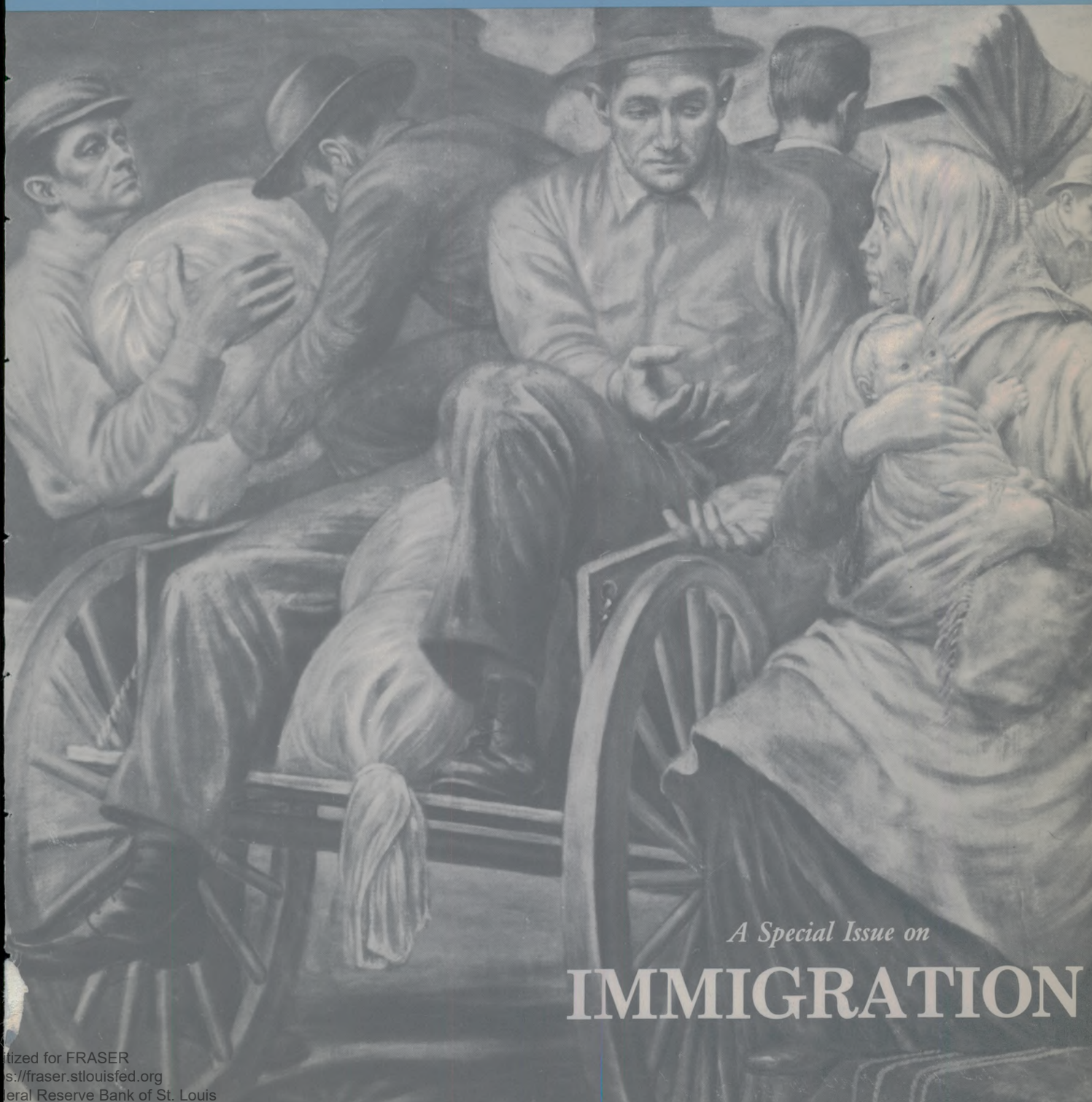


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U.S. Department of Labor
Bureau of Labor Statistics
October 1980



A Special Issue on

IMMIGRATION



U.S. DEPARTMENT OF LABOR
Ray Marshall, Secretary

BUREAU OF LABOR STATISTICS
Janet L. Norwood, Commissioner

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October cover:

Fragment panel from the mural "Immigration" (1937) painted by Edward Laning. Formerly located on Ellis Island, an abandoned site for screening immigrants to the United States, the mural was retrieved and restored by the General Services Administration.

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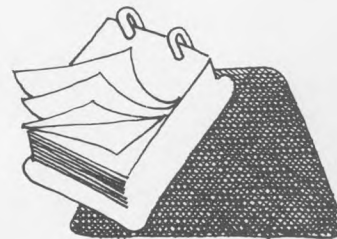
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Labor Month In Review



IMPROVING JOBLESS PAY. The National Commission on Unemployment Compensation, a 13-member panel representing employers, employees, and the public, completed a 4-year study with more than 30 recommendations to improve or preserve the unemployment compensation system. Highlights:

Broader coverage. The commission calls for a major expansion of coverage. Several proposals would be especially beneficial to women: the panel asks that "sexual harassment" and "compelling family circumstances" be considered legitimate reasons for leaving a job and that persons who seek only part-time work be eligible for compensation. In addition, displaced homemakers who registered for work would qualify for benefits through unemployment insurance credits or equivalent work or on the basis of credits earned by their spouses. Other groups included in the broadened coverage are all agricultural workers (presently only those on farms with 10 or more employees or a \$20,000 payroll are insured) and household workers who are paid at least \$50 a quarter (presently only those receiving \$1,000 or more are covered).

Tax-exempt payments. The panel recommends that unemployment insurance payments be exempted from Federal income tax, calling the practice discriminatory (because some other incomes are not taxed) and citing the difficulties of the Internal Revenue Service in enforcing this provision. It recommends that basic benefits be increased, in steps, to a maximum in 1986 of two-thirds of a State's average weekly wage for covered workers.

The Commission wants greater protection provided during periods of heavy unemployment and recommends a "State extended benefit" (SEB) program that would provide, depending on a State's insured unemployment rate, up to an additional 26 weeks of unemployment benefits. This means that some workers could receive 65 weeks of aid; the present maximum benefit period is 39 weeks. For the longer-term unemployed, the Commission proposes increasing Comprehensive Employment and Training Administration (CETA) job slots and recommends establishing some type of income-tested program, separate from the unemployment compensation program, for all unemployed persons, including those who have exhausted their benefits under the present program.

Finances and administration. The Commission, concerned about recent increases of unemployment which have threatened the integrity of the system, makes several recommendations for putting unemployment compensation programs on sound financial footing. It proposes gradually increasing the taxable wage base from 50 percent of the average earnings of covered employees in 1983 to 65 percent in 1989 and also favors reducing employer payroll taxes for past debts. To encourage prudent financial policies, the Commission suggests allowing only financially solvent States to borrow from Federal funds. The panel also wants to establish a Board of Trustees to monitor unemployment insurance trust funds. Several of the board's major responsibilities would be to set investment policies and inform the Congress on amounts needed

to finance a State's compensation fund.

The panel suggests the system would be more efficient if the U.S. Treasury Department would let the States collect unemployment payroll taxes. It also wants more Federal funds allocated for detecting fraud, errors, and tax delinquencies and believes that the U.S. Employment Service should be expanded, from its present ceiling of 30,000 employees to 50,000 by 1985.

First major review. The Federal-State unemployment system was established in 1935. Although many changes have been made at both the Federal and State levels, this study marks the first time a comprehensive review of the system has been made. Congress established the National Commission on Unemployment Compensation in 1976 to examine the unemployment programs of States and make recommendations for improvement. The Commission expired September 30, but it asks the Congress to appoint a similar National Commission every 10 years, beginning in 1988.

Wilbur J. Cohen, head of the panel, estimated that adoption of all the recommendations would increase the cost of the unemployment compensation program by \$10 billion, to \$35 billion. But, he warned that "uncompensated unemployment can cost society much more than the cost of a reasonably improved unemployment compensation system."

The preliminary report, *Unemployment Compensation Policy Decisions*, is available from the National Commission on Unemployment Compensation, 1815 Lynn Street, Arlington, Va. 22209. □

Immigration and the labor force

Although the United States has been, from its beginning, a nation of immigrants—more are admitted each year than to any other nation in the world—U.S. immigration policy has wavered between welcoming immigrants and excluding them. When workers and their skills were needed, immigrants usually have been welcomed, even actively sought. During hard times, when job competition was keenest, efforts at exclusion have been frequent.

Recent discussion of immigration to the United States has focused on illegal immigrants, their impact on the U.S. economy, and on refugees from Southeast Asia and Cuba. This special issue of the *Monthly Labor Review* reports on these groups, but also examines broader immigration questions.

In the opening articles, Philip L. Martin and Alan Richards help us view U.S. immigration in the context of international migration, while Ayse Kudat and Mine Sabuncuoglu examine Europe's guestworker experience. The problems of counting and evaluating the impact of Mexican and other illegal aliens are explored by Ellen Sehgal and Joyce Vialet. Barry R. Chiswick analyzes the earnings patterns of immigrants, while David S. North examines the special problems of aliens who are temporary workers. The employment patterns and prospects of recent immigrants from Southeast Asia and Cuba are the subjects of articles by Robert L. and Jennifer B. Bach. In the final article, David S. North and Philip L. Martin examine differences between immigration and employment policies and point to the need for more coordination.

Although the articles deal with many facets of immigration and represent differing approaches, not all aspects or views of immigration are covered. Readers who wish to comment on the articles or present additional information are invited to do so.

The editors thank the authors who contributed to this special issue of the *Review* and express particular appreciation to Ellen Sehgal, who served as overall consultant for the issue, and to Gregory J. Mounts and Mary K. Rieg, who provided special editorial assistance.



International migration of labor: boon or bane?

According to trade theory, free labor flows across national borders should benefit workers, employers, and societies; but recent evidence indicates that such migrations may not provide these desired benefits

PHILIP L. MARTIN AND ALAN RICHARDS

An estimated 20 million persons currently live and work in countries where they are neither citizens nor intend to be permanent immigrants. One-half of these are legally admitted "guestworkers"; the rest are illegal aliens or "undocumented workers."¹ This article surveys contemporary labor migrations, assesses their impacts on the areas which send and receive them, and explores future trends in international labor flows.²

Historically, migration brought permanent settlers from the cosmopolitan East to the frontier West. Between 1800 and 1930, for example, 60 to 70 million foreigners arrived in the Americas, including indentured servants and slaves. Some eventually returned to their countries of origin,³ but most brought with them their mobile assets, intending a permanent break with their homelands.

Contemporary migration, on the other hand, is largely a flow of workers, rather than of permanent settlers. Most of today's migrants move from less to more developed nations. They tend to be drawn from the middle economic ranks of the societies which send them; the very poor are generally unable to finance the trip or obtain a work permit.⁴

Much migration is temporary today because few areas remain open for permanent immigrants. Better communication, lower real transport costs, and the cre-

ation of new borders should promote *more* international resettlement. Instead, most estimates put the number of legally admitted immigrants (excluding refugees) to all countries at no more than 1 million annually, of which the United States receives 40 to 50 percent. While the impulse to migrate may be as strong as ever, aspiring permanent settlers find few opportunities to do so.⁵

Migrant labor benefits a variety of people in sending and receiving areas. Labor migration provides income for individual aliens and remittances, through workers' dependents, to sending nations. Employers hiring aliens benefit, as do domestic consumers, when lower labor costs translate into lower prices for goods and services. Some native workers may also gain if the presence of foreign labor preserves or creates skilled or supervisory jobs for them. Finally, governments in labor-importing countries may enjoy increased net income if more is collected from legal aliens in taxes than it costs to provide them public services.

The original premise motivating labor transfers held that such migration was a positive-sum exchange: except for a few natives who might have to compete for jobs with the aliens, everyone gained. It is true that benefits do flow from the use of foreign labor—benefits sufficient to make halting labor migration very difficult. But labor transfer often leads to undesired results, mainly unemployment and low wages for some host-nation residents and employer addiction to low-cost labor. Much of the following discussion focuses on what goes wrong in labor migrations, but it is important to note

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that economic advantages also accrue from the use of alien labor.

Contemporary labor flows

The magnitude and diversity of present day labor flows is unprecedented. They may reflect traditional movements to and from new nation states, illegal migration on a new scale, or publicly and privately organized labor transfers. Among the most controversial of these flows are those of illegal aliens to the United States, "guestworkers" to Western Europe, large foreign workforces to the Middle East, and black labor to South Africa.

Guestworkers. Legal "guestworkers" are foreign nationals admitted to a country for a fixed period to work for a particular employer.⁶ Thus, they are "guests" in the economic system, rather than aspiring permanent residents. Most official guestworker programs are jointly directed by labor ministries and immigration authorities so that immigration can be regulated in accordance with current labor market needs.

