4	2.5	2.5	2.3	2.8	2.3	2.2	2.4
Operatives	5.7	5.0	4.4	4.3	4.1	4.3	4.5	4.3	4.8	5.1	5.1	5.0	4.7	4.4	4.5
Nonfarm laborers	7.9	6.9	7.2	6.5	6.4	6.7	7.4	7.0	7.7	7.8	7.6	8.0	7.2	6.7	7.2
Serviceworkers	4.7	3.9	4.5	4.4	4.0	4.3	4.5	4.6	4.3	4.9	4.5	4.2	4.5	4.2	4.5
Farmworkers	2.1	1.8	2.2	1.9	1.6	1.6	2.4	2.3	1.9	2.3	2.4	2.4	2.2	1.9	2.1

[1] These data have been adjusted to reflect the experience through December 1969. For a discussion of a seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1970 issue of **Employment and Earnings.**

6. Unemployed persons, by reason for unemployment

[In thousands—not seasonally adjusted]

Reason for unemployment, age, and sex	1970				1969									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
Total, 16 years and over	3,552	3,733	3,794	3,406	2,628	2,710	2,839	2,958	2,869	3,182	3,400	2,299	2,542	2,831	2,817
Lost last job	1,669	1,797	1,787	1,595	1,133	939	882	823	894	979	875	892	1,088	1,017	1,070
Left last job	507	441	473	485	378	421	451	586	507	459	448	325	394	436	431
Reentered labor force	1,001	1,143	1,158	999	825	1,011	1,093	1,105	997	1,010	1,275	796	770	965	909
Never worked before	375	351	377	328	292	339	414	445	471	734	802	286	290	413	407
Male, 20 years and over	1,498	1,606	1,678	1,456	1,052	909	906	914	888	945	905	810	901	963	993
Lost last job	988	1,059	1,144	997	693	524	458	440	469	534	427	438	575	556	599
Left last job	214	200	185	197	150	141	141	209	192	170	183	148	145	164	167
Reentered labor force	261	312	310	230	188	226	267	235	200	195	262	204	164	216	205
Never worked before	34	35	39	32	20	18	40	30	24	46	33	19	17	27	22
Female, 20 years and over	1,171	1,264	1,238	1,086	840	994	1,097	1,202	1,119	987	1,058	867	967	1,015	985
Lost last job	497	542	451	418	303	309	314	288	310	307	336	344	374	335	341
Left last job	188	156	200	177	138	183	209	237	196	184	172	107	159	171	167
Reentered labor force	439	530	529	437	354	457	501	596	549	434	480	377	399	455	422
Never worked before	47	36	58	54	46	45	72	81	64	62	69	39	35	55	55
Both sexes, 16 to 19 years	883	863	878	864	736	807	836	842	865	1,250	1,437	623	674	853	839
Lost last job	184	196	192	180	137	106	110	95	115	138	112	110	139	126	130
Left last job	104	85	88	111	90	97	101	140	119	105	93	70	90	101	97
Reentered labor force	301	302	319	331	283	328	324	274	248	380	533	214	207	294	281
Never worked before	293	280	280	241	226	276	301	334	383	627	699	228	238	331	330

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7. Unemployment rates, by age and sex, seasonally adjusted [1]

Age and sex	1970				1969									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
TOTAL															
16 years and over	4.8	4.4	4.2	3.9	3.5	3.5	3.8	3.8	3.5	3.5	3.4	3.5	3.5	3.5	3.6
16 to 19 years	15.7	13.9	13.4	13.8	11.8	11.8	12.9	12.9	12.3	12.2	11.7	12.4	12.7	12.2	12.7
16 and 17 years	18.7	15.7	16.3	17.2	13.7	14.3	16.5	16.1	15.8	14.6	13.5	14.0	14.8	14.5	14.7
18 and 19 years	13.8	12.4	11.7	11.6	10.2	9.2	10.4	10.6	9.8	10.3	10.1	11.5	11.4	10.5	11.2
20 to 24 years	7.7	6.8	7.3	6.1	5.8	5.8	6.4	6.5	5.4	5.8	5.4	5.5	5.7	5.7	5.8
25 years and over	3.1	3.0	2.6	2.4	2.2	2.2	2.4	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.3
25 to 54 years	3.2	3.1	2.7	2.5	2.3	2.1	2.4	2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3
55 years and over	2.8	2.7	2.4	2.0	2.1	1.9	2.3	2.2	2.0	2.0	2.0	1.7	2.0	2.0	2.2
MALE															
16 years and over	4.2	3.6	3.6	3.3	2.9	2.9	3.1	3.2	2.8	2.9	2.7	2.7	2.7	2.8	2.9
16 to 19 years	15.2	12.5	13.0	12.6	11.0	11.7	11.8	12.0	11.3	11.8	10.7	11.1	11.5	11.4	11.6
16 and 17 years	17.2	14.6	15.4	14.9	13.1	13.7	14.4	15.0	15.5	14.4	13.0	13.9	13.1	13.7	13.9
18 and 19 years	13.9	10.8	11.0	10.8	9.3	8.9	9.6	9.4	7.8	9.7	8.5	9.2	10.4	9.3	9.6
20 to 24 years	7.9	6.4	6.9	6.1	5.5	5.3	6.3	6.4	4.5	5.3	4.8	4.8	4.8	5.1	5.1
25 years and over	2.6	2.4	2.2	2.0	1.8	1.7	1.9	1.8	1.7	1.7	1.6	1.7	1.6	1.7	1.8
25 to 54 years	2.6	2.3	2.1	2.0	1.7	1.4	1.8	1.8	1.6	1.7	1.5	1.7	1.6	1.6	1.7
55 years and over	2.8	2.8	2.4	2.1	2.2	1.9	2.2	2.0	2.0	1.9	1.8	1.6	1.8	1.9	2.1
FEMALE															
16 years and over	5.7	5.7	5.1	4.8	4.5	4.5	4.9	5.0	4.8	4.6	4.7	4.8	4.9	4.7	4.8
16 to 19 years	16.4	15.6	13.9	15.2	12.8	11.9	14.2	14.2	13.6	12.7	13.0	14.0	14.3	13.3	14.0
16 and 17 years	20.6	17.0	17.3	20.3	14.7	15.0	19.2	17.7	16.2	14.8	14.3	14.2	17.1	15.5	15.9
18 and 19 years	13.7	14.3	12.7	12.4	11.2	9.6	11.3	12.0	12.0	11.0	11.9	14.1	12.6	11.8	12.8
20 to 24 years	7.5	7.2	7.6	6.2	6.1	6.5	6.5	6.6	6.3	6.3	6.0	6.4	6.7	6.3	6.7
25 years and over	3.8	4.0	3.3	3.0	3.0	3.1	3.4	3.4	3.3	3.2	3.3	3.1	3.2	3.2	3.2
25 to 54 years	4.2	4.4	3.6	3.3	3.3	3.4	3.6	3.7	3.6	3.5	3.6	3.4	3.5	3.5	3.4
55 years and over	2.7	2.5	2.3	1.7	1.9	2.0	2.5	2.5	2.1	2.3	2.3	1.9	2.5	2.2	2.3

[1] These data have been adjusted to reflect the experience through December 1969. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1970 issue of **Employment and Earnings.**

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8. Unemployment indicators, seasonally adjusted [1]

[In percent]

Selected categories	1970				1969									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
Total (all civilian workers)	4.8	4.4	4.2	3.9	3.5	3.5	3.8	3.8	3.5	3.5	3.4	3.5	3.5	3.5	3.6
Men, 20 years and over	3.2	2.9	2.8	2.5	2.2	2.1	2.3	2.4	2.1	2.2	2.0	2.0	2.0	2.1	2.2
Women, 20 years and over	4.4	4.5	4.1	3.6	3.5	3.6	3.8	3.9	3.8	3.7	3.7	3.7	3.8	3.7	3.8
Both sexes, 16–19 years	15.7	13.9	13.4	13.8	11.8	11.8	12.9	12.9	12.3	12.2	11.7	12.4	12.7	12.2	12.7
White	4.3	4.1	3.8	3.6	3.2	3.2	3.5	3.5	3.2	3.2	3.0	3.1	3.1	3.1	3.2
Negro and other	8.7	7.1	7.0	6.3	5.7	6.2	6.6	6.7	6.4	6.5	6.8	6.4	7.0	6.4	6.7
Married men	2.4	2.2	2.0	1.8	1.7	1.5	1.6	1.7	1.5	1.6	1.5	1.5	1.5	1.5	1.6
Full-time workers	4.4	4.0	3.7	3.4	3.2	3.1	3.1	3.3	3.1	3.1	3.1	3.1	3.2	3.1	3.1
Unemployed 15 weeks and over [2]	.7	.7	.6	.5	.5	.5	.4	.5	.5	.5	.5	.5	.5	.5	.5
State insured [3]	3.1	2.7	2.7	2.5	2.4	2.4	2.2	2.2	2.1	2.2	2.1	2.0	2.1	2.1	2.2
Labor force time lost [4]	5.1	4.8	4.5	4.2	3.9	4.0	4.3	4.3	4.0	4.0	3.8	3.8	3.8	3.9	4.0
OCCUPATION															
White-collar workers	2.9	2.7	2.3	2.1	2.1	2.1	2.4	2.2	2.2	2.2	2.1	2.0	1.8	2.1	2.0
Professional and managerial	1.7	1.8	1.4	1.3	1.5	1.1	1.3	1.3	1.2	1.2	1.2	1.2	1.1	1.2	1.1
Clerical workers	4.0	3.6	3.2	3.1	2.8	3.5	3.4	3.2	3.2	3.2	3.0	2.9	2.5	3.0	3.0
Sales workers	4.1	3.5	3.4	2.8	2.6	2.2	3.5	2.8	2.9	3.2	2.8	2.9	3.1	2.9	2.8
Blue-collar workers	5.7	5.2	5.0	4.6	4.3	4.2	4.2	4.4	3.8	3.8	3.7	3.8	4.0	3.9	4.1
Craftsmen and foremen	3.5	3.1	2.5	2.3	2.3	2.1	2.4	2.6	2.1	1.9	1.9	2.3	2.2	2.2	2.4
Operatives	6.3	6.2	6.0	5.1	5.0	4.9	4.9	4.7	4.2	4.2	4.3	4.1	4.6	4.5	4.4
Nonfarm laborers	8.8	7.4	7.7	8.5	7.4	6.9	6.5	7.6	6.8	7.1	6.1	6.5	6.8	6.7	7.2
Service workers	5.0	4.9	4.8	4.5	3.6	4.0	4.2	4.8	4.5	4.3	4.4	4.2	4.5	4.2	4.5
INDUSTRY															
Nonagricultural private wage and salary workers [5]	4.8	4.6	4.3	3.9	3.6	3.6	3.8	3.9	3.5	3.5	3.5	3.5	3.5	3.5	3.6
Construction	8.1	8.1	7.9	7.1	6.0	5.4	7.3	7.4	7.0	5.9	5.1	5.7	6.0	6.0	6.9
Manufacturing	4.7	4.7	4.6	3.8	3.8	3.7	3.6	3.7	2.9	3.2	3.3	3.1	3.2	3.3	3.3
Durable goods	4.9	4.8	4.7	3.8	3.7	3.6	3.2	3.2	2.3	3.1	3.2	2.9	3.0	3.0	3.0
Nondurable goods	4.5	4.6	4.4	3.8	3.9	3.9	4.2	4.3	3.7	3.3	3.4	3.4	3.4	3.7	3.7
Transportation and public utilities	3.9	3.1	2.4	2.9	2.4	2.4	2.9	2.0	2.0	2.0	1.9	2.4	2.3	2.2	2.0
Wholesale and retail trade		4.7	4.7	4.3	3.9	3.9	4.2	4.5	4.3	4.1	4.2	4.1	4.2	4.1	4.0
Finance and service industries	5.5 3.9	4.0	3.2	3.1	2.7	3.2	3.1	3.4	3.4	3.6	3.2	3.3	3.3	3.2	3.4
Government wage and salary workers	2.2	2.1	2.0	2.2	2.0	2.1	2.4	1.9	1.9	1.8	1.7	1.7	1.6	1.9	1.8
Agricultural wage and salary workers	5.9	6.4	5.8	6.2	6.5	5.2	6.3	6.5	6.5	8.9	5.6	5.3	5.8	6.1	6.3

[1] These data have been adjusted to reflect the experience through December 1969. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1970 issue of **Employment and Earnings.**

[2] Unemployment rate calculated as a percent of civilian labor force.

[3] Insured unemployment under State programs as a percent of average covered employment.

[4] Man-hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force man-hours.

[5] Includes mining, not shown separately.

9. Duration of unemployment, seasonally adjusted [1]

[In thousands]

Period	1970				1969									Annual average	
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
Less than 5 weeks	2,295	1,995	1,973	1,756	1,515	1,558	1,882	1,756	1,646	1,656	1,578	1,720	1,711	1,629	1,594
5 to 14 weeks	1,075	1,154	1,016	914	893	912	882	995	854	824	812	639	748	827	810
15 weeks and over	569	545	465	409	392	389	363	392	385	400	385	400	381	375	412
15 to 26 weeks	372	363	306	276	272	249	233	240	250	233	255	263	246	242	256
27 weeks and over	197	182	159	133	120	140	130	152	135	167	130	137	135	133	156
15 weeks and over as a percent of civilian labor force	.7	.7	.6	.5	.4	.4	.4	.4	.4	.4	.4	.5	.6	.5	.5

[1] These data have been adjusted to reflect the experience through December 1969. For a discussion of seasonal adjustment procedures and the historical seasonally adjusted series, see the February 1970 issue of **Employment and Earnings.**

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10. Unemployment insurance and employment service operations [1]

[All items except average benefits amounts are in thousands]

Item	1970			1969									
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.
Employment service: [2]													
New applications for work	828	765	950	658	711	762	801	750	874	1,237	850	822	745
Nonfarm placements	328	295	326	311	372	463	503	471	469	512	437	454	397
State unemployment insurance programs:													
Initial claims [3 4]	1,078	1,169	1,529	1,363	866	745	655	731	1,105	710	613	756	709
Insured unemployment [5] (average weekly volume) [6]	1,798	1,874	1,847	1,375	1,030	864	840	948	1,021	852	906	1,090	1300
Rate of insured un employment [7]	3.5	3.6	3.6	2.7	2.0	1.6	1.6	1.8	2.0	1.7	1.8	2.2	2.6
Weeks of unemploy ment compensated	6,956	6,517	6,418	4,692	3,054	3,156	3,104	3,496	3,626	3,123	3,519	4,496	4,998
Average weekly benefit amount for total unemployment	$48.93	$49.11	$48.49	$47.42	$46.47	$46.25	$45.70	$46.16	$45.30	$44.88	$45.14	$46.03	$46.71
Total benefits paid	$331,067	$310,800	$299,352	$214,260	$136,585	$139,536	$136,182	$156,707	$159,161	$135,004	$152,966	$200,052	$226,516
Unemployment compensation for ex-servicemen: [8 9]													
Initial claims [3 6]	42	38	44	39	30	29	26	27	32	26	20	22	24
Insured unemployment [6] (average weekly volume)	69	66	61	48	38	32	32	37	36	30	29	35	40
Weeks of unemployment compensated	89	244	242	193	126	127	133	148	143	114	122	155	163
Total benefits paid	$14,200	$12,028	$11,957	$9,517	$6,240	$6,256	$6,514	$7,156	$6,946	$5,511	$5,847	$7,425	$7,794
Unemployment compensation for Federal civilian employees: [9 10]													
Initial claims [3]	11	15	15	12	13	11	10	8	11	10	8	8	8
Insured unemployment [5] (average weekly volume)	29	30	28	24	22	18	17	18	19	18	17	20	23
Weeks of unemployment compensated		109	110	101	75	76	74	77	78	69	73	88	94
Total benefits paid	128	$5,239	$5,194	$4,748	$3,465	$3,494	$3,163	$3,497	$3,597	$3,155	$3,318	$4,038	$4,265
	$6,192												
Railroad unemployment insurance:	9												
Applications [11]		4	9	5	5	10	6	7	17	11	11	5	5
Insured unemployment (average weekly volume)	19	18	21	17	14	15	13	13	13	10	18	17	21
Number of payments [12]	42	38	47	35	28	36	28	28	26	25	39	41	46
Average amount of benefit payment [13]	$92.00	$96.76	$94.78	$96.02	$96.28	$89.31	$93.64	$94.12	$91.74	$90.69	$75.65	$88.32	$91.06
Total benefits paid [14]	$3,668	$3,374	$4,091	$3,241	$2,513	$2,918	$2,478	$2,375	$2,113	$2,043	$2,804	$3,386	$4,056
All programs: [15]													
Insured unemployment [6]	1,916	1,987	1,957	1,464	1,105	929	902	1,015	1,088	911	970	1,162	1,384

[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.

SOURCE: U.S. Department of Labor, Office of Manpower Management Data Systems for all items except railroad unemployment insurance which is prepared by the U.S. Railroad Retirement Board. Data for latest month are subject to revision.

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11. Employees[1] on nonagricultural payrolls, by industry division, 1947 to date

[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	67,860	610	3,267	19,768	4,313	14,081	3,618	10,464	3,383	10,592	11,846	2,737	9,109
1969	70,141	628	3,411	20,121	4,448	14,644	3,767	10,876	3,559	11,103	12,227	2,757	9,469

[1] The industry series have been adjusted to March 1968 benchmarks (comprehensive counts of employment) and data are not comparable with those published in issues prior to August 1969. Historical data for a particular industry are available upon request to any of the Bureau's eight regional offices (see inside front cover for addresses) or to the Bureau of Labor Statistics, Washington, D.C. 20212.

These series are based upon establishment reports which cover all full- and part-time employees in nonagricultural establishments who worked during, or received 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	Mar. 1970 p	Feb. 1970	Mar. 1969	State	Mar. 1970 p	Feb. 1970	Mar. 1970
Alabama	995.2	996.7	978.7	Montana	188.0	187.9	188.1
Alaska	81.2	80.3	76.6	Nebraska	475.4	471.6	459.7
Arizona	544.8	542.4	502.9	Nevada	192.0	190.5	180.9
Arkansas	526.1	527.3	521.6	New Hampshire	250.6	250.3	249.7
California	6,955.0	6,894.1	6,777.6	New Jersey	2,588.8	2,560.1	2,518.5
Colorado	716.9	714.8	691.4	New Mexico	287.9	286.8	279.6
Connecticut	1,197.3	1,194.0	1,174.4	New York	7,153.5	7,096.4	7,074.8
Delaware	207.0	202.7	206.3	North Carolina	1,739.6	1,738.4	1,720.2
District of Columbia	683.7	680.2	674.8	North Dakota	157.7	157.2	151.9
Florida	2,171.6	2,179.4	2,079.3	Ohio	3,902.6	3,870.2	3,812.9
Georgia	1,526.4	1,520.7	1,498.5	Oklahoma	757.8	759.2	735.3
Hawaii	282.3	281.0	266.1	Oregon	692.1	689.2	687.8
Idaho	197.8	196.0	192.9	Pennsylvania	4,348.8	4,318.5	4,297.6
Illinois	4,356.2	4,328.2	4,290.0	Rhode Island	335.5	334 4	338.8
Indiana	1,848.0	1,836.0	1,845.9	South Carolina	814.7	813.5	803.3
Iowa	875.5	872.0	863.7	South Dakota	169.8	169.1	164.7
Kansas	676.9	674.4	678.4	Tennessee	1,319.1	1,318.6	1,284.1
Kentucky[1]	898.5	893.2	874.6	Texas	3,679.9	3,665.9	3,532.7
Louisiana	1,041.3	1,041.9	1,021.4	Utah	348.6	346.1	338.6
Maine	324.3	324.4	320.0	Vermont	145.8	145.5	140.3
Maryland	1,288.8	1,276.5	1,250.6	Virginia	1,436.0	1,431.8	1,405.9
Massachusetts	2,228.1	2,216.9	2,192.0	Washington	1,097.8	1,097.5	1,104.6
Michigan	3,021.0	2,994.0	3,049.1	West Virginia	508.3	506.3	500.7
Minnesota	1,298.6	1,294.2	1,252.1	Wisconsin	1,516.0	1,506.5	1,480.8
Mississippi	571.9	569.9	557.0	Wyoming	103.5	102.1	99.2
Missouri	1,662.4	1,649.5	1,647.9				

[1] Revised series; not strictly comparable with previously published data.

p (=) preliminary.

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.

Historical data for tables 11 and 13 through 22 are published periodically by the Bureau of Labor Statistics in the Bulletin 1312 series "Employment and Earnings, United States." The next edition, covering the period 1909 to 1970, is scheduled for publication in the fall of 1970. Publication of the edition covering the period 1909 to 1969 has been cancelled. Historical data for a particular industry are available from any of the Bureau's eight regional offices (see inside front cover for addresses) or from the Bureau of Labor Statistics, Washington, D.C. 20212.

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13. Employees [1] on nonagricultural payrolls, by industry division and major manufacturing group

[In thousands]

Industry division and group	1970				1969									Annual average	
	Apr. p	Mar. p	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
TOTAL	70,582	70,297	69,893	69,797	71,629	71,227	71,198	70,814	70,607	70,347	70,980	69,929	69,462	70,141	67,860
MINING	623	617	616	619	631	631	632	639	647	645	638	624	619	628	610
CONTRACT CONSTRUCTION	3,270	3,140	3,045	3,021	3,373	3,530	3,623	3,663	3,707	3,681	3,601	3,404	3,255	3,411	3,267
MANUFACTURING	19,564	19,722	19,712	19,767	20,056	20,143	20,339	20,421	20,435	20,114	20,336	19,982	19,952	20,121	19,768
Production workers [2]	14,196	14,341	14,312	14,365	14,647	14,732	14,918	14,997	14,971	14,665	14,923	14,624	14,604	14,735	14,505
Durable goods	11,464	11,579	11,553	11,605	11,785	11,816	11,991	12,014	11,976	11,874	12,036	11,846	11,835	11,880	11,624
Production workers [2]	8,261	8,361	8,317	8,366	8,544	8,570	8,733	8,755	8,691	8,600	8,781	8,615	8,612	8,639	8,456
Ordnance and accessories	269.3	279.2	286.7	291.7	300.1	306.0	307.7	315.1	323.4	331.7	335.3	338.7	341.2	328.5	341.5
Lumber and wood products	566.3	567.2	568.1	573.2	585.9	589.4	593.9	605.3	617.8	616.3	624.4	604.1	593.4	600.2	597.8
Furniture and fixtures	473.4	478.0	479.3	484.4	491.0	494.3	496.9	495.9	497.9	485.0	496.0	489.6	490.7	492.3	474.2
Stone, clay, and glass products	648.7	639.3	637.4	637.0	655.8	666.9	669.6	674.2	679.1	676.2	676.1	657.2	654.8	661.2	637.0
Primary metal industries	1,323.8	1,330.7	1,338.5	1,343.6	1,360.1	1,357.0	1,355.9	1,365.5	1,367.9	1,366.7	1,375.6	1,346.1	1,336.8	1,350.2	1,314.3
Fabricated metal products	1,413.7	1,430.2	1,435.6	1,447.6	1,471.0	1,470.9	1,468.0	1,472.5	1,461.9	1,441.7	1,469.1	1,445.5	1,441.6	1,454.3	1,393.7
Machinery, except electrical	2,017.4	2,030.6	2,029.9	2,019.6	2,018.5	2,004.2	2,011.9	2,009.7	1,999.3	2,009.3	2,025.6	2,000.9	2,007.0	2,006.5	1,960.5
Electrical equipment	1,988.2	2,011.6	2,020.4	1,954.2	1,975.5	1,981.7	2,094.9	2,083.1	2,074.2	2,047.7	2,058.7	2,035.8	2,027.7	2,037.5	1,981.9
Transportation equipment	1,874.8	1,922.5	1,869.4	1,966.5	2,009.2	2,015.2	2,054.8	2,063.8	2,023.4	1,991.0	2,053.7	2,018.9	2,037.3	2,035.4	2,028.4
Instruments and related products	460.8	463.8	463.8	464.8	470.1	469.4	469.2	469.8	475.7	470.9	474.1	470.3	469.6	470.0	459.9
Miscellaneous manufacturing	427.1	425.9	424.2	421.9	447.7	460.7	467.7	458.9	455.8	437.5	447.6	439.2	435.3	443.8	434.6
Nondurable goods	8,100	8,143	8,159	8,162	8,271	8,327	8,348	8,407	8,459	8,240	8,300	8,136	8,117	8,241	8,144
Production workers [2]	5,935	5,980	5,995	5,999	6,103	6,162	6,185	6,242	6,280	6,065	6,142	6,009	5,992	6,096	6,049
Food and kindred products	1,718.7	1,731.0	1,738.4	1,741.8	1,790.3	1,833.6	1,860.4	1,920.2	1,932.0	1,827.6	1,785.3	1,725.3	1,710.8	1,793.6	1,780.8
Tobacco manufactures	71.3	73.7	76.5	78.8	82.2	85.0	91.3	93.9	90.0	71.9	72.1	71.3	71.6	80.6	83.8
Textile mill products	965.3	963.5	966.2	973.8	981.8	984.4	982.3	984.7	988.1	980.7	1,000.9	984.7	988.4	987.2	990.6
Apparel and other textile products	1,383.4	1,406.9	1,408.8	1,393.9	1,412.9	1,423.4	1,428.6	1,427.3	1,433.3	1,375.8	1,440.1	1,419.1	1,411.2	1,417.5	1,407.9
Paper and allied products	717.1	717.9	718.3	720.6	727.1	724.9	720.6	722.2	726.8	719.8	725.0	707.6	703.5	716.2	692.5
Printing and publishing	1,102.8	1,102.9	1,102.6	1,100.6	1,108.9	1,106.3	1,100.5	1,091.6	1,091.1	1,085.4	1,085.0	1,071.1	1,077.3	1,086.5	1,063.1
Chemicals and allied products	1,048.1	1,049.4	1,048.7	1,046.2	1,049.7	1,048.1	1,046.2	1,052.2	1,064.4	1,064.5	1,060.9	1,045.1	1,046.9	1,049.1	1,026.1
Petroleum and coal products	190.5	190.4	189.3	189.1	190.0	192.0	192.7	192.9	196.0	196.3	193.7	188.9	187.8	183.8	187.0
Rubber and plastics products, nec	570.2	574.8	575.6	580.5	586.7	588.2	587.2	585.8	586.2	576.1	586.2	577.0	575.7	581.0	557.1
Leather and leather products	332.2	332.5	334.6	336.7	341.4	341.1	338.3	336.2	351.0	341.4	350.3	345.5	343.8	345.2	355.5
TRANSPORTATION AND PUBLIC UTILITIES	4,441	4,457	4,439	4,453	4,498	4,506	4,502	4,529	4,533	4,528	4,512	4,431	4,403	4,448	4,313
WHOLESALE AND RETAIL TRADE	14,778	14,698	14,608	14,709	15,642	15,090	14,847	14,702	14,660	14,662	14,717	14,517	14,398	14,644	14,081
Wholesale trade	3,832	3,832	3,826	3,834	3,875	3,849	3,834	3,806	3,821	3,818	3,793	3,709	3,688	3,767	3,618
Retail trade	10,946	10,866	10,782	10,875	11,767	11,241	11,013	10,896	10,839	10,844	10,924	10,808	10,710	10,876	10,464
FINANCE, INSURANCE, AND REAL ESTATE	3,667	3,639	3,617	3,606	3,609	3,599	3,591	3,597	3,642	3,629	3,585	3,534	3,517	3,559	3,383
SERVICES	11,439	11,296	11,232	11,133	11,229	11,230	11,255	11,183	11,253	11,266	11,243	11,131	11,044	11,103	10,592
Hotels and other lodging places	724.2	701.0	697.3	689.6	693.7	695.8	718.8	743.5	825.9	829.2	763.0	727.4	714.6	729.6	719.4
Personal services	1,004.0	1,006.5	1,003.2	1,005.3	1,022.2	1,025.4	1,028.0	1,021.8	1,023.0	1,036.0	1,042.2	1,031.1	1,025.4	1,025.2	1,031.3
Medical and other health services	3,016.9	3,006.7	2,986.2	2,965.4	2,947.0	2,935.7	2,913.7	2,893.8	2,891.0	2,889.3	2,866.6	2,816.9	2,804.3	2,855.7	2,637.7
Educational services	1,183.1	1,187.1	1,187.0	1,154.8	1,170.8	1,175.5	1,155.4	1,053.4	951.1	967.2	1,062.5	1,158.3	1,159.8	1,108.7	1,065.9
GOVERNMENT	12,800	12,728	12,624	12,489	12,591	12,498	12,409	12,080	11,730	11,822	12,348	12,306	12,274	12,227	11,846
Federal [3]	2,845	2,758	2,694	2,690	2,760	2,705	2,715	2,733	2,804	2,841	2,832	2,740	2,747	2,757	2,737
State and Local	9,955	9,970	9,930	9,799	9,831	9,793	9,694	9,347	8,926	8,981	9,516	9,566	9,527	9,469	9,109

[1] For comparability of data with those published in issues prior to August 1969, and coverage of these series, see footnote 1, table 11.