Because guestworkers are admitted for predetermined periods of employment, they leave families and assets behind. After achieving a savings target or fulfilling a 1- or 2-year contract, they are expected to return home and perhaps be replaced by other workers eager for a chance to earn "high wages." Thus, implementation of a guestworker program reflects the belief by the host nation that a particular domestic labor shortage is only temporary. As we will see, such beliefs are often unrealistic.

The most noteworthy guestworker programs were initiated by Western European nations between 1960 and 1973.⁷ France and Germany absorbed more than two-thirds of Europe's migrant workers, although alien labor dependency reached its zenith during the late 1960's in Switzerland, where 1 in 3 workers was foreign. In most instances, international agreements regulated the recruitment and transportation of guestworkers, while both domestic and bilateral considerations governed migrant rights in receiving societies and the ultimate fate of migrant populations. During the 6 years following the European "recruitment stop," nations which formerly imported labor have been plagued by unanticipated results of their guestworker programs. These problems include foreign resident populations swelled by family unification; persistent labor shortages in the "secondary" (low-wage, low-skill) job markets in which alien labor is concentrated; and the treatment of migrant children, who are expected to leave, but are likely to become permanent residents.

Migrants in the United States. The U.S. labor system most closely resembling a legal guestworker program is

that which supplies farmworkers for temporary harvest employment. This reliance on imported farmworkers is anachronistic; most industrialized nations do not structure agriculture in a way which requires migrant labor. And, whether inherently flawed or only badly administered to date, temporary farmworker programs are generally regarded as one of the sorriest chapters in American labor history.

The United States is also the world's largest *de facto* employer of foreign labor. A variety of past and current factors, including the Bracero program (1942-1964), lax enforcement of U.S. borders and immigration laws, and Third World perceptions of U.S. economic opportunities, have produced an illegal labor force 4 to 6 million strong. Apprehensions of such workers by the Immigration and Naturalization Service have been mounting steadily for over a decade, and now exceed 1 million persons annually. Many observers believe that current resident aliens must eventually be granted amnesty permitting them to stay in the United States. Other possible solutions to the problem of illegal immigration are currently under study by a Congressional Select Commission.

Finally, the United States admits more of the world's stock of 14 million refugees than any other nation. The 1952 immigration law expedited the entry of aliens fleeing Communist and Middle Eastern lands but discouraged granting asylum to those from other countries. Since 1975, the United States has admitted more than 750,000 refugees. The economic and social pressure of these numbers led to passage of the Refugee Act of 1980,⁸ which sought to streamline admission procedures by adopting the United Nations' definition of "refugee"⁹ and setting an annual limit of 50,000 refugees for the United States. The challenge now facing this nation and other industrial societies is how to distinguish between economic and political refugees, particularly when some authoritarian governments blur such distinctions.

Other labor flows. Oil-rich Middle Eastern countries are the temporary homes of 2 to 3 million workers. Aliens often constitute well over half of a Middle Eastern labor importer's workforce. Labor flows in this region are characterized by a relatively high proportion of managerial or highly skilled persons from more industrialized nations. Even so, most of the Middle East's alien workers, like guestworkers everywhere, are unskilled or semi-skilled.

Private contractors in the Middle East are expected to supply and control their own workforces. Some guestworkers are also hired directly by governmental agencies, but the absence of general labor laws and formal labor transfer agreements produces employment conditions which vary widely within and between countries.¹⁰

The other major labor flows are still more varied. Several million agricultural guestworkers move between African nations each year. In South America, the economic attractions of Venezuela and Argentina make them the primary destinations, although South America's migrations often include political refugees as well as persons seeking employment. And, East Germany is a temporary home to an estimated 100,000 workers from other Eastern Bloc nations. A variety of less visible illegal flows, and legal but only seasonal labor transfers complete this sketch of current international labor migration.¹¹

During the 1970's, many countries attempted to reduce their legal alien workforces by encouraging workers to return to their homes, or by permitting them to become permanent immigrants. However, indications are that over the same period, the number of illegal migrants has increased dramatically.

Theory and reality

According to international trade theory, two nations with unequal resource endowments or productivities can enjoy a bilateral increase in economic well-being by freely exchanging capital, goods, and labor. Economic benefits arise from the fact that one nation can use the other's capital or labor more productively, or that one nation has a comparative advantage over its trading partner in the production of certain goods. Permitting trade and migration thus increases the output available to both nations. Conversely, restricting exchange forces each nation to produce and consume at less than full capacity.

Trade theory also assumes that the welfare of all individuals is equally important, but in reality most nations are more concerned with citizen welfare than with the well-being of foreign nationals. Labor importation benefits aliens and their employers, but may force natives to compete with migrants for jobs, housing, and scarce public goods. Thus, even if total output in both nations increases, migration is "mutually beneficial" only if its effects on each country's income distribution are offsetting or relatively minor.

Another problem is that labor markets in sending countries are highly imperfect. Often, there is limited substitutability among workers of different skill levels. Such labor-market segmentation can make it difficult to fill specific vacancies caused by emigration, despite widespread unemployment, thus retarding economic development.

Finally, free migration is different from free trade in a fundamental way. A trade transaction is a mere commodity exchange. Labor flows consist of people, whose services are only rented, and whose desires can change in unpredictable ways. International trade theory fails

to account for the willingness and capacity of migrants to adapt to life abroad.

Labor market impacts

The availability of migrant workers makes labor markets more competitive in the short run. Many migrants will work at or below prevailing wages, because they are accustomed to lower standards of living. Their belief that working in a wealthy society is a privilege usually retards unionization and limits complaints about working conditions, especially among migrants of doubtful legal status.¹² As a result some (usually the lower-skilled) sectors of the labor market experience slower growth in real wages.

If migrants and most domestic workers do not compete in the same labor markets, migration can promote dualism or labor-market segmentation, with each segment responding to separate economic and social forces. The availability of migrant labor preserves traditional labor-intensive agricultural, manufacturing, and service jobs. Employers in these sectors must choose between labor-intensive production based at least partially on low-wage foreign workers, or capital-intensive production using a smaller but more highly paid domestic work force. In general, it is the smallest operations which rely on alien labor to maintain production, because they lack capital or the skills to manage large-scale automated firms. Thus, migrant labor may help to preserve inefficient establishments which might otherwise fail in the face of foreign or domestic competition.

Illegal alien workers are more likely to be found in small firms for another reason. Small employers often know workers personally, maintain their own records, and sometimes operate on a "cash" basis. The employer who knowingly hires illegal workers can avoid paying his or her share of taxes for social security, unemployment insurance, and workers' compensation. And, because aliens generally do not understand the handling of payroll taxes, the employer may pocket the employee's share of these taxes as well. If uniform deductions are made from the wages of legal and illegal workers alike, take-home pay will be the same for both.

Payroll taxes on employer and employee, combined, range from 25 to 35 percent of a U.S. employer's total wage bill and up to 50 percent in Europe. They are forwarded by the employer to the appropriate revenue office, and are only verified when an employee files a claim for benefits. If the employer can assume that illegal workers will not attempt to obtain benefits for fear of apprehension, the tax savings from employing alien labor may contribute substantially to profits.¹³ The extent to which tax evasion opportunities cause employers to hire aliens is not known, but the practice is common enough to be of concern in both the United States and Western Europe.

The rationale for labor importation

Legal guestworkers in industrialized societies are most often found in larger establishments because their employment imposes additional hiring and supervision costs. They must be recruited, screened, and transported, often housed in company-owned units, and either taught the host country's language or supervised by multilingual personnel. And, to protect the jobs of domestic workers, the recruitment of aliens often entails the payment of a fee to the labor ministry. Given these additional employment costs, why might employers hire guestworkers?

The answer lies in the relatively rigid wage structures characteristic of large firms in industrialized societies. Whether by tradition or contractual agreement, such structures are typically hierarchical, with well-defined wage differences among groups of workers. For example, in a hypothetical auto manufacturing plant employing 10,000, assembly-line workers earn \$10 and skilled workers receive \$15 per hour. A labor shortage develops on the assembly line which could be filled locally by raising assembly-line wages from \$10 to \$13. However, the additional cost of filling the openings is not simply \$3 per hour times the number of vacant assembly-line jobs; rather, it is \$3 per hour times all 10,000 jobs, or \$30,000 per hour, in order to maintain previous wage differentials.¹⁴ The profit-maximizing employer may elect to recruit foreign labor if the extra recruitment, housing, and supervisory expenses do not exceed the cost of hiring locally.

In other cases, changes in technology, industry structure, or educational attainment permit more native workers to obtain white-collar positions. The domestic supply of persons willing to fill unskilled industrial and service jobs is thus reduced. Employers, faced with the costs and uncertainties of restructuring existing wage levels and job status patterns, may see foreign labor as a surer and cheaper way to staff undesirable positions.

The migratory chain

Whether imported to fill permanent or temporary labor market gaps, foreign workers who gain a foothold in a host nation quickly make the immigration process self-feeding.¹⁵ The first migrant workers are single males, but if the demand for labor persists, especially among service-sector employers, females immigrate. Some of the temporary workers form families, while others send for spouses and dependents as soon as they secure housing and obtain permission, usually after 1 year of employment if they have legal status, and longer if they are undocumented. A growing stock of foreign workers and their families then justifies additional immigration so that migrants can have access to familiar foods and services—the third stage in the migration process.

The fourth and final step in the migratory chain is *de facto* permanence. Individuals may come and go, but a growing core of foreign nationals acquires financial and personal equity in the host society. The proximate cause of this permanence is the persistence of employer “needs” for low-wage labor, which in turn results from the original choice to import labor rather than reorder domestic wage structures.¹⁶ Thus, importing foreign workers does not solve domestic labor-market problems, but only postpones the need to address them.

In fact, importing workers often causes new problems. Most migrants initially anticipate a short stay abroad. However, they become permanent residents as they adjust to industrial life and its rewards; when they realize that their accumulated savings will not provide a better life back home; when they form or unite families abroad; when economic problems in their homelands persist or worsen; and when their current employers continue to offer jobs. They may go home only every third or fourth year, thus carefully preserving their right to return to a foreign job. When that right is threatened, many migrants simply refuse to leave. Some receiving societies have avoided such “backdoor” immigration by rotating imported workers periodically, but these policies are unpopular, and must be enforced through elaborate administrative and policing systems.

Permanent settlement changes the economic impacts of international labor flows. When settling, migrants demand housing and consumer durables, thereby increasing demand in host nations and creating yet more jobs. However, the net result of settlement may still be economically undesirable because of the concentration of immigrants by industry, occupation, and residence.

Migrant permanence alters the social impacts of labor exchanges, as well. Host countries initially benefit from the fact that imported workers do not require social infrastructure—health care, education, and other services. But permanent immigrants do require social investments if they and their children are to be brought up to host-country norms. Providing that infrastructure often involves a higher than usual per capita cost, because the children must be educated to function in both the sending and the receiving countries.

Such social investments might seem profitable if the children of immigrants were to fill the same labor-market roles their parents did. But migrant children adopt native attitudes quickly, and some reject the jobs so eagerly accepted by their parents.¹⁷ Thus, the host nation finds itself again on a labor importation treadmill. In turn, each round of immigration results in more permanent residents, but fewer workers willing to fill undesirable jobs. And employers, rather than national policymakers, determine who these new residents will be, where they will locate, and how they will be integrated into the receiving society.

Impacts on sending societies

Demographic issues. Personal characteristics of emigrants help to determine the economic results of exporting labor. Males between the ages of 18 and 45 are generally first to be recruited, but must leave their dependents behind until they have met host-country service requirements for legal family unification (usually 1 year). As a result, the home-country labor force decreases, although some women take jobs vacated by the men; the age structure develops concentrations of young and old persons, who are often dependent on the 18- to 45-year-olds abroad; and birth rates decline, as some migrants delay marriage while others adopt the birth control practices of labor-receiving nations. Recruitment may be regionally selective as well, taking persons only from certain cities or areas.

Agricultural decline. The outflow of prime-aged workers should prompt agricultural land consolidation, a reform which usually results in increased productivity and output. Dependents remaining in rural villages often rely on remittances for virtually all of their income, but few guestworker families are willing to sell or lease their land, given the uncertainty of the breadwinner's tenure abroad. Thus, rather than being consolidated, land is left idle or farmed less intensively, and the nation may be required to increase food imports. At the same time, local rural labor shortages may lead to an irreversible decline in agricultural capital, as terraces go untended and irrigation systems collapse.¹⁸

Urbanization. Migrant labor is often recruited in "urban staging areas," a practice which accelerates growth in these cities. The trend toward urbanization is intensified if remittances from breadwinners abroad increase rural family incomes enough to permit relocation in cities. Often the result is an urban real estate "boom," which is unsupported by any increase in domestic output.