[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.

[3] Beginning January 1969, Federal employment includes approximately 39,000 civilian technicians of the National Guard, who were transferred from State to Federal status in accordance with Public Law 90-486.

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14. Employees [1] on nonagricultural payrolls, by industry division and major manufacturing group, seasonally adjusted

[In thousands]

Industry division and group	1970				1969								
	Apr. p	Mar. p	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.
TOTAL	70,972	71,060	71,004	70,818	70,679	70,635	70,651	70,390	70,500	70,247	70,300	70,013	69,789
MINING	628	633	634	634	635	632	631	631	631	629	622	622	624
CONTRACT CONSTRUCTION	3,378	3,443	3,418	3,334	3,459	3,461	3,418	3,420	3,410	3,434	3,466	3,407	3,363
MANUFACTURING	19,721	19,865	19,886	19,965	20,007	20,004	20,156	20,197	20,334	20,164	20,198	20,118	20,111
Production workers [2]	14,332	14,468	14,467	14,542	14,582	14,588	14,732	14,772	14,922	14,772	14,811	14,740	14,739
Durable goods	11,494	11,618	11,608	11,663	11,738	11,740	11,932	11,965	12,081	11,912	11,931	11,874	11,868
Production workers [2]	8,284	8,391	8,364	8,417	8,487	8,492	8,674	8,701	8,823	8,668	8,687	8,630	8,634
Ordnance and accessories	271	280	286	290	299	304	306	314	325	332	337	342	343
Lumber and wood products	576	580	584	591	591	591	589	595	598	600	607	610	604
Furniture and fixtures	479	481	482	486	486	488	491	492	493	491	496	496	496
Stone, clay, and glass products	652	656	664	661	664	664	662	660	659	658	662	656	658
Primary metal industries	1,313	1,329	1,343	1,353	1,371	1,378	1,381	1,378	1,361	1,348	1,347	1,333	1,326
Fabricated metal products	1,422	1,440	1,444	1,452	1,459	1,456	1,456	1,468	1,465	1,456	1,456	1,453	1,450
Machinery, except electrical	2,009	2,018	2,024	2,018	2,025	2,012	2,030	2,020	2,005	2,007	2,010	1,999	1,999
Electrical equipment	2,006	2,022	2,020	1,948	1,952	1,958	2,076	2,075	2,076	2,070	2,063	2,058	2,046
Transportation equipment	1,867	1,907	1,853	1,951	1,972	1,983	2,030	2,054	2,183	2,032	2,035	2,009	2,029
Instruments and related products	463	465	465	466	468	468	469	469	473	471	473	474	472
Miscellaneous manufacturing	436	440	443	447	451	438	442	440	443	447	445	444	445
Nondurable goods	8,227	8,247	8,278	8,302	8,269	8,264	8,224	8,232	8,253	8,252	8,267	8,244	8,243
Production workers [2]	6,048	6,077	6,103	6,125	6,095	6,096	6,058	6,071	6,099	6,104	6,124	6,110	6,105
Food and kindred products	1,803	1,818	1,830	1,814	1,803	1,808	1,777	1,791	1,797	1,787	1,789	1,793	1,795
Tobacco manufactures	81	80	79	80	76	78	78	80	83	81	81	82	81
Textile mill products	968	966	974	986	982	979	977	979	979	988	990	987	991
Apparel and other textile products	1,397	1,397	1,403	1,421	1,414	1,409	1,410	1,412	1,414	1,423	1,429	1,426	1,425
Paper and allied products	724	724	726	726	724	722	720	718	718	716	717	714	710
Printing and publishing	1,104	1,104	1,106	1,106	1,102	1,103	1,099	1,093	1,089	1,084	1,083	1,075	1,078
Chemicals and allied products	1,045	1,052	1,056	1,056	1,055	1,053	1,050	1,051	1,052	1,054	1,055	1,046	1,044
Petroleum and coal products	193	194	194	194	193	193	191	189	190	191	191	190	190
Rubber and plastics products, nec	574	578	577	581	581	581	583	583	586	585	584	581	579
Leather and leather products	338	334	333	338	339	338	339	336	345	343	348	350	350
TRANSPORTATION AND PUBLIC UTILITIES	4,477	4,511	4,511	4,521	4,489	4,484	4,480	4,480	4,484	4,483	4,467	4,444	4,439
WHOLESALE AND RETAIL TRADE	14,983	14,947	14,991	14,939	14,773	14,836	14,809	14,716	14,702	14,671	14,665	14,609	14,533
Wholesale trade	3,882	3,882	3,876	3,865	3,837	3,815	3,807	3,787	3,776	3,773	3,774	3,758	3,737
Retail trade	11,101	11,065	11,115	11,074	10,936	11,021	11,002	10,929	10,926	10,898	10,891	10,851	10,796
FINANCE, INSURANCE, AND REAL ESTATE	3,682	3,665	3,654	3,650	3,623	3,613	3,595	3,586	3,581	3,568	3,557	3,541	3,531
SERVICES	11,439	11,422	11,415	11,349	11,297	11,264	11,244	11,150	11,120	11,067	11,066	11,065	11,044
Hotels and other lodging places	751	755	751	754	749	742	740	721	704	706	724	730	741
Personal services	1,003	1,016	1,017	1,015	1,017	1,021	1,025	1,026	1,026	1,030	1,026	1,025	1,024
Medical and other health services	3,026	3,013	2,992	2,980	2,956	2,936	2,917	2,897	2,874	2,861	2,850	2,831	2,813
Educational services	1,142	1,138	1,140	1,117	1,121	1,118	1,113	1,092	1,094	1,099	1,102	1,120	1,119
GOVERNMENT	12,664	12,574	12,495	12,426	12,396	12,341	12,318	12,210	12,238	12,231	12,259	12,207	12,144
Federal [3]	2,856	2,780	2,721	2,714	2,720	2,721	2,729	2,749	2,752	2,777	2,790	2,754	2,758
State and local	9,808	9,794	9,774	9,712	9,676	9,620	9,589	9,461	9,486	9,454	9,469	9,453	9,386

[1] For comparability of data with those published in issues prior to August 1969, and coverage of these series, see footnote 1, table 11.

[2] For definition of production workers, see footnote 2, table 13.

[3] See footnote 3, table 13.

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15. Labor turnover rates in manufacturing, 1959 to date [1]

[Per 100 employees]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
Total accessions													
1959	3.8	3.7	4.1	4.1	4.2	5.4	4.4	5.2	5.1	3.9	3.4	3.6	4.2
1960	4.0	3.5	3.3	3.4	3.9	4.7	3.9	4.9	4.8	3.5	2.9	2.3	3.8
1961	3.7	3.2	4.0	4.0	4.3	5.0	4.4	5.3	4.7	4.3	3.4	2.6	4.1
1962	4.1	3.6	3.8	4.0	4.3	5.0	4.6	5.1	4.9	3.9	3.0	2.4	4.1
1963	3.6	3.3	3.5	3.9	3.9	4.8	4.3	4.8	4.8	3.9	2.9	2.5	3.9
1964	3.6	3.4	3.7	3.8	3.9	5.1	4.4	5.1	4.8	4.0	3.2	2.6	4.0
1965	3.8	3.5	4.0	3.8	4.1	5.6	4.5	5.4	5.5	4.5	3.9	3.1	4.3
1966	4.6	4.2	4.9	4.6	5.1	6.7	5.1	6.4	6.1	5.1	3.9	2.9	5.0
1967	4.3	3.6	3.9	3.9	4.6	5.9	4.7	5.5	5.3	4.7	3.7	2.8	4.4
1968	4.2	3.8	3.9	4.3	4.6	5.9	5.0	5.7	5.7	5.0	3.8	3.0	4.6
1969	4.6	3.9	4.4	4.5	4.8	6.6	5.1	5.6	5.9	4.9	3.6	2.9	4.7
1970	4.0	3.6	p3.8										
New hires													
1959	2.0	2.1	2.4	2.5	3.7	2.7	3.0	3.5	3.5	2.6	1.9	1.5	2.6
1960	2.2	2.2	2.0	2.0	2.3	3.0	2.4	2.9	2.8	2.1	1.5	1.0	2.2
1961	1.5	1.4	1.6	1.8	2.1	2.9	2.5	3.1	3.0	2.7	2.0	1.4	2.2
1962	2.2	2.1	2.2	2.4	2.8	3.5	2.9	3.2	3.1	2.5	1.8	1.2	2.5
1963	1.9	1.8	2.0	2.3	2.5	3.3	2.7	3.2	3.2	2.6	1.8	1.4	2.4
1964	2.0	2.0	2.2	2.4	2.5	3.6	2.9	3.4	3.5	2.8	2.2	1.6	2.6
1965	2.4	2.4	2.8	2.6	3.0	4.3	3.2	3.9	4.0	3.5	2.9	2.2	3.1
1966	3.2	3.1	3.7	3.6	4.1	5.6	3.9	4.8	4.7	4.2	3.1	2.1	3.8
1967	3.0	2.7	2.8	2.8	3.3	4.6	3.3	4.0	4.1	3.7	2.8	2.0	3.3
1968	3.0	2.7	2.9	3.2	3.6	4.7	3.7	4.3	4.5	4.0	2.9	2.2	3.5
1969	3.3	3.0	3.4	3.5	3.8	5.4	3.9	4.3	4.8	4.0	2.8	2.1	3.7
1970	2.9	2.5	p2.7										
Total separations													
1959	3.7	3.1	3.3	3.6	3.5	3.6	4.0	4.6	5.3	5.5	4.7	3.9	4.1
1960	3.6	3.5	4.0	4.2	3.9	4.0	4.4	4.8	5.3	4.7	4.5	4.8	4.3
1961	4.7	3.9	3.8	3.4	3.5	3.6	4.1	4.2	5.1	4.2	4.0	4.0	4.0
1962	3.9	3.4	3.6	3.6	3.8	3.8	4.4	5.1	5.0	4.4	4.0	3.8	4.1
1963	4.0	3.2	3.5	3.6	3.6	3.4	4.1	4.8	4.9	4.1	3.9	3.7	3.9
1964	4.0	3.3	3.5	3.5	3.6	3.5	4.4	4.3	5.1	4.2	3.6	3.7	3.9
1965	3.7	3.1	3.4	3.7	3.6	3.6	4.3	5.1	5.6	4.5	3.9	4.1	4.1
1966	4.0	3.6	4.1	4.3	4.3	4.4	5.3	5.8	6.6	4.8	4.3	4.2	4.6
1967	4.5	4.0	4.6	4.3	4.2	4.3	4.8	5.3	6.2	4.7	4.0	3.9	4.6
1968	4.4	3.9	4.1	4.1	4.3	4.1	5.0	6.0	6.3	4.9	4.1	3.8	4.6
1969	4.5	4.0	4.4	4.5	4.6	4.5	5.3	6.2	6.6	5.3	4.3	4.1	4.9
1970	4.8	4.3	p4.4										
Quits													
1959	1.1	1.0	1.2	1.4	1.5	1.5	1.6	2.1	2.6	1.7	1.2	1.0	1.5
1960	1.2	1.2	1.2	1.4	1.3	1.4	1.4	1.8	2.3	1.3	.9	.7	1.3
1961	.9	.8	.9	1.0	1.1	1.2	1.2	1.7	2.3	1.4	1.1	.9	1.2
1962	1.1	1.1	1.2	1.3	1.5	1.5	1.4	2.1	2.4	1.5	1.1	.8	1.4
1963	1.1	1.0	1.2	1.3	1.4	1.4	1.4	2.1	2.4	1.5	1.1	.8	1.4
1964	1.2	1.1	1.2	1.3	1.5	1.4	1.5	2.1	2.7	1.7	1.2	1.0	1.5
1965	1.4	1.3	1.5	1.7	1.7	1.7	1.8	2.6	3.5	2.2	1.7	1.4	1.9
1966	1.9	1.8	2.3	2.5	2.5	2.5	2.5	3.6	4.5	2.8	2.1	1.7	2.6
1967	2.1	1.9	2.1	2.2	2.2	2.3	2.1	3.2	4.0	2.5	1.9	1.5	2.3
1968	2.0	1.9	2.1	2.2	2.4	2.2	2.3	3.7	4.1	2.8	2.1	1.6	2.5
1969	2.3	2.1	2.4	2.6	2.7	2.6	2.6	4.0	4.4	2.9	2.1	1.6	2.7
1970	2.1	1.9											
Layoffs													
1959	2.1	1.5	1.6	1.6	1.4	1.4	1.8	1.8	2.0	3.2	2.9	2.4	2.0
1960	1.8	1.7	2.2	2.2	1.9	2.0	2.4	2.4	2.4	2.8	3.1	3.6	2.4
1961	3.2	2.6	2.3	1.9	1.8	1.8	2.3	1.8	2.1	2.0	2.2	2.6	2.2
1962	2.1	1.7	1.6	1.6	1.6	1.6	2.2	2.2	1.9	2.2	2.3	2.5	2.0
1963	2.2	1.6	1.7	1.6	1.5	1.4	2.0	1.9	1.8	1.9	2.1	2.3	1.8
1964	2.0	1.6	1.6	1.4	1.4	1.3	2.1	1.4	1.5	1.8	1.7	2.1	1.7
1965	1.6	1.2	1.2	1.3	1.1	1.1	1.8	1.6	1.3	1.4	1.5	1.9	1.4
1966	1.3	1.0	1.0	1.0	.9	1.0	2.0	1.1	1.0	1.1	1.3	1.7	1.2
1967	1.5	1.3	1.5	1.3	1.1	1.1	1.9	1.2	1.2	1.3	1.3	1.6	1.4
1968	1.5	1.2	1.1	1.0	1.0	.9	1.7	1.2	1.1	1.2	1.2	1.4	1.2
1969	1.2	1.0	1.0	.9	.9	.9	1.6	1.1	1.1	1.3	1.3	1.8	1.2
1970	1.7	1.5	p1.6										

[1] For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11.

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 for the following reasons: (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.

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16. Labor turnover rates [1] in manufacturing, by major industry group

[Per 100 employees]

Major industry group	Accession rates						Separation rates								
	Total			New hires			Total			Quits			Layoffs		
	Mar. 1970p	Feb 1970	Mar. 1969	Mar. 1970p	Feb. 1970	Mar. 1969	Mar. 1970p	Feb. 1970	Mar. 1969	Mar 1970p	Feb. 1970	Mar. 1969	Mar. 1970p	Feb. 1970	Mar. 1969
MANUFACTURING	3.8	3.6	4.4	2.7	2.5	3.4	4.4	4.3	4.4	2.0	1.9	2.4	1.6	1.5	1.0
Seasonally adjusted	4.0	4.3	4.6	3.2	3.1	4.0	4.9	5.1	4.9	2.3	2.4	2.7	1.8	1.7	1.2
Durable goods	3.4	3.3	4.4	2.4	2.3	3.4	4.4	4.3	4.1	1.8	1.7	2.3	1.7	1.8	.8
Ordnance and accessories	1.2	1.5	2.9	.8	.8	2.3	4.6	3.8	3.4	1.1	1.0	1.7	2.9	2.2	.9
Lumber and wood products	5.3	4.1	7.0	4.0	3.3	5.9	5.9	6.3	6.6	3.4	2.9	4.4	1.6	2.7	1.2
Furniture and fixtures	4.7	4.0	6.0	3.7	3.2	5.4	5.8	5.6	6.1	3.2	3.0	4.4	1.5	1.6	.6
Stone, clay, and glass products	4.2	3.8	5.4	2.8	2.6	4.1	4.1	4.3	4.1	2.1	1.9	2.6	1.2	1.5	.6
Primary metal industries	2.7	2.8	3.9	1.9	1.9	2.9	3.5	3.6	3.3	1.4	1.3	1.7	1.0	1.2	.5
Fabricated metal products	4.0	3.7	5.0	3.1	2.7	4.1	4.6	4.9	5.0	2.2	2.0	2.8	1.4	1.9	1.0
Machinery, except electrical	2.8	2.9	3.5	2.2	2.2	2.8	3.1	3.2	3.2	1.4	1.3	1.8	.8	.9	.5
Electrical equipment	3.0	3.1	3.9	2.2	2.1	2.9	4.4	4.1	3.8	1.7	1.7	2.1	1.6	1.4	.7
Transportation equipment	3.5	3.3	4.0	1.7	1.7	2.6	5.5	5.4	4.2	1.2	1.2	1.7	3.4	3.4	1.6
Instruments and related products	2.7	2.6	3.3	2.1	2.0	2.8	3.1	3.2	3.1	1.4	1.4	1.8	.9	1.0	.4
Miscellaneous manufacturing	5.9	5.2	6.5	4.0	3.7	4.8	5.6	4.7	5.3	2.8	2.5	3.3	1.7	1.2	.9
Nondurable goods	4.2	4.0	4.5	3.0	2.9	3.4	4.5	4.2	4.8	2.2	2.2	2.6	1.5	1.2	1.3
Food and kindred products	5.5	4.9	5.4	3.5	3.4	3.8	5.9	5.2	6.2	2.6	2.5	2.9	2.5	2.0	2.4
Tobacco manufactures	2.2	2.9	2.0	1.8	2.2	1.5	3.8	6.0	4.3	1.8	1.9	1.7	1.3	3.3	1.8
Textile mill products	4.6	4.2	5.0	3.4	3.2	4.0	5.0	5.0	5.2	3.2	3.0	3.6	.8	1.0	.6
Apparel and other textile products	4.9	5.1	5.3	3.4	3.4	3.6	5.7	4.9	5.8	2.5	2.4	2.7	2.5	1.7	2.4
Paper and allied products	3.1	3.0	3.9	2.4	2.5	3.4	3.0	3.4	3.9	1.7	1.8	2.4	.6	.7	.5
Printing and publishing	3.4	3.1	3.5	2.8	2.5	3.0	3.1	3.0	3.2	1.8	1.8	2.2	.7	.6	.4
Chemicals and allied products	2.4	2.1	2.7	2.0	1.7	2.3	2.5	2.2	2.4	1.2	1.1	1.4	.6	.6	.3
Petroleum and coal products	1.9	2.0	2.6	1.7	1.7	2.1	2.3	1.8	2.3	.9	.8	1.1	.7	.3	.4
Rubber and plastics products, n.e.c.	4.4	4.0	5.5	3.3	3.1	4.5	4.9	5.0	5.3	2.5	2.5	3.4	1.3	1.5	.8
Leather and leather products	5.0	5.3	5.2	3.6	3.6	3.6	5.8	5.7	6.2	3.2	3.2	3.5	1.8	1.4	1.6

[1] For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For relationship to employment series see footnote 1, table 15.

NOTE: For additional detail see Employment and Earnings, table D-2.
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17. Gross hours and earnings of production and nonsupervisory workers[1] on private nonagricultural payrolls by industry division, 1947 to date

Year	Total private: Weekly earnings	Total private: Weekly hours	Total private: Hourly earnings	Manufacturing: Weekly earnings	Manufacturing: Weekly hours	Manufacturing: Hourly earnings	Durable goods: Weekly earnings	Durable goods: Weekly hours	Durable goods: Hourly earnings	Nondurable goods: Weekly earnings	Nondurable goods: Weekly hours	Nondurable goods: Hourly earnings
1947	$45.58	40.3	$1.131	$49.17	40.4	$1.217	$51.76	40.5	$1.278	$46.03	40.2	$1.145
1948	49.00	40.0	1.225	53.12	40.0	1.328	56.36	40.4	1.395	49.50	39.6	1.250
1949	50.24	39.4	1.275	53.88	39.1	1.378	57.25	39.4	1.453	50.38	38.9	1.295
1950	53.13	39.8	1.335	58.32	40.5	1.440	62.43	41.1	1.519	53.48	39.7	1.347
1951	57.86	39.9	1.45	63.34	40.6	1.56	68.48	41.5	1.65	56.88	39.5	1.44
1952	60.65	39.9	1.52	67.16	40.7	1.65	72.63	41.5	1.75	59.95	39.7	1.51
1953	63.76	39.6	1.61	70.47	40.5	1.74	76.63	41.2	1.86	62.57	39.6	1.58
1954	64.52	39.1	1.65	70.49	39.6	1.78	76.19	40.1	1.90	63.18	39.0	1.62
1955	67.72	39.6	1.71	75.70	40.7	1.86	82.19	41.3	1.99	66.63	39.9	1.67
1956	70.74	39.3	1.80	78.78	40.4	1.95	85.28	41.0	2.08	70.09	39.6	1.77
1957	73.33	38.8	1.89	81.59	39.8	2.05	88.26	40.3	2.19	72.52	39.2	1.85
1958	75.08	38.5	1.95	82.71	39.2	2.11	89.27	39.5	2.26	74.11	38.8	1.91
1959[2]	78.78	39.0	2.02	88.26	40.3	2.19	96.05	40.7	2.36	78.61	39.7	1.98
1960	80.67	38.6	2.09	89.72	39.7	2.26	97.44	40.1	2.43	80.36	39.2	2.05
1961	82.60	38.6	2.14	92.34	39.8	2.32	100.35	40.3	2.49	82.92	39.3	2.11
1962	85.91	38.7	2.22	96.56	40.4	2.39	104.70	40.9	2.56	85.93	39.6	2.17
1963	88.46	38.8	2.28	99.63	40.5	2.46	108.09	41.1	2.63	87.91	39.6	2.22
1964	91.33	38.7	2.36	102.97	40.7	2.53	112.19	41.4	2.71	90.91	39.7	2.29
1965	95.06	38.8	2.45	107.53	41.2	2.61	117.18	42.0	2.79	94.64	40.1	2.36
1966	98.82	38.6	2.56	112.34	41.3	2.72	122.09	42.1	2.90	98.49	40.2	2.45
1967	101.84	38.0	2.68	114.90	40.6	2.83	123.60	41.2	3.00	102.03	39.7	2.57
1968	107.73	37.8	2.85	122.51	40.7	3.01	132.07	41.4	3.19	109.05	39.8	2.74
1969	114.61	37.7	3.04	129.51	40.6	3.19	139.59	41.3	3.38	115.53	39.7	2.91

Year	Mining: Weekly earnings	Mining: Weekly hours	Mining: Hourly earnings	Contract construction: Weekly earnings	Contract construction: Weekly hours	Contract construction: Hourly earnings	Wholesale and retail trade: Weekly earnings	Wholesale and retail trade: Weekly hours	Wholesale and retail trade: Hourly earnings	Finance, insurance, and real estate: Weekly earnings	Finance, insurance, and real estate: Weekly hours	Finance, insurance, and real estate: Hourly earnings
1947	$59.94	40.8	$1.469	$58.87	38.2	$1.541	$38.07	40.5	$0.940	$43.21	37.9	$1.140
1948	65.56	39.4	1.664	65.27	38.1	1.713	40.80	40.4	1.010	45.48	37.9	1.200
1949	62.33	36.3	1.717	67.56	37.7	1.792	42.93	40.5	1.060	47.63	37.8	1.260
1950	67.16	37.9	1.772	69.68	37.4	1.863	44.55	40.5	1.100	50.52	37.7	1.340
1951	74.11	38.4	1.93	76.96	38.1	2.02	47.79	40.5	1.18	54.67	37.7	1.45
1952	77.59	38.6	2.01	82.86	38.9	2.13	49.20	40.0	1.23	57.08	37.8	1.51
1953	83.03	38.8	2.14	86.41	37.9	2.28	51.35	39.5	1.30	59.57	37.7	1.58
1954	82.60	38.6	2.14	88.91	37.2	2.39	53.33	39.5	1.35	62.04	37.6	1.65
1955	89.54	40.7	2.20	90.90	37.1	2.45	55.16	39.4	1.40	63.92	37.6	1.70
1956	95.06	40.8	2.33	96.38	37.5	2.57	57.48	39.1	1.47	65.68	36.9	1.78
1957	98.65	40.1	2.46	100.27	37.0	2.71	59.60	38.7	1.54	67.53	36.7	1.84
1958	96.08	38.9	2.47	103.78	36.8	2.82	61.76	38.6	1.60	70.12	37.1	1.89
1959[2]	103.68	40.5	2.56	108.41	37.0	2.93	64.41	38.8	1.66	72.74	37.3	1.95
1960	105.44	40.4	2.61	113.04	36.7	3.08	66.01	38.6	1.71	75.14	37.2	2.02
1961	106.92	40.5	2.64	118.08	36.9	3.20	67.41	38.3	1.76	77.12	36.9	2.09
1962	110.43	40.9	2.70	122.47	37.0	3.31	69.91	38.2	1.83	80.94	37.3	2.17
1963	114.40	41.6	2.75	127.19	37.3	3.41	72.01	38.1	1.89	84.38	37.5	2.25
1964	117.74	41.9	2.81	132.06	37.2	3.55	74.28	37.9	1.96	85.79	37.3	2.30
1965	123.52	42.3	2.92	138.38	37.4	3.70	76.53	37.7	2.03	88.91	37.2	2.39
1966	130.24	42.7	3.05	146.26	37.6	3.89	79.02	37.1	2.13	92.13	37.3	2.47
1967	135.89	42.6	3.19	154.95	37.7	4.11	81.76	36.5	2.24	95.46	37.0	2.58
1968	143.05	42.7	3.35	164.56	37.4	4.40	86.40	36.0	2.40	101.75	37.0	2.75
1969	154.73	43.1	3.59	181.64	38.0	4.78	91.14	35.6	2.56	108.33	37.1	2.92

[1] For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11.
Data relate to production workers in mining and manufacturing; to construction workers in contract construction, and to nonsupervisory workers in wholesale and related trade, finance, insurance, and real estate; transportation and public utilities and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls. Transportation and public utilities, and services are included in total private but are not shown separately in this table.

[2] Data include Alaska and Hawaii beginning 1959.

NOTE: For additional detail see Employment and Earnings, table C-1.

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18. Gross average weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry division and major manufacturing group

Industry division and group	1970				1969									Annual average	
	Apr. p	Mar. p	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
TOTAL PRIVATE	37.1	37.2	37.1	37.1	37.7	37.5	37.7	38.0	38.2	38.1	38.0	37.7	37.5	37.7	37.8
MINING	42.6	42.5	42.6	42.4	43.4	43.4	43.4	43.5	43.7	43.1	42.5	43.5	43.6	43.1	42.7
CONTRACT CONSTRUCTION	37.9	37.3	36.8	35.7	37.7	37.1	38.4	39.3	39.2	38.8	38.5	38.2	37.6	38.0	37.4
MANUFACTURING	39.7	40.0	39.8	40.1	41.0	40.6	40.7	41.0	40.6	40.5	40.9	40.7	40.5	40.6	40.7
Overtime hours	2.8	3.0	3.0	3.2	3.6	3.6	3.7	4.0	3.7	3.5	3.7	3.6	3.5	3.6	3.6
Durable Goods	40.3	40.6	40.3	40.7	41.7	41.2	41.4	41.7	41.1	40.9	41.5	41.4	41.2	41.3	41.4
Overtime hours	2.7	3.0	3.0	3.3	3.8	3.7	3.9	4.2	3.8	3.6	3.9	3.7	3.6	3.8	3.8
Ordnance and accessories	40.5	40.8	40.8	41.0	41.0	40.7	40.3	40.6	40.2	39.8	40.8	40.6	40.5	40.5	41.5
Lumber and wood products	39.5	39.6	39.5	39.0	40.2	39.9	40.4	40.4	40.2	39.7	40.7	40.7	40.2	40.2	40.6
Furniture and fixtures	38.6	39.0	38.7	38.9	40.8	40.3	40.6	40.7	40.8	39.7	40.8	40.4	40.1	40.4	40.6
Stone, clay, and glass products	41.6	41.3	40.9	40.9	42.0	42.0	42.2	42.6	42.6	41.9	42.4	42.4	41.9	42.0	41.8
Primary metal industries	40.4	40.8	40.8	41.3	41.6	41.4	41.7	42.1	41.8	41.6	42.0	41.9	42.1	41.8	41.6
Fabricated metal products	40.7	41.0	40.7	41.0	41.9	41.6	41.7	42.1	41.7	41.2	42.0	41.7	41.4	41.6	41.7
Machinery, except electrical	41.4	42.1	41.9	42.2	43.1	42.2	42.4	42.7	42.0	41.8	42.6	42.6	42.6	42.5	42.1
Electrical equipment and supplies	39.7	40.1	39.7	40.3	40.9	40.5	40.4	40.7	40.3	39.8	40.7	40.5	40.3	40.4	40.3
Transportation equipment	39.7	40.0	39.6	40.1	42.2	41.5	41.9	42.3	40.5	41.6	41.6	41.3	41.0	41.5	42.2
Instruments and related products	40.5	40.7	40.2	40.5	41.3	41.1	40.9	41.2	40.7	40.5	41.0	40.7	40.5	40.7	40.5
Miscellaneous manufacturing industries	38.8	39.0	38.8	38.7	39.4	39.3	39.3	39.2	39.1	38.4	39.2	39.0	39.1	39.0	3.93
Nondurable goods	39.0	39.2	39.1	39.2	40.0	39.8	39.7	40.0	39.9	39.8	39.9	39.7	39.4	39.7	39.8
Overtime hours	2.8	3.0	3.0	3.1	3.4	3.4	3.5	3.7	3.5	3.4	3.4	3.3	3.2	3.4	3.3
Food and kindred products	39.8	40.1	40.0	40.5	41.0	41.0	40.7	41.8	41.4	41.2	40.9	40.6	40.1	40.8	40.8
Tobacco manufactures	36.6	36.4	37.0	37.2	36.9	37.4	38.4	38.9	37.5	37.7	39.9	37.6	35.8	37.4	37.8
Textile mill products	40.0	40.2	40.0	40.0	41.3	41.1	40.9	41.0	41.0	40.7	41.4	40.9	40.4	40.8	41.2
Apparel and other textile products	35.6	35.8	35.5	35.2	35.9	35.8	35.8	35.8	36.3	35.9	36.3	36.1	35.9	35.9	36.1
Paper and allied products	41.6	42.1	41.9	42.4	43.2	42.9	43.0	43.2	43.0	43.0	43.0	43.0	42.9	43.0	42.9
Printing and publishing	37.7	38.0	37.8	37.7	39.0	38.4	38.4	38.6	38.6	38.4	38.4	38.3	38.1	38.3	38.3
Chemicals and allied products	41.7	41.9	41.6	41.7	42.0	42.0	41.7	41.7	41.7	41.7	41.8	41.9	41.9	41.8	41.8
Petroleum and coal products	42.2	41.9	41.8	41.9	41.7	42.7	42.7	42.6	42.9	43.6	42.5	43.3	43.2	42.6	42.5
Rubber and plastics products, nec	40.3	40.4	40.6	40.7	41.5	41.1	41.3	41.5	41.0	40.8	41.3	41.2	41.0	41.1	41.5
Leather and leather products	36.9	36.9	37.4	37.7	38.3	37.4	37.0	36.8	37.1	37.4	37.8	37.3	36.5	37.2	38.3
WHOLESALE AND RETAIL TRADE	35.0	35.0	35.0	35.1	35.6	35.2	35.3	35.7	36.6	36.5	35.9	35.4	35.3	35.6	36.0
Wholesale trade	39.9	40.0	40.0	40.2	40.6	40.2	40.3	40.3	40.5	40.3	40.1	40.0	40.0	40.2	40.1
Retail trade	33.3	33.4	33.3	33.4	34.1	33.6	33.7	34.2	35.3	35.2	34.5	33.9	33.8	34.2	34.7
FINANCE, INSURANCE, AND REAL ESTATE	36.8	36.9	37.0	36.9	37.0	37.2	37.1	37.0	37.0	37.1	37.1	37.0	37.1	37.1	37.0

[1] For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: For additional detail, see Employment and Earnings, table C-2.
p = Preliminary.

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19. 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	1970				1969								
	Apr.p	Mar.p	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.
TOTAL PRIVATE	37.4	37.4	37.4	37.4	37.5	37.6	37.6	37.8	37.8	37.8	37.8	37.8	37.8
MINING	42.8	43.1	43.4	42.8	43.4	43.8	42.9	43.2	43.2	42.6	42.0	43.4	43.8
CONTRACT CONSTRUCTION	38.3	38.0	38.3	37.2	38.2	38.2	37.5	38.1	37.9	37.5	37.6	38.1	38.0
MANUFACTURING	40.0	40.2	39.9	40.3	40.7	40.5	40.5	40.8	40.6	40.7	40.7	40.7	40.8
Overtime hours	3.0	3.1	3.2	3.3	3.5	3.5	3.5	3.7	3.7	3.6	3.6	3.6	3.7
Durable Goods	40.5	40.7	40.4	40.9	41.3	41.1	41.2	41.5	41.3	41.2	41.3	41.4	41.4
Overtime hours	2.8	3.1	3.2	3.4	3.6	3.5	3.7	3.9	3.8	3.8	3.9	3.8	3.8
Ordnance and accessories	40.9	41.0	41.0	40.6	40.5	40.4	40.1	40.4	40.4	40.2	40.9	40.6	40.9
Lumber and wood products	39.5	39.8	40.3	39.4	40.4	40.3	40.0	40.1	39.8	39.7	40.2	40.3	40.2
Furniture and fixtures	39.3	39.3	39.1	39.5	40.0	39.9	39.9	40.1	40.3	40.1	40.7	40.9	40.9
Stone, clay, and glass products	41.7	41.9	41.8	41.6	42.1	42.0	41.7	42.1	42.1	41.7	41.9	42.1	42.0
Primary metal industries	40.2	40.7	40.9	41.2	41.6	41.6	42.2	42.2	42.0	41.5	41.7	41.7	41.8
Fabricated metal products	41.1	41.3	41.1	41.4	41.6	41.4	41.4	41.5	41.6	41.6	41.8	41.6	41.8
Machinery, except electrical	41.4	41.8	41.8	42.3	42.6	42.2	42.4	42.7	42.6	42.2	42.5	42.6	42.6
Electrical equipment and supplies	40.3	40.2	39.7	40.4	40.3	40.1	40.2	40.5	40.4	40.3	40.6	40.6	40.9
Transportation equipment	40.2	40.4	40.2	40.0	41.5	40.6	41.3	41.8	41.2	42.3	41.6	41.1	41.5
Instruments and related products	40.8	40.7	40.2	40.7	40.9	40.9	40.7	41.0	40.9	40.9	40.9	40.8	40.8
Miscellaneous manufacturing industries	39.2	38.9	38.7	39.2	39.2	38.9	38.8	39.0	39.0	39.1	39.2	39.1	39.5
Nondurable Goods	39.4	39.4	39.3	39.6	39.8	39.6	39.5	39.7	39.6	39.7	39.8	39.8	39.8
Overtime hours	3.0	3.2	3.2	3.4	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.4
Food and kindred products	40.6	40.7	40.7	40.8	40.8	40.8	40.5	41.0	40.9	40.6	40.7	40.8	40.9
Tobacco manufactures	37.2	37.3	37.4	38.3	36.3	37.4	37.2	37.4	37.2	38.2	39.5	38.1	36.4
Textile mill products	40.7	40.2	40.0	40.2	40.9	40.8	40.6	40.8	40.9	41.2	41.2	41.0	41.1
Apparel and other textile products	35.7	35.5	35.5	35.7	36.0	35.8	35.7	35.8	35.9	36.0	36.2	36.1	36.0
Paper and allied products	42.1	42.3	42.3	43.0	42.8	42.7	42.7	42.8	42.8	43.0	42.9	43.0	43.4
Printing and publishing	37.9	38.0	38.0	38.2	38.6	38.4	38.3	38.3	38.4	38.5	38.4	38.4	38.3
Chemicals and allied products	41.4	41.9	41.8	42.0	41.8	41.9	41.7	41.6	41.9	41.9	41.8	41.8	41.6
Petroleum and coal products	41.9	42.4	42.7	42.4	42.2	42.7	42.6	42.0	42.8	42.9	42.2	43.0	42.9
Rubber and plastics products, nec	40.7	40.7	41.0	40.9	41.1	40.8	40.9	41.0	40.9	41.2	41.3	41.4	41.4
Leather and leather products	38.1	37.2	37.0	37.6	37.7	37.4	37.3	37.1	36.8	37.0	37.4	37.6	37.7
WHOLESALE AND RETAIL TRADE	35.3	35.3	35.4	35.4	35.4	35.5	35.5	35.7	35.8	35.7	35.7	35.7	35.6
Wholesale Trade	40.1	40.1	40.2	40.3	40.4	40.2	40.3	40.3	40.3	40.0	40.0	40.1	40.2
Retail trade	33.6	33.8	33.7	33.8	33.8	34.0	33.9	34.2	34.3	34.2	34.2	34.3	34.1
FINANCE, INSURANCE, AND REAL ESTATE	36.8	36.9	37.0	36.9	36.9	37.2	37.1	37.1	37.0	37.0	37.2	37.0	37.1

[1] For comparability of data with those published in issues prior to August, 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

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20. Gross average hourly earnings of production or nonsupervisory workers [1] on private nonagricultural payrolls, by industry division and major manufacturing group

Industry and division group	1970				1969									Annual average	
	Apr.p	Mar.p	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
TOTAL PRIVATE	$3.18	$3.17	$3.15	$3.13	$3.11	$3.12	$3.11	$3.10	$3.05	$3.04	$3.03	$3.01	$2.98	$3.04	$2.85
MINING	3.77	3.78	3.75	3.74	3.70	3.70	3.68	3.63	3.59	3.58	3.55	3.57	3.55	3.59	3.35
CONTRACT CONSTRUCTION	5.08	5.07	5.05	5.06	5.02	4.96	4.95	4.91	4.79	4.74	4.71	4.71	4.64	4.78	4.40
MANUFACTURING	3.32	3.31	3.29	3.29	3.29	3.26	3.24	3.24	3.19	3.19	3.17	3.16	3.15	3.19	3.01
Durable Goods	3.51	3.50	3.48	3.49	3.49	3.45	3.44	3.44	3.39	3.37	3.36	3.35	3.33	3.38	3.19
Ordnance and accessories	3.63	3.60	3.56	3.56	3.54	3.55	3.50	3.49	3.46	3.44	3.45	3.42	3.41	3.44	3.27
Lumber and wood products	2.86	2.84	2.83	2.82	2.82	2.84	2.82	2.83	2.78	2.74	2.71	2.68	2.64	2.73	2.57
Furniture and fixtures	2.73	2.71	2.70	2.71	2.70	2.70	2.68	2.68	2.64	2.62	2.62	2.60	2.58	2.62	2.47
Stone, clay, and glass products	3.35	3.32	3.28	3.28	3.28	3.28	3.26	3.25	3.21	3.18	3.17	3.17	3.14	3.18	2.99
Primary metal industries	3.86	3.85	3.85	3.86	3.87	3.85	3.85	3.87	3.84	3.79	3.76	3.75	3.74	3.79	3.55
Fabricated metal products	3.49	3.46	3.45	3.44	3.43	3.40	3.39	3.39	3.33	3.32	3.33	3.31	3.29	3.33	3.16
Machinery, except electrical	3.75	3.74	3.72	3.70	3.71	3.67	3.67	3.63	3.57	3.55	3.56	3.56	3.54	3.58	3.36
Electrical equipment and supplies	3.24	3.23	3.20	3.17	3.16	3.12	3.13	3.13	3.09	3.09	3.08	3.07	3.05	3.09	2.93
Transportation equipment	4.02	4.01	3.98	4.02	4.04	3.98	3.96	3.95	3.93	3.91	3.86	3.83	3.84	3.90	3.69
Instruments and related products	3.30	3.29	3.28	3.27	3.26	3.24	3.22	3.20	3.16	3.14	3.15	3.13	3.11	3.16	2.98
Miscellaneous manufacturing industries	2.80	2.80	2.80	2.78	2.76	2.71	2.68	2.67	2.64	2.64	2.65	2.64	2.62	2.65	2.50
Nondurable Goods	3.03	3.02	3.01	3.01	2.99	2.97	2.96	2.95	2.92	2.92	2.89	2.88	2.87	2.91	2.74
Food and kindred products	3.12	3.10	3.07	3.08	3.04	3.00	2.97	2.96	2.93	2.97	2.94	2.95	2.94	2.95	2.80
Tobacco manufactures	3.01	2.90	2.90	2.87	2.69	2.64	2.52	2.54	2.52	2.77	2.79	2.74	2.68	2.64	2.49
Textile mill products	2.43	2.43	2.42	2.42	2.42	2.42	2.41	2.41	2.39	2.35	2.31	2.30	2.30	2.34	2.21
Apparel and other textile products	2.36	2.38	2.36	2.36	2.35	2.35	2.34	2.35	2.31	2.29	2.30	2.29	2.28	2.31	2.21
Paper and allied products	3.37	3.35	3.34	3.34	3.33	3.32	3.31	3.31	3.28	3.26	3.22	3.19	3.17	3.24	3.05
Printing and publishing	3.86	3.85	3.81	3.80	3.81	3.78	3.77	3.75	3.70	3.68	3.68	3.66	3.64	3.69	3.48
Chemicals and allied products	3.60	3.59	3.59	3.59	3.57	3.56	3.54	3.52	3.49	3.49	3.46	3.43	3.40	3.47	3.26
Petroleum and coal products	4.23	4.22	4.23	4.22	4.10	4.11	4.06	4.04	4.00	4.04	4.00	4.03	4.03	4.01	3.75
Rubber and plastics products, nec	3.16	3.15	3.14	3.15	3.14	3.13	3.13	3.13	3.09	3.09	3.05	3.04	3.02	3.07	2.92
Leather and leather products	2.48	2.47	2.47	2.46	2.44	2.42	2.40	2.38	2.35	2.34	2.35	2.35	2.35	2.36	2.23
WHOLESALE AND RETAIL TRADE	2.69	2.68	2.68	2.65	2.61	2.63	2.61	2.59	2.56	2.55	2.55	2.54	2.52	2.56	2.40
Wholesale trade	3.39	3.40	3.39	3.35	3.34	3.33	3.29	3.29	3.24	3.23	3.24	3.20	3.18	3.23	3.05
Retail trade	2.41	2.40	2.40	2.38	2.34	2.36	2.35	2.33	2.30	2.30	2.30	2.29	2.27	2.30	2.16
FINANCE, INSURANCE, AND REAL ESTATE	3.03	3.04	3.04	3.01	2.98	2.98	2.94	2.93	2.92	2.91	2.93	2.90	2.88	2.92	2.75

[1] For comparability of data with those published in issues prior to August 1969, see ootnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: p=preliminary. For additional detail see Employment and Earnings, table C-2.

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21. Gross average weekly earnings of production or nonsupervisory workers [1] on private nonagricultural payrolls, by industry division and major manufacturing group

Industry division and group	1970				1969									Annual average	
	Apr.p	Mar.p	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	1969	1968
TOTAL PRIVATE	$117.98	$117.92	$116.87	$116.12	$117.25	$117.00	$117.25	$117.80	$116.51	$115.82	$115.14	$113.48	$111.75	$114.61	$107.73
MINING	160.60	160.65	159.75	158.58	160.58	160.58	159.71	157.91	156.88	154.30	150.88	155.30	154.78	154.73	143.05
CONTRACT CONSTRUCTION	192.53	189.11	185.84	180.64	189.25	184.02	190.08	192.96	187.77	183.91	181.34	179.92	174.46	181.64	164.56
MANUFACTURING	131.80	132.40	130.94	131.93	134.89	132.36	131.87	132.84	129.51	129.20	129.65	128.61	127.58	129.51	122.51
Durable goods	141.45	142.10	140.24	142.04	145.53	142.14	142.42	143.45	139.33	137.83	139.44	138.69	137.20	139.59	132.07
Ordnance and accessories	147.02	146.88	145.25	145.96	145.14	144.49	141.05	141.69	139.09	136.91	140.76	138.85	138.11	139.32	135.71
Lumber and wood products	112.97	112.46	111.79	109.98	113.36	113.32	113.93	114.33	111.76	108.78	110.30	109.08	106.13	109.75	104.34
Furniture and fixtures	105.38	105.69	104.49	105.42	110.16	108.81	108.81	109.08	107.71	104.01	106.90	105.04	103.46	105.85	100.28
Stone, clay, and glass products	139.36	137.12	134.15	134.15	137.76	137.76	137.57	138.45	136.75	133.24	134.41	134.41	131.57	133.56	124.98
Primary metal industries	155.94	157.08	157.08	159.42	160.99	159.39	160.55	162.93	160.51	157.66	157.92	157.13	157.45	158.42	147.68
Fabricated metal products	142.04	141.86	140.42	141.04	143.72	141.44	141.36	142.72	138.86	136.78	139.86	138.03	136.21	138.53	131.77
Machinery, except electrical	155.25	157.45	155.87	156.14	159.90	154.87	155.61	155.00	149.94	148.39	151.66	151.66	150.80	152.15	141.46
Electrical equipment and supplies	128.63	129.52	127.04	127.75	129.24	126.36	126.45	127.39	124.53	122.98	125.36	124.34	122.92	124.84	118.08
Transportation equipment	159.59	160.40	157.61	161.20	170.49	165.17	165.92	167.09	159.17	162.66	160.58	158.18	157.44	161.85	155.72
Instruments and related products	133.65	133.90	131.86	132.44	134.64	133.16	131.70	131.84	128.61	127.17	129.15	127.39	125.96	128.61	120.69
Miscellaneous manufacturing industries	108.64	109.20	108.64	107.59	108.74	106.50	105.32	104.66	103.22	101.38	103.88	102.96	102.44	103.35	98.25
Nondurable goods	118.17	118.38	117.69	117.99	119.60	118.21	117.51	118.00	116.51	116.22	115.31	114.34	113.08	115.53	109.05
Food and kindred products	124.18	124.31	122.80	124.74	124.64	123.00	120.88	123.73	121.30	122.36	120.25	119.77	117.89	120.36	114.24
Tobacco manufactures	110.17	105.56	107.30	106.76	99.26	98.74	96.77	98.81	94.50	104.43	111.32	103.02	95.94	98.74	94.12
Textile mill products	97.20	97.69	96.80	96.80	99.95	99.46	98.57	98.81	97.99	95.65	95.63	94.07	92.92	95.47	91.05
Apparel and other textile products	84.02	85.20	83.78	83.07	84.37	84.13	83.77	84.13	83.85	82.21	83.49	82.67	81.85	82.93	79.78
Paper and allied products	140.19	141.04	139.95	141.62	143.86	142.43	142.33	142.99	141.04	140.18	138.46	137.17	135.99	139.32	130.85
Printing and publishing	145.52	146.30	144.02	143.26	148.59	145.15	144.77	144.75	142.82	141.31	141.31	140.18	138.68	141.33	133.28
Chemicals and allied products	150.12	150.42	149.34	149.70	149.94	149.52	147.62	146.78	145.53	145.53	144.63	143.72	142.46	145.05	136.27
Petroleum and coal products	178.51	176.82	176.81	176.82	170.97	175.50	173.36	172.10	171.60	176.14	170.00	174.50	174.10	170.83	159.38
Rubber and plastics products, n e c	127.35	127.26	127.48	128.21	130.31	128.64	129.27	129.90	126.69	126.07	125.97	125.25	123.82	126.18	121.18
Leather and leather products	91.51	91.14	92.38	92.74	93.45	90.51	88.80	87.58	87.19	87.52	88.83	87.66	85.78	87.79	85.41
WHOLESALE AND RETAIL TRADE	94.15	93.80	93.80	93.02	92.92	92.58	92.13	92.46	93.70	93.08	91.55	89.92	88.96	91.14	86.40
Wholesale trade	135.26	136.00	135.60	134.67	135.60	133.87	132.59	132.59	131.22	130.17	129.92	128.00	127.20	129.85	122.31
Retail trade	80.25	80.16	79.92	79.49	79.79	79.30	79.20	79.69	81.19	80.96	79.35	77.63	76.73	78.66	74.95
FINANCE, INSURANCE, AND REAL ESTATE	111.50	112.18	112.48	111.07	110.26	110.86	109.07	108.41	108.04	107.96	108.70	107.30	106.85	108.33	101.75

[1] For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.

NOTE: For additional detail see Employment and Earnings, table C-2.
p = Preliminary.

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22. Gross and spendable average weekly earnings of production or nonsupervisory workers [1] on private nonagricultural payrolls, in current and 1957–59 dollars, 1960 to date

Year and month	Total private						Manufacturing					
	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	1957–59 dollars	Current dollars	1957–59 dollars	Current dollars	1957–59 dollars	Current dollars	1957–59 dollars	Current dollars	1957–59 dollars	Current dollars	1957–59 dollars
1960	$80.67	$78.24	$65.95	$63.62	$72.96	$70.77	$89.72	$87.02	$72.57	$70.39	$80.11	$77.70
1961	82.60	79.27	67.08	64.38	74.48	71.48	92.34	88.62	74.60	71.59	82.18	78.87
1962	85.91	81.55	69.56	66.00	76.99	73.05	96.56	91.61	77.86	73.87	85.53	81.15
1963	88.46	82.91	71.05	66.59	78.56	73.63	99.63	93.37	79.82	74.81	87.58	82.08
1964	91.33	84.49	75.04	69.42	82.57	76.38	102.97	95.25	84.40	78.08	92.18	85.27
1965	95.06	86.50	78.99	71.87	86.30	78.53	107.53	97.84	89.08	81.06	96.78	88.06
1966	98.82	87.37	81.29	71.87	88.66	78.39	112.34	99.33	91.57	80.96	99.45	87.93
1967	101.84	87.57	83.38	71.69	90.86	78.13	114.90	98.80	93.28	80.21	101.26	87.07
1968	107.73	88.89	86.71	71.54	95.28	78.61	122.51	101.08	97.70	80.61	106.75	88.08
1969	114.61	89.75	90.96	71.23	99.99	78.30	129.51	101.42	101.90	79.80	111.44	87.27
1969:												
March	111.67	88.91	88.80	70.70	97.76	77.83	127.39	101.43	100.34	79.89	109.81	87.43
April	111.75	88.41	88.86	70.30	97.82	77.39	127.58	100.93	100.48	79.49	109.95	86.99
May	113.48	89.50	90.13	71.08	99.13	78.18	128.61	101.43	101.24	79.84	110.74	87.33
June	115.14	90.24	91.35	71.59	100.40	78.68	129.65	101.61	102.00	79.94	111.54	87.41
July	115.82	90.34	91.85	71.65	100.92	78.72	129.20	100.78	101.67	79.31	111.20	86.74
August	116.51	90.53	92.35	71.76	101.45	78.83	129.51	100.63	101.90	79.18	111.44	86.59
September	117.80	91.11	93.30	72.16	102.44	79.23	132.84	102.74	104.34	80.70	114.01	88.17
October	117.25	90.33	92.89	71.56	102.01	78.59	131.87	101.59	103.63	79.84	113.25	87.25
November	117.00	89.66	92.71	71.04	101.82	78.02	132.36	101.43	103.99	79.69	113.63	87.07
December	117.25	89.30	92.89	70.75	102.01	77.69	134.89	102.73	105.85	80.62	115.61	88.05
1970:												
January	116.12	88.10	93.43	70.89	101.97	77.37	131.93	100.10	105.28	79.88	114.48	86.86
February	116.87	88.20	94.00	70.94	102.57	77.41	130.94	98.82	104.53	78.89	113.69	85.80
March p	117.92	88.53	94.78	71.16	103.39	77.62	132.40	99.40	105.63	79.30	114.85	86.22

[1] For comparability of data with those published in issues prior to August 1969, see footnote 1, table 11. For employees covered, see footnote 1, table 17.
Spendable average weekly earnings are based on gross average weekly earnings as published in table 21 less the estimated amount of the workers' 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 1957–59 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.

23. Consumer and Wholesale Price Indexes, annual averages and changes, 1949 to date [1]

[Indexes: 1957–59=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	83.0	−1.0	87.1	−2.6	72.6	4.6	83.5	−5.0	94.3	−11.7	80.0	−2.1
1950	83.8	1.0	87.6	0.6	75.0	3.3	86.8	4.0	98.8	4.8	82.9	3.6
1951	90.5	8.0	95.5	9.0	78.9	5.2	96.7	11.4	112.5	13.9	91.5	10.4
1952	92.5	2.2	96.7	1.3	82.4	4.4	94.0	−2.8	108.0	−4.0	89.4	−2.3
1953	93.2	0.8	96.4	−.3	86.0	4.4	92.7	−1.4	101.0	−6.5	90.1	.8
1954	93.6	0.4	95.5	−.9	88.7	3.1	92.9	.2	100.7	−.3	90.4	.3
1955	93.3	−.3	94.6	−.9	90.5	2.0	93.2	.3	95.9	−4.8	92.4	2.2
1956	94.7	1.5	95.5	1.0	92.8	2.5	96.2	3.2	95.3	−.6	96.5	4.4
1957	98.0	3.5	98.5	3.1	96.6	4.1	99.0	2.9	98.6	3.5	99.2	2.8
1958	100.7	2.8	100.8	2.3	100.3	3.8	100.4	1.4	103.2	4.7	99.5	.3
1959	101.5	.8	100.9	.1	103.2	2.9	100.6	.2	98.4	−4.7	101.3	1.8
1960	103.1	1.6	101.7	.8	106.6	3.3	100.7	.1	98.6	.2	101.3	----------
1961	104.2	1.1	102.3	.6	108.8	2.1	100.3	−.4	98.6	----------	100.8	−0.5
1962	105.4	1.2	103.2	.9	110.9	1.9	100.6	.3	99.6	1.0	100.8	----------
1963	106.7	1.2	104.1	.9	113.0	1.9	100.3	−.3	98.7	−.9	100.7	−.1
1964	108.1	1.3	105.2	1.1	115.2	1.9	100.5	.2	98.0	−.7	101.2	.5
1965	109.9	1.7	106.4	1.1	117.8	2.3	102.5	2.0	102.1	4.2	102.5	1.3
1966	113.1	2.9	109.2	2.6	122.3	3.8	105.9	3.3	108.9	6.7	104.7	2.1
1967	116.3	2.8	111.2	1.8	127.7	4.4	106.1	.2	105.2	−3.4	106.3	1.5
1968	121.2	4.2	115.3	3.7	134.3	5.2	108.7	2.5	107.6	2.3	109.0	2.5
1969	127.7	5.4	120.5	4.5	143.7	7.0	113.0	4.0	113.5	5.5	112.7	3.4

[1] Historical price changes are shown in greater detail and for earlier years in the Bureau's "Handbook of Labor Statistics, 1969" (BLS Bulletin 1630), in tables 108–120.