Industrial distortion. Domestic industry takes on an outward resemblance to "modern" industry abroad as a result of emigration. Because individual employers must compete with foreign recruiters for labor, emigration puts upward pressure on wages and increases employer uncertainty. Returned migrants, now familiar with sophisticated production techniques, may not wish to work in less capital-intensive industries at home. Rather, many returnees enter the domestic service sector, intending to support themselves with a small vehicle or establishment.

As a result, labor-exporting countries move directly from an agricultural focus to a service-oriented economy, bypassing the development of industrial capacity. In an economy fueled by foreign earnings, an insuffi-

cient industrial base encourages consumption of imported goods, and increases the nation's dependence on industrial societies. Perhaps the chief economic cause for skepticism about the true amount of "foreign aid" to be derived from exporting labor is the tendency of returned migrants to purchase "unproductive" capital or imported goods with their savings.

Economic development. In the aggregate, emigration is a source of foreign currency, and should thus be helpful to domestic development plans. But migrant earnings are an uncertain source of foreign exchange, because they fluctuate with short-term foreign labor demands and the savings and repatriation decisions of individual workers. Economic development is a long-term process, and development plans based on such a stream of remittances may be disrupted by recession in a labor-host nation, usually at a time when the labor-sending country most critically needs foreign exchange.

Political trends. Because there are far more labor-sending than receiving societies, and because national sovereignty implies the right to control immigration, sending nations have little influence over the immigration policies of labor-short countries. However, despite their heretofore limited role in international labor-force decision-making, these nations appear to have realized that the blessings of exporting workers are not unmixed.¹⁹ In years preceding the European guestworker programs, labor-exporting countries usually cooperated with labor recruiters, helping to locate and screen workers in preparation for the trip abroad. During the early 1970's, however, many sending nations began to view their labor exports as subsidies to industrialized societies. The result has been ambivalence toward emigration; labor-exporting countries resent the worker emigration, but realize that they cannot provide full employment for their citizens.

The future of international labor migration

The study of past and present labor flows yields an important lesson for the future: despite the initial recruitment effort required, most temporary worker migrations are easier to start than to stop. The benefits from labor transfers are clear and immediate; the costs are distant and ambiguous. Availability of foreign labor distracts receiving nations from solving the job-market problems which first made it necessary to import workers. As aliens are assimilated by the receiving society and climb the economic ladder, new labor shortages develop which are similarly eased with imported labor. Temporary worker transfers thus become permanent migration channels. Subsequent attempts to block these channels are likely to result in illegal immigration.

Even so, pressures to initiate labor transfer programs will probably increase during the 1980's. Unequal economic, social and political development in coming years will reinforce wage and unemployment differences among nations. Most industrialized societies, for example, will experience sharp drops in numbers of new labor-force entrants as the effects of declining birth rates are felt, and female labor-force participation rates stabilize. During the same period, less developed countries may be experiencing unprecedented levels of unemployment. Such a combination of domestic and foreign influences would make it virtually impossible to limit worker migration. Therefore, a critical reevaluation of international labor flows by both sending and receiving countries is imperative.

During the next decade, the United States will be one

of the first countries to debate the merits of a legal guestworker program.²⁰ The report of the Congressional Select Commission, due in March 1981, is not expected to address the question of guestworkers directly, but at least five bills now pending propose such programs. Supporters of these bills argue that the United States cannot seal its borders, that Mexico and other less developed nations need a "safety-valve" for their surplus labor, and that the United States must have alien labor to do its undesirable work. But opponents say that guestworkers provide immediate economic benefits to selected employers and consumers, but most of their costs to society-at-large are deferred to a later date. If the United States decides to continue to import labor, it should admit aliens as permanent immigrants, so that both benefits and costs are explicit from the outset. □

—FOOTNOTES—

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¹ Philip Martin and Marion Houston, "The Future of International Labor Migration," *Journal of International Affairs*, Fall-Winter 1979, pp. 311-33.

² Reprints of this article will be available from the Giannini Foundation, University of California at Berkeley. No. 592.

³ Migration of this type was widespread in the late 19th century. Most of the "second wave" of immigration to the United States consisted of "target earnest," who hoped to return home with their accumulated savings. Return migration as a percentage of in-migration from 1908 to 1910 for various ethnic groups was estimated as follows: Croatian and Slovenian, 57 percent; French, 45 percent; Greek, 25 percent; Northern Italian, 63 percent; Southern Italian, 56 percent; Magyar, 65 percent; Polish, 31 percent; and Slovak, 59 percent. Rates for some groups were much lower, such as the 8 percent reported for Hebrews. The figures above are from the Dillingham Commission on Immigration, *Abstract of Reports of the Immigration Commission*, U.S. Senate, 61st Cong., 3d Sess., S. Doc. 747 (Washington, 1911), Vol. I, p. 182, table 16.

⁴ David North, "Worker Migration: A State of the Arts Review." Mimeographed, 1979.

⁵ Roger Böhning notes that migration pressures are escalating just when most countries are moving to restrict immigration. See "International Migration—Past, Present, and Future." Mimeographed, 1979.

⁶ Roger Böhning distinguishes temporary alien workers (expected to leave and sometimes forced out) from guestworkers (expected to leave but never forced out). U.S. discussions center on a temporary alien worker program. See "Guestworker Employment—Lessons for the U.S." Mimeographed, 1980.

⁷ See Philip Martin, *Guestworker Programs: Lessons from Europe* (U.S. Department of Labor, 1980).

⁸ Public Law 96-212, signed Mar. 17, 1980.

⁹ The United Nations defines a refugee as any person who is outside his or her country of nationality or habitual residence because of well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion, who is unwilling, because of such fear, to avail himself or herself of the protection of his or her country of origin or to return to the country of habitual residence. This definition is not restricted to persons fleeing any specific nation or type of government. (See *Department of State Bulletin*, December 1979, p. 12.)

¹⁰ See, for example, J. S. Birks and C. A. Sinclair, *International Migration and Development in the Arab Region* (Geneva, International Labor Organization, 1980); Nazli Choukri, "Demographic Changes in the Middle East: New Factors in Regional Politics," *The Political Economy of the Middle East—Changes Since 1973* (Washington, Library of Congress, Congressional Research Service, 1979); and, "The New Migration in the Middle East: A Problem for Whom?" *International Migration Review*, Winter 1977, pp. 421-43.

¹¹ See P. Martin and M. Houston, "The Future of International Labor Migration."

¹² See Michael J. Piore, *Birds of Passage: Migrant Labor and Industrial Societies* (New York, Cambridge University Press, 1979), chs. 3-4.

¹³ David North and Marion Houston found that most of the 793 apprehended aliens interviewed had worked for employers who knew they were in the United States illegally. For more detail, see *The Characteristics and Role of Illegal Aliens in the U.S. Labor Market: An Exploratory Study* (Washington, Linton and Co., 1976).

¹⁴ If skilled workers demand the same percentage increase in pay as the unskilled, the cost would be even higher. There is a large body of literature on the stability of wage contours. See, for example, John Dunlop, *Wage Determination Under Trade Unions* (New York, Kelly, 1950). More recent discussions may be found in Lester C. Thurow, *Generating Inequality* (New York, Basic Books, 1975), ch. 5; and, Michael J. Piore, *Birds of Passage*, ch. 2.

¹⁵ For empirical examples, see Roger Böhning, *The Economic Effects of the Employment of Foreign Workers* (Paris, Organization for Economic Cooperation and Development, 1975).

¹⁶ Indeed, this is a "choice" only for society as a whole, not for an individual employer. See Suzanne Paine, *Exporting Workers: The Turkish Case*, (New York, The Cambridge University Press, 1974), ch. 1.

¹⁷ See Michael J. Piore, *Birds of Passage*.

¹⁸ Jon Swanson, *Emigration and Economic Development: The Case of the Yemen Arab Republic* (Boulder, Colo., Westview Press, 1979); J. S. Birks and C. A. Sinclair, "The Sultanate of Oman: Economic Development, The Domestic Labor Market and International Migration," Working Paper WEP 2-26/WP 28 (Geneva, International Labor Organization, World Employment Program, June 1978).

¹⁹ Roger Böhning, "International Migration in Western Europe: Reflections on the Past Five Years," *International Labor Review*, July-August 1979, pp. 401-14.

²⁰ For a survey of the arguments, see Philip Martin, "Guestworkers and Immigration Policy." Mimeographed, 1980.

The changing composition of Europe's guestworker population

Although the flow of guestworkers diminished during the 1970's, wives joined men who remained; as the proportion of women migrants—now more than 40 percent—rose, labor market structures changed, as did socioeconomic implications for host countries

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The rapid economic recovery of Western Europe after World War II was accompanied by severe labor shortages. Consequently, European industries sought workers from other countries, and migrant labor flows increased significantly in the following decades. By the 1960's, approximately 800,000 workers were emigrating annually from the Mediterranean countries alone. When these flows peaked in the early 1970's, they were unmatched in scale by any other documented labor movement in history.

However, with the successive introduction of restrictive immigration measures by the labor-importing countries after 1970, the movement slowed and came to a virtual standstill with the onset of the 1973-74 oil crisis. During 1973-75, flows from the major labor-exporting countries within the Organization for Economic Cooperation and Development declined from 500,000 to 100,000, and approximately 600,000 workers returned to these sending countries during 1974-75. The great majority, however, managed to remain in the host countries during the crisis.¹

In 1975, the share of foreign workers within the total labor force of six labor-importing countries (Austria, France, West Germany, the Netherlands, Switzerland, and Sweden) was slightly more than 10 percent, with considerable national differences. The individual shares

ranged from a high of 24 percent in Switzerland to a low of 4.2 percent in the Netherlands. Those registered as unemployed among the total number of foreign workers in these countries averaged 5.7 percent. The share of foreign workers in the count of total persons unemployed in each country, however, was as high as 25 percent in Switzerland and as low as 4.5 percent in Sweden, with an average of nearly 12 percent in the six countries.²

Several trends have distinguished earlier phases of European labor migration from more recent ones. First, the majority of the early migrant workers were unskilled laborers. Even as late as the 1970's, 82 percent of all Mediterranean labor migrants in the Netherlands, for example, remained unskilled. By 1976, however, this figure had fallen to 25 percent as a result of more selective entry criteria as well as skill improvement among migrants.³ Second, during the initial phases of the movement, migrant workers tended to remain in host countries for shorter periods. Stays progressively lengthened, however, as increased numbers of migrants were reunited with their spouses and children in host countries. Again, Dutch statistics indicate that in 1965 nearly one-third of foreign work-permit holders returned to their home countries, but that by 1970 this proportion had dwindled to 15 percent, and by 1973 had reached a low of 4.5 percent.⁴

Although a new peak in return migration was attained in the years immediately following the 1973 recession, relatively low levels of new worker inflow and

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outflow have prevailed since 1976. Yet the influx of migrant family members, which was especially heavy after 1973, accounted for the fact that little overall change in the stock of migrants occurred despite a reduction in the number of those working. This influx resulted in a significant increase in the proportion of migrant women who, together with second-generation migrants, filled available job vacancies, thus mitigating the need for new labor importation. Indeed, approximately one-quarter of all European work permits issued to foreigners since 1970 have been for women.⁵ And today, more than 40 percent of all migrants and 25 percent of migrant workers in Europe are women.

Some of the consequences of this massive movement of human resources are becoming increasingly clear now that new flows have significantly subsided and strategies for consolidation of existing migrant populations are being implemented in most European countries. Yet many new issues relating to the circumstances of the workers who have remained in host countries have also emerged as migrant families have reunited, expanded, and their offspring have matured and sought entry into the labor markets of host countries. Among these, the roles and problems of migrant women have been least explored.

In the following sections, data on migrants in Europe are examined with reference to the changing role of women. Sex-based differences observed among Yugoslav and Turkish migrants in West Berlin offer particularly interesting insights into the new character of Europe's guest-worker population.

More women guestworkers

In four major European labor-importing countries (West Germany, Austria, Switzerland, and the Netherlands) for which sex-specific information on immigrants is available, the proportions of women (working either in or outside the home) have been high throughout the past decade. In 1978, women constituted an average 37 percent of the largest migrant groups in the four countries. During 1974-78, the overall ratio of foreign resident and working women to men in West Germany and in Austria increased by 14.5 percent and 17.9 percent, respectively. In West Germany, increases in the female ratios among seven of the eight major foreign resident groups accounted for nearly 11 percent of this change, with Moroccans and Tunisians exhibiting the highest rates of increase. The data for each major group in West Germany, collectively representing 73.7 percent of all foreigners, are presented in table 1.