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24. Consumer Price Index—general summary and U.S. average for groups, subgroups, and selected items

[The official name of the index is, "Consumer Price Index for Urban Wage Earners and Clerical Workers." It measures the average change in prices of goods and services purchased by families and single workers. The indexes shown below represent the average of price changes in 56 metropolitan areas, selected to represent all U.S. urban places having populations of more than 2500.]

[1957–59=100 unless otherwise specified]

Item and group	General summary													
	1970				1969									Annual average 1969
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	
All items	134.0	133.2	132.5	131.8	131.3	130.5	129.8	129.3	128.7	128.2	127.6	126.8	126.4	127.7
All items (1947–49=100)	164.4	163.4	162.5	161.7	161.1	160.1	159.3	158.6	157.9	157.3	156.6	155.6	155.0	156.7
Food	132.0	131.6	131.5	130.7	129.9	128.1	127.2	127.5	127.4	126.7	125.5	123.7	123.2	125.5
Food at home	127.4	127.4	127.4	126.6	125.8	123.8	122.9	123.6	123.6	123.0	121.8	119.8	119.3	121.5
Food away from home	154.0	152.4	151.5	150.6	149.9	149.0	148.1	146.7	145.8	144.8	143.7	142.8	142.2	144.6
Housing	134.4	133.6	132.2	131.1	130.5	129.8	129.2	128.6	127.8	127.0	126.3	125.8	125.3	126.7
Rent	122.6	122.3	121.8	121.3	121.0	120.5	120.1	119.7	119.3	118.8	118.5	118.1	117.8	118.8
Homeownership	152.1	150.9	148.5	146.8	145.4	144.5	143.6	142.6	141.3	140.0	138.7	138.0	137.1	139.4
Apparel and upkeep	131.1	130.6	130.0	129.3	130.8	130.7	129.8	128.7	126.6	126.8	127.0	126.6	125.6	127.1
Transportation	128.9	127.1	127.3	127.3	126.4	125.6	125.7	123.6	124.2	124.3	124.6	124.0	124.6	124.2
Health and recreation	142.3	141.4	140.7	140.1	139.6	139.1	138.6	138.4	137.7	137.0	136.3	135.7	135.1	136.6
Medical care	162.8	161.6	160.1	159.0	158.1	157.4	156.9	157.6	156.8	155.9	155.2	154.5	153.6	155.0
Special groups:														
All items less shelter	131.5	130.7	130.3	129.8	129.5	128.6	128.1	127.6	127.1	126.7	126.3	125.4	125.0	126.3
All items less food	134.8	133.8	133.0	132.3	131.9	131.4	130.8	130.0	129.3	128.8	128.4	127.9	127.5	128.6
All items less medical care	132.2	131.5	130.8	130.1	129.7	128.9	128.2	127.6	127.0	126.5	126.0	125.2	124.7	126.1
Commodities	125.2	124.5	124.2	123.7	123.6	122.9	122.4	121.7	121.4	121.0	120.5	119.6	119.3	120.5
Nondurables	129.3	128.7	128.4	127.8	127.7	126.7	126.1	125.8	125.2	124.7	124.1	123.0	122.5	124.1
Durables	114.8	114.1	113.7	113.7	113.6	113.5	113.2	111.6	111.9	111.9	111.7	111.3	111.4	111.6
Services	153.4	152.3	150.7	149.6	148.3	147.2	146.5	146.0	145.0	144.0	143.3	142.7	142.0	143.7
Commodities less food	121.6	120.8	120.4	120.1	120.3	120.2	119.8	118.7	118.2	118.1	118.0	117.5	117.2	118.0
Nondurables less food	127.0	126.1	125.8	125.2	125.7	125.5	125.1	124.4	123.3	123.1	123.0	122.4	121.9	123.0
Apparel commodities	130.4	129.9	129.3	128.6	130.3	130.4	129.3	128.1	125.9	126.2	126.4	126.0	124.9	126.5
Apparel commodities less footwear	127.1	126.7	126.2	125.5	127.5	127.7	126.6	125.3	122.8	123.5	123.7	123.4	122.2	123.7
Nondurables less food and apparel	125.0	123.9	123.7	123.2	123.0	122.6	122.6	122.2	121.7	121.3	121.0	120.3	120.2	121.0
Household durables	107.8	107.4	106.9	106.6	106.5	106.5	106.4	106.2	106.0	106.0	105.8	105.6	105.0	105.5
Housefurnishings	112.0	111.7	111.1	110.5	110.6	110.4	110.2	109.9	109.4	109.3	109.0	108.8	108.3	109.0
Service less rent	160.1	158.9	157.1	155.8	154.3	153.1	152.3	151.7	150.7	149.6	148.8	148.1	147.4	149.2
Household services less rent	159.1	157.7	155.0	153.2	152.4	151.4	150.4	149.5	148.2	146.9	145.7	145.0	144.2	146.4
Transportation services	155.5	154.5	154.1	152.9	148.4	145.8	145.1	144.0	143.1	142.5	142.3	141.8	141.4	142.9
Medical care services	178.4	177.0	175.2	173.8	172.8	171.8	171.2	172.2	171.1	170.1	169.1	168.2	167.2	168.9
Other services	151.4	150.3	149.8	149.4	148.9	148.2	147.6	147.2	146.5	145.7	145.2	144.7	144.2	145.5

Item and group	Other index bases	U.S. average for groups, subgroups, and selected items													
		Apr. 1970	Mar. 1970	Feb. 1970	Jan. 1970	Dec. 1969	Nov. 1969	Oct. 1969	Sept. 1969	Aug. 1969	July 1969	June 1969	May 1969	Apr. 1969	Annual average 1969
FOOD		132.0	131.6	131.5	130.7	129.9	128.1	127.2	127.5	127.4	126.7	125.5	123.7	123.2	125.5
Food away from home		154.0	152.4	151.5	150.6	149.9	149.0	148.1	146.7	145.8	144.8	143.7	142.8	142.2	144.6
Restaurant meals		154.2	152.5	151.6	150.7	150.2	149.3	148.3	147.2	146.2	145.1	144.0	143.0	142.3	144.9
Snacks	Dec. 63	134.0	132.4	132.0	131.4	129.9	129.2	128.8	126.2	125.6	125.1	124.4	124.1	123.7	125.4
Food at home		127.4	127.4	127.4	126.6	125.8	123.8	122.9	123.6	123.6	123.0	121.8	119.8	119.3	121.5
Cereals and bakery products		127.6	127.0	126.3	125.5	124.9	124.1	123.7	123.0	122.6	122.6	122.0	121.6	121.3	122.4
Flour		114.2	113.1	112.1	111.9	110.9	111.2	111.6	111.2	111.4	111.6	112.1	112.2	111.7	111.5
Cracker meal	Dec. 63	134.3	132.9	130.2	127.8	127.9	127.2	126.9	125.8	124.7	123.3	122.1	119.3	117.9	122.3
Corn flakes		130.0	130.4	130.2	130.2	130.0	129.7	129.6	129.4	129.4	129.0	129.0	127.9	128.4	129.2
Rice		114.8	114.4	114.2	113.8	113.4	113.0	113.0	112.9	112.6	112.3	112.1	112.0	111.7	112.3
Bread, white		133.3	133.4	132.6	132.2	131.1	129.7	129.1	128.8	128.1	128.2	127.2	127.1	127.2	128.1
Bread, whole wheat	Dec. 63	125.7	125.6	125.5	124.4	124.1	123.4	122.5	121.6	120.3	120.9	119.6	119.6	119.5	120.5
Cookies		103.4	102.4	101.7	101.3	100.9	99.8	99.8	101.0	100.9	100.9	100.1	100.9	101.1	100.6
Layer cake	Dec. 63	121.7	121.3	119.9	118.1	118.0	117.1	115.4	113.2	113.8	113.6	114.1	113.9	112.3	113.7
Cinnamon rolls	Dec. 63	118.2	116.4	116.7	116.3	115.8	115.1	115.2	113.2	112.8	113.4	113.2	111.9	112.1	113.1
Meats, poultry, and fish		130.9	130.2	129.7	128.8	127.2	127.2	127.6	129.0	127.9	127.6	125.3	119.9	118.4	123.2
Meats		135.6	134.7	133.9	132.9	131.3	131.1	132.0	133.1	131.9	131.7	129.5	123.4	121.2	126.8
Beef and veal		136.5	133.6	133.0	132.2	130.6	131.5	132.9	135.0	135.4	136.8	134.6	127.9	125.1	129.5
Steak, round		131.1	126.9	126.4	126.2	123.2	125.2	126.8	128.1	129.9	132.5	131.0	124.1	121.4	124.4
Steak, sirloin	Apr. 60	124.5	121.8	120.4	121.4	119.0	121.1	123.4	128.3	127.4	131.1	129.6	120.7	117.2	121.7
Steak, porterhouse	Dec. 63	130.5	126.8	126.4	126.6	123.9	125.9	129.0	132.9	132.7	135.5	133.0	125.2	121.6	126.4
Rump roast	Dec. 63	125.1	121.1	120.1	120.7	118.8	119.5	121.1	122.1	123.4	125.0	123.0	117.2	115.4	118.4
Rib roast		142.8	141.2	141.8	141.6	140.5	140.9	140.8	145.9	146.5	150.1	147.1	138.1	133.6	139.7
Chuck roast		130.0	126.9	126.7	122.1	123.2	122.7	125.3	127.2	128.7	131.0	127.9	121.5	119.2	122.3
Hamburger		142.4	140.8	140.5	138.7	137.8	138.4	139.1	140.9	140.5	140.0	137.9	131.4	128.3	134.0
Beef liver	Dec. 63	121.1	120.5	119.9	118.7	118.6	117.9	117.8	117.8	117.8	115.4	112.1	109.6	101.1	113.2
Veal cutlets		171.1	168.1	166.0	164.0	162.0	162.1	162.8	162.8	162.1	161.1	159.8	154.2	150.6	156.4

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24. Consumer Price Index—general summary and U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1970				1969									Annual average 1969
		Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	
FOOD—Continued															
Meats, poultry, and fish—Continued															
Meats—Continued															
Pork		135.9	137.9	137.2	135.6	133.3	132.0	132.7	133.7	130.2	129.0	126.1	118.8	117.5	125.2
Chops		135.6	139.7	139.5	136.9	135.7	134.1	134.0	137.6	135.7	136.4	134.8	122.4	122.0	129.6
Loin roast	Apr. 60	143.5	146.1	146.2	143.7	143.4	140.4	141.8	143.0	141.3	141.9	139.7	129.8	128.1	135.8
Pork sausage	Dec. 63	150.6	150.6	148.6	146.7	146.8	148.3	149.1	149.6	146.0	143.6	137.2	130.0	127.4	137.8
Ham, whole		133.5	135.3	134.0	136.9	130.7	124.8	123.9	121.8	117.0	114.2	114.2	111.1	108.0	117.1
Picnics	Dec. 63	139.9	142.1	139.9	137.7	134.7	136.0	136.5	135.5	134.5	130.9	124.8	121.5	121.1	127.5
Bacon		138.2	138.7	138.8	136.7	133.1	132.4	134.9	135.6	128.7	126.8	124.1	118.4	117.3	124.3
Other meats		138.0	137.3	136.0	135.3	134.4	133.6	133.3	132.6	131.2	128.8	127.2	124.0	122.2	127.7
Lamb chops	Dec. 63	142.0	142.2	140.8	140.9	140.4	139.4	139.9	139.7	139.3	140.9	139.1	136.2	133.7	137.0
Frankfurters		137.4	136.1	134.2	134.2	134.6	134.7	134.7	135.4	133.7	129.4	127.6	122.2	120.4	127.4
Ham, canned	Dec. 63	138.3	138.3	136.6	134.8	130.4	127.8	125.1	122.6	120.6	115.6	117.6	116.6	115.3	120.0
Bologna sausage	Dec. 63	139.7	138.4	137.7	137.2	136.6	136.1	136.2	136.2	134.5	132.0	128.8	123.7	122.4	129.3
Salami sausage	Dec. 63	131.8	130.4	128.6	128.0	127.9	127.1	127.2	127.0	126.0	123.7	121.5	118.6	116.6	122.1
Liverwurst	Dec. 63	131.9	131.6	131.4	130.1	129.9	129.8	129.9	128.0	126.3	125.0	122.2	120.6	118.8	123.7
Poultry		97.1	97.9	99.1	99.5	97.9	99.1	98.2	102.0	101.4	100.4	97.3	93.3	95.3	96.9
Frying chicken		95.4	96.7	98.5	99.4	97.9	99.5	98.6	103.8	103.3	103.1	99.2	94.7	97.9	98.1
Chicken breasts	Dec. 63	109.4	110.4	110.4	110.1	110.4	110.8	112.0	113.8	113.0	109.4	107.6	104.4	106.7	108.4
Turkey	Dec. 63	119.0	116.9	115.9	114.4	110.3	110.0	107.2	105.9	104.7	101.8	101.1	98.7	93.4	102.8
Fish		141.1	139.8	138.3	137.0	135.4	134.0	133.4	132.2	131.5	130.6	129.8	129.5	128.4	130.6
Shrimp, frozen	Dec. 63	126.8	127.4	126.2	125.4	124.4	122.9	122.5	121.0	120.8	119.7	118.3	118.2	116.8	119.3
Fish, fresh or frozen		152.5	150.9	148.1	145.2	143.4	141.1	139.9	138.6	137.2	134.5	133.1	132.0	130.2	134.6
Tuna, fish, canned		124.5	123.1	121.6	120.5	117.9	116.7	116.2	114.9	114.4	113.6	113.8	114.0	113.1	114.4
Sardines, canned	Dec. 63	129.3	126.9	126.5	126.0	125.4	125.0	124.9	124.2	123.5	124.4	124.0	123.7	123.7	124.2
Dairy products		129.5	129.4	128.8	128.4	127.6	126.3	125.8	125.5	125.0	124.4	124.0	123.6	122.9	124.5
Milk, fresh, grocery		126.5	126.8	126.2	126.1	125.0	123.4	122.8	122.8	122.3	121.7	121.3	120.7	120.5	121.8
Milk, fresh, delivered		133.9	133.5	133.1	132.7	132.3	130.4	130.1	129.4	128.7	128.0	127.6	127.3	126.8	128.4
Milk, fresh, skim	Dec. 63	128.3	128.4	127.3	127.4	126.0	125.0	124.3	124.8	124.3	122.9	122.3	121.7	121.5	123.0
Milk, evaporated		127.9	127.7	127.4	126.4	125.0	124.3	123.8	124.1	124.1	123.9	124.0	123.8	122.9	123.5
Ice cream		102.7	102.7	102.1	102.1	102.0	100.7	99.9	100.1	99.5	99.0	99.8	98.8	97.0	99.5
Cheese, American process		157.3	156.4	154.8	153.1	152.4	151.0	149.9	148.9	148.5	147.7	146.6	146.1	143.6	146.8
Butter		120.2	119.5	119.5	119.9	119.6	119.4	119.9	118.3	118.0	118.0	117.8	117.9	117.4	118.3
Fruits and vegetables		134.7	133.1	132.4	130.9	132.1	127.0	124.0	126.8	130.2	132.3	130.8	130.0	127.9	128.4
Fresh fruits and vegetables		148.0	145.7	144.5	141.9	144.1	135.4	130.1	134.9	141.0	145.0	142.4	140.9	137.6	138.1
Apples		141.3	139.6	135.8	134.0	129.3	125.7	131.7	174.6	190.5	192.9	185.3	171.4	167.4	162.5
Bananas		101.4	101.9	96.5	94.5	93.3	93.9	100.7	99.6	97.4	97.7	94.5	96.3	91.7	95.3
Oranges		122.4	125.4	124.5	121.5	125.0	132.4	131.9	132.1	132.7	127.9	125.4	126.2	126.4	128.4
Orange juice, fresh	Dec. 63	89.9	90.6	90.7	90.5	91.5	91.8	92.0	92.1	92.0	91.4	91.8	91.2	91.7	90.9
Grapefruit		152.4	150.6	151.7	143.7	142.0	144.1	184.0	205.9	194.6	156.6	143.5	137.3	134.5	155.1
Grapes		162.7	(1)	(1)	(1)	(1)	154.3	144.0	137.8	147.4	188.3	(1)	(1)	(1)	154.4
Strawberries		134.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	126.8	121.5	147.5	131.9
Watermelon		(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	116.1	119.6	159.9	(1)	(1)	131.9
Potatoes		159.9	153.3	151.1	144.3	142.0	140.1	137.6	144.5	159.0	165.2	154.5	143.8	141.2	144.8
Onions		180.8	171.0	166.9	140.5	136.4	133.2	134.2	139.0	152.2	141.5	135.0	130.5	124.3	134.1
Asparagus	Dec. 63	119.3	176.6	(1)	141.6	(1)	(1)	(1)	(1)	(1)	129.6	121.1	118.9	152.2	138.7
Cabbage		202.1	204.5	211.3	188.7	173.4	150.6	145.9	135.6	138.3	145.7	155.6	152.6	148.8	152.0
Carrots		115.3	122.1	145.3	139.2	146.6	127.1	129.6	128.3	139.6	129.5	119.8	109.7	114.0	123.8
Celery		128.7	136.2	143.6	140.5	132.2	131.2	115.5	120.1	130.2	151.8	139.2	134.3	113.2	125.6
Cucumbers	Dec. 63	214.0	209.1	208.5	203.4	176.5	122.5	118.5	111.7	122.5	123.0	124.6	161.1	161.9	148.1
Lettuce		125.2	123.0	122.7	137.6	189.5	177.9	133.3	130.8	124.2	126.8	120.2	149.3	166.1	144.4
Peppers, green	Dec. 63	299.7	265.5	283.9	231.2	217.2	160.9	145.7	147.8	146.4	165.6	180.7	188.0	163.7	172.4
Spinach	Dec. 63	119.9	118.3	122.0	120.3	121.8	116.5	120.1	118.0	117.2	118.8	111.1	109.6	113.4	114.8
Tomatoes		159.0	136.1	134.8	168.1	177.5	146.7	119.0	103.2	116.3	131.0	158.0	173.8	118.7	138.1
Processed fruits and vegetables		118.0	117.3	117.3	117.1	117.1	116.8	116.6	116.9	116.7	116.4	116.3	116.3	115.9	116.3
Fruit cocktail, canned		106.2	105.3	104.9	105.3	106.2	105.4	105.6	106.6	106.3	107.1	106.3	106.0	106.5	106.4
Pears, canned	Dec. 63	104.9	104.9	105.4	106.0	106.4	106.9	107.6	108.2	108.8	108.6	108.9	109.0	109.4	108.7
Grapefruit-pineapple juice, canned	Dec. 63	105.2	104.1	103.7	103.0	102.4	102.6	102.2	101.8	101.0	100.4	99.9	99.1	99.6	100.5
Orange juice concentrate, frozen		92.6	93.5	96.5	96.4	97.4	97.2	98.2	99.4	100.0	100.4	101.0	103.7	102.1	98.9
Lemonade concentrate, frozen	Apr. 60	96.5	95.9	94.8	95.1	94.7	94.1	93.8	93.3	92.5	90.6	92.3	92.5	92.3	92.5
Beets, canned	Dec. 63	116.2	115.0	114.1	113.9	113.6	113.3	112.8	113.1	112.8	113.3	112.7	113.4	113.1	113.2
Peas, green, canned		123.1	121.8	122.2	122.4	122.4	123.1	122.9	122.9	122.7	121.7	121.0	121.1	121.3	121.7
Tomatoes, canned		130.7	128.0	127.2	126.7	126.6	125.5	124.8	124.1	124.6	124.5	124.1	123.8	123.6	124.7
Dried beans		121.5	122.0	123.4	123.1	123.3	123.6	124.3	125.0	125.0	124.7	124.9	125.4	124.6	124.7
Broccoli, frozen	Dec. 63	113.0	112.7	111.8	110.8	109.6	108.0	106.7	107.5	106.7	105.4	104.9	103.2	101.1	104.7
Other food at home		113.8	116.0	118.1	117.7	116.6	112.9	111.0	110.5	110.5	107.2	106.6	107.1	109.0	109.9
Eggs		103.6	122.6	141.0	143.0	140.6	122.3	114.5	113.8	114.4	95.6	92.5	97.4	109.8	112.1
Fats and oils:															
Margarine		108.8	106.1	105.6	105.6	105.0	103.7	102.7	102.2	102.4	103.1	103.5	102.8	102.6	103.0
Salad dressing, Italian	Dec. 63	102.3	102.2	101.9	102.5	102.6	102.5	102.8	102.3	102.3	102.4	103.4	103.2	102.9	102.6
Salad or cooking oil	Dec. 63	131.2	129.1	127.2	126.2	124.8	123.9	123.0	123.6	123.6	123.5	123.3	122.7	122.3	123.4
Sugar and sweets		130.5	129.7	128.6	128.1	127.5	126.6	126.4	126.0	125.4	125.3	125.2	124.7	124.4	125.1
Sugar		118.9	118.2	117.2	116.7	116.2	116.2	116.3	116.4	116.5	116.2	115.6	115.0	114.4	115.3
Grape jelly		131.3	131.5	130.6	129.7	128.7	126.5	125.6	124.7	123.9	123.9	124.1	123.1	122.5	124.1
Chocolate bar		130.1	127.9	126.6	127.1	127.4	126.6	126.7	126.5	125.1	124.9	124.8	124.5	124.5	125.1
Syrup, chocolate flavored	Dec. 63	110.3	110.1	109.3	108.1	107.1	106.9	106.8	106.5	106.5	106.4	106.5	106.4	106.3	106.1

See footnotes at end of table.

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24. Consumer Price Index—general summary and U.S. average for groups, subgroups, and selected items—Continued