In Austria, where available statistics relate exclusively to new work-permit holders, growth in the proportions of female workers among major groups (representing 90.3 percent of the total foreign labor force) ranged from a high of 21.8 percent for Yugoslavs to a low of 3.2 percent for Italians. These data are presented in

Table 1. Foreign resident population in West Germany by nationality and sex,¹ 1974 and 1978

Nationality	September 1974		September 1978		Percent change in female ratio 1974-1978
	Total	Percent female	Total	Percent female	
All nationalities	3,525,220	35.2	3,027,951	40.3	14.5
Nationalities listed below	2,597,383	35.5	2,195,023	39.3	10.7
Greek	314,560	45.7	223,005	46.2	1.1
Italian	495,160	31.8	439,343	33.9	6.1
Moroccan	21,928	8.2	22,970	17.7	115.9
Portuguese	101,683	37.0	81,599	44.2	19.5
Spanish	221,031	37.0	145,448	40.3	8.9
Tunisian	16,085	13.8	15,481	25.9	87.7
Turkish	873,882	39.6	774,278	39.4	-5
Yugoslav	626,794	35.9	492,899	41.3	15.0

¹Excluding children under 16 years of age.

SOURCE: Adapted from OECD continuous reporting system on migration (SOPEMI), 1979, p. 22.

table 2.

Interestingly, the ratio of working German women in Austria decreased during 1974-78, and that of Italian women increased only marginally in comparison to the same ratios for Turkish and Yugoslav women. Female migration trends to the Netherlands have followed similar patterns. During 1976-78, the proportion of all female foreign residents from principal "recruitment countries" increased by nearly 10 percent. As shown in table 3, percent changes in these ratios among individual nationality groups ranged from a high of 34.7 percent for Moroccans to no change for Greeks. As in Austria and in West Germany, the rates of increase in the proportion of female migrants to the Netherlands have been the most pronounced among North African nationalities.

Swiss statistics. Data from Switzerland offer the most comprehensive and detailed basis for evaluating the extent and nature of female participation in labor migration to Europe. But economic structural differences between Switzerland and West Germany, for example, prevent generalization of the Swiss case to the overall European context. As a heavily industrialized country,

Table 2. Initial work permits issued in Austria, by nationality and sex, 1974 and 1978

Nationality	1974		1978		Percent change in female ratios 1974-1978
	Total	Percent female	Total	Percent female	
All nationalities	189,840	31.3	81,120	36.9	17.9
Nationalities listed below	171,510	31.3	71,420	37.0	18.2
German	4,140	40.6	3,160	38.9	-4.2
Italian	1,060	31.1	780	32.1	3.2
Turkish	22,530	22.1	12,450	25.5	15.4
Yugoslav	143,780	32.5	55,030	39.6	21.8

SOURCE: Adapted from OECD continuous reporting system on migration (SOPEMI), 1979, p. 8.

West Germany has traditionally attracted larger proportions of male migrant workers. In contrast, the predominantly service-oriented Swiss economy has offered less physically demanding work opportunities, attracting women as well as men from a wide range of developed and developing countries. According to recent Organization for Economic Cooperation and Development sources, 45.9 percent of all foreign residents in Switzerland (including annual work-permit holders) were women in 1978—the highest such percentage among the European countries examined here. Further, the female ratios among all major foreign groups were consistently high, ranging from 43.9 to 49.6 percent. A comparison of the data in tables 1 and 3 reveals that, in fact, the greatest variation in the sex-composition of different foreign groups was in West Germany.

An examination of sex-specific employment figures for five of the largest "permanent" immigrant groups in Switzerland in 1978 (presented in table 4) shows that female worker ratios in Switzerland paralleled the rates existing in Austria and in the Netherlands. However, during 1974–78, the overall female worker ratios in Switzerland only exhibited a 3.3-percent positive change as compared with 18.2 percent in Austria and 9.8 percent in the Netherlands. Percentage changes in the ratio of women among individual nationalities in the three countries were quite different. Whereas female worker ratios increased in almost all cases in Austria and in the Netherlands, these ratios declined in Switzerland among German, French, and Austrian workers; only Spanish and Italian women exhibited relative employment gains.

Swiss data for 1955–78 reveal even more distinct trends. Overall, the percentage change in the proportion of women among the groups represented was significantly negative during 1955–65, less so during 1965–74 and slightly positive during 1974–78. Among individual groups, the total number of German and Italian workers decreased by one-half over this entire period. Also, by 1978, the total number of Austrian workers fell to a quarter of the 1955 level. But, in contrast to the decline in the female proportion of German and Austrian workers during the 23-year period, the ratio of women

Table 3. Foreign population in the Netherlands, by nationality and sex, 1976 and 1978

Nationality	1976		1978 ¹		Percent change in female ratio 1976–1978
	Total	Percent female	Total	Percent female	
Total	196,100	33.7	225,800	37.0	9.8
Greek	4,200	38.1	4,200	38.1	.0
Italian	20,000	34.5	20,700	34.8	.9
Yugoslav	13,800	44.9	13,600	46.3	3.1
Moroccan	42,200	21.6	55,400	29.1	34.7
Portuguese	8,800	44.3	9,400	45.7	3.2
Spanish	29,100	37.8	25,800	39.5	4.5
Tunisian	1,500	20.0	1,700	23.5	17.5
Turkish	76,500	35.3	95,000	39.6	12.2

¹ Provisional figures.

SOURCE: Adapted from "Fact Sheet on the Netherlands," Ministry of Cultural Affairs, Recreation and Social Welfare, the Netherlands, 1979, p. 1.

among Italians increased during 1965–74, and again during 1974–78. The number of French and Spanish workers in Switzerland during 1955–78 increased by a factor of 5 and 6, respectively. The proportions of Spanish women increased by 18.7 percent during 1974–78, offsetting a decline of similar magnitude during 1965–74.

Switzerland is one of the rare cases in which sex-specific statistics on migrant populations have been systematically compiled according to types of migration. Tables 5 through 7 present such figures for annual, seasonal, and frontier workers. Table 5 indicates that the peak in the overall level of migration occurred in the mid-to-late 1960's. By 1978, migrant worker flows had decreased by over 50 percent; however, steady but slight growth occurred in the proportion of women. The female ratio among annual work-permit holders showed minor decreases while the proportion of women seasonal workers significantly increased. The volume of frontier workers doubled during this period, also with slight growth in female ratios.

Table 6 provides a breakdown of migrants by nationality and type of migration in 1978. Italians have predominated in permanent and seasonal migration to Switzerland, and approximated the French numbers in frontier migration. Following the Italians, Spaniards and Yugoslavs have assumed the bulk of seasonal and

Table 4. Foreign workers in Switzerland, by nationality and sex, selected years 1955 to 1978¹

Nationality	1955		1960		1965		1970		1974		1978		Percent change in female ratio		
	Total	Percent female	Total	Percent female	Total	Percent female	Total	Percent female	Total	Percent female	Total	Percent female	1955–65	1965–74	1974–78
Total	271,149	46.4	435,476	42.3	676,328	35.8	659,485	35.9	551,346	33.2	285,889	34.3	-22.8	-7.3	-3.3
German	59,208	49.6	72,365	45.8	67,668	39.9	52,975	36.5	40,573	34.0	27,377	32.7	-19.6	-14.8	-3.8
French	8,140	43.1	11,932	42.6	23,775	37.8	41,486	40.9	58,368	40.8	41,961	40.6	-12.3	7.9	-.5
Italian	162,343	32.5	303,090	27.8	448,547	26.8	371,814	29.3	227,895	27.2	98,302	30.3	-17.5	1.5	11.3
Austrian	35,441	63.8	31,604	56.5	24,184	41.0	19,920	36.9	15,121	33.1	8,921	32.6	-35.7	-19.3	-1.5
Spanish	6,017	43.2	6,408	39.5	79,419	35.5	112,636	32.7	112,703	28.9	42,052	34.3	N/A	-18.6	18.7
Other	.....	.....	10,077	41.3	32,735	33.8	60,654	39.0	96,686	35.0	67,276	35.5	N/A	3.6	1.4

¹ Not including annual, seasonal or frontier workers.

SOURCE: *Annuaire Statistique de la Suisse*, 1978.

annual work. This table also shows that female rates of participation in annual migration to Switzerland have been consistently high. Yet significant sex-discrepancies are evident among national groups in seasonal migration. Although the Italians, for example, have dominated the short-term labor market in Switzerland, Italian women represented a mere 6.4 percent in seasonal flows, the lowest rate among all the groups. A similar pattern was evident among Yugoslavs and Spaniards who, together with the Italians, constituted 60 percent of the short-term labor force.

Overall, approximately one-third of all these migrants in 1978 were women. The proportion of women among all annuals and frontier workers was about 38 percent, while their ratio among seasonal workers was only 13.2 percent. A look at the sectoral distribution of the three types of migrants presented in table 7 provides some possible explanations. Among annual workers, men assumed most of the jobs provided by the two largest employers of migrants—the metal and construction industries, whereas women predominated in textile clothing, health, and tourism (hotels and restaurants) occupations. A similar pattern occurred among border workers, except that more of these women were employed in commerce.

The majority of Switzerland's migrant seasonal workers were employed in the construction, tourism, and agricultural sectors. Only in tourism, the second largest employer of seasonal workers, did the proportion of women exceed 10 percent. Because women are generally considered unsuitable for industrial work, and particularly construction, their greatest concentration (80.8 percent of the seasonal female work force) was found in the tourism sector. Consequently, women number one-seventh of all men in the seasonal work force, as opposed to one-third for the short-term economy as a whole. Aside from the sectoral demand for such work, the ability of women to respond to seasonal work opportunities is typically limited by age and social circumstances. Married women with or without children generally will not leave home on a seasonal basis unless their family is destitute, or the male head of the household cannot find work. Possible exceptions to this are

Table 6. Foreign workers in Switzerland, by mode of migration and nationality, 1978

Nationality	Annual		Seasonal		Frontier		All groups	
	Total	Percent female	Total	Percent female	Total	Percent female	Total	Percent female
German	11,435	37.9	391	42.2	15,551	26.8	27,377	32.7
French	4,352	36.2	750	49.5	36,859	41.0	41,961	40.6
Italian	53,144	30.9	14,776	6.4	30,382	40.7	98,302	30.3
Austrian	4,090	37.3	305	46.2	4,526	27.4	8,921	32.6
Spanish	31,976	40.5	10,008	14.7	68	22.1	42,052	34.3
Yugoslav	19,286	46.7	10,088	12.5	47	44.7	29,421	35.0
Other countries	33,298	37.6	4,303	4.0	254	32.7	37,855	35.9

SOURCE: *Annuaire Statistique de la Suisse*, 1978.

those cases in which the seasonal migration of entire families can be arranged.

Import of data on women. The preceding data shed some light on the role women play within differing migration patterns. But because of the paucity of comparable data in other contexts, as well as more detailed sex-specific data in general, important aspects of women's participation in labor migration remain unexplored. This is regrettable as sex-differences in modes of migration and sectoral distributions seem related to the status and welfare of foreign workers in host societies. The circumstances and roles of women who have migrated as dependents of their husbands, for example, presumably have a bearing on the size and nature of the illegal foreign female work force. In March 1980, illegal workers employed by the clothing industry in France organized a hunger strike which was supported by radical domestic political parties and trade unions. An estimated 25,000 persons, thought to be predominantly Turkish in origin, participated in the strike. Although no sex-specific estimates were released, the traditional preponderance of women in this industry (corroborated by the Swiss statistics) suggests that a significant proportion of the strikers were women. It would thus appear that in France, at least, migrants who experience great frustration and poor working conditions include those in industries with high proportions of women.

It is also common knowledge that the spouses and daughters of large numbers of migrants in France, Germany, and other European countries are increasingly employed "illegally" as domestic help. Even some legal women workers, and particularly those already employed in the domestic sector, take such unrecorded jobs to supplement their incomes. There has been no official acknowledgment of this fact, and little is known about the volume of such activities and the working conditions of the women involved.

The problem of migrants working illegally in Western Europe is somewhat different from the issue of illegal aliens working in the United States.⁶ In Europe, the illegal workers are primarily women. Over the years, large

Table 5. Foreign workers in Switzerland, by mode of migration and sex, selected years 1960 to 1978

Year	Annual		Seasonal		Frontier		All groups	
	Total	Percent female	Total	Percent female	Total	Percent female	Total	Percent female
1960	256,519	46.4	139,538	9.8	39,419	36.6	435,476	33.8
1965	446,493	38.9	184,235	9.6	45,600	31.5	676,328	30.4
1970	429,956	40.0	154,732	9.4	74,797	35.2	659,485	32.3
1974	296,176	39.3	121,226	9.6	107,902	36.3	525,304	31.8
1978	157,581	37.0	40,621	13.2	87,687	37.9	285,889	33.9

SOURCE: *Annuaire Statistique de la Suisse*, 1977 and 1978.

numbers of women have migrated to Europe in a dependent status. With a spouse in Europe, the acquisition of entry permits for women has been generally easier than obtaining work permits.⁷ Following their arrival, wives of migrants often seek to supplement relatively low family income in the host country. Thus, many probably work illegally, but their dependent status makes documentation of illegal work very difficult.