Item or group	Other index bases	1970 Apr.	1970 Mar.	1970 Feb.	1970 Jan.	1969 Dec.	1969 Nov.	1969 Oct.	1969 Sept.	1969 Aug.	1969 July	1969 June	1969 May	1969 Apr.	Annual average 1969
FOOD—Continued															
Other food at home—Continued															
Nonalcoholic beverages		114.0	112.4	110.7	109.1	107.4	106.1	104.3	103.7	103.8	103.3	103.4	102.7	102.6	103.7
Coffee, can and bag		102.2	99.7	97.4	94.9	92.3	90.0	87.0	86.6	86.7	86.3	86.8	86.6	86.8	87.5
Coffee, instant	July 61	114.1	113.1	111.0	109.6	108.0	106.0	104.2	103.8	103.9	103.6	103.7	103.0	102.1	103.2
Tea		103.6	103.1	103.6	103.1	102.9	102.2	102.1	102.0	102.2	102.0	102.0	100.8	101.0	101.8
Cola drink		162.0	161.9	160.3	159.3	158.4	158.7	158.0	156.8	156.6	155.3	155.1	153.8	153.8	155.3
Carbonated fruit drink	Dec. 63	128.5	127.4	126.0	125.5	124.8	124.7	124.5	123.4	123.1	122.7	121.9	120.4	119.8	121.9
Prepared and partially prepared foods	Dec. 63	109.8	109.5	109.0	108.5	108.2	107.6	107.4	106.9	106.7	106.2	105.9	106.0	105.8	106.2
Bean soup, canned	Dec. 63	110.5	110.4	110.9	109.7	108.8	107.2	106.3	105.6	105.4	105.1	105.1	105.2	104.5	105.0
Chicken soup, canned	Dec. 63	102.0	101.8	101.1	100.8	100.3	99.5	98.3	98.1	98.3	98.0	97.8	98.2	97.5	98.0
Spaghetti, canned	Dec. 63	122.7	121.8	121.1	120.8	120.4	119.8	118.9	117.2	117.3	117.0	116.4	116.2	116.0	117.1
Mashed potatoes, instant	Dec. 63	110.6	110.5	110.3	109.7	109.6	110.0	109.6	108.9	108.5	108.1	107.7	107.7	106.4	107.2
Potatoes, french fried, frozen	Apr. 60	93.2	93.2	92.8	92.7	92.5	92.1	92.8	92.7	92.5	91.8	90.8	90.6	91.2	91.4
Baby foods, canned		112.9	112.0	112.0	112.1	111.9	111.4	111.7	112.7	112.1	111.7	110.7	110.9	111.1	111.6
Sweet pickle relish	Dec. 63	118.0	117.2	116.0	115.6	115.0	114.3	114.2	112.6	112.0	111.0	111.8	112.5	113.2	112.8
Pretzels	Dec. 63	110.0	109.1	108.3	107.1	107.5	107.0	107.6	107.6	107.6	107.4	107.0	106.8	106.9	107.1
HOUSING		134.4	133.6	132.2	131.1	130.5	129.8	129.2	128.6	127.8	127.0	126.3	125.8	125.3	126.7
Shelter		143.7	142.8	140.9	139.6	138.5	137.7	137.0	136.1	135.1	134.0	133.0	132.4	131.6	133.6
Rent		122.6	122.3	121.8	121.3	121.0	120.5	120.1	119.7	119.3	118.8	118.5	118.1	117.8	118.8
Homeownership		152.1	150.9	148.5	146.8	145.4	144.5	143.6	142.6	141.3	140.0	138.7	138.0	137.1	139.4
Mortgage interest rates	Dec. 63	149.1	148.9	143.5	139.9	139.6	139.3	138.8	138.2	137.1	135.8	134.9	134.3	133.5	134.4
Property taxes		138.2	134.7	133.6	133.0	132.0	131.5	130.5	130.4	129.9	128.7	128.2	128.3	128.1	129.0
Property insurance rates		153.6	153.2	152.8	152.5	153.3	152.3	150.7	149.5	150.3	149.6	147.4	146.9	146.0	148.7
Maintenance and repairs		148.8	148.3	146.9	146.4	145.8	144.9	144.5	143.8	142.4	141.5	140.8	139.6	138.4	140.7
Commodities	Dec. 63	117.8	117.2	116.5	116.1	115.9	116.0	116.2	116.7	117.2	117.5	117.8	117.5	117.0	116.1
Exterior house paint		119.9	121.0	119.8	119.3	119.1	118.7	118.0	117.6	116.5	115.7	115.6	115.9	116.2	116.5
Interior house paint	Dec. 63	114.6	114.7	114.8	114.1	114.3	113.6	113.8	113.1	113.1	112.3	112.2	111.6	111.7	112.4
Services	Dec. 63	146.7	146.2	144.7	144.1	143.5	142.2	141.6	140.4	138.2	136.9	135.7	134.2	132.9	136.4
Repainting living and dining rooms		187.9	186.8	185.4	184.6	183.6	182.6	181.8	179.7	178.3	176.1	174.0	171.5	167.9	174.6
Reshingling roofs		165.6	166.1	165.4	164.9	164.1	163.0	162.3	161.4	157.6	155.4	154.2	152.3	151.4	155.8
Residing houses	Dec. 63	137.1	136.7	135.0	134.6	134.0	134.2	133.7	133.0	130.0	129.3	128.6	127.6	126.5	129.0
Replacing sinks	Dec. 63	149.1	148.2	145.6	145.2	144.5	142.6	142.0	140.4	139.0	137.8	137.2	135.3	134.7	137.4
Repairing furnaces	Dec. 63	152.9	152.4	151.3	150.0	149.7	145.2	144.1	142.8	141.2	139.7	137.7	136.4	135.0	139.1
Fuel and utilities		116.3	115.6	114.9	114.6	114.6	114.2	113.5	113.3	113.0	112.6	112.7	112.6	112.6	112.9
Fuel oil and coal		120.9	120.8	120.6	119.7	119.2	118.9	118.4	118.1	117.7	117.4	117.5	117.5	117.4	117.8
Fuel oil, #2		117.8	117.8	117.5	116.6	116.2	116.0	115.5	115.4	115.2	115.0	115.0	114.9	114.8	115.1
Gas and electricity		115.7	114.8	114.6	114.1	113.7	113.2	112.2	112.0	111.5	110.9	111.3	111.2	111.2	111.5
Gas		123.1	121.9	121.5	120.5	119.8	118.8	116.9	116.7	116.1	115.7	116.4	116.4	116.5	116.8
Electricity		108.0	107.5	107.4	107.4	107.2	107.2	106.9	106.8	106.4	105.6	105.7	105.5	105.4	105.8
Other utilities:															
Residential telephone services		104.8	103.9	102.8	103.0	103.8	103.7	103.6	103.6	103.6	103.6	103.6	103.4	103.3	103.5
Residential water and sewerage		151.0	151.0	147.5	147.5	147.5	147.5	145.3	145.3	145.3	145.3	143.4	143.4	143.4	144.4
Household furnishings and operation		122.0	121.6	120.8	120.1	120.0	119.6	119.3	119.0	118.5	118.2	117.9	117.4	116.9	117.9
Housefurnishings		112.0	111.7	111.1	110.5	110.6	110.4	110.2	109.9	109.4	109.3	109.0	108.8	108.3	109.0
Textiles		116.7	116.4	115.7	114.2	116.1	115.7	115.0	115.2	113.8	114.8	114.8	114.4	114.6	114.4
Sheets, percale or muslin		123.6	122.7	120.8	117.3	122.2	121.7	120.1	119.8	116.2	118.7	120.2	118.3	121.0	119.6
Curtains, tailored, polyester marquisette		113.3	113.7	112.7	111.6	112.3	112.1	112.0	112.0	112.0	111.6	111.5	111.1	110.4	110.9
Bedspreads, chiefly cotton, tufted		117.8	117.1	116.6	115.0	117.6	117.7	117.1	116.9	115.7	116.5	116.9	117.3	117.3	116.2
Drapery fabric, cotton or rayon/acetate		127.0	126.5	125.8	125.0	126.6	126.0	124.1	124.5	125.0	124.8	122.2	122.1	121.3	123.1
Slipcovers, ready made, chiefly cotton	Dec. 63	111.8	112.1	112.3	111.0	110.4	110.0	111.1	110.0	110.3	110.1	109.6	109.4	109.3	109.6
Furniture and bedding		126.0	125.4	124.6	124.1	123.9	123.7	123.6	122.9	122.4	122.1	121.8	121.6	120.5	121.5
Bedroom furniture chest and dresser [3]		100.4	130.3	129.5	128.6	128.0	128.0	127.6	127.2	125.8	125.3	124.8	124.4	123.0	124.9
Living room suites, good and inexpensive quality	Mar. 70	127.9	127.3	126.1	126.0	126.3	125.8	125.9	124.9	124.8	123.9	123.4	123.3	122.4	123.7
Lounge chairs, upholstered	Dec. 63	121.9	121.0	120.0	120.0	118.8	118.6	118.9	119.0	117.9	116.5	116.2	114.6	113.3	115.8
Dining room chairs [4]	Mar. 70	100.2	131.9	131.1	130.3	129.5	129.4	128.7	127.5	126.0	126.6	126.1	126.7	125.7	126.6
Sofas, upholstered	Dec. 63	118.7	118.0	116.5	116.3	116.5	115.7	115.9	114.8	115.1	114.3	113.8	114.3	113.3	114.2
Sofas, dual purpose		122.6	120.6	120.0	120.5	120.0	120.2	118.9	118.8	118.6	117.9	117.1	116.2	116.0	117.2
Box springs	Dec. 63	(5)	124.2	122.5	122.4	122.6	122.5	124.1	123.7	123.2	123.0	123.0	122.8	121.6	122.0
Cribs	Dec. 63	120.0	120.6	119.9	119.6	119.8	119.5	119.2	117.1	118.0	117.7	117.5	117.1	115.8	117.0
Floor coverings		106.9	106.9	106.9	106.8	107.1	107.1	107.1	107.0	106.3	106.4	106.2	106.2	106.2	106.5
Rugs, soft surface		103.8	103.9	104.0	104.0	104.7	104.8	104.9	104.9	104.1	104.4	104.1	104.2	104.4	104.5
Rugs, hard surface		113.7	113.7	113.6	113.2	112.5	112.5	112.1	111.8	111.6	111.5	111.2	111.1	110.3	111.2
Tile, vinyl	Dec. 63	111.8	111.7	111.3	110.3	110.3	110.1	109.6	109.3	108.5	108.2	108.0	108.0	107.7	108.4
Appliances		87.1	86.8	86.6	86.5	86.4	86.3	86.2	86.0	86.0	85.9	85.8	85.6	85.6	85.8
Washing machines, electric, automatic		92.9	92.4	92.3	91.8	91.5	91.2	90.9	91.0	90.8	90.5	90.5	90.2	90.1	90.6
Vacuum cleaners, canister type		81.6	81.3	81.5	81.8	81.4	81.4	81.5	81.3	82.1	82.0	81.8	81.4	81.2	81.5

See footnotes at end of table.

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24. Consumer Price Index—general summary and U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1970 Apr.	1970 Mar.	1970 Feb.	1970 Jan.	1969 Dec.	1969 Nov.	1969 Oct.	1969 Sept.	1969 Aug.	1969 July	1969 June	1969 May	1969 Apr.	Annual average 1969
HOUSING—Continued															
Household furnishings and operation—Con.															
Appliances—Continued															
Refrigerators or refrigerator-freezers, electric		87.5	87.2	86.8	86.1	86.0	85.8	85.8	85.8	85.7	85.4	85.2	84.9	84.8	85.3
Ranges, free standing, gas or electric		100.7	100.1	99.3	99.0	99.0	98.8	98.5	98.1	98.2	97.6	97.4	97.0	97.1	97.7
Clothes dryers, electric, automatic	Dec. 63	102.1	101.8	101.3	100.8	100.6	100.5	99.8	99.6	99.7	99.5	99.5	99.1	98.9	99.4
Air conditioners, demountable	June 64	101.3	[2]	[1]	[1]	[1]	[1]	[1]	[1]	99.8	99.7	99.5	99.2	99.3	99.5
Room heaters, electric, portable	Dec. 63	[1]	100.5	100.6	100.6	100.4	99.8	99.6	[2]	[1]	[1]	[1]	[1]	[1]	98.8
Garbage disposal units	Dec. 63	107.2	106.6	105.9	105.5	105.0	105.0	104.7	104.3	103.9	103.9	103.9	103.6	103.1	103.9
Other house furnishings:															
Dinnerware, earthenware		138.1	138.1	137.1	136.2	135.6	135.2	134.8	134.3	133.5	133.6	132.7	132.5	132.2	133.3
Flatware, stainless steel	Dec. 63	120.7	120.4	120.1	119.2	119.0	119.6	119.6	119.8	119.6	119.5	118.9	118.1	118.1	118.7
Table lamps, with shade	Dec. 63	121.2	119.9	118.6	118.3	118.7	118.3	117.8	116.0	115.4	115.3	114.0	113.6	113.0	114.6
Housekeeping supplies:															
Laundry soaps and detergents		109.8	110.0	108.8	108.1	107.1	106.2	106.8	107.4	107.4	106.4	106.5	106.1	105.7	106.3
Paper napkins		136.4	134.7	131.3	129.8	131.0	130.0	129.0	128.6	128.0	127.2	128.1	127.1	127.0	128.2
Toilet tissue		127.8	126.8	123.5	121.9	120.3	121.2	121.2	120.7	119.1	119.5	119.8	118.0	117.7	118.9
Housekeeping services:															
Domestic service, general housework		184.8	182.5	182.0	180.5	179.9	178.7	177.6	175.1	173.9	172.9	172.2	171.9	171.1	173.5
Baby sitter service	Dec. 63	140.9	140.0	138.6	137.6	137.4	136.6	135.7	135.6	134.9	134.5	133.7	133.1	131.9	133.7
Postal charges		165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5	165.5
Laundry, flatwork, finished service	Dec. 63	149.8	149.1	147.9	147.5	146.8	144.3	143.2	142.7	141.4	140.6	140.2	139.6	139.0	140.6
Licensed day care service, preschool child	Dec. 63	132.1	132.0	132.0	132.0	131.8	131.8	130.7	130.3	129.7	128.4	128.1	127.2	125.3	127.9
Washing machine repairs	Dec. 63	139.8	139.6	138.3	136.6	135.4	135.1	135.2	134.4	133.5	133.0	131.6	131.0	129.2	131.7
APPAREL AND UPKEEP		131.1	130.6	130.0	129.3	130.8	130.7	129.8	128.7	126.6	126.8	127.0	126.6	125.6	127.1
Men's and boys'		133.4	132.3	131.0	130.8	132.0	132.1	131.0	130.0	128.7	128.1	128.5	128.1	127.3	128.5
Men's:															
Topcoats, wool		[1]	144.1	141.0	143.7	147.4	148.5	145.9	144.0	[1]	[1]	[1]	[1]	[1]	142.9
Suits, year round weight		159.8	157.3	153.9	154.2	158.2	158.2	156.4	154.5	150.7	149.6	150.0	150.1	148.1	150.9
Suits, tropical weight	June 64	137.4	136.6	[1]	[1]	[1]	[1]	[1]	[1]	[1]	127.7	130.8	130.0	128.1	128.6
Jackets, lightweight	Dec. 63	125.3	125.3	125.6	125.5	125.7	125.6	125.4	125.2	125.0	125.1	125.6	125.3	124.6	124.6
Slacks, wool or wool blend		131.8	131.0	129.6	130.0	131.2	131.7	130.4	128.9	127.1	126.1	126.6	126.3	126.5	127.4
Slacks, cotton or manmade blend		123.0	120.9	119.4	117.6	117.6	117.1	115.6	115.2	114.5	112.1	114.3	114.3	114.2	113.9
Trousers, work, cotton		117.2	116.6	116.4	116.0	117.2	117.0	116.9	116.9	116.8	116.9	116.7	116.5	116.0	116.4
Shirts, work, cotton		126.4	126.0	124.9	124.4	124.2	124.7	124.2	123.2	123.3	123.1	123.4	122.6	122.2	122.9
Shirts, business, cotton		124.1	123.7	123.2	122.5	122.3	122.2	122.2	121.8	121.6	121.5	121.7	121.3	120 5	121.3
T-shirts, chiefly cotton		134.1	132.9	133.3	132.4	131.9	131.8	131.5	130.6	130.6	130.1	129.4	128.8	129.0	130.0
Socks, cotton		122.6	121.5	121.3	120.9	120.9	120.4	121.1	121.6	121.6	121.1	120.5	119.4	118.9	119.8
Handkerchiefs, cotton	Dec. 63	114.4	114.2	113.9	113.8	113.8	113.3	112.9	112.7	112.4	112.3	112.3	111.5	111.6	112.1
Boys':															
Coats, all purpose, cotton or cotton blend	Dec. 63	[1]	114.6	114.3	114.2	116.1	115.9	115.2	113.5	[1]	[1]	[1]	[1]	[1]	112.4
Sport coats, wool or wool blend	Dec. 63	[1]	[1]	[1]	127.8	130.3	131.0	126.4	122.5	[1]	[1]	[1]	[1]	[1]	125.6
Dungarees, cotton or cotton blend		129.5	129.5	129.4	128.9	127.1	127.9	126.9	127.4	127.4	127.2	127.0	126.0	125.2	126.3
Undershorts, cotton		130.9	130.5	129.9	130.1	130.3	130.3	129.0	128.9	128.4	127.9	126.6	126.1	125.6	127.1
Women's and girls'		125.2	125.3	125.4	124.2	127.2	127.4	126.2	124.6	120.8	122.5	122.7	122.4	121.0	122.8
Women's:															
Coats, heavyweight, wool or wool blend		[1]	[1]	[1]	124.9	136.2	139.9	139.9	136.0	[1]	[1]	[1]	[1]	[1]	134.4
Skirts, wool or wool blend	Sept. 61	[1]	[1]	121.0	135.6	144.6	145.3	133.9	129.4	[1]	[1]	[1]	[1]	[1]	129.3
Skirts, cotton or cotton blend	Mar. 62	135.2	[2]	[1]	[1]	[1]	[1]	[1]	[1]	121.8	130.7	135.0	134.4	124.4	129.3
Blouses, cotton		127.1	125.3	124.9	126.9	127.6	127.2	125.4	122.7	122.2	122.4	122.7	123.4	123.2	123.6
Dresses, street, chiefly manmade fiber		158.9	158.5	158.7	155.9	158.3	158.8	155.9	152.5	147.3	147.6	147.3	147.7	148.8	150.2
Dresses, street, wool or wool blend		[1]	[1]	[1]	144.2	145.7	144.8	145.7	140.8	[1]	[1]	[1]	[1]	[1]	141.0
Dresses, street, cotton		[3]	[3]	[1]	[1]	[1]	[1]	[1]	[1]	136.6	149.9	150.6	150.5	148.5	147.2
Housedresses, cotton		[3]	[3]	153.5	152.3	153.0	152.1	150.7	149.0	150.0	148.8	149.6	147.3	146.4	147.9
Slips, nylon		114.7	114.2	114.6	113.4	112.3	112.2	111.9	111.9	111.6	109.7	110.5	110.1	110.3	110.8
Panties, acetate		112.7	113.2	112.7	112.0	111.2	111.5	110.5	109.9	109.1	108.6	108.4	108.8	108.5	109.2
Girdles, manmade blend		121.3	121.4	120.9	120.5	120.8	120.5	120.2	119.5	119.4	119.0	118.7	119.0	119.1	119.1
Brassieres, cotton	Dec. 63	128.4	127.4	125.6	124.4	124.9	123.8	123.1	122.9	122.5	122.2	122.0	120.8	120.7	121.7
Hose, nylon, seamless		98.9	99.0	98.3	98.5	99.8	99.8	99.4	99.2	98.8	99.6	99.0	99.1	98.7	99.1
Anklets, cotton	Dec. 63	120.1	120.5	122.5	121.0	121.5	118.5	118.5	118.4	118.2	118.1	117.6	116.6	115.2	117.2
Gloves, fabric, nylon or cotton	Dec. 63	110.6	110.9	111.0	110.7	110.5	109.8	109.2	109.0	109.3	108.9	108.9	108.6	108.4	108.6
Handbags, rayon faille or plastic	Dec. 63	118.8	118.2	118.5	116.4	117.3	117.2	115.5	114.8	114.1	113.8	113.7	113.0	112.1	113.6
Girls':															
Raincoats, vinyl plastic or chiefly cotton	Dec. 63	[1]	114.8	118.9	118.1	125.6	124.4	121.7	120.8	[1]	[1]	[1]	[1]	[1]	120.9
Skirts, wool or wool blend		[1]	[1]	[1]	117.4	123.2	123.4	124.0	[2]	[1]	[1]	[1]	[1]	[1]	121.4

See footnotes at end of table.

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24. Consumer Price Index—general summary and U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1970 Apr.	Mar.	Feb.	Jan.	1969 Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Annual average 1969
APPAREL AND UPKEEP—Continued															
Women's and girls'—Continued															
Girls' Continued															
Dresses, cotton		135.1	134.0	132.3	129.8	133.6	136.3	137.4	136.9	135.4	134.2	133.9	134.1	134.1	134.4
Slacks, cotton	Dec. 63	(1)	125.5	125.4	128.4	131.8	131.7	127.9	(2)	(1)	(1)	(1)	(1)	(1)	125.8
Slips, cotton blend	Dec. 63	107.5	108.1	107.8	108.0	108.0	108.6	108.5	107.7	108.0	108.1	107.2	107.0	107.0	107.5
Handbags	Dec. 63	115.7	115.1	114.9	113.7	114.2	114.7	111.1	108.9	108.3	108.2	106.5	108.5	108.8	109.3
Footwear		147.2	146.3	145.0	144.4	144.4	143.9	143.3	142.3	141.5	139.9	140.1	139.6	138.4	140.3
Men's:															
Shoes, street, oxford		144.7	143.8	142.3	141.3	142.6	142.1	141.5	140.1	138.7	137.5	138.6	138.2	136.7	138.4
Shoes, work, high		142.6	142.1	141.4	140.9	139.8	139.5	139.0	138.4	138.1	137.3	136.8	136.1	135.2	136.7
Women's:															
Shoes, street, pump		157.3	155.5	151.6	151.8	152.7	152.5	152.0	150.8	149.9	147.3	147.9	148.0	147.2	148.6
Shoes, evening, pump	Dec. 63	125.8	125.0	124.8	124.2	123.2	122.9	122.9	122.3	121.8	121.0	120.0	119.1	118.0	120.3
Shoes, casual, pump	Dec. 63	138.3	136.3	135.7	134.2	134.0	133.4	132.0	129.6	128.9	126.8	128.2	127.1	125.5	127.7
Houseslippers, scuff	Dec. 63	127.7	128.2	127.8	128.0	127.5	127.1	126.6	126.4	125.4	123.9	124.0	123.9	123.4	124.7
Children's:															
Shoes, oxford		146.3	146.6	145.9	144.3	144.3	143.3	142.3	141.4	140.7	140.2	139.8	139.4	138.2	140.1
Sneakers, boys', oxford type	Dec. 63	122.0	120.7	120.0	119.6	119.5	119.3	119.1	118.9	118.1	116.9	116.2	115.8	115.8	117.2
Dress shoes, girls', strap	Dec. 63	137.5	138.0	136.6	136.6	136.4	135.7	134.6	134.1	133.1	130.6	131.9	130.7	129.1	131.5
Miscellaneous apparel:															
Diapers, cotton gauze		104.8	104.9	104.3	104.0	104.0	104.1	103.8	103.9	104.0	103.5	103.2	102.7	102.3	103.0
Yard goods, cotton		126.8	125.9	124.6	123.3	123.5	123.1	123.5	123.2	123.2	122.1	123.2	120.5	119.3	120.9
Apparel services:															
Drycleaning, men's suits and women's dresses		135.7	135.2	134.6	133.8	133.3	132.9	132.2	132.0	131.7	130.5	130.2	129.8	129.9	130.8
Automatic laundry service	Dec. 63	113.1	113.2	112.3	112.0	112.0	111.8	111.4	111.3	111.0	111.0	110.4	110.3	108.4	110.1
Laundry, men's shirts	Dec. 63	128.8	128.5	128.0	126.8	126.7	124.3	123.8	123.4	123.2	123.0	122.5	122.1	122.2	122.9
Tailoring charges, hem adjustment	Dec. 63	128.4	127.7	127.4	127.0	127.4	127.6	127.5	126.5	125.4	125.2	125.1	123.5	122.7	124.5
Shoe repairs, women's heel lift		126.3	125.5	125.0	124.6	123.7	123.6	122.7	123.1	121.3	121.1	120.4	120.1	120.1	121.3
TRANSPORTATION		128.9	127.1	127.3	127.3	126.4	125.6	125.7	123.6	124.2	124.3	124.6	124.0	124.6	124.2
Private		124.9	123.0	123.3	123.3	123.4	122.7	122.8	120.5	121.3	121.4	121.8	121.2	121.9	121.3
Automobiles, new		104.3	104.4	104.6	104.7	104.9	105.1	104.2	99.5	101.0	101.6	101.8	101.8	101.9	102.4
Automobiles, used		121.1	117.6	117.8	120.7	123.9	124.9	125.8	121.4	125.4	127.0	128.2	126.8	131.2	125.3
Gasoline, regular and premium		119.2	115.3	116.7	116.6	116.9	116.3	118.0	117.7	118.0	117.7	118.6	117.3	117.8	117.0
Motor oil, premium		142.6	142.3	141.4	140.7	140.2	140.1	139.6	139.1	138.7	138.1	137.4	136.7	136.0	137.5
Tires, new, tubeless		118.6	119.4	118.5	118.2	118.2	118.0	117.4	117.0	116.0	116.3	115.5	115.6	115.7	116.2
Auto repairs and maintenance		142.1	141.5	140.2	139.2	137.3	136.6	136.1	135.2	134.5	133.8	133.3	132.9	132.3	133.8
Auto insurance rates		178.6	176.4	176.0	173.4	171.5	164.6	163.7	163.2	160.3	159.0	158.7	158.1	157.2	160.2
Auto registration		140.9	140.3	140.3	140.3	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	134.2	133.6
Public		165.8	165.8	165.4	165.1	153.0	151.1	150.3	150.3	149.7	149.5	149.1	148.0	148.0	148.9
Local transit fares		183.9	183.8	183.8	183.3	163.2	163.0	161.7	161.7	160.8	160.5	159.9	159.6	159.6	160.4
Taxicab fares	Dec. 63	131.5	131.5	131.5	131.5	131.5	127.5	127.5	127.5	127.5	127.5	127.5	124.8	124.8	126.7
Railroad fares, coach		121.1	121.1	117.2	117.2	117.2	115.5	115.1	115.1	114.9	114.9	114.9	114.6	114.6	114.0
Airplane fares, chiefly coach	Dec. 63	117.8	117.8	117.4	117.4	117.4	111.6	111.6	111.6	112.1	112.1	112.1	110.7	110.7	110.6
Bus fares, intercity	Dec. 63	128.6	128.6	127.9	127.9	127.9	127.0	127.0	127.0	122.9	122.9	122.9	118.6	118.6	122.4
HEALTH AND RECREATION		142.3	141.4	140.7	140.1	139.6	139.1	138.6	138.4	137.7	137.0	136.3	135.7	135.1	136.6
Medical care		162.8	161.6	160.1	159.0	158.1	157.4	156.9	157.6	156.8	155.9	155.2	154.5	153.6	155.0
Drugs and prescriptions		100.9	100.3	100.0	99.7	99.6	99.6	99.4	99.3	99.3	99.2	99.3	99.3	99.0	99.2
Over-the-counter items	Dec. 63	108.6	107.8	107.2	107.2	107.1	107.1	106.9	106.9	107.0	106.9	107.1	107.0	106.8	106.9
Multiple vitamin concentrates	Dec. 63	92.0	91.7	90.8	92.3	92.8	92.4	92.5	92.4	92.4	92.1	92.2	92.4	92.2	92.4
Aspirin compounds	Dec. 63	108.1	107.3	107.4	106.2	106.6	106.2	106.1	105.5	106.8	106.4	106.6	106.2	106.3	106.2
Liquid tonics	Dec. 63	101.9	101.5	101.2	101.3	101.3	101.3	100.8	100.9	100.9	100.8	100.9	100.9	100.9	101.0
Adhesive bandages, package	Dec. 63	119.8	119.7	118.2	117.8	117.7	117.1	117.4	117.0	116.5	116.7	117.0	116.9	116.6	116.9
Cold tablets or capsules	Dec. 63	112.6	112.2	111.5	111.0	110.5	110.0	109.6	109.1	109.2	109.1	109.5	109.3	109.3	109.2
Cough syrup	Dec. 63	116.0	113.5	113.0	113.4	112.9	114.7	113.7	115.1	114.8	114.8	115.2	115.1	114.5	114.5
Prescriptions		90.3	89.7	89.7	89.3	89.1	89.0	89.0	88.8	88.7	88.6	88.6	88.6	88.3	88.6
Anti-infectives	Mar. 60	63.0	62.8	63.0	62.8	62.8	62.8	63.0	62.9	62.9	62.8	63.1	63.1	62.5	62.8
Sedatives and hypnotics	Mar. 60	113.7	112.1	112.0	110.6	110.4	109.6	108.9	107.8	107.6	107.1	106.9	106.4	106.1	107.2
Ataractics	Mar. 60	90.7	90.0	90.0	90.0	89.8	89.8	89.8	89.8	89.7	89.9	90.0	90.0	89.7	89.8
Anti-spasmodics	Mar. 60	102.2	101.7	101.6	101.5	101.3	101.3	101.3	101.2	101.0	101.0	101.2	101.1	100.9	101.1
Cough preparations	Mar. 60	118.1	117.1	115.2	112.7	112.0	111.7	111.4	111.1	110.8	110.2	109.7	109.3	108.5	109.4
Cardiovasculars and antihypertensives	Mar. 60	100.0	99.0	98.8	98.3	98.0	98.0	97.9	97.7	97.6	97.1	97.0	96.9	96.9	97.1
Analgesics, internal	Mar. 67	105.3	104.7	105.0	104.3	103.3	103.2	103.1	103.1	103.1	102.9	102.8	103.0	103.0	102.8
Anti-obesity	Mar. 67	106.0	105.8	105.5	104.8	104.3	104.3	104.2	103.6	103.3	102.9	102.6	102.6	102.4	103.1
Hormones	Mar. 67	93.6	93.9	93.6	93.6	94.2	93.9	94.3	93.9	93.9	93.8	93.9	94.9	94.7	94.3
Professional services:															
Physicians' fees		164.3	163.7	161.6	160.7	160.0	159.0	158.3	158.0	156.8	156.0	155.5	154.3	153.3	155.4
Family doctor, office visits		167.3	166.6	164.0	163.1	162.4	161.0	160.6	160.3	158.7	158.3	157.6	155.8	154.9	157.2
Family doctor, house visits		172.5	171.7	169.0	167.9	167.6	166.2	165.9	165.6	163.9	163.8	163.4	162.9	162.4	163.3
Obstetrical cases		159.2	159.0	157.6	155.9	155.0	154.9	153.9	153.2	152.8	150.1	149.4	148.6	147.4	150.2
Pediatric care, office visits	Dec. 63	148.7	148.5	147.7	146.5	145.9	145.5	144.2	144.1	142.8	140.9	140.3	140.2	139.9	141.4
Psychiatrist, office visits	Dec. 63	134.7	134.6	133.7	133.0	132.6	132.6	131.7	131.7	130.9	129.3	129.6	129.2	126.6	129.1

See footnotes at end of table.

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24. Consumer Price Index—general summary and U.S. average for groups, subgroups, and selected items—Continued

Index or group	Other index bases	1970 Apr.	1970 Mar.	1970 Feb.	1970 Jan.	1969 Dec.	1969 Nov.	1969 Oct.	1969 Sept.	1969 Aug.	1969 July	1969 June	1969 May	1969 Apr.	Annual average 1969
HEALTH AND RECREATION—Continued															
Medical care—Continued															
Professional services—Continued															
Physicians' fees—Continued															
Herniorrhaphy, adult	Dec. 63	128.7	127.5	126.7	126.3	125.4	125.2	124.6	124.6	124.3	124.3	124.1	123.9	123.2	123.9
Tonsillectomy and adenoidectomy		154.2	153.8	152.6	152.3	151.6	151.3	149.3	149.1	149.0	148.1	147.8	147.3	146.5	148.2
Dentists' fees		150.7	148.7	148.4	148.0	147.6	147.2	146.9	146.0	145.5	144.9	144.2	143.6	142.9	143.9
Fillings, adult, amalgam, one surface		152.5	150.6	150.3	149.8	148.7	148.3	148.3	147.1	146.4	145.7	145.1	144.6	144.0	144.9
Extractions, adult		148.9	146.1	145.9	146.0	147.0	146.7	145.9	145.3	144.7	144.5	143.4	142.6	141.8	143.1
Dentures, full upper	Dec. 63	132.7	131.7	131.3	130.6	130.2	129.7	129.5	128.9	128.8	128.3	127.7	127.3	126.5	127.4
Other professional services:															
Examination, prescription, and dispensing of eyeglasses		136.7	136.3	135.7	134.6	133.9	133.8	132.8	132.4	132.2	131.7	131.2	130.8	129.5	131.1
Routine laboratory tests	Dec. 63	121.2	120.8	119.8	119.6	119.5	119.4	118.5	118.5	118.6	118.0	117.9	117.6	115.6	117.4
Hospital service charges:															
Daily service charges		282.3	279.0	275.6	271.6	267.9	265.4	263.8	261.9	259.9	256.7	253.8	252.4	251.4	256.0
Semiprivate rooms		279.1	275.6	271.9	268.0	264.1	261.7	260.1	258.4	255.3	253.0	250.0	248.4	247.4	252.1
Private rooms		271.4	268.7	265.9	261.8	258.7	256.1	254.7	252.6	250.8	247.9	245.5	244.4	243.5	247.5
Operating room charges	Dec. 63	180.3	177.7	175.4	172.8	170.9	170.6	170.9	168.7	167.6	166.4	165.6	164.8	163.0	165.2
X-ray, diagnostic series, upper G.I.	Dec. 63	128.1	127.7	125.4	124.7	124.7	124.5	124.8	124.6	123.2	122.7	122.3	122.1	121.8	122.7
Personal care		129.8	129.6	129.0	128.5	128.1	127.8	127.3	127.3	126.8	126.6	126.2	125.8	125.5	126.2
Toilet goods		113.0	112.9	112.4	112.0	111.6	111.8	111.6	111.7	111.4	111.2	110.9	110.4	110.4	110.7
Toothpaste, standard dentifrice		114.7	113.9	114.3	114.1	114.6	114.7	114.4	113.8	113.4	112.9	113.6	113.2	114.1	113.7
Toilet soap, hard milled		124.3	125.6	124.3	123.0	123.4	124.8	125.1	126.3	123.3	125.1	123.6	123.9	124.2	124.1
Hand lotions, liquid	Dec. 63	117.3	110.5	110.0	109.2	109.1	109.7	110.7	111.1	111.2	110.4	109.0	107.7	107.0	108.6
Shaving cream, aerosol		102.3	102.2	102.1	102.1	101.9	101.6	102.0	102.1	102.1	101.4	102.3	102.3	101.9	102.0
Face powder, pressed		131.0	130.8	129.1	128.1	127.6	127.5	127.2	126.8	126.6	126.1	125.0	124.0	124.4	125.0
Deodorants, cream or roll-on	Dec. 63	95.9	96.1	96.1	96.0	94.5	95.0	95.1	95.3	95.5	95.0	94.9	95.4	95.1	94.9
Cleansing tissues		116.0	115.5	114.4	113.8	112.5	111.8	109.2	108.4	109.3	109.3	108.7	107.9	108.0	108.8
Home permanent refills		98.3	98.6	98.6	98.6	98.7	98.6	98.5	99.2	99.1	98.8	99.3	98.4	97.5	98.0
Personal care services		150.5	150.1	149.5	148.9	148.5	147.5	146.7	146.5	145.8	145.5	144.9	144.7	144.2	145.2
Men's haircuts		159.7	159.1	158.7	158.0	157.8	156.4	155.2	154.8	154.5	154.7	153.8	153.1	152.3	153.7
Beauty shop services		140.9	140.6	140.0	139.2	138.8	138.0	137.7	137.5	136.6	136.0	135.6	135.7	135.4	136.1
Women's haircuts	Dec. 63	126.3	126.1	125.4	125.3	125.2	124.0	123.4	123.2	121.9	121.2	120.9	121.7	121.4	122.0
Shampoo and wave sets, plain		158.6	158.3	157.5	156.8	156.3	155.3	154.9	154.6	153.6	152.8	152.3	152.1	151.7	152.7
Permanent waves, cold		109.4	109.0	108.9	107.5	107.2	107.2	107.1	107.0	106.9	106.7	106.5	106.5	106.1	106.4
Reading and recreation		134.4	133.6	133.2	133.1	132.7	132.3	132.0	131.6	131.2	130.7	130.4	130.2	129.6	130.5
Recreational goods	Dec. 63	99.6	99.4	99.2	99.1	99.1	99.2	99.1	99.0	98.8	98.7	98.6	98.6	98.4	98.6
TV sets, portable and console		80.0	79.9	79.9	80.0	80.2	80.3	80.2	80.0	79.7	79.8	80.0	80.1	80.1	80.1
TV replacement tubes	Dec. 63	117.5	117.3	117.3	116.6	116.3	116.3	115.9	115.7	115.4	115.6	115.8	115.6	115.3	115.5
Radios, portable and table model		76.5	76.0	76.1	76.4	76.5	76.5	76.6	76.9	76.5	76.5	76.6	76.6	76.5	76.5
Tape recorders, portable	Dec. 63	90.3	90.2	90.2	90.0	90.1	91.2	91.4	91.5	91.4	91.5	91.9	91.7	91.7	91.3
Phonograph records, stereophonic	Dec. 63	97.8	98.1	97.9	98.0	98.0	98.0	98.1	97.6	97.7	97.9	97.5	97.5	96.6	97.2
Movie cameras, Super 8, zoom lens	Dec. 63	81.4	81.3	81.6	82.1	82.3	83.4	83.1	83.5	83.4	83.5	84.1	85.0	84.9	84.0
Film, 35mm, color	Dec. 63	99.7	99.7	99.7	99.1	99.1	99.1	99.4	99.6	99.2	99.1	99.0	99.0	98.9	99.0
Bicycle, boys'	Dec. 63	110.8	111.4	111.2	110.7	110.4	110.0	109.7	109.9	109.5	109.7	109.1	109.0	108.6	109.0
Tricycles	Dec. 63	111.6	111.2	112.0	112.0	111.6	111.4	111.9	111.6	111.2	109.4	109.2	108.5	107.9	109.6
Recreational services	Dec. 63	135.0	134.1	133.7	133.9	133.2	132.6	132.1	131.7	131.1	130.1	129.7	129.2	128.7	129.9
Indoor movie admissions		215.4	212.0	210.5	211.7	210.3	208.3	207.0	206.5	204.2	200.2	198.3	197.4	196.3	200.6
Adult		210.9	207.7	206.1	207.3	205.4	203.2	201.9	201.6	198.8	194.4	192.9	192.0	191.5	195.5
Children's		230.6	226.7	225.4	226.9	227.1	225.4	224.5	223.2	222.1	219.6	216.7	215.6	212.5	217.6
Drive-in movie admissions, adult	Dec. 63	168.1	167.5	167.0	165.6	165.5	165.0	164.5	164.1	163.5	161.9	160.1	157.0	156.0	159.9
Bowlng fees, evening	Dec. 63	115.2	114.8	115.0	115.3	113.7	113.6	112.1	110.9	110.3	110.4	110.6	110.6	110.8	111.1
Golf greens fees	Dec. 63	139.3	[2]	[2]	[2]	[2]	[2]	135.5	135.9	135.8	134.7	134.6	133.8	130.9	131.8
TV repairs, picture tube replacement		98.7	98.9	99.5	100.2	100.2	100.0	101.4	101.0	101.0	101.0	102.2	102.3	103.3	101.7
Film developing, black and white	Dec. 63	117.6	117.3	117.7	117.4	117.7	117.9	117.9	118.3	118.4	118.9	119.2	120.0	120.5	119.1
Reading and education:															
Newspapers, street sale and delivery		160.4	160.4	159.8	160.2	158.2	156.7	156.4	155.9	155.8	155.2	154.3	153.7	153.2	154.7
Piano lessons, beginner	Dec. 63	128.2	127.8	127.7	127.6	127.3	126.7	126.5	126.1	123.8	122.8	122.3	122.2	122.2	123.7
Other goods and services		135.6	134.8	134.3	133.9	133.5	133.1	132.2	131.3	130.1	129.1	127.9	126.9	126.6	129.0
Tobacco products		156.4	155.0	154.9	154.1	153.8	153.1	151.5	150.6	148.7	146.7	144.0	142.3	142.1	146.5
Cigarettes, nonfilter tip, regular size		164.1	162.8	162.7	161.8	161.4	160.7	158.9	158.0	155.8	153.7	150.8	149.3	149.1	153.6
Cigarettes, filter tip, king size	Mar. 59	156.8	154.9	154.8	154.0	153.5	152.6	151.0	150.0	148.1	146.2	143.4	141.0	140.9	145.7
Cigars, domestic, regular size		108.6	108.7	108.7	109.0	110.0	109.9	109.4	109.6	108.7	107.1	106.5	106.1	106.0	107.6
Alcoholic beverages		122.5	122.0	121.4	121.0	120.6	120.4	120.0	119.1	118.2	117.7	117.4	116.8	116.5	117.8
Beer		118.2	117.7	116.9	116.5	116.5	116.6	116.3	116.4	115.3	114.8	114.5	114.2	113.9	114.8
Whiskey, spirit blended and straight bourbon		111.8	111.6	111.3	111.2	111.5	111.4	111.3	110.4	110.1	109.8	109.4	109.2	109.2	109.9
Wine, dessert and table	Dec. 63	118.9	117.4	116.8	116.5	115.2	114.5	113.6	112.0	110.6	110.2	109.5	108.8	108.6	110.5
Beer, away from home	Dec. 63	128.4	128.0	127.6	127.1	125.9	125.6	125.0	123.0	122.3	121.8	121.5	120.5	119.9	121.8
Financial and miscellaneous personal expenses:															
Funeral services, adult	Dec. 63	119.0	118.6	118.1	117.7	117.4	117.3	116.9	116.5	115.9	115.5	115.2	114.6	114.0	115.2
Bank service charges, checking accounts	Dec. 63	110.0	110.1	110.0	110.2	110.3	109.9	109.1	108.3	103.4	108.2	108.2	107.9	107.8	108.3
Legal services, short form will	Dec. 63	145.6	145.1	142.7	142.3	141.2	139.5	139.5	138.8	137.8	135.0	134.5	132.9	130.8	134.7

[1] Priced only in season.
[2] Not available.
[3] This item is a replacement for bedroom suites, good or inexpensive quality, which was discontinued after March 1970.
[4] This item is a replacement for dining room suites, which was discontinued after March 1970.
[5] Item discontinued.
NOTE: Monthly data for individual nonfood items not available for 1968.

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25. Consumer Price Index[1]—U.S. city average, and selected areas

[1957–59=100 unless otherwise specified]

Area[2]	1970 Apr.	1970 Mar.	1970 Feb.	1970 Jan.	1969 Dec.	1969 Nov.	1969 Oct.	1969 Sept.	1969 Aug.	1969 July	1969 June	1969 May	1969 Apr.	Annual avg. 1969
All items														
U.S. city average[3]	134.0	133.2	132.5	131.8	131.3	130.5	129.8	129.3	128.7	128.2	127.6	126.8	126.4	127.7
Atlanta, Ga	(4)	131.9	(4)	(4)	129.9	(4)	(4)	128.6	(4)	(4)	126.1	(4)	(4)	126.7
Baltimore, Md	(4)	133.5	(4)	(4)	131.9	(4)	(4)	130.4	(4)	(4)	127.9	(4)	(4)	128.3
Boston, Mass	137.9	(4)	(4)	136.1	(4)	(4)	134.7	(4)	(4)	132.1	(4)	(4)	129.8	131.8
Buffalo, N.Y. (Nov. 1963=100)	(4)	(4)	125.3	(4)	(4)	123.2	(4)	(4)	121.2	(4)	(4)	120.2	(4)	120.5
Chicago, Ill.–Northwestern Ind	130.2	129.9	129.3	129.1	128.3	127.7	126.9	127.2	126.1	125.3	124.6	123.6	123.2	124.9
Cincinnati, Ohio–Kentucky	(4)	129.2	(4)	(4)	127.7	(4)	(4)	125.5	(4)	(4)	124.6	(4)	(4)	124.6
Cleveland, Ohio	(4)	(4)	132.3	(4)	(4)	129.5	(4)	(4)	127.3	(4)	(4)	125.3	(4)	126.3
Dallas, Tex. (Nov. 1963=100)	(4)	(4)	125.6	(4)	(4)	123.7	(4)	(4)	121.2	(4)	(4)	119.4	(4)	120.3
Detroit, Mich	133.8	133.1	132.2	131.1	130.8	129.8	129.2	128.6	128.5	127.6	127.3	126.4	125.7	127.1
Honolulu, Hawaii (Dec. 1963=100)	(4)	122.0	(4)	(4)	119.7	(4)	(4)	118.1	(4)	(4)	116.6	(4)	(4)	117.0
Houston, Tex	132.9	(4)	(4)	130.9	(4)	(4)	129.8	(4)	(4)	127.0	(4)	(4)	125.5	127.0
Kansas City, Mo.–Kansas	(4)	134.6	(4)	(4)	133.2	(4)	(4)	131.4	(4)	(4)	130.4	(4)	(4)	130.1
Los Angeles–Long Beach, Calif	133.5	132.2	131.6	131.2	131.1	130.0	130.1	129.6	128.9	128.6	127.9	126.9	126.9	128.0
Milwaukee, Wis	(4)	(4)	128.5	(4)	(4)	127.0	(4)	(4)	123.9	(4)	(4)	122.8	(4)	123.6
Minneapolis-St. Paul, Minn	135.1	(4)	(4)	132.8	(4)	(4)	130.3	(4)	(4)	128.0	(4)	(4)	125.1	127.4
New York, N.Y.–Northeastern N.J	140.1	139.1	138.1	137.0	136.0	134.6	134.1	133.5	132.5	132.1	131.6	130.8	130.5	131.8
Philadelphia, Pa.–N.J	135.7	135.4	134.1	132.9	132.2	131.7	131.2	131.0	130.2	129.2	128.2	127.5	127.6	128.9
Pittsburgh, Pa	132.4	(4)	(4)	129.4	(4)	(4)	128.5	(4)	(4)	127.7	(4)	(4)	126.0	127.0
Portland, Oreg.–Wash.[5]	133.4	(4)	(4)	130.7	(4)	(4)	130.1	(4)	(4)	128.4	(4)	(4)	127.9	128.4
St. Louis, Mo.–Ill	(4)	132.4	(4)	(4)	130.7	(4)	(4)	129.2	(4)	(4)	127.0	(4)	(4)	127.5
San Diego, Calif. (Feb. 1965=100)	(4)	(4)	118.6	(4)	(4)	117.0	(4)	(4)	116.0	(4)	(4)	114.4	(4)	115.1
San Francisco–Oakland, Calif	(4)	136.1	(4)	(4)	134.5	(4)	(4)	132.8	(4)	(4)	130.8	(4)	(4)	131.1
Scranton, Pa.[5]	(4)	(4)	134.4	(4)	(4)	127.3	(4)	(4)	130.5	(4)	(4)	128.1	(4)	129.2
Seattle, Wash	(4)	(4)	132.2	(4)	(4)	130.0	(4)	(4)	129.5	(4)	(4)	127.6	(4)	128.3
Washington, D.C.–Md.–Va	(4)	(4)	134.6	(4)	(4)	132.0	(4)	(4)	130.8	(4)	(4)	128.8	(4)	129.5
Food														
U.S. city average[3]	132.0	131.6	131.5	130.7	129.9	128.1	127.2	127.5	127.4	126.7	125.5	123.7	123.2	125.5
Atlanta, Ga	130.6	130.5	130.7	129.0	128.4	126.9	126.5	126.7	126.3	124.4	122.8	121.2	121.8	123.8
Baltimore, Md	135.9	136.2	135.4	134.9	134.1	132.3	131.5	131.8	130.8	130.1	127.9	126.2	126.3	128.8
Boston, Mass	135.9	135.4	135.0	134.3	133.1	131.6	131.2	131.4	131.8	130.2	129.5	127.8	127.5	129.3
Buffalo, N.Y. (Nov. 1963=100)	128.4	127.3	127.0	125.4	125.1	122.8	121.9	121.8	122.5	122.4	121.2	118.9	118.2	120.6
Chicago, Ill.–Northwestern Ind	132.6	133.0	133.2	132.8	131.3	129.4	128.3	130.2	130.5	129.0	127.5	125.3	124.4	127.2
Cincinnati, Ohio–Kentucky	128.6	127.9	127.8	127.2	126.6	125.1	124.1	123.6	123.2	123.3	121.9	120.7	120.2	122.1
Cleveland, Ohio	129.7	129.3	128.4	129.0	128.5	125.7	125.0	125.1	125.2	123.3	123.2	122.3	120.1	123.2
Dallas, Tex. (Nov. 1963=100)	125.5	125.5	125.9	125.0	124.2	122.8	121.7	122.0	121.9	120.6	120.1	118.2	116.9	119.8
Detroit, Mich	131.2	130.9	130.2	129.8	129.3	126.8	126.1	126.5	127.3	126.5	124.5	122.7	121.9	124.3
Honolulu, Hawaii (Dec. 1963=100)	123.4	123.4	122.9	123.0	120.8	119.5	119.7	119.1	118.0	116.9	116.3	116.1	115.8	117.4
Houston, Tex	133.8	132.7	133.3	132.3	131.2	129.2	128.7	129.2	129.0	127.7	126.8	125.2	124.3	126.9
Kansas City, Mo.–Kansas	136.4	135.9	135.8	135.1	134.4	132.9	131.2	131.9	131.3	130.7	129.8	127.5	126.6	129.4
Los Angeles–Long Beach, Calif	127.4	126.7	127.2	126.2	125.8	124.7	124.0	124.0	123.9	124.0	123.0	121.6	121.2	122.6
Milwaukee, Wis	129.3	130.2	130.1	129.5	128.4	127.8	127.6	127.9	127.6	126.5	125.1	123.3	122.9	125.2
Minneapolis-St. Paul, Minn	131.2	131.2	130.6	129.5	128.2	127.2	126.5	125.9	126.4	125.4	122.8	121.3	120.7	123.7
New York, N.Y.–Northeastern N.J	135.7	135.1	134.7	133.8	132.9	130.6	129.6	129.1	128.7	128.1	126.6	124.9	124.7	127.1
Philadelphia, Pa.–N.J	131.5	132.0	132.0	130.7	129.7	128.0	127.0	127.2	127.2	126.0	124.5	123.1	124.3	125.5
Pittsburgh, Pa	128.3	128.2	128.0	127.5	127.1	125.7	123.3	123.2	123.9	124.2	123.2	120.9	119.6	122.4
Portland, Oreg.–Wash.[5]	128.5	------	------	126.7	------	------	124.4	------	------	125.2	------	------	122.7	124.0
St. Louis, Mo.–Ill	136.5	136.6	137.4	136.6	135.5	133.5	132.4	132.6	131.2	129.8	128.6	126.9	126.4	129.5
San Diego, Calif. (Feb. 1965=100)	121.3	120.8	121.3	120.6	120.0	119.1	117.8	118.3	118.6	118.7	118.1	116.4	115.3	117.0
San Francisco–Oakland, Calif	128.8	128.2	128.7	128.2	127.2	126.2	125.6	124.9	124.9	125.9	124.3	122.7	122.3	123.8
Scranton, Pa.	------	------	131.3	------	------	131.9	------	------	127.5	------	------	123.4	------	125.0
Seattle, Wash	130.1	128.5	129.2	127.8	127.6	126.2	125.2	125.9	126.2	125.8	125.0	123.6	123.2	124.5
Washington, D.C.–Md.–Va	136.6	135.7	136.2	134.8	133.5	131.2	130.5	131.6	132.5	131.3	129.1	128.3	127.6	129.5

[1] See table 23. 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.

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26. Wholesale price indexes,[1] by group and subgroup of commodities

[1957–59=100 unless otherwise specified] [2]

Code	Commodity Group	1970 Apr.	1970 Mar.	1970 Feb	1970 Jan.	1969 Dec.	1969 Nov.	1969 Oct.	1969 Sept.	1969 Aug.	1969 July	1969 June	1969 May	1969 Apr.	Annual average 1969
	ALL COMMODITIES	116.6	116.6	116.4	116.0	115.1	114.7	114.0	113.6	113.4	113.3	113.2	112.8	111.9	113.0
	FARM PRODUCTS AND PROCESSED FOODS AND FEEDS	117.6	118.8	118.7	118.2	116.4	115.7	114.3	114.3	114.6	115.5	115.5	114.1	110.9	113.5
	INDUSTRIAL COMMODITIES	116.2	115.8	115.5	115.1	114.6	114.2	113.8	113.2	112.8	112.4	112.2	112.2	112.1	112.7
	FARM PRODUCTS, AND PROCESSED FOODS AND FEEDS														
01	Farm products	111.3	114.3	113.7	112.5	111.7	111.1	107.9	108.4	108.9	110.5	111.2	110.5	105.6	108.5
01-1	Fresh and dried fruits and vegetables	112.7	118.2	117.2	116.6	112.4	125.3	101.3	103.4	106.7	103.1	112.9	126.7	106.8	111.0
01-2	Grains	87.8	85.5	85.9	85.9	82.9	81.7	84.8	83.4	81.9	83.7	85.6	86.7	83.1	83.3
01-3	Livestock	124.8	129.6	124.9	117.3	120.2	116.6	118.7	119.2	123.6	126.8	130.4	123.0	113.8	118.3
01-4	Live poultry	82.8	90.8	87.1	94.8	86.9	86.3	85.3	89.0	92.3	90.2	89.8	90.7	87.0	89.8
01-5	Plant and animal fibers	65.4	64.9	65.4	65.3	65.7	66.0	66.1	66.4	66.9	67.7	67.7	67.7	67.3	67.1
01-6	Fluid milk	141.1	139.7	140.8	140.5	138.3	137.6	136.8	135.6	135.1	134.9	134.6	134.1	133.5	134.8
01-7	Eggs	94.9	120.1	136.9	152.2	155.8	139.8	113.8	122.5	100.5	117.0	85.9	80.6	97.3	112.9
01-8	Hay, hayseeds, and oilseeds	109.8	106.3	106.3	107.7	105.1	103.4	101.2	105.7	107.3	111.3	110.6	115.1	113.8	109.2
01-9	Other farm products	114.7	114.8	115.2	116.3	113.1	115.9	116.7	110.6	109.5	106.9	106.2	105.6	106.1	109.1
02	Processed foods and feeds	124.9	124.9	125.2	125.1	122.6	121.8	121.6	121.3	121.5	122.0	121.4	119.4	117.3	119.8
02-1	Cereal and bakery products	124.6	123.7	123.3	122.3	122.0	121.9	121.2	120.4	120.1	119.9	119.7	119.4	119.3	120.2
02-2	Meats, poultry, and fish	124.9	127.1	124.9	125.8	121.9	120.5	120.2	122.9	124.5	127.5	126.5	121.0	114.0	119.5
02-3	Dairy products	135.1	133.1	134.1	133.9	133.9	131.2	130.7	133.4	133.0	133.0	133.0	132.5	131.4	131.9
02-4	Processed fruits and vegetables	117.5	116.5	117.3	116.9	116.4	116.3	116.0	116.6	116.8	116.6	115.6	115.7	115.4	115.7
02-5	Sugar and confectionery	128.7	127.4	127.7	129.1	127.1	127.9	127.7	127.2	127.2	122.3	123.0	122.7	120.2	123.6
02-6	Beverages and beverage materials	118.8	118.4	118.3	117.4	116.1	116.0	115.0	113.1	112.6	112.6	112.4	111.8	111.4	112.9
02-71	Animal fats and oils	118.8	133.7	115.7	111.0	115.6	123.0	118.3	104.0	105.0	96.4	91.2	89.0	90.8	100.3
02-72	Crude vegetable oils	114.7	110.7	99.5	86.4	86.1	97.0	88.4	79.8	80.0	80.0	81.9	81.0	80.6	83.5
02-73	Refined vegetable oils	107.7	111.9	99.8	97.8	97.9	91.1	88.9	85.0	84.7	89.4	89.4	89.4	89.4	90.3
02-74	Vegetable oil end products	113.6	112.4	107.5	107.5	108.0	106.5	104.7	102.1	102.1	102.1	103.3	103.3	103.3	103.5
02-8	Miscellaneous processed foods	125.8	127.1	127.4	126.5	126.4	127.2	131.6	121.2	119.8	119.5	118.6	118.6	119.0	121.5
02-9	Manufactured animal feeds	121.4	119.0	131.3	131.7	121.8	119.5	119.9	119.3	118.2	118.7	116.9	114.9	118.3	118.2
	INDUSTRIAL COMMODITIES														
03	Textile products and apparel	109.3	109.5	109.4	109.5	109.2	109.2	109.1	109.0	108.7	107.7	107.2	106.9	107.1	108.0
03-1	Cotton products	105.8	105.8	106.1	106.1	106.1	106.0	105.8	105.9	105.7	105.3	104.5	104.6	104.5	105.2
03-2	Wool products	104.0	104.4	104.3	104.3	104.3	104.6	104.5	105.0	104.8	105.0	105.0	104.3	104.3	104.6
03-3	Manmade fiber textile products	89.9	90.4	91.0	91.5	91.1	91.5	91.6	92.1	92.7	92.6	92.7	92.6	92.4	92.2
03-41	Silk yarns	201.3	194.2	196.3	193.5	191.1	184.6	183.9	181.2	177.1	168.2	164.6	157.9	155.4	169.7
03-5	Apparel	117.9	117.9	117.5	117.2	116.9	116.7	116.5	116.2	115.8	113.9	113.3	112.9	113.0	114.5
03-6	Textile housefurnishings	108.6	108.6	109.0	109.1	108.1	108.0	108.0	107.3	104.7	104.2	104.2	103.2	107.7	106.7
03-7	Miscellaneous textile products	121.4	126.5	124.3	129.0	127.8	129.6	127.2	121.4	119.6	120.3	118.0	114.7	119.7	122.8
04	Hides, skins, leather, and related products	128.5	126.8	126.7	126.6	126.5	126.8	127.4	128.2	126.4	126.4	125.7	126.1	126.0	125.8
04-1	Hides and skins	106.6	99.4	101.1	102.8	108.9	110.4	118.0	128.7	123.1	123.0	117.4	122.6	125.8	116.9
04-2	Leather	120.4	118.2	117.3	119.6	119.7	119.6	120.3	121.7	121.0	121.2	121.5	121.7	122.3	119.9
04-3	Footwear	138.4	136.9	136.9	135.9	135.0	135.5	135.2	134.9	132.7	132.7	132.3	132.1	131.9	133.2
04-4	Other leather and related products	120.0	119.9	119.8	119.2	118.5	118.6	118.4	117.9	117.6	117.5	117.2	117.0	116.0	116.9
05	Fuels and related products and power	107.5	106.3	106.4	105.6	106.1	105.5	105.4	104.7	104.7	105.0	105.0	104.5	104.5	104.6
05-1	Coal	145.9	133.4	131.7	125.4	124.6	123.5	120.6	115.9	115.5	115.4	114.2	113.5	112.8	116.2
05-2	Coke	139.6	126.9	126.9	126.9	126.9	126.9	126.9	120.3	120.3	120.3	120.3	120.3	120.3	122.0
05-3	Gas fuels (Jan. 1958=100)	136.2	135.0	135.2	132.4	131.8	128.8	128.7	123.0	121.8	121.6	121.8	121.6	121.8	124.5
05-4	Electric power (Jan. 1958=100)	103.7	103.6	103.6	103.4	103.4	103.4	103.7	103.5	102.4	102.5	102.6	102.5	102.3	102.7
05-61	Crude petroleum	104.5	104.5	104.5	104.5	104.5	104.5	104.5	104.5	104.5	104.5	104.5	104.7	104.8	103.7
05-7	Petroleum products, refined	101.3	100.8	101.2	101.0	102.2	101.6	101.6	101.8	102.5	103.2	103.3	102.4	102.5	101.8
06	Chemicals and allied products	100.4	100.0	99.5	99.1	98.8	98.9	98.6	98.9	98.7	98.2	98.3	98.1	97.9	98.3
06-1	Industrial chemicals	97.9	97.3	97.7	97.9	97.8	97.8	97.6	98.2	98.2	97.7	97.0	96.9	96.7	97.7
06-21	Prepared paint	122.8	122.8	122.0	121.7	120.3	120.3	120.3	119.2	119.2	119.2	119.2	118.7	118.7	119.2
06-22	Paint materials	92.6	92.6	92.8	93.4	93.4	93.1	93.9	93.3	93.3	93.2	92.8	92.8	92.2	92.8
06-3	Drugs and pharmaceuticals	94.7	95.0	94.6	94.5	94.6	94.2	94.0	94.0	93.8	93.8	93.8	93.8	93.7	93.8
06-4	Fats and oils, inedible	107.6	102.2	94.3	95.0	92.8	100.5	98.9	102.1	99.3	90.5	86.8	83.3	83.7	88.7
06-5	Agricultural chemicals and chem. products	92.4	92.0	91.4	87.6	86.7	86.7	86.3	87.4	88.4	88.6	92.1	92.1	92.1	89.8
06-6	Plastic resins and materials	81.1	81.2	80.3	80.0	80.1	79.6	80.2	81.0	80.7	80.2	80.8	80.8	80.9	80.7
06-7	Other chemicals and allied products	116.8	116.5	115.7	115.5	115.1	114.9	114.3	113.9	112.9	112.8	112.8	112.7	112.2	112.9
07	Rubber and plastic product [3]	104.2	104.4	104.6	104.7	104.5	104.4	103.5	102.7	103.0	102.5	101.2	101.1	101.2	102.1
07-11	Crude rubber	87.5	87.6	89.4	89.3	88.1	88.7	89.7	90.6	92.5	90.7	89.7	89.5	90.1	89.4
07-12	Tires and tubes	101.7	101.7	101.7	101.7	101.7	101.7	100.6	99.2	99.2	98.4	96.3	96.3	96.3	98.2
07-13	Miscellaneous rubber products	114.3	114.3	114.3	114.0	113.4	113.0	111.7	110.7	110.8	111.0	110.2	110.2	110.1	110.8
07-21	Plastic construction products (Dec. 1969=100)	98.7	99.1	99.1	99.8	100.0									
08	Lumber and wood products	120.1	119.5	120.2	121.6	122.5	123.9	122.6	123.2	124.0	125.3	129.8	138.0	143.3	132.0
08-1	Lumber	123.5	123.3	124.1	126.9	128.2	129.3	128.0	129.5	131.1	133.4	142.3	155.9	164.9	142.6
08-2	Millwork	130.8	130.7	130.7	131.5	131.7	133.2	133.9	134.4	135.1	135.6	136.0	134.3	132.3	132.2
08-3	Plywood	97.2	94.5	96.3	95.5	96.9	99.6	95.8	94.4	93.6	93.9	94.2	103.5	111.0	109.3
08-4	Other wood products (Dec. 1966=100)	119.3	119.5	119.5	119.5	118.4	116.7	116.7	116.5	116.8	115.6	115.1	114.7	112.6	114.8