These issues suggest the need for more sex-specific data in migration research. Until now, analyses of labor migration have mostly concerned problems of overall national economic and social accommodation. Rarely have questions been asked about the differences in male and female migrant behavior and circumstances—for example, employment security, retirement rights, political organization, and union involvement. In general, it has been assumed that the needs of migrant women are taken care of by husbands, other male family members, or income from some form of legal employment. This conception clearly fails to address more subtle existing and potential trends that may threaten the economic, social, and political fabric of host systems.

Turks and Yugoslavs in West Berlin

In 1974, one of the authors and her colleagues surveyed 1,500 Turkish and 700 Yugoslav workers in West Berlin.⁸ The data revealed interesting differences in economic and social status between working men and women of these two nationalities.

Prior to the survey, in June 1973, women constituted 30 percent of the total foreign labor force in all of West Germany as well as in West Berlin. Both in 1972 and

in 1973 (the year of the official ban on new worker entries), the number of foreign women who obtained entry permits increased. Greeks, Yugoslavs, and Turks together accounted for 84 percent of all new immigrants during this period. Twenty-two percent of these were women. Of these women, nearly one-half were Turkish, and one-third were of Yugoslav origin. Further, the *Berlin Statistical Yearbook* reported that, in 1973, 40 percent of the Turks and 48 percent of the Yugoslavs employed in the city were women,⁹ the largest such percentages for these two nationalities at any time in Europe.

Explanations for such high proportions of women include the fact that West Germany has served as a traditional destination for large numbers of Turkish and Yugoslav migrant workers. And in the early 1970's, migrants' wives were far more likely to accompany or join their spouses than in earlier years. In general, worker recruitment patterns in the 1970's contributed to a higher proportion of women among migrants. In West Germany, migrant women were accorded employment priority in the first half of the decade to fill vacancies in the electronics industry, largely concentrated in West Berlin. Large numbers of foreign women also independently took advantage of this opportunity, and joined their husbands in Germany. In the late 1970's, worker recruitment was severely curtailed, and entry permits restricted primarily to the immediate relatives and dependents of resident workers.

The priority given female immigrants stemmed largely from the advantages employers perceived in maintaining large female work forces. Employers

Table 7. Foreign workers in Switzerland, by mode of migration, sex, and employment sector, 1978

Employment sector	Annual		Seasonal		Frontier		All groups	
	Total	Percent female	Total	Percent female	Total	Percent female	Total	Percent female
Total	157,581	37.0	40,621	13.2	87,687	37.9	285,889	33.9
Agriculture	2,077	15.9	3,706	7.5	450	15.3	6,233	10.9
Forestry-fishing	124	1.6	169	2.4	34	2.9	327	2.1
Mining	266	1.5	308	0	135	3.7	709	1.3
Food-tobacco	5,643	42.1	633	61.1	3,474	40.8	9,750	42.9
Textile industry	8,317	53.4	11	18.2	2,109	48.6	10,437	52.4
Clothing industry	6,731	73.9	7	28.6	7,693	88.3	14,431	81.5
Wood-cork	2,399	10.8	239	5.4	2,010	7.7	4,648	9.2
Paper	1,533	36.8	0	0	595	40.8	2,128	37.9
Graphic arts	1,774	32.3	4	75.0	1,156	25.6	2,934	29.7
Leather crafts	325	57.8	0	0	159	59.7	484	58.5
Rubber-plastic	1,590	32.2	2	50.0	683	30.9	2,275	31.8
Chemical industry	2,690	25.2	8	0	7,398	36.6	10,096	33.6
Stonework	2,276	7.9	446	2	948	10.2	3,670	7.6
Metalwork-machines	28,431	20.0	288	7	19,783	16.5	48,502	18.5
Watchmaking	2,284	56.0	1	0	3,587	57.5	5,872	56.9
Other industries	1,153	39.6	15	0	1,235	33.4	2,403	36.2
Construction-civil engineering	20,640	1.3	23,833	3	10,275	2.1	54,748	1.0
Commerce-banking	14,638	30.6	418	19.6	13,033	52.4	28,089	40.5
Transportation-communications	3,220	13.5	148	17.6	3,672	28.5	7,040	21.4
Hotels-restaurants	16,762	46.4	10,025	43.1	2,794	49.1	29,581	45.5
Health services	19,377	72.6	80	76.3	2,041	77.1	21,498	73.0
Teaching-science	4,674	45.5	18	66.7	713	59.7	5,405	47.5
Housework	2,102	91.8	48	66.7	1,096	98.1	3,246	93.6
Other	8,555	55.4	214	24.8	2,614	71.2	11,383	58.4

SOURCE: *Annuaire Statistique de la Suisse*, 1978.

Table 8. Married Turkish and Yugoslav workers in West Berlin, by circumstances of migration, 1974

Circumstances of migration	Turks				Yugoslavs			
	Men		Women		Men		Women	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Together	45	53	31	7.0	24	9.3	9	8.0
Alone, spouse came later	501	58.7	172	39.1	87	33.7	20	17.7
Alone, spouse still in home country	132	15.5	61	13.9	77	29.8	40	35.4
Alone, married here	48	5.6	43	9.8	59	22.9	23	20.4
Alone, spouse was already in Germany	127	14.9	133	30.2	10	3.9	20	17.7

SOURCE: Ayse Kudat, "International Labor Migration: A Description of the Preliminary Findings of the West Berlin Migrant Worker Survey," International Institute for Com-

parative Social Studies, Preprint No. P/74-1b, October 1974.

expected that women, particularly single ones, could be easily housed in dormitory-style living quarters, and they would pose fewer potential problems in terms of personnel management. They would be more pliable to authoritarian demands, and had shown little tendencies in the past to participate in organized labor movements in host countries. Employers thus viewed migrant women workers as a reliable source of cheap labor.

The results of the 1974 survey of Yugoslav and Turkish workers in West Berlin, in part, bear out some of these expectations. Among both groups, a significantly lower percentage of women were married than men. Among Yugoslavs, 42 percent of the women and 59 percent of the men were married; Turkish marriage rates were 72 percent for women and 89 percent for men. Only a small proportion of the married women in both cases had migrated with their spouses. As shown in table 8, 69.3 percent of the Turkish women had migrated either to join a spouse already in West Berlin, or to arrange a reunion there with him at a later date. In contrast, only 34.4 percent of the Yugoslav women migrated with such expectations. Over one-half of the Yugoslav women, and nearly a quarter of the Turkish women who claimed to be married came without their spouses, or were married in the host country. The average age of the men surveyed was 31 for Yugoslavs and 33 for Turks. The corresponding average ages among women were 29 and 30.

The majority of women workers were recruited through official immigration channels (71 percent of the Turks and 86 percent of the Yugoslavs). Both women and men who claimed to have been "tourists" or "visitors" upon arrival were a small minority among the workers in both national groups. Sex differences thus appear to have played a negligible role in the mode of migration. This runs counter to the popular view that women play a predominantly dependent role in migration, at least in West Berlin. However, sex differences appear to have assumed greater importance once the migrants entered the host system. For example, both Yugoslav and Turkish women exhibited low mobility—

both geographically and in job status—relative to men. Eighty percent of the Turkish women, but only 58 percent of the Turkish men, claimed West Berlin as their first port of entry. These ratios were 93 percent and 85 percent for Yugoslav women and men, respectively.

The lower geographic mobility rates for Yugoslavs in general are explained in part by their shorter experience in international worker migration relative to Turks. The very low mobility rates for women of both nationalities may be explained both by the nature of their original placement in the job market and by their relative inexperience in labor force participation. Further, the geographic isolation of West Berlin from the rest of West Germany is a considerable obstacle to the mobility of new or inexperienced migrants. In this sense, the setting works in favor of employers who can expect less worker turnover and, hence, lower costs for on-the-job training.

On average, women changed jobs fewer times than men during their stay abroad. For example, in 1974, Turkish men changed their jobs an average of 2.2 times, whereas the figure for women was 1.6. Further, the average number of job changes among all Turks was greater than that among all Yugoslavs. Prior to arrival, less than half as many women as men among both nationalities had been employed in their home countries. More than two-thirds of the women in both groups became employed for the first time after migration. Women claiming previous employment in their home countries had been primarily unskilled workers. Among the few that reported prior skilled employment, there was a higher percentage of Turkish than Yugoslav women.

Upon arrival, the majority among both sexes of the two nationalities were employed in an unskilled capacity within the industrial sector. However, a dramatic skill improvement was observed among men in comparison with women. For instance, more than a third of the Yugoslav men who were unskilled workers at the time of arrival bettered their job status in a matter of a few years. In 1974, only 29 percent of Yugoslav men were employed as unskilled workers; 59 percent had be-

Table 9. Sectoral distribution of Turkish and Yugoslav workers in West Berlin, 1974

Sector of employment	Turks				Yugoslavs			
	Men		Women		Men		Women	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture	185	19.3	12	2.0	31	7.0	18	6.8
Industry	139	14.5	60	10.0	217	48.8	36	13.5
Service	138	14.4	78	13.0	11	2.5	11	4.1
Commerce	124	12.9	18	3.0	12	2.7	11	4.1
Construction	91	9.5	..	..	35	7.9	2	.8
Other	179	18.6	12	2.0	2	.4	2	.8
No answer	104	10.8	412	70.0	137	30.9	186	70.0

Source: Ayse Kudat, "International Labor Migration: A Description of the Preliminary Findings of the West Berlin Migrant Worker Survey," International Institute for Comparative Social Studies, Preprint No. P/74-1b, October 1974.

come skilled laborers, and another 12 percent, foremen. However, 94 percent of Yugoslav women remained in unskilled positions in 1974. Sex differences among the Turks were also significant, although not to the same extent. Seventy-two percent of the men as opposed to 95 percent of the women remained unskilled. The sectoral spread of men of both nationalities was also greater than that of women; although, over the years, the workers of both sexes shifted gradually from the industrial to the service and commercial sectors, parallel to the changes in the sectoral distribution of the indigenous labor force. Data for these distributions in 1974 are presented in table 9.

Most of the workers surveyed from both nationalities had limited residence and work permits, with an average 1-year duration. The average length of women's permits was somewhat shorter than men's. This pattern was more consistent among Yugoslav than Turkish women. Significantly, very few among all the workers in both groups had acquired unlimited residence permits;¹⁰ again, the ratio of women with flexible permits was lower in general than that of men. Almost 90 percent of the Turks claimed to have no knowledge of long-term permits, thus contributing to the low ratio for Turkish women. Yet less than 30 percent of the Yugoslavs responded negatively, with evident sex differences. The best explanation may be that the shorter national experience of Yugoslavs in international labor migration may have precluded the qualification of many of these workers for such permits at the time of the survey, because application for longer term permits is possible only after 5 years continuous residence in West Germany.

These patterns also are supported by the findings that a far lower percentage of Turks than Yugoslavs had been educated beyond the primary level or exhibited competence in German (with negligible sex differences). Surprisingly, however, a far greater percentage of Turks than Yugoslavs had acquired union membership in West Germany. This ratio for Turkish men was nearly double the Yugoslav ratio, and the ratio for Turkish

women was nearly triple that of Yugoslavs. There is an open question as to why proportionately more Turkish women joined unions than their Yugoslav counterparts. One obvious reason is that many Turkish women joined unions because their compatriots were members.

What next?

The increased presence of women in European and international labor migration needs further attention. The evidence presented here suggests that sex differences in labor migration have important social and economic implications for the migrant population as well as for the host country.

Increasing numbers of women migrants redefine the needs of the foreign population and thereby change the infrastructural costs for the host countries. The influx of women migrants has further amplified the already apparent duality in the European labor market. With migrant women replacing native women as well as migrant men in the worst paid sectors, the latter groups may shift to jobs with higher pay and greater social benefits.

The economic and social implications of female immigrant workers are clearly different from those associated with male migrants—if only because of the added potential for future generations of an immigrant population. Many of the resulting socioeconomic problems could be dealt with more effectively by anticipating trends. For example, migrant sex ratios examined on a longitudinal basis would identify patterns which signal the nature and potential volume of future demands for employment, education, health and child care, housing, and other social services that might be made on public resources. High fertility rates among migrant women, such as those in Europe, amplify the magnitude of these potential demands, especially in host countries with low population growth.¹¹

Past research has shown that the migration of men and women is primarily motivated by economic factors. But the specific nature of the "push" and "pull" factors affecting women migrants awaits greater clarification. The significant nationality discrepancies found to exist among migrant women in Europe suggest that motivational factors vary among groups. Thus, a thorough investigation of migrant women's economic and social circumstances, as well as policies governing their migration in host and home countries should be undertaken. In particular, the circumstances surrounding return migration of migrant women also requires more focused attention. A second survey of 2,519 Turkish migrants returning home from West Berlin between January 1975 and June 1976 has revealed, for example, that not all workers were leaving because of unemployment.¹² Fewer male and female returning migrants were unemployed than had voluntarily quit their jobs before departure. This was especially the case among women. Further-

more, family responsibility accounted for 80 to 90 percent of the reasons given for departure among women. This contrasts sharply with the responses in 1974 indicating that a high percentage of women were recruited to West Berlin for employment purposes.

Although a full description of this second survey and its results cannot be presented here, the findings alluded to above suffice to illustrate the need for more detailed information on the female component of international labor migration. For example, how do the characteristics of female migrants returning home differ from those remaining in host countries? what personal effects does migratory movement have on women and their families?

and what are the prospects for integration and reintegration of migrant women into host and home societies?

Migrant populations are an increasingly important and dynamic factor of economic and social importance in a world more closely linked by improved transportation and communication. Thus, the role of migrant women is of special salience. However, this role cannot be properly assessed on the basis of national aggregate statistics alone. Only a combination of macro and micro-level information, disaggregated according to sex, will provide a suitable foundation for a realistic understanding of the problems and prospects of migrant workers throughout the world. □

—FOOTNOTES—

¹ Organization for Economic Cooperation and Development, SOPEMI (Continuous Reporting System on Migration), 1976-79.

² *Ibid.*

³ "Fact Sheet on the Netherlands," Ministry of Cultural Affairs, Recreation and Social Welfare, the Netherlands, 1979.

⁴ *Ibid.*

⁵ SOPEMI, *op. cit.*, 1976-79.

⁶ For a fuller treatment of issues of illegal migration in Europe and in the United States, See Jonathan Power, "The Great Debate on Illegal Immigration—Europe and the USA compared," *Journal of International Affairs*, Fall/Winter 1979.

⁷ For example, in West Germany, spouses and unmarried children are allowed to join a foreign worker after the latter has completed a 1-year residence in the host country. Until April 1979, a workers family members were allowed access to the labor market providing they had entered West Germany before certain "key dates"; however, the new regulation requires a waiting period. Children of workers who are of legal employment age can now acquire a "general work permit" after a 2-year residence (those having completed 6 months of vocational training are granted immediate access). Spouses are now granted special permits for work in sectors where there are labor shortages, and this only after a 3 or 4-year residence. Further, these provisions are completely at the discretion of the Labor Institute and apply to jobs for which German nationals have not been granted precedence. See

SOPEMI, 1979, p. 41.

⁸ Ayse Kudat, "International Labor Migration: A Description of the Preliminary Findings of the West Berlin Migrant Worker Survey," International Institute for Comparative Social Studies, Berlin, Preprint No. P/74-1b, October 1974.

⁹ The *Berlin Statistical Yearbook* 1973 (W. Berlin, Office of the Mayor).

¹⁰ Until Oct. 1, 1978, unlimited work permits were available to all foreigners with 10 years residence in West Germany, who could demonstrate some proficiency in German and establish a legal claim for residence. This waiting period has now been reduced to 8 years. However, such a permit will now be issued after 5 years provided the applicant has reasonable housing, simple oral proficiency in German, and children who have been properly enrolled in school. See SOPEMI, 1979, p. 42.

¹¹ In 1965, for example, foreigners and migrant workers constituted .6 percent and 1.4 percent of the overall population and labor force in West Berlin, respectively. The corresponding ratios in 1974 were 4.3 percent and 12 percent. During the second half of the 1970's, each of these ratios approximated 10 percent, with nearly half of all births in the city being accounted for by migrant populations.

¹² This survey was sponsored by the Berlin Science Center and implemented in cooperation with the Turkish Consulate in West Berlin. Its results have not yet been published.

Documenting the undocumented: data, like aliens, are elusive

Millions of illegal immigrants currently live and work in the United States, but efforts to estimate their economic and societal impact are hampered by a lack of valid information

ELLEN SEHGAL AND JOYCE VIALET

Most undocumented, or illegal, aliens enter the country unlawfully, bypassing inspection and other procedures required by the Immigration and Nationality Act. A smaller number enter legally and subsequently violate the terms of their admission, generally by overstaying their temporary visas and accepting unauthorized employment. Increasingly large numbers of illegal immigrants have been apprehended by the Immigration and Naturalization Service over the past decade. In 1977 alone, the agency apprehended 1,042,215 deportable aliens, more than double the 462,315 immigrants legally admitted that year.

It is generally believed that more illegal aliens escape detection than are apprehended and that they may contribute to a number of social and economic problems, including unemployment. At issue, then, is how best to reduce the number and presumably adverse impact of undocumented aliens in the United States. The problem is especially difficult because there are no exact facts and figures concerning illegal immigrants, their numbers, or their effective role in the U.S. labor market.

Research—limitations and accomplishments

Data problems. Research in this area has been severely hampered by the difficulty in collecting valid data; one cannot know the “universe” of illegal immigrants, or

obtain a representative sample. One would assume that the aliens and their employers would be reluctant to respond to official interviews. And research findings based on interviews with apprehended aliens or with migrants who have returned to their homes may not necessarily apply to those who have remained in this country undetected.

The Immigration and Naturalization Service (INS) collects data on arrests for law enforcement purposes, but the resulting information is of limited value in research. INS apprehension statistics record occurrences, not persons, and thus are subject to considerable overcounting. And Mexicans are far more likely to be located than other foreign nationals, because the efforts of the INS are concentrated along the U.S.-Mexican border. In fiscal 1977 for example, 92 percent (954,778) of the deportable aliens found by the agency were Mexican citizens.

Recent research efforts. A number of research efforts have attempted to estimate the numbers of undocumented aliens in the United States. The results of six of these are summarized in exhibit 1. As indicated previously, Mexican nationals account for an overwhelming majority of INS apprehensions, and are the focus of the greater part of research on illegal immigrants to this country.

Of particular interest is the study conducted by Clarise Lancaster and Frederick Scheuren of the Social Security Administration. The authors used two estimates of the U.S. population, one which included illegal immigrants, and the other excluding them. The latter, a

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population estimate of the Census Bureau updating a corrected 1970 census count, was subtracted from the estimate which included undocumented aliens. That estimate, in turn, was based on the March 1973 Current Population Survey sample, which had been matched with individual Federal income tax and social security records.

Lancaster and Scheuren estimated that there were about 3.9 million 18- to 44-year-old illegal immigrants in the United States in April 1973, but noted that the actual figure could be anywhere between 2.9 and 5.7 million. They also cautioned that their work should be considered exploratory, citing a number of limitations in both the data and the assumptions underlying the

Exhibit 1. Recent estimates of the undocumented alien population in the United States

Study	Scope and period of measurements	Estimate
Lancaster, Clarise and Frederick Scheuren, "Counting the uncountable illegals: some initial statistical speculations—employing capture-recapture techniques," <i>1977 Proceedings of the Social Statistics Section of the American Statistical Association</i> , (Washington, American Statistical Association, 1978), pp. 68–75.	United States as a whole, each sex, age 18–44, white and nonwhite races, April 1973.	2.9–5.7 million in stock, 18–44 years old; 2.0–3.7 million whites in stock, same age group.
Robinson, J. Gregory, "Estimating the approximate size of the illegal alien population in the United States by the comparative trend analysis of age-specific death rates," paper presented at the annual meeting of the Population Association of America (Philadelphia, April 1979).	Five States in Northeast, five in Southwest, white males, age 20–44, 1960–1975.	.6–4.7 million net flow, white males, 20–44 in 1960–1975 in 10 States. .4–2.5 million net flow, in 5 southwestern States.
Goldberg, Howard, "Estimates of emigration from Mexico and illegal entry into the United States, 1960–1970 by the residual method," unpublished seminar paper (Washington, Georgetown University, Center for Population Research, 1974), p. 19.	Mexico as a whole, each sex, all age groups, 1960–1970.	1.6 million, net flow, Mexicans in all of the United States.
Heer, David, "What is the net flow of undocumented Mexican immigrants to the United States?" paper presented at the annual meeting of the Population Association of America (Atlanta, 1978). An abbreviated version of the same paper appears in <i>Demography</i> , August 1979, pp. 417–23.	United States as a whole, both sexes, all age groups, Mexicans, 1970–1975.	80,000–242,000 annual net flow, Mexicans, 1970–1975.
Garcia y Griego, Manuel, <i>El volumen de la migracion de mexicanos no documentados a los Estados Unidos (Nuevas hipotesis)</i> (Mexico, Centro Nacional de Informacion y Estadisticas del Trabajo, in press, 1980).	United States as a whole, both sexes, all age groups, Mexicans, 1972–1977.	.5 million to 1.2 million Mexicans in stock, January 1977, 50,000–158,000 annual net flow, 1972–1977. 629,000–2,043,000 annual gross flow (entries) in same period.
Zazueta Carlos H, "Mexican workers in the United States: Some initial results and methodological consideration of the National Household Survey on Migration (ENEFNEU)," paper prepared for the Working Group on Mexican Migrants and U.S. Responsibility, (College Park, University of Maryland, Center for Philosophy and Public Policy, January 1980).	Mexico as a whole and the United States as a whole, regions of destination in United States, persons looking for work, age 15 and over, December–January 1978–1979.	.4 million Mexican workers age 15 and over in the United States, January 1979.

SOURCE: Manuel Garcia y Griego, presentation before the Washington Statistical Society, Mar. 20, 1980.

analysis. For example, the data used were subject to matching and survey coverage errors; and, the nature of the methodology was such that the illegal population estimates were retained as a residual and thus may be of questionable accuracy.¹

More information is available on the characteristics of undocumented aliens than on their numbers. Studies of persons apprehended consistently show that workers from Mexico are predominantly young men, who are poorly educated, and have a limited command of English. They come to the United States to find work, and send a large part of their earnings back to their families.

There is less information on illegal migrants from other parts of the world, although it is thought that they are generally better educated and better off financially than those from Mexico. Many enter this country legally on temporary tourist visas, but overstay their visas and find jobs. The results of a major study also indicate that they tend to be somewhat older than Mexican entrants; more are married with family members present; they are more likely to speak English; and they report higher earnings.²

Economic effects of illegal migration. Studies have consistently found that the principal impact of illegal migration is on the labor market. Because of the economic imbalance between the United States and less developed nations, citizens of the Third World may perceive illegal immigration as their only means of escape from poverty.

Available information indicates that many U.S. employers are willing to hire undocumented workers in spite of, and sometimes because of, their illegal status. Such workers, accustomed to the lower standards of living of their home economies, will frequently work for lower wages than U.S. natives. They are also susceptible to exploitation in the form of substandard working conditions and minimal fringe benefits because they fear being reported to the Immigration and Naturalization Service.

Therefore, many observers believe that this source of cheap labor, if available on a fairly constant basis, has an adverse effect on U.S. wage standards and working conditions. Illegal aliens may also displace native workers, adding to the country's already serious regional and national unemployment problems. Concern over this issue, formerly focused primarily on the Southwest border and on agriculture, has now extended to other regions and parts of the economy.

However, some analysts contend that most undocumented aliens take jobs which native workers will not accept at existing wage levels. They argue further that, without migrant labor, many low-wage industries would be forced to shut down or move abroad, thereby costing U.S. workers jobs.

Legislation and other Federal response

Administration initiatives. On January 6, 1975, President Ford established a Cabinet-level Domestic Council Committee on Illegal Aliens. The preliminary report of this committee was released in January 1977. While it contained no numerical estimates, the report stated that illegal immigration was a significant and growing problem, and recommended legislation establishing penalties for the knowing employment of undocumented workers.

The issue continued to receive extensive study by the Carter Administration. On August 4, 1977, President Carter submitted a message to the 95th Congress, outlining a "set of actions to help markedly reduce the increasing flow of undocumented aliens in this country and to regulate the presence of the millions of undocumented aliens already here." Included in the proposal were: civil penalties for the employment of illegal aliens; increased Southwest border enforcement; more vigorous administration of labor standards legislation; continued cooperation with major migrant-source countries in order to improve their economies; permanent resident status for eligible aliens who had been in the United States continuously prior to January 1, 1970; and 5-year temporary resident status for aliens who had been here continuously as of January 1, 1977. At the same time, the President indicated support of pending legislation to increase the annual limitation on Mexican and Canadian immigration from 20,000 each to a combined total of 50,000.

This Administration initiative represented an attempt to balance the various conflicting interests involved in the complex and controversial illegal alien issue. Foreign policy considerations, such as the predictable adverse reaction of the Mexican government to any drastic change in the status quo, had to be weighed against domestic factors, including the impact of foreign workers on the U.S. labor market. It was in the latter area that the research on undocumented aliens was most relevant. For example, the decision to request increased enforcement of minimum wage and other labor standards legislation was in keeping with findings of labor-market exploitation of undocumented workers. By minimizing the economic incentive to hire aliens, their employment would presumably be reduced.