See footnotes at end of table.

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26. Wholesale price indexes,[1] by group and subgroup of commodities—Continued

[1957=100 unless otherwise specified][2]

Code	Commodity Group	1970 Apr.	1970 Mar.	1970 Feb.	1970 Jan.	1969 Dec.	1969 Nov.	1969 Oct.	1969 Sept.	1969 Aug.	1969 July	1969 June	1969 May	1969 Apr.	Annual average 1969
	INDUSTRIAL COMMODITIES—Continued														
09	**Pulp, paper, and allied products**	112.5	112.1	111.8	111.1	109.5	109.3	109.0	108.8	108.7	108.4	108.3	108.1	108.0	108.2
09-1	Pulp, paper, and products, excluding building paper and board	113.2	112.9	112.5	111.8	110.1	109.9	109.6	109.3	109.2	108.9	108.6	108.3	108.3	108.6
09-11	Woodpulp	105.0	104.7	104.7	103.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
09-12	Wastepaper	108.5	108.5	108.2	107.5	106.7	107.0	107.2	108.4	110.3	111.2	108.8	107.1	109.1	108.3
09-13	Paper	121.6	121.6	121.5	120.3	117.4	117.0	116.5	116.5	117.2	117.1	117.0	116.7	116.4	116.6
09-14	Paperboard	97.0	97.0	97.1	96.0	96.0	96.0	95.9	95.9	95.8	93.7	93.5	93.5	93.5	94.4
09-15	Converted paper and paperboard products	113.5	112.9	112.2	111.9	110.7	110.6	110.3	109.8	109.2	109.0	108.7	108.4	108.3	108.8
09-2	Building paper and board	93.4	92.9	93.0	93.4	93.9	94.4	94.6	95.1	95.2	95.9	99.4	100.7	100.4	97.1
10	**Metals and metal products**	127.8	127.0	126.1	124.9	123.8	122.9	122.4	121.7	120.4	118.7	117.9	117.5	116.5	118.9
10-1	Iron and steel	117.3	117.7	117.0	114.6	113.9	113.7	113.7	113.2	112.7	111.1	110.3	109.9	108.9	111.0
10-13	Steel mill products	118.7	118.4	117.7	115.5	116.4	116.4	116.4	115.5	115.4	113.6	112.8	112.7	111.9	113.7
10-2	Nonferrous metals	157.1	153.4	152.8	152.8	150.1	146.4	144.8	143.5	139.5	136.1	135.5	134.2	132.4	137.4
10-3	Metal containers	125.0	125.0	125.0	120.6	120.6	120.6	120.6	120.3	119.7	119.7	119.7	119.7	119.7	119.7
10-4	Hardware	125.2	124.9	124.7	124.2	123.0	122.7	122.2	121.0	120.6	120.5	119.9	119.9	119.9	120.5
10-5	Plumbing fixtures and brass fittings	123.2	122.8	122.8	122.8	122.8	122.2	120.8	120.2	119.4	119.4	117.9	117.1	116.6	118.7
10-6	Heating equipment	101.3	100.5	99.9	99.7	99.7	99.3	98.7	98.0	97.7	97.7	97.2	97.0	96.8	97.6
10-7	Fabricated structural metal products	116.4	116.0	114.6	114.0	113.7	113.6	113.4	112.8	112.6	112.0	111.0	110.8	110.2	111.5
10-8	Miscellaneous metal products	127.5	127.1	125.2	124.9	124.5	124.4	124.4	124.2	123.2	121.3	120.7	120.5	120.4	122.0
11	**Machinery and equipment**	123.4	123.1	122.8	122.5	121.9	121.0	120.5	119.9	119.1	119.0	118.6	118.3	118.0	119.0
11-1	Agricultural machinery and equipment	137.3	137.1	137.2	136.7	136.4	135.8	133.2	133.0	132.3	132.3	132.0	131.9	131.8	132.8
11-2	Construction machinery and equipment	140.8	140.6	140.3	140.2	139.8	138.6	137.7	136.1	134.9	134.8	134.5	134.3	134.1	135.5
11-3	Metalworking machinery and equipment	140.3	139.8	139.3	138.6	138.0	136.5	135.4	134.4	133.5	133.3	132.3	132.1	131.8	133.4
11-4	General purpose machinery and equipment	127.6	127.1	126.5	126.1	124.8	123.7	123.4	122.6	121.8	121.5	121.2	120.3	120.0	121.4
11-6	Special industry machinery and equipment (Jan. 1961=100)	133.6	133.6	133.4	133.3	132.8	130.6	130.2	129.6	129.2	129.2	128.1	128.0	127.2	128.7
11-7	Electrical machinery and equipment	107.3	107.2	106.9	106.8	106.2	106.0	105.6	105.4	104.7	104.8	104.7	104.5	104.3	104.8
11-9	Miscellaneous machinery	122.8	122.3	121.7	121.5	121.0	120.4	120.0	119.2	118.5	118.1	117.8	117.6	116.6	118.1
12	**Furniture and household durables**	108.3	108.1	107.9	107.5	107.2	106.9	106.5	106.4	106.2	106.1	105.9	105.9	105.8	106.1
12-1	Household furniture	125.6	125.3	125.1	124.3	123.6	123.6	123.3	123.0	123.0	122.8	122.3	121.9	121.5	122.3
12-2	Commercial furniture	125.1	124.9	124.5	124.4	124.1	124.0	122.4	121.7	119.5	119.5	119.3	119.0	118.0	120.0
12-3	Floor coverings	93.1	93.4	93.5	93.5	93.1	93.1	93.1	93.2	93.2	93.2	93.8	94.6	95.0	94.1
12-4	Household appliances	94.8	94.7	94.4	94.4	93.6	93.6	93.1	93.0	93.0	93.0	92.9	93.0	93.0	93.0
12-5	Home electronic equipment	77.0	77.2	77.2	77.2	77.8	77.7	77.9	77.9	77.9	77.9	78.1	78.1	78.5	78.2
12-6	Other household durable goods	135.6	134.6	134.8	133.0	133.3	131.1	131.2	131.4	131.4	131.2	130.2	130.0	130.0	130.6
13	**Nonmetallic mineral products**	117.8	117.3	116.9	116.5	114.5	113.9	113.8	113.5	113.0	113.0	112.8	112.6	112.3	112.8
13-11	Flat glass	121.5	119.9	119.0	118.4	117.8	116.2	116.2	116.2	116.2	116.2	115.2	114.6	113.4	114.6
13-2	Concrete ingredients	121.9	120.8	120.6	120.1	116.7	116.7	116.6	116.5	116.1	116.1	115.9	115.6	115.6	115.6
13-3	Concrete products	117.2	117.0	116.4	115.9	114.2	113.6	113.5	113.2	112.4	112.3	111.6	111.6	111.3	112.2
13-4	Structural clay products exc. refractories	120.9	119.8	119.4	119.4	118.5	118.5	117.8	117.5	117.0	116.9	116.9	116.8	116.7	117.0
13-5	Refractories	125.9	125.4	125.1	123.5	120.9	117.2	117.2	117.2	117.0	113.6	113.6	113.6	113.6	115.1
13-6	Asphalt roofing	95.1	97.8	100.8	101.8	101.2	94.0	96.7	96.7	96.7	100.9	100.2	97.9	99.2	98.3
13-7	Gypsum products	105.6	107.0	108.3	107.3	104.3	109.8	105.9	106.1	103.2	104.9	108.7	108.7	106.2	106.4
13-8	Glass containers	120.9	120.9	120.9	120.9	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1
13-9	Other nonmetallic minerals	113.5	112.4	111.0	111.0	110.6	110.6	110.6	109.6	109.2	109.0	109.0	109.0	109.0	109.1
14	**Transportation equipment** (Dec. 1968=100)	103.1	103.2	102.9	102.9	102.7	102.7	102.3	100.0	99.9	100.4	100.3	100.2	100.1	100.7
14-1	Motor vehicles and equipment	109.3	109.4	109.1	109.1	109.0	109.0	108.7	106.1	106.0	106.6	106.6	106.5	106.4	107.0
14-4	Railroad equipment (Jan. 1961=100)	118.8	118.7	117.7	117.4	115.7	115.1	115.1	114.4	114.3	114.3	111.8	111.1	110.2	112.4
15	**Miscellaneous products**	117.8	117.8	117.5	117.4	117.0	117.0	116.7	116.4	115.9	115.5	115.1	112.8	112.7	114.7
15-1	Toys, sporting goods, small arms, ammunition	115.0	115.3	114.2	114.1	112.7	112.8	112.3	112.1	111.8	111.2	110.9	110.7	110.8	111.3
15-2	Tobacco products	124.1	124.1	124.0	124.0	124.0	124.0	123.8	123.8	123.5	123.4	123.2	117.0	116.9	120.8
15-3	Notions	109.0	109.0	109.0	107.2	107.2	107.2	106.7	106.7	106.7	102.0	102.0	102.0	100.8	103.6
15-4	Photographic equipment and supplies	116.2	115.9	115.8	115.7	115.3	115.0	114.9	113.9	111.4	111.4	112.6	112.4	112.1	113.0
15-9	Other miscellaneous products	115.0	114.8	114.8	115.1	114.9	114.9	114.8	114.3	114.2	114.1	112.6	111.7	111.7	113.1

[1] As of January 1967, the indexes 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 1962, the indexes were converted from the former base of 1947–49=100 to the new base of 1957–59=100. Technical details and earlier data on the 1957–59 base furnished upon request to the Bureau.

[3] Retitled to cover the direct pricing of plastic construction products; continuity of the group index is not affected.

NOTE: For a description of the general method of computing the monthly Wholesale Price Index, see "BLS Handbook of Methods for Surveys and Studies" (BLS Bulletin 1458, October 1966), Chapter 11.

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27. Wholesale price indexes for special commodity groupings [1]

[1957–59=100, unless otherwise specified][2]

Commodity group	1970				1969									Annual average 1969
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	
All commodities—less farm products	117.2	116.8	116.6	116.3	115.4	115.0	114.7	114.1	113.8	113.6	113.3	112.9	112.5	113.4
All foods	123.2	124.9	124.5	125.0	123.3	123.1	119.8	120.1	119.9	120.7	119.9	119.0	115.4	119.0
Processed foods	125.4	125.7	124.6	124.5	122.8	122.1	121.8	121.6	121.9	122.5	122.0	119.9	117.0	119.9
Textile products, excluding hard and bast fiber products	100.4	100.6	101.0	101.3	101.0	101.1	101.1	101.3	101.3	101.0	100.8	100.6	100.9	101.0
Hosiery	92.3	92.4	92.8	92.8	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
Underwear and nightwear	116.7	116.4	116.4	116.2	115.9	115.7	115.7	115.6	115.6	115.6	114.5	114.3	114.2	115.0
Refined petroleum products	101.3	100.8	101.2	101.0	102.2	101.6	101.6	101.8	102.5	103.2	103.3	102.4	102.5	101.8
East Coast	103.6	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4	103.4
Mid-Continent	98.5	99.2	102.2	101.2	103.9	102.5	98.7	98.0	103.9	98.8	103.9	101.0	103.2	102.0
Gulf Coast	98.6	99.3	99.3	98.4	100.7	99.8	101.4	101.4	101.4	104.8	103.2	102.4	101.8	100.7
Pacific Coast	94.0	92.2	91.2	92.5	92.5	92.5	92.3	94.9	94.9	94.9	93.6	93.6	93.6	93.0
Midwest (Jan. 1961=100)	99.3	96.8	98.0	98.0	99.1	98.4	97.4	97.0	97.0	97.0	98.7	97.4	97.6	97.5
Pharmaceutical preparations	96.8	97.4	97.0	97.0	97.1	96.7	96.5	96.5	96.2	96.3	96.2	96.2	96.2	96.3
Lumber and wood products excluding millwork and other wood products [3]	117.3	116.4	117.5	119.3	120.6	122.2	120.1	120.8	121.7	123.5	130.0	142.5	151.1	134.6
Special metals and metal products [4]	122.5	122.0	121.4	120.6	119.9	119.2	118.8	117.5	116.6	115.7	115.2	114.9	114.3	116.0
Machinery and motive products	119.0	118.9	118.6	118.4	117.9	117.4	116.9	115.5	115.1	115.2	114.9	114.7	114.4	115.3
Machinery and equipment, except electrical	133.7	133.3	132.9	132.6	131.9	130.6	129.9	129.0	128.3	128.1	127.5	127.1	126.6	128.1
Agricultural machinery, including tractors	139.7	139.6	139.7	139.3	139.1	138.5	135.5	135.3	134.6	134.7	134.3	134.3	134.4	135.2
Metalworking machinery	147.1	146.6	146.0	145.2	144.6	143.6	143.4	141.7	140.9	140.9	139.2	138.9	138.6	140.5
Total tractors	142.8	142.9	143.0	142.8	142.5	141.3	139.4	138.4	137.1	137.0	137.0	137.0	137.0	138.1
Industrial valves	130.1	130.0	129.4	128.5	127.3	125.8	125.8	124.8	124.8	125.8	126.5	123.5	123.1	124.2
Industrial fittings	124.2	124.2	124.2	123.2	119.4	118.6	118.0	118.0	115.3	115.3	115.9	115.9	114.7	115.9
Abrasive grinding wheels	107.1	107.1	107.1	107.1	107.1	107.0	102.6	102.6	102.6	102.6	102.6	102.6	102.6	103.3
Construction materials	118.0	117.5	117.4	117.4	116.9	116.9	116.3	115.9	115.7	115.9	116.9	118.9	120.2	117.7

[1] See footnote 1, table 26.
[2] See footnote 2, table 26.
[3] Formerly titled "Lumber and wood products, excluding millwork."
[4] Metals and metal products, agricultural machinery and equipment, and motor vehicles and equipment.

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28. Wholesale price indexes,[1] by stage of processing

[1957-59=100][2]

Commodity group	1970				1969									Annual average 1969
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	
ALL COMMODITIES	116.6	116.6	116.4	116.0	115.1	114.7	114.0	113.6	113.4	113.3	113.2	112.8	111.9	113.0
CRUDE MATERIALS FOR FURTHER PROCESSING	113.4	114.2	113.0	110.7	109.9	109.0	108.7	108.7	109.5	110.2	111.2	109.7	105.7	107.9
Foodstuffs and feedstuffs	115.3	117.3	115.5	112.9	112.2	111.0	110.5	110.4	112.1	113.8	115.6	113.5	107.6	110.4
Nonfood materials except fuel	107.0	106.6	106.9	105.3	104.2	104.0	104.0	104.8	104.1	102.6	102.1	101.8	101.1	102.0
Manufacturing	105.8	105.6	105.9	104.3	103.2	103.0	103.0	103.9	103.2	101.6	101.0	100.8	100.0	101.0
Construction	120.2	118.0	117.5	116.4	115.3	115.3	115.1	114.9	114.1	114.1	113.8	113.2	113.2	114.0
Crude fuel	131.5	125.2	124.7	122.2	121.5	121.1	119.9	118.1	117.2	117.1	116.8	116.4	116.2	117.6
Manufacturing industries	126.0	121.5	121.2	119.6	118.8	118.6	117.8	116.7	115.6	115.5	115.3	115.0	114.9	116.0
Nonmanufacturing industries	138.8	130.3	129.4	125.8	125.0	124.5	122.8	120.1	119.4	119.3	118.7	118.2	117.8	119.8
INTERMEDIATE MATERIALS, SUPPLIES AND COMPONENTS	115.3	114.8	114.7	114.4	113.5	113.1	112.8	112.4	111.9	111.4	111.4	111.4	111.4	111.8
Materials and Components for Manufacturing	115.0	114.4	113.9	113.6	112.9	112.6	112.2	111.8	111.4	110.6	110.4	110.2	109.8	110.8
Materials for food manufacturing	123.4	122.9	121.5	121.1	119.9	120.0	119.2	118.3	118.4	117.8	117.8	116.3	114.1	116.8
Materials for nondurable manufacturing	102.7	102.4	102.3	102.3	101.6	101.7	101.5	101.7	101.7	101.2	101.1	100.9	100.8	101.2
Materials for durable manufacturing	124.5	123.4	122.7	122.1	121.4	120.4	120.0	119.6	118.7	117.4	117.1	117.5	117.3	118.1
Components for manufacturing	118.7	118.3	118.0	117.7	117.0	116.7	116.1	115.1	114.3	113.9	113.4	113.1	112.6	114.0
Materials and Components for Construction	118.2	117.7	117.3	117.3	116.8	116.7	116.2	115.8	115.5	115.4	116.0	117.6	118.4	116.9
Processed fuels and lubricants	103.6	103.0	103.0	102.4	102.7	102.1	102.3	101.0	100.6	100.8	100.9	100.5	100.3	100.9
Manufacturing industries	106.7	106.1	106.0	105.3	105.1	104.5	104.8	103.2	102.3	102.4	102.4	102.4	102.2	103.1
Nonmanufacturing industries	98.8	98.3	98.3	97.8	99.0	98.4	98.4	97.6	97.8	98.4	98.5	97.5	97.2	97.4
Containers	118.5	118.1	117.6	116.2	114.8	114.6	114.5	114.2	113.7	113.3	113.2	113.1	112.9	113.3
Supplies	118.5	117.6	120.1	119.7	116.9	115.9	115.6	115.1	114.4	114.3	113.8	113.3	113.9	114.4
Manufacturing industries	121.7	121.1	120.9	120.5	119.4	118.7	118.0	117.8	117.4	116.8	116.7	116.5	116.3	117.0
Nonmanufacturing industries	116.4	115.4	119.1	118.6	115.1	113.9	113.9	113.3	112.4	112.5	111.9	111.2	112.1	112.5
Manufactured animal feeds	113.2	110.7	122.8	123.7	114.1	111.6	112.3	111.7	110.5	110.8	109.3	107.4	110.8	110.6
Other supplies	114.2	113.9	113.4	112.3	111.8	111.4	111.0	110.4	109.7	109.7	109.6	109.4	109.2	109.8
FINISHED GOODS (Including Raw Foods and Fuels)	118.6	119.0	118.8	118.8	118.0	117.6	116.5	116.0	115.7	115.9	115.4	114.7	113.8	115.3
Consumer Goods	116.8	117.4	117.3	117.3	116.5	116.2	115.1	114.7	114.4	114.8	114.2	113.5	112.3	114.0
Foods	124.1	126.0	125.9	126.4	124.5	123.9	121.2	121.6	121.2	122.3	121.3	120.1	116.9	120.3
Crude	114.3	123.3	128.0	131.6	129.5	131.0	114.2	116.9	112.4	114.9	111.3	116.0	111.4	117.5
Processed	125.9	126.4	125.4	125.3	123.5	122.5	122.4	122.4	122.8	123.7	123.1	120.9	117.9	120.7
Other nondurable goods	114.9	114.7	114.6	114.2	114.1	113.8	113.6	113.3	113.0	112.6	112.2	111.4	111.5	112.3
Durable goods	107.8	107.8	107.6	107.4	107.2	107.1	106.9	105.3	105.2	105.6	105.5	105.4	105.4	105.8
Producer Finished Goods	123.7	123.5	123.1	122.9	122.3	121.5	120.8	119.9	119.3	119.3	118.7	118.5	118.1	119.3
Manufacturing industries	129.1	128.9	128.4	128.0	127.5	126.2	125.8	125.0	124.4	124.4	123.5	123.2	122.7	124.1
Nonmanufacturing industries	118.7	118.5	118.2	118.0	117.4	117.0	116.1	115.0	114.4	114.5	114.2	113.9	113.7	114.7
SPECIAL GROUPINGS														
Crude materials for further processing, excluding crude foodstuffs and feedstuffs, plant and animal fibers, oilseeds and leaf tobacco	120.3	118.5	118.5	116.0	114.5	114.1	113.7	113.9	112.5	110.7	110.2	109.7	109.0	110.5
Intermediate materials supplies and components, excluding intermediate materials for food mfg., and mfr.'d animal feeds	114.7	114.2	113.9	113.5	112.9	112.6	112.2	111.8	111.3	110.9	110.8	111.1	111.0	111.3
Consumer finished goods, excluding consumer foods	112.2	112.1	111.9	111.7	111.5	111.3	111.1	110.3	110.1	110.0	109.7	109.2	109.2	109.9

[1] See footnote 1, table 26.
[2] See footnote 2, table 26.

NOTE: For description of the series by stage of processing, see "Wholesale Prices and Price Indexes," January 1967 (final) and February 1967 (final).

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29. Wholesale price indexes,[1] by durability of product

[1957-59=100] [2]

Commodity group	1970				1969									Annual average 1969
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	
All commodities	116.6	116.6	116.4	116.0	115.1	114.7	114.0	113.6	113.4	113.3	113.2	112.8	111.9	113.0
Total durable goods	120.9	120.5	120.0	119.6	119.0	118.4	117.9	117.1	116.5	116.1	115.9	116.1	116.0	116.6
Total nondurable goods	113.6	113.9	113.9	113.4	112.4	111.9	111.2	111.1	111.1	111.3	111.2	110.3	108.8	110.3
Total manufactures	116.9	116.6	116.4	116.1	115.3	114.9	114.6	113.9	113.6	113.5	113.2	112.8	112.4	113.3
Durable	120.5	120.1	119.7	119.4	118.8	118.3	117.9	117.0	116.4	116.1	116.0	116.2	116.2	116.6
Nondurable	113.4	113.2	113.2	113.0	111.9	111.6	111.4	111.0	111.0	111.0	110.6	109.6	108.9	110.1
Total raw or slightly processed goods	114.7	116.3	116.0	114.8	113.9	113.1	111.0	111.6	111.5	112.2	112.6	112.1	108.6	110.9
Durable	131.9	134.0	133.8	128.9	125.3	124.0	122.8	123.7	119.7	114.8	114.9	113.3	110.6	115.8
Nondurable	113.8	115.3	115.1	114.1	113.3	112.5	110.3	110.9	111.1	112.1	112.4	112.0	108.5	110.7

[1] See footnote 1, table 26.
[2] See footnote 2, table 26.

NOTE: For description of the series by durability of product and data beginning with 1947, see "Wholesale Price and Price Indexes, 1957" (BLS Bulletin 1235, 1958).