In connection with the employer sanctions proposal, however, the President also had to consider the interests of U.S. employers, who stressed enforcement difficulties; of Hispanic groups and the U.S. Catholic Conference, which were concerned that legal residents (particularly Hispanics) would encounter hiring discrimination because employers would not want to risk violating the law; and of civil libertarians, who feared that the plan would require each citizen to carry an identity card, a practice viewed as an invasion of privacy. The Adminis-

tration bill, entitled the "Alien Adjustment and Employment Act," did not receive action beyond a Senate Judiciary Committee hearing in May 1978.

Congressional action. Legislative solutions to the problem of mass illegal entry have been under congressional study since the early 1970's. In 1974, the 93rd Congress amended the Farm Labor Contractor Registration Act of 1963 to strengthen administrative, civil, and criminal penalties for farm labor contractors who knowingly engage the services of illegal aliens. During the same Congress, a bill (H.R. 982) proposing a graduated series of civil and criminal penalties of increasing severity for other employers of undocumented workers passed the House but was not acted on by the Senate Judiciary Committee.

During the 94th Congress, consideration was given to another bill (H.R. 8713), which would have made it unlawful to knowingly employ illegal aliens, and would have provided injunctive remedies as well as civil and criminal penalties for violation. Unlike previous bills, it also authorized the Attorney General to take civil action against employers who discriminated against U.S. citizens on the grounds of national origin, and provided an amnesty for certain undocumented workers who had entered the country prior to June 30, 1968. This bill was favorably reported by the full Judiciary Committee, but was not brought before the House for a vote.

On the Senate side during the 94th Congress, omnibus legislation (S. 3074) was introduced which included graduated civil penalties for the knowing employment of illegal aliens, an injunctive remedy, and a provision allowing certain aliens who entered the country illegally prior to July 1, 1968, to establish a record of lawful admission. This bill was not reported to the full Judiciary

Committee.

Legislation which was enacted by the 94th Congress, the Immigration and Nationality Act Amendments of 1976,³ included a provision prohibiting aliens who have entered the country legally as nonimmigrants, and who have subsequently violated the terms of their admission by accepting unauthorized employment, from adjusting their status to that of permanent resident alien while in the United States. The provision was intended to deter tourists, foreign students, and other nonimmigrants from working illegally. The 1976 Amendments also extended to the Western Hemisphere an immigration preference system and a 20,000-person annual limit for each country, provisions previously in effect only for Eastern Hemisphere countries.

The 95th Congress amended the Immigration and Nationality Act to provide for the seizure and forfeiture of vehicles used to illegally transport aliens into the United States.⁴ In another relevant enactment, the same Congress combined the Eastern and Western Hemisphere ceilings on immigration into a worldwide ceiling of 290,000.⁵ Additionally, it created a 16-member Select Commission on Immigration and Refugee Policy, composed of four members each from the House and Senate Judiciary Committees, four Cabinet members, and four members appointed by the President.

The Commission is to report to the President and the Congress by March 1, 1981, on its administrative and legislative recommendations relating to the admission of immigrants and refugees. Without question, the issue of undocumented aliens will be of major concern to its members. Both the Administration and the Legislature appear to be awaiting Commission findings before acting in an area where political controversy is severely compounded by lack of reliable data. □

— FOOTNOTES —

¹ For an independent review of the Lancaster-Scheuren work, see Jacob S. Siegel, Jeffrey S. Passel, and J. Gregory Robinson, "Preliminary Review of Existing Studies of a Number of Illegal Residents in the United States," *Working Document* (Washington, U.S. Bureau of Census, January 1980).

² David S. North and Marion Houstoun, *The Characteristics and*

Role of Illegal Aliens in the U.S. Labor Market: An Exploratory Study (Washington, Linton and Company, Inc., March 1976).

³ Public Law 94-571.

⁴ Public Law 95-582.

⁵ Public Law 95-412.

Immigrant earnings patterns by sex, race, and ethnic groupings

Based on 1970 census data, most immigrant men reach earnings equality with the native born in 11 to 15 years; for women, earnings following arrival vary more by racial and ethnic group; skills and motive for moving affect performance

BARRY R. CHISWICK

How well and how quickly immigrants adapt to a new life in the United States concerns policymakers as well as the public. Responses to the recent arrival of Cuban and Indochinese immigrants discussed elsewhere in this issue reflect the concern over the ability of these groups to assimilate into U.S. society. On an economic basis, the success of immigrants in the United States can be measured by their level of earnings following arrival. Some immigrant groups tend to reach earnings equality with the native population more quickly than others. An examination of these patterns could provide clues about the future earnings performance of those newly arrived.

This article summarizes the findings on the earnings and occupational mobility of immigrants from a large ongoing analysis of the economic adjustment of immigrants and how they compare with the native population.¹ Presented here, with the use of economic theory and statistical analysis, is an assessment of immigrants' economic progress relative to that of their native-born racial and ethnic counterparts. The purpose of the entire project is to add to the currently insufficient research base regarding immigrants.

Immigrant earnings theory

A theoretical analysis of the earnings of immigrants may be based on two concepts—the international

transferability of the skills acquired in the country of origin and the “self-selection” of immigrants. The weaker the transferability of schooling and on-the-job training, the smaller the effect of these skills on future earnings and the lower they will be just after immigration. With the passage of time, however, the relative earnings of immigrants would rise as they acquire information, credentials, and marketable skills.

Persons who become international migrants tend to be different from those who remain. Migrants typically have greater innate ability, greater motivation for personal economic advancement, and are more willing to sacrifice current consumption to make investments that may increase future consumption. Such self-selected immigrants would tend to have higher earnings than the native born in the destination, if it were not for the disadvantages of being foreign born. Combining the effects of skill transferability and favorable self-selection suggests that the earnings of the foreign born may eventually equal and then surpass those of the native born. The year at which this earnings cross-over occurs can be estimated.

Data on various measures of “achievement” suggest that it may be transmitted from one generation to the next, but with a “regression to the mean.” That is, the children of high achievers tend to have higher-than-average achievement which is nonetheless lower than that of their parents.² (The reverse is true for offspring of low achievers.) This suggests that the children of immigrants would tend to have an earnings advantage over other children if it were not for the disadvantages of be-

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ing raised in a household that is less familiar with the language and customs of the country. It also implies that this advantage would disappear asymptotically with successive generations.

Analytically, it is useful to consider three groups: "economic migrants," those who move primarily for their own economic betterment; "refugees," those who move primarily out of concern for their personal safety or for political or ideological reasons; and "tied movers," those who move primarily to join or accompany a family member. Although refugees sometimes have a higher level of schooling than economic migrants, their skills are often less readily transferable internationally. For example, lawyers and judges, who have country-specific skills, appear in refugee populations but are seldom economic migrants. In addition, although refugees may, arguably, have more innate ability and work motivation than the population which remains at home, the difference is likely to be smaller for refugees than for economic migrants. As would be expected, tied movers generally have skills that are less readily transferable than those of economic migrants.

It is not easy to identify the primary motive for migration. The immigration category under which a person enters a country (family reunification, scarce skills, refugee, and so on) is often unrelated to motive. However, immigrant groups from some countries at certain periods are likely to include a larger proportion of refugees. Examples of this are the Chinese beginning in 1949, the Cubans beginning in 1959, and the Southeast Asians beginning in 1975. Wives, especially those of Americans, are more likely to be tied movers than are other immigrant women with the same demographic characteristics.

Earnings of men

The most recent analyses of earnings for foreign-born and foreign-parentage men in the United States use data from the 1970 Census of Population (Public Use Sample, State files, one-in-a-hundred samples from the 5-percent and 15-percent questionnaires). In spite of the substantial differences among the various racial and ethnic groups studied, quite stable patterns emerge when the immigrant generations are compared within racial and ethnic groups (table 1).

Other things the same, schooling and preimmigration labor-market experience of the foreign born have a smaller effect on U.S. earnings than skills acquired by the native born (table 2). For example, among white men, an extra year of schooling raises earnings by 7.2 percent for the native born and 5.7 percent for the foreign born. The effect of schooling and preimmigration experience is particularly small for refugee groups; an extra year of schooling raises earnings by only 3.1 percent for Cuban immigrants and 4.8 percent for Chinese

Table 1. Comparison of earnings and earnings related characteristics for native-born and foreign-born adult men in the United States, by racial and ethnic group, 1970¹

Racial and ethnic group and nativity ²	Means				Years since migration at earnings cross-over ³
	Average earnings	Average schooling (years)	Average age	Years since migration	
White:					
Native	9,738	11.9	42.8	.....	.....
Foreign	9,662	10.8	45.6	21.7	13
Cuban:					
Native	10,341	12.3	43.6	.....	.....
Foreign	6,857	10.8	42.2	7.2	18
Mexican:					
Native	6,523	8.9	39.6	.....	.....
Foreign	5,474	6.1	41.9	18.0	15
Black:					
Native	6,138	9.9	41.8	.....	.....
Foreign	6,585	11.0	40.4	11.3	11
Asian:					
Japanese:					
Native	10,389	12.6	43.6	.....	.....
Foreign	9,191	14.3	38.4	10.9	18
Chinese:					
Native	10,745	12.7	41.8	.....	.....
Foreign	8,019	11.9	42.8	16.8	(⁴)
Filipino:					
Native	7,010	11.1	36.8	.....	.....
Foreign	7,086	11.0	44.6	18.9	13

¹ Men aged 25 to 64 in 1970 who worked and had earnings in 1969 and, for the analyses for black and Asian immigrants, were not enrolled in school in 1970.

² Race/ethnic identity is defined by the race and Spanish origin variables. White men are used as the native-born comparison group in the Cuban analysis. The Mexican analysis is for Arizona, California, Colorado, New Mexico, and Texas. The Cuban and black analyses are for urban areas.

³ The number of years in the United States at which the earnings of the foreign born equal the earnings of the native born, when other variables are held constant.

⁴ The earnings of Chinese immigrants approach but do not equal the earnings of native-born Chinese-Americans, even after 3 decades in the United States.

SOURCE: 1970 Census of Population, Public Use Sample, 5-percent questionnaire, 1/100 sample, except for a 1/1,000 sample for the white analysis.

immigrants, the two groups with the largest proportion of refugees. In addition, there is a larger partial effect on earnings of schooling and labor-market experience for white and black immigrants from English-language countries than for those from other countries, reflecting the greater transferability of the skills acquired in the country of origin.

The effect of time in the United States on earnings, controlling for schooling and total labor market experience, is quite large (table 2). The differential effect of U.S. labor market experience compared with that abroad is greatest for immigrants with the weakest transferability of skills—refugees from other than English-language countries, Cubans and Chinese. It is smallest for those with highly transferable skills—economic migrants from English-language countries.

What is the progress of male immigrants relative to native-born men? Other things equal, the earnings of economic migrants equal those of the native born (or those with native-born parents) of the same racial and ethnic group after 11 to 15 years in the United States; beyond this point, immigrants have higher earnings (table 1). For example, among whites the earnings of foreigners are 10 percent lower than those of natives after 5 years of residence, 3 percent lower after 10 years,

equal to the natives after 13 years, and 6 percent higher after 20 years. Among Mexican-Americans, the earnings cross-over occurs at about 15 years; among Filipinos, at about 13 years; and among blacks, it occurs at 11 years for the country as a whole and 13 years if the data are limited to urban New York State, the home of two-thirds of foreign-born blacks. Among the Japanese, the earnings cross-over is also in the 11 to 15-year interval if the comparison is with third-generation Americans. The earnings cross-over occurs later, or does not occur at all, for refugees; that is, for the Cuban and Chinese immigrants under study.³

The rise in the relative economic position of immigrants based on their duration of residence is found in longitudinal data on earnings and occupational status. In the National Longitudinal Survey file for older men, earnings increased more rapidly from 1965 to 1973 for the foreign born than for the native born, other things the same. Evidence of this relationship also appears in the longitudinal analysis of the occupational mobility (1965 to 1970) of white male immigrants using 1970 census data. The occupational mobility of male immigrants exhibits a U-shaped pattern; that is, occupational status declines when the "last" occupation in the country of origin is compared with the "early" U.S. occupation, after which upward occupational mobility is greater for the foreign born than for the native born. This U-shaped pattern is most intense for those whose skills are the least transferable (Cuban refugees) and least intense for those with highly transferable skills

Table 3. Relative earnings advantage of native-born U.S. men with foreign-born parents over native-born men with native-born parents, by racial and ethnic group, 1970¹

Racial and ethnic group	Earnings advantage ² (in percent)	
White:	4.9	(4.8.6)
Mexican ³	5.1	
Black:		
All States (urban)	4.8.4	
New York State (SMSA)	4.10.7	
Asian:		
Japanese	4.5.2	
Chinese	4.4.3	
Filipino	4.9.0	

NOTE: All coefficients are statistically significant, except for the Japanese, Chinese, and Filipino groups. The sample size for each Asian group was very small for native-born men with both parents native born.