30. Industry-sector price indexes for the output of selected industries [1]

[1957-59=100 unless otherwise indicated]

1963 SIC Code	Industry	Other bases	1969												1968	Annual average 1969
			Dec.[2]	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
	MINING															
1111	Anthracite		118.4	114.9	111.4	111.4	108.0	108.0	104.2	104.2	106.2	107.4	107.4	107.0	107.0	109.0
1211	Bituminous coal		124.9	124.2	121.3	116.2	116.1	116.0	115.0	114.1	113.4	113.1	113.1	113.1	113.1	116.7
1311	Crude petroleum and natural gas		110.9	110.9	110.8	110.9	110.6	110.5	110.6	110.7	110.9	109.9	106.6	106.5	106.4	110.0
1421	Crushed and broken stone		114.5	114.5	114.2	114.2	113.6	113.6	113.6	112.6	112.5	112.5	112.5	112.5	111.3	113.4
1442	Construction sand and gravel		123.0	123.0	123.0	122.5	121.5	121.5	120.7	120.6	120.8	120.6	119.8	119.8	118.6	121.4
1475	Phosphate rock		147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4
1476	Rock salt		107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	100.8	100.8	100.8	100.8	105.5
1477	Sulfur		115.8	115.8	124.1	165.4	165.4	165.4	165.4	165.4	165.4	165.4	165.4	173.7	173.7	154.4
	MANUFACTURING															
2011	Meat slaughtering plants	12/66	114.0	113.5	113.8	116.2	117.4	121.7	121.2	114.8	108.0	104.6	103.9	104.2	100.1	112.8
2013	Meat processing plants	12/66	121.3	118.5	119.1	120.3	122.0	118.7	117.0	109.7	104.8	103.4	101.7	100.3	100.7	113.1
2015	Poultry dressing plants		105.7	103.3	101.7	104.0	107.8	103.3	101.7	102.3	96.1	99.6	98.5	95.9	90.4	101.7
2021	Creamery butter	12/66	106.3	105.1	105.1	105.1	104.9	104.9	104.8	104.8	104.9	103.4	103.3	103.4	105.0	104.7
2033	Canned fruits and vegetables	12/66	109.8	109.7	109.5	109.0	108.7	108.7	107.7	107.7	107.8	107.7	107.6	107.4	107.3	108.4
2036	Fresh or frozen packaged fish		150.8	154.1	146.5	145.9	143.8	146.4	139.9	140.4	136.8	141.7	141.4	140.1	139.0	144.0
2044	Rice milling		94.0	94.0	94.0	93.1	92.6	92.6	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.6
2052	Biscuits, crackers and cookies	12/66	109.7	109.7	108.0	107.1	104.5	104.4	104.4	104.4	104.3	104.3	104.3	104.3	104.3	105.8
2061	Raw cane sugar	12/66	107.0	110.1	110.5	109.6	108.9	104.5	109.5	109.5	109.0	108.5	107.7	107.5	106.8	108.5
2062	Cane sugar refining	12/66	108.9	109.3	109.2	108.4	108.1	107.6	107.6	107.2	105.8	103.9	103.6	103.6	103.2	106.9
2063	Beet sugar	12/66	106.1	106.6	106.7	106.4	106.3	105.7	106.7	104.9	105.0	102.3	102.2	102.6	102.5	105.1
2073	Chewing gum		106.2	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1
2082	Malt liquors		107.3	107.3	107.7	107.1	107.2	107.2	106.7	106.0	104.9	104.9	104.9	104.9	104.9	106.3
2083	Malt	12/66	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
2084	Wines and brandy		118.3	118.3	118.3	115.5	115.5	115.7	115.7	115.7	115.7	115.7	115.5	115.5	115.5	116.3
2091	Cottonseed oil mills		99.4	95.8	91.5	97.0	97.2	98.3	92.9	92.7	93.9	93.6	93.7	95.0	94.5	95.1
2092	Soybean oil mills	12/66	88.6	88.0	91.0	85.7	87.4	87.1	87.0	86.3	85.6	84.8	83.1	83.3	82.2	86.5
2094	Animal and marine fats and oils	12/66	96.4	104.9	102.1	105.8	104.6	99.6	93.8	89.0	88.9	85.1	82.9	81.3	79.7	94.5
2096	Shortening and cooking oils		108.8	107.2	105.5	102.6	102.5	102.3	103.3	103.1	103.2	103.1	102.9	101.0	100.3	103.8
2098	Macaroni and noodle products	12/66	101.9	101.9	101.9	101.9	101.8	101.9	101.8	101.8	101.5	100.4	100.3	100.3	100.3	101.5
2111	Cigarettes		125.1	125.0	125.0	125.0	125.0	125.0	124.9	117.5	117.5	117.4	117.4	117.4	117.4	121.9
2121	Cigars		107.3	107.3	106.8	106.8	105.2	103.8	102.7	102.7	102.7	102.1	102.0	102.0	101.7	104.3
2131	Chewing and smoking tobacco		141.4	140.6	138.5	138.3	138.1	138.1	137.1	137.0	136.0	134.7	134.7	132.4	132.4	137.2
2254	Knit underwear mills	12/66	107.8	107.7	107.7	107.7	107.7	107.7	106.3	106.4	106.3	106.3	106.3	106.3	105.7	107.0
2311	Men's and boys' suits and coats		142.7	142.2	140.4	139.4	138.5	137.1	135.8	134.4	134.7	134.3	134.3	134.2	133.4	137.3
2321	Men's dress shirts and nightwear		122.1	121.0	121.0	120.6	120.6	118.3	118.2	118.2	118.8	118.8	118.9	118.7	115.5	119.6
2322	Men's and boys' underwear	12/66	109.1	109.0	109.0	107.9	107.9	107.7	106.9	107.0	107.1	107.1	107.0	106.9	106.4	107.7
2327	Men's and boys' separate trousers	12/66	106.9	106.8	106.8	106.4	106.3	106.1	106.1	104.8	104.8	104.7	104.7	104.7	103.9	105.8
2328	Work clothing		119.1	119.0	119.0	118.3	117.7	117.4	117.4	116.6	116.6	116.6	116.6	116.5	115.1	117.6
2381	Fabric dress and work gloves		137.1	135.4	135.4	134.8	132.1	131.9	131.9	131.9	131.7	130.8	130.6	130.1	128.4	132.8
2426	Hardwood dimension and flooring	12/66	116.5	116.6	116.7	117.2	117.3	117.8	119.0	120.7	121.1	120.6	118.8	116.5	114.7	118.2
2442	Wirebound boxes and crates	12/67	110.7	110.0	110.0	110.0	108.6	108.3	107.4	107.4	106.5	106.4	106.4	106.3	105.6	108.2
2515	Mattresses and bedsprings	12/66	108.2	108.7	108.5	108.5	108.5	108.3	108.2	108.2	108.3	108.2	108.2	106.7	104.3	108.2
2521	Wood office furniture		139.2	138.9	137.6	135.9	134.3	134.3	134.3	133.4	132.8	132.2	131.7	131.1	131.1	134.6
2647	Sanitary paper products	12/66	115.3	115.3	113.9	113.5	113.1	112.3	111.5	111.1	111.1	111.1	110.2	108.0	108.0	112.2
2654	Sanitary food containers	12/66	101.3	101.2	100.6	100.4	100.4	100.1	100.7	100.6	100.6	100.4	100.7	100.8	100.5	100.7

See footnotes at end of table.

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30. Industry-sector price indexes for the output of selected industries [1]—Continued

1963 SIC Code	Industry	Other bases	1969												1968	Annual Average 1969
			Dec. [2]	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	
	MANUFACTURING—Continued															
2822	Synthetic rubber		96.0	96.0	96.0	96.0	95.9	95.9	95.9	95.9	95.8	95.3	95.3	94.5	94.7	95.7
2823	Cellulosic man-made fibers		95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.8	95.8	95.8	95.7	95.7
2824	Organic fibers, noncellulosic	12/66	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
2871	Fertilizers	12/66	85.0	85.0	85.4	88.3	88.5	88.7	99.2	99.2	99.2	99.4	99.4	99.6	100.3	93.1
2872	Fertilizers, mixing only	12/66	90.6	90.6	91.2	92.7	92.6	93.1	93.3	93.3	93.3	93.9	93.7	94.1	94.8	92.7
2892	Explosives		117.1	117.3	117.3	117.4	117.5	117.4	117.5	116.9	115.0	114.8	114.1	114.1	114.6	116.4
2911	Petroleum refining		97.8	97.3	97.3	97.5	98.1	98.8	98.8	98.0	98.0	97.1	95.1	94.7	95.1	97.4
3111	Leather tanning and finishing		120.4	120.5	121.2	122.3	121.5	121.7	122.1	122.2	122.8	116.7	116.7	117.0	116.1	120.4
3121	Industrial leather belting	12/66	118.3	117.2	117.4	117.6	118.2	117.5	113.5	115.4	112.0	111.5	110.5	109.7	111.0	114.9
3221	Glass containers		116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	110.3	116.1
3241	Cement, hydraulic		114.9	114.9	114.9	114.9	114.8	114.8	114.8	114.8	114.8	114.7	111.7	108.5	105.9	114.0
3251	Brick and structural clay tile		125.1	125.1	124.4	124.4	123.5	123.5	123.4	123.2	123.0	121.5	121.5	121.4	121.2	123.3
3255	Clay refractories		126.2	122.2	122.2	122.2	122.0	117.8	117.8	117.8	117.8	116.7	116.7	116.7	116.7	119.7
3259	Structural clay products, n.e.c		116.4	116.4	115.9	115.1	115.0	114.4	114.8	115.3	115.3	115.3	115.1	115.0	114.1	115.3
3261	Vitreous plumbing fixtures		104.6	104.2	103.4	102.4	102.4	102.4	100.9	100.8	99.8	99.8	99.7	99.5	99.1	101.7
3262	Vitreous china food utensils		143.7	143.7	139.8	139.8	139.8	139.8	137.2	137.2	137.2	134.3	134.3	134.3	134.3	138.4
3263	Fine earthenware food utensils		131.2	131.2	130.9	130.9	130.9	130.9	127.0	127.0	127.0	123.3	123.3	123.3	123.3	128.1
3271	Concrete block and brick		115.4	115.0	114.9	114.6	114.5	114.5	113.7	114.2	114.2	114.5	113.4	112.9	111.7	114.3
3273	Ready mixed concrete	1958	115.7	114.9	114.7	114.4	113.7	113.5	112.7	112.6	112.3	112.0	111.8	111.7	110.3	113.3
3275	Gypsum products		104.7	110.1	106.2	106.4	103.6	105.2	108.9	108.9	106.5	106.5	106.5	106.5	106.5	106.7
3312	Blast furnace and steel mills		115.3	115.3	115.2	114.4	114.3	112.5	111.8	111.7	110.8	110.6	109.5	109.3	107.7	112.6
3315	Steel wire drawing, etc	12/66	108.6	108.5	108.4	107.5	107.0	106.4	106.3	105.9	105.1	105.1	105.1	104.5	103.7	106.5
3316	Cold finishing of steel shapes	12/66	113.6	113.7	113.7	112.1	112.1	109.0	109.0	108.7	107.5	107.4	107.4	107.2	107.0	110.1
3317	Steel pipe and tube	12/66	110.5	110.4	110.4	108.4	107.8	107.7	107.3	107.3	107.2	105.7	105.6	104.8	104.7	107.8
3333	Primary zinc	12/66	107.7	107.7	107.4	105.6	100.9	100.6	100.5	100.4	97.1	96.9	96.9	97.2	93.9	101.6
3334	Primary aluminum	12/66	114.0	114.0	114.0	110.0	110.0	110.0	109.0	109.0	109.0	109.0	109.0	106.1	105.4	110.3
3339	Primary nonferrous metals, n.e.c.	12/66	134.8	138.9	133.9	131.8	123.8	120.5	120.1	120.1	120.3	119.5	119.8	122.3	119.4	125.5
3351	Copper rolling and drawing		171.4	166.4	166.4	165.9	160.6	154.5	152.3	151.7	147.8	144.6	142.8	142.8	134.3	155.6
3411	Metal cans	12/66	109.0	109.0	109.0	109.0	109.0	108.9	108.9	108.9	108.9	108.9	108.8	106.3	106.2	108.7
3423	Hand and edge tools	12/67	110.8	110.6	109.6	108.4	108.4	107.8	107.1	106.9	107.2	106.3	105.9	105.0	104.8	107.8
3431	Metal plumbing fixtures		100.4	100.3	99.8	99.4	98.8	98.7	97.3	96.6	95.8	95.8	95.7	95.3	95.0	97.8
3493	Steel springs	12/66	107.2	107.2	107.2	106.8	106.8	106.8	106.3	106.0	105.9	105.8	105.8	105.8	105.2	106.5
3496	Collapsible tubes	1958	103.8	103.7	103.7	103.7	103.6	103.6	103.5	103.2	103.2	103.1	103.0	102.9	101.5	103.4
3498	Fabricated pipe and fittings		130.9	130.8	130.4	130.4	130.3	130.3	129.7	129.7	129.7	123.4	123.4	123.4	122.7	128.5
3519	Internal combustion engines	12/66	110.9	110.8	110.1	109.7	109.1	108.0	108.3	108.3	107.9	107.5	106.9	106.7	106.6	108.7
3533	Oil field machinery		125.1	122.7	122.5	122.4	121.8	121.5	121.0	120.8	120.4	120.0	119.1	119.0	118.0	121.4
3534	Elevators and moving stairways	12/66	110.5	107.7	107.7	107.6	107.6	107.6	104.5	104.5	104.5	104.5	103.9	103.9	103.9	106.2
3537	Industrial trucks and tractors		134.0	133.9	133.6	132.6	131.2	131.2	130.5	129.1	128.6	128.6	128.2	128.1	127.2	130.8
3562	Ball and roller bearings	12/66	105.7	103.7	103.7	102.6	102.6	102.2	102.2	102.1	102.1	102.1	102.1	101.6	101.6	102.7
3572	Typewriters	12/66	103.9	103.8	103.2	103.1	103.1	101.5	101.4	101.3	100.5	100.6	100.6	100.6	100.6	102.0
3576	Scales and balances		133.4	133.2	133.0	133.0	129.9	129.9	128.6	127.0	127.0	126.9	126.9	126.3	126.4	129.6
3612	Transformers	12/66	100.3	99.3	100.2	101.6	101.6	101.3	101.1	100.2	100.8	102.2	102.3	104.6	104.6	101.3
3613	Switchgear and switchboards	12/66	107.1	106.7	105.7	105.9	103.6	104.4	104.9	104.0	103.6	104.3	104.9	104.8	104.4	105.0
3624	Carbon and graphite products	12/67	104.8	104.4	104.4	104.3	104.3	104.3	103.0	101.1	101.0	101.0	101.0	101.0	101.0	102.9
3635	Household vacuum cleaners	12/66	99.9	99.9	99.9	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.5	99.8
3641	Electric lamps	12/66	98.4	98.5	99.2	101.1	100.3	99.6	104.1	103.1	103.6	102.7	103.0	103.0	103.0	101.4
3652	Phonograph records		123.5	123.5	123.5	123.5	122.6	122.6	122.6	122.3	122.3	122.3	122.3	121.3	119.8	122.7
3671	Electron tubes, receiving type	12/66	121.2	121.3	121.3	121.2	117.8	117.8	117.8	117.8	117.8	117.7	109.6	105.9	105.9	117.3
3672	Cathode ray picture tubes	12/66	87.5	89.7	90.0	90.0	90.0	90.0	89.9	89.9	89.9	89.9	89.8	89.9	92.4	89.7
3673	Electron tubes, transmitting	12/66	103.2	103.2	103.1	103.0	102.9	102.9	102.1	102.1	102.0	102.0	102.0	102.1	102.0	102.6
3674	Semiconductors	12/66	92.7	92.8	92.7	92.6	92.7	92.6	92.6	92.7	92.7	92.6	92.4	92.4	92.5	92.6
3692	Primary batteries, dry and wet		115.4	115.4	115.3	115.2	115.2	115.2	115.2	115.2	115.2	114.9	113.8	112.5	111.3	114.9
3693	X-ray apparatus and tubes	12/67	117.4	115.6	115.4	113.1	112.8	112.8	112.5	112.6	111.0	111.3	111.4	111.1	107.7	113.1
3941	Games and toys	12/66	112.1	112.2	111.4	111.4	111.4	111.1	111.1	111.1	111.2	111.1	111.2	110.3	110.1	111.3

[1] For a description of the series, see BLS Handbook of Methods for Surveys and Studies (BLS Bulletin 1458), Chapter 12. See also, "Industry and Sector Price indexes," in Monthly Labor Review, August 1965, pp. 974–982.

[2] Current monthly industry-sector price indexes are not available for this issue. At the beginning of each calendar year, changes in the sample for some indexes must be made and nesessary internal reweighting accomplished; this has caused the delay. Indexes beginning with January 1970 will be published in a later report.

NOTE. Beginning in January 1967, index weights and classifications are based on the 1963 Censuses of Manufactures and Minerals. They were formerly based on the 1958 Industrial Censuses.

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31. 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
1967: January	286	443	94.4	163.5	1,247.9	.09
February	292	485	104.1	159.2	1,275.8	.10
March	368	545	129.9	195.4	1,507.8	.10
April	462	638	397.6	438.8	2,544.8	.19
May	528	769	277.8	584.9	4,406.4	.30
June	472	759	211.8	405.0	4,927.4	.33
July	389	682	664.6	865.5	4,328.7	.32
August	392	689	91.3	233.1	2,859.5	.18
September	415	681	372.8	473.6	6,159.8	.45
October	449	727	178.8	458.7	7,105.6	.47
November	360	653	277.1	559.5	3,213.2	.22
December	182	445	74.4	209.5	2,546.5	.18
1968: January	314	483	187.8	275.7	2,668.5	.18
February	357	569	275.0	451.3	4,104.1	.29
March	381	618	174.5	368.7	3,682.0	.26
April	505	748	537.2	656.7	5,677.4	.38
May	610	930	307.3	736.2	7,452.2	.49
June	500	810	168.5	399.9	5,576.8	.40
July	520	880	202.0	465.1	4,611.9	.30
August	466	821	153.8	359.6	4,048.9	.26
September	448	738	169.8	349.0	3,081.1	.22
October	434	741	279.0	414.5	3,991.7	.25
November	327	617	129.9	306.1	2,430.5	.17
December	183	408	64.1	189.2	1,692.5	.11
1969: January	342	511	184.9	264.3	3,173.3	.21
February	385	578	177.1	339.9	2,565.8	.18
March	436	651	158.1	386.3	2,412.5	.16
April	578	831	309.7	462.3	3,755.0	.24
May	723	1,054	286.3	507.7	4,744.7	.32
June	565	911	214.6	500.0	4,722.7	.31
July	528	883	255.0	461.5	4,311.0	.27
August	538	915	191.2	394.8	3,634.3	.24
September	554	904	185.6	274.5	2,193.4	.15
October	531	850	337.0	420.9	3,167.5	.19
November	324	611	131.0	367.6	4,307.6	.31
December	196	446	50.8	267.0	3,881.8	.24
1970: January p	260	420	55	233	3,730	.25
February p	290	460	106	296	1,820	.13
March p	390	570	294	364	2,230	.14

[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 establishments or industries whose employees are made idle as a result of material or service shortages.

p=Preliminary.

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32. Output per man-hour, hourly compensation and unit labor costs, private economy, seasonally adjusted

[Indexes 1957-59=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	
	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm	Private	Private nonfarm
1967: 1st quarter	146.4	148.2	110.6	115.5	132.4	128.3	147.9	143.5	129.0	125.2	111.7	111.9
2d quarter	147.2	148.9	109.6	114.9	134.4	129.6	150.3	145.5	130.1	126.0	111.9	112.3
3d quarter	148.9	150.7	110.3	115.3	134.9	130.6	152.2	147.6	130.4	126.4	112.9	113.0
4th quarter	150.2	152.1	110.9	116.0	135.4	131.1	154.3	149.7	131.1	127.2	114.0	114.2
Annual average	148.2	150.0	110.4	115.4	134.3	129.9	151.2	146.6	130.1	126.2	112.6	112.9
1968: 1st quarter	152.4	154.3	111.2	116.4	137.0	132.6	158.5	153.6	133.3	129.2	115.7	115.9
2d quarter	155.2	157.5	112.2	117.5	138.3	134.1	160.8	155.7	133.7	129.4	116.3	116.1
3d quarter	156.7	159.0	112.7	118.3	139.0	134.4	163.7	158.1	134.5	129.8	117.8	117.6
4th quarter	158.1	160.6	112.6	118.3	140.4	135.8	167.8	162.0	136.3	131.5	119.6	119.4
Annual average	155.6	157.9	112.2	117.6	138.7	134.2	162.7	157.4	134.4	130.0	117.4	117.3
1969: 1st quarter	159.1	161.5	113.7	119.6	139.9	135.0	170.5	164.4	136.7	131.8	121.8	121.8
2d quarter	159.9	162.3	114.6	120.7	139.5	134.5	172.7	166.5	136.2	131.3	123.8	123.8
3d quarter	160.8	163.1	115.0	121.4	139.8	134.4	175.8	169.1	136.8	131.5	125.8	125.8
4th quarter	160.5	163.2	114.3	121.0	140.3	134.9	179.4	172.2	137.6	132.1	127.8	127.7
Annual average	160.1	162.5	114.4	120.6	139.9	134.7	174.7	168.1	136.9	131.7	124.9	124.8
1970: 1st quarter p	159.7	162.2	114.0	120.6	140.1	134.5	182.7	175.2	138.0	132.3	130.4	130.3
	Percent change over previous quarter at annual rate [3]											
1967: 1st quarter	−1.4	−2.2	0.0	−0.3	−1.4	−1.9	3.9	4.9	3.2	4.1	5.3	6.9
2d quarter	2.3	1.9	−3.7	−2.1	6.2	4.1	6.7	5.5	3.7	2.6	0.5	1.4
3d quarter	4.5	4.8	2.9	1.7	1.5	3.0	5.2	5.8	0.9	1.6	3.6	2.7
4th quarter	3.6	3.9	2.1	2.4	1.5	1.5	5.6	5.9	2.1	2.3	4.1	4.4
1968: 1st quarter	6.0	6.0	1.0	1.2	4.9	4.8	11.3	10.9	6.8	6.5	6.0	5.9
2d quarter	7.4	8.4	3.5	3.8	3.8	4.5	6.0	5.5	1.1	0.7	2.1	1.0
3d quarter	4.1	4.0	1.9	2.8	2.1	1.1	7.5	6.4	2.3	1.3	5.3	5.3
4th quarter	3.5	4.0	−0.3	0.0	3.8	4.0	10.4	10.3	5.5	5.4	6.3	6.0
1969: 1st quarter	2.6	2.2	3.8	4.6	−1.2	−2.3	6.4	5.8	1.4	0.8	7.6	8.3
2d quarter	1.9	2.0	3.2	3.5	−1.3	−1.4	5.4	5.4	−1.4	−1.4	6.8	6.9
3d quarter	2.2	2.0	1.3	2.4	0.8	−0.4	7.4	6.2	1.5	0.4	6.5	6.6
4th quarter	−0.7	0.2	−2.3	−1.3	1.6	1.5	8.3	7.6	2.4	1.8	6.6	6.0
1970: 1st quarter p	−1.9	−2.4	−1.3	−1.2	−0.6	−1.2	7.7	7.1	1.4	0.8	8.4	8.4
	Percent change over previous year [4]											
1969: 1st quarter	4.4	4.6	2.2	2.8	2.1	1.8	7.6	7.0	2.6	2.0	5.3	5.1
2d quarter	3.0	3.0	2.2	2.7	0.8	0.3	7.4	7.0	1.9	1.5	6.5	6.6
3rd quarter	2.6	2.6	2.0	2.6	0.5	0.0	7.4	6.9	1.7	1.3	6.8	7.0
4th quarter	1.5	1.6	1.5	2.3	0.0	−0.7	6.9	6.2	1.0	0.4	6.9	6.9
1970: 1st quarter p	0.4	0.4	0.2	0.8	0.1	−0.4	7.2	6.6	1.0	0.4	7.1	7.0

[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] Percent change computed from original data.

[4] Current quarter divided by comparable quarter a year ago.

p = Preliminary

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.

Scheduled release dates for major BLS statistical series, July 1970

Title	Date of release	Period covered	MLR table numbers
Wholesale Price Index, final	July 7	June	26–30
Work stoppages	July 22	June	31
Consumer Price Index	July 23	June	24–25
Factory labor turnover	July 29	June	15–16
Wholesale Price Index, preliminary	July 29	July	26–30

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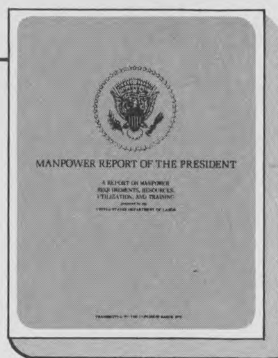

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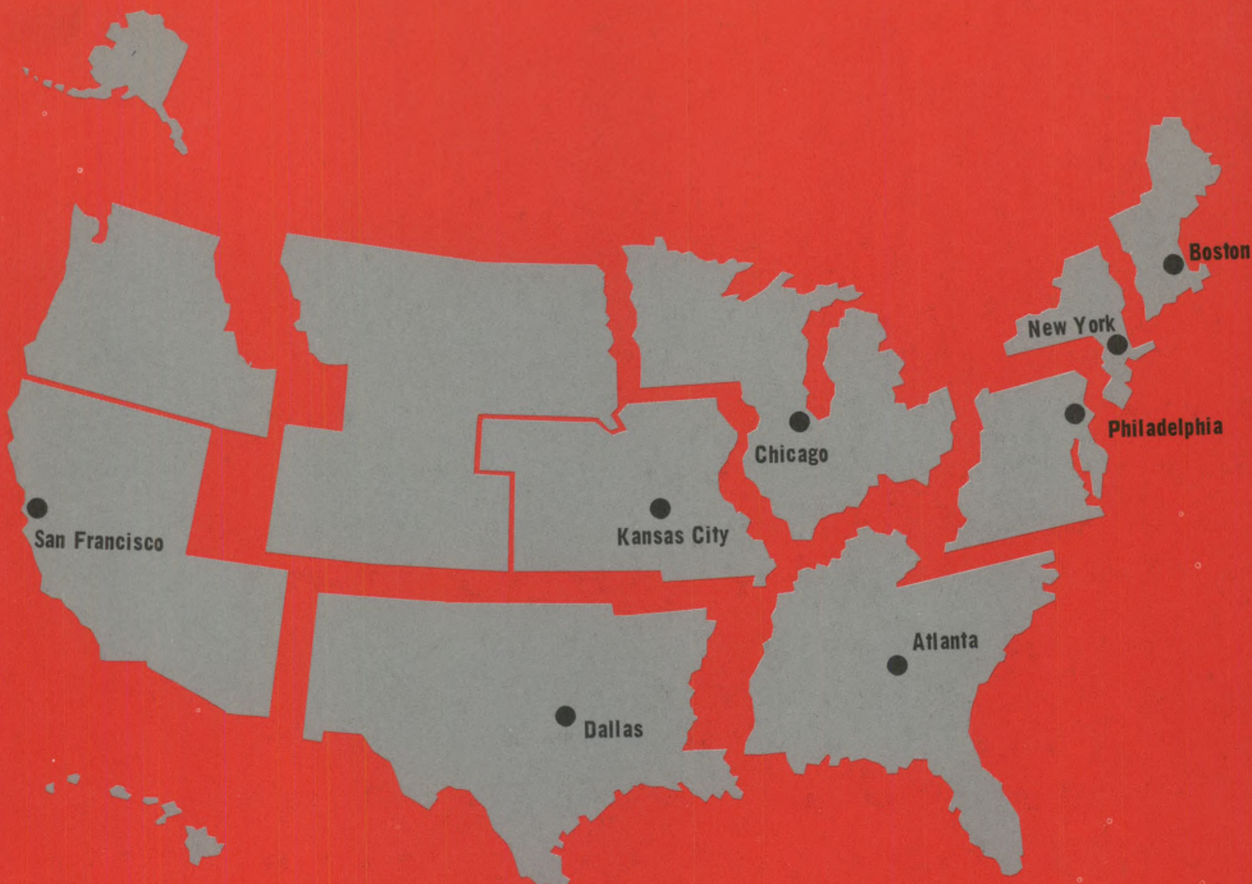

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