¹ Earnings in 1969 for native-born men, age 25 to 64 in 1970, who worked and had earnings in 1969. There were too few native-born men with Cuban-born parents for an analysis of this group.

² The parameter is 100 times the coefficient of a foreign parentage dichotomous variable when the natural logarithm of earnings is regressed on schooling, experience, marital status, the log of weeks worked, geographic area, nativity of parents, and, in some equations, mother tongue. For small values, the parameter is the percent difference in earnings. A positive value indicates higher earnings for those with foreign-born parents (one or both).

³ Men with Spanish surnames living in Arizona, California, Colorado, New Mexico, and Texas.

⁴ Mother tongue is held constant. Evaluated for a Spanish mother tongue in the Mexican analysis and an English mother tongue in the black analysis.

SOURCE: 1970 Census of Population, Public Use Sample, 15-percent questionnaire, 1/1,000 sample for the white men, and 1/100 sample for other groups.

(English-speaking economic migrants).

Second-generation American men are about the same age and have the same schooling as those with both parents born in the United States, but other things being equal they had a 5 to 10-percent earnings advantage in the 1970 census data (table 3). In the National Longitudinal Survey (NLS), but not in the census, third-generation Americans can be compared with fourth and later generations. Analyses using the NLS file for older white men suggest that the earnings advantage of the foreign-origin population is smaller and may disappear by the third generation. Although the second generation has a significant 6-percent earnings advantage over the third generation, the latter has either no earnings advantage or only a small positive advantage (1.0 to 4.0 percent, not statistically significant) over later-generation Americans. This represents a "regression to the mean" in the earnings performance of the foreign-origin population with successive generations born in the United States.

Faster equality for most immigrant women

An analysis of the earnings of immigrant women for the same seven groups, using the same data from the 1970 census, shows patterns similar to the men but with greater variability by race and ethnic origin. Among women who worked, schooling and preimmigration labor market experience of the foreign born have a smaller effect on U.S. hourly earnings than the skills of the native born. The relative difference in the effect of schooling is greatest for the immigrant groups that include the largest proportion of refugees and tied movers.

When there is an earnings cross-over for women, it

Table 2. Partial effects on earnings of schooling and labor market experience for adult men in the United States, 1970¹

Racial and ethnic group	Average percent change in earnings for an additional year —				
	of schooling for natives	of schooling for immigrants	of U.S. labor market experience for natives	of foreign labor market experience for immigrants ²	of U.S. labor market experience for immigrants ³
White:	7.2	5.7	2.13	1.41	1.12
Cuban (urban)	7.3	3.1	2.22	0.33	2.37
Mexican (South-west)	5.2	3.9	1.80	1.67	1.34
Black (urban)	4.6	3.3	.78	1.18	1.60
Asian:					
Japanese	6.3	5.9	1.73	1.52	2.38
Chinese	6.7	4.8	2.73	⁴ 0.60	2.70
Filipino	5.8	6.4	1.30	1.46	1.94

NOTE: Unless indicated otherwise, the explanatory variables are statistically significant.

¹ The foreign born are compared with native-born men of the same racial and ethnic group, except for the Cubans where the comparison is with native-born urban white men. Unless noted otherwise, the data are for men age 25 to 64 in 1970, who worked at least 1 week and had earnings (wage, salary, and self-employment income) in 1969. The analyses for black and for Asian men exclude persons enrolled in school in 1970. The parameters are estimated from a linear regression of the natural logarithm of earnings on schooling, labor market experience and its square, the logarithm of weeks worked, marital status, and geographic area and, for the foreign born, years since migration and its square.

² The quadratic experience variables (T, T²) were evaluated at T=10.

³ The quadratic years since migration variables (YSM, YSM²) were evaluated at YSM=10. The value measures the differential effect of an extra year of labor market experience in the United States rather than in the country of origin.

⁴ Set of country-of-origin experience variables (T, T²) has no significant effect on earnings.

SOURCE: 1970 Census of Population, Public Use Sample, 5-percent questionnaire, 1/100 sample, except for a 1/1,000 sample for the white analysis.

occurs sooner than for men. On average, just after they arrive, white women have higher hourly earnings than natives, and the gap widens over time. For most groups of nonwhite immigrants, hourly earnings equal those of natives of the same racial and ethnic group within about 5 years. However, among Mexican and Filipino immigrants, time in the United States appears to have no differential effect on earnings (controlling for total potential experience), and their earnings never equal those of women born here of similar descent.

Persons who migrate primarily because of their spouse's job opportunities tend to have less readily transferable skills and are obviously not necessarily economic migrants. Women who married prior to immigration and whose migration decisions therefore may have been influenced in large part by their husband's are found to have lower earnings. For example, among white women, those who married prior to immigration have earnings that are lower by 3 percent, a significant difference. The earnings disadvantage is particularly great for Asian women who married U.S. servicemen.

Women of the second generation earn more than women with native-born parents, other things being equal. The estimated earnings advantage of the former in each of the groups studied is consistent with the 5 to 10-percent earnings advantage found among men of the second generation.

Economic implications

There are clear patterns of racial and ethnic differences in the economic success of immigrants in the United States, even though there is substantial variation in the earnings of individuals within each group.

Among the groups studied by immigrant generation, Mexicans and Filipinos tend to have low earnings compared with whites, both overall and when other variables are the same; whereas this is not the situation for those of Japanese and Chinese descent. These findings challenge conventional notions about the impact of discrimination on the schooling and earnings of racial and ethnic minorities.

The impact of immigrants on the native population changes with their length of residence, as they acquire new skills. The longer immigrants reside in the United States and the more their skills generate an economic return comparable to that of the native population, the smaller their adverse effect or the larger their favorable effect on the wages of low-skilled native workers, the smaller their use of income transfers for the poor, and the more favorable is their effect on the aggregate income of the native population.

Economic migrants are likely to have a more favorable impact than refugees or tied movers of the same demographic characteristics and level of schooling, because the former tend to have relatively higher earnings. Among potential economic migrants, those selected by U.S. immigration policy on the basis of their likely productivity in this country will tend to have a more favorable impact than immigrants selected under alternative rationing mechanisms, such as kinship or a first-come, first-served system. The immigration policies of the United States and many other countries, however, include special preferences for refugees and the relatives of citizens and resident aliens because of humanitarian and foreign policy objectives, as well as for domestic social and political considerations. These other objectives, however, have economic costs. □

— FOOTNOTES —

¹ For a more detailed analysis of immigrant earnings and occupational mobility, see Barry R. Chiswick, "An Analysis of the Economic Progress and Impact of Immigrants," Part II, final report submitted to the Employment and Training Administration, U.S. Department of Labor, June 1980.

² See Lloyd G. Humphrey, "To Understand Regression from Parent

to Offspring, Think Statistically," *Psychological Bulletin*, 85 (1978), pp. 1,317-22.

³ Patterns similar to those for the contemporary United States emerge in data for contemporary Britain, Canada, and Israel and for the United States at the turn of the century. See Chiswick, "An Analysis . . .," Ch. 12.

Nonimmigrant workers: visiting labor force participants

Working visitors include students, laborers, and professionals; most require sponsors, and those in health fields must now pass tough entry tests; to obtain controversial temporary alien labor, employers must show that U.S. workers are unavailable

DAVID S. NORTH

The term "nonimmigrant" is an awkward one, typical of the often negative lexicon within the immigration field. Traditionally, all aliens seeking admission to the United States have been viewed as intending immigrants, until proven otherwise. Those who show that they do not intend to stay here for the rest of their lives are thus viewed as nonimmigrants.

Millions of nonimmigrants are admitted to the United States each year (more than 8.2 million in fiscal year 1978). Fully 80 percent of them are simply tourists,¹ and the balance come to pursue other activities, including work. Of those who come to work, many are not actually employed in the U.S. labor market. There are, for example, diplomats representing their nations in Washington, international civil servants working for the United Nations in New York, and representatives of foreign business concerns seeking markets, raw materials, or technology. None of these temporary entrants performs work normally assigned to U.S. residents.

There are, however, five classes of nonimmigrants who can and do work in the U.S. labor market: students, temporary workers of distinguished merit and ability, other temporary workers, exchange visitors, and intracompany transferees (employees of multinational corporations). Although their numbers are not large, compared to total nonimmigrant admissions, they play interesting—and sometimes controversial—roles in our

society. They are, in a sense, the American equivalent of Europe's guestworkers; many of them (those working in agriculture) are modern *braceros*, the term for Mexican nationals who worked for low wages in U.S. agriculture during 1942–64 in the largest nonimmigrant worker program in our history.

In a recent study, the interaction of the five classes with the U.S. labor market was examined.² A thumbnail sketch of each category appears in exhibit 1.

A majority of the members of most of the classes are "bonded" to their employers. Bonded workers' right of residence in the United States is tied to their pre-arranged employment. They do not have legal access to other jobs in the United States, and if they cease working for the employer that brought them into the country they are no longer legally entitled to remain and are subject to deportation. The bonding concept is not an inevitable characteristic of alien worker programs; legal immigrants in the United States and many guestworkers in Europe are not bonded to their employers.

Program summaries

Each of the five programs of interest was created for a specific purpose, and has its own interaction with the U.S. labor market. Following is a summary of each of the programs in alphabetical order as they are listed in the immigration law.³

Students. Those with F-1 visas are admitted to pursue their education; that many of them wind up working in

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Exhibit 1. Labor market characteristics, fiscal 1978 admissions, and admission trends of selected classes of nonimmigrants

Class and visa symbol	Fiscal 1978 admissions	Characteristics
Students (F-1)	187,030	Only a minority work (at least legally); none are bonded to their employers; admissions of this group have increased in the 1970's.
Temporary workers of distinguished merit and ability (H-1)	16,838	All are workers, mostly in the professions; all are bonded to their employers; admissions have declined in the 1970's.
Other temporary workers (H-2)	22,832	All are workers, mostly in blue-collar occupations (including farmwork); all are bonded to their employers; admissions have declined in the 1970's.
Exchange visitors (J-1)	53,319	Most are workers, some are not; most are in the professions; some of the workers are bonded to their employers; admissions have been steady in the 1970's.
Intracompany transferees (L-1)	21,495	All are workers, mostly well-paid professionals and managers; all are bonded to their employers; admissions increased rapidly in the 1970's.

SOURCE: Admissions data from fiscal 1978 Annual Report, Immigration and Naturalization Service (forthcoming); characteristics from David S. North, *Nonimmigrant Workers in the U.S.: Current Trends and Future Implications* (Washington, New TransCentury Foundation, 1980).

the United States is an unintentional, but predictable, byproduct of their presence here. Although most F-1's attend 4-year colleges or graduate schools, many are admitted to attend grammar schools, high schools, and institutions where they are taught English and vocational subjects.

Students wishing to come to the United States must first find and be accepted by an educational institution authorized to admit foreign students by the Immigra-

tion and Naturalization Service. The school then issues a document (form I-20) to the student, which he or she then takes to a U.S. Consulate to apply for a visa. During the visa application process, the alien must satisfy the consular officer that he or she has enough money to get to and from the United States, to pay for the planned educational program, and to cover living expenses without working. Unless this assurance can be made, no visa is granted.

Should the student subsequently find that he or she needs additional funds and cannot secure those funds by working on campus (permission for which can be obtained from the college foreign student adviser), the student is required to seek a work permit from the Immigration Service. In fiscal 1979, for example, when nearly 190,000 F-1 students were admitted, 33,285 were granted permission to work and 5,364 were denied such permission. These data suggest either that most F-1 students do not need to work or that many work without permission.

F-1 students who work, either legally or illegally, are not bonded to their employers, as are most other nonimmigrant workers. They are free to move around the U.S. labor market, making their own arrangements and changing jobs as they choose. The nature of their work and the pay they receive is roughly comparable to that of U.S. students in the same situation, although their limited knowledge of English and of U.S. society is a handicap to some, and others presumably experience anti-alien discrimination.

Temporary workers of distinguished merit and ability. Those with H-1 visas are admitted because a U.S. employer filed a formal petition for their presence, the Immigration Service approved the petition (as it does in approximately 95 percent of the cases), and a consular official issued a visa to the nonimmigrant. These temporary workers are bonded to their employers, and include persons with extraordinary talents (leading opera singers, actors, and musicians) or exotic skills (jai alai players, French chefs). Sometimes entire companies (ice shows, symphony orchestras) arrive on a single H-1 petition, bringing their blue-collar support staff with them.⁴

A third subclass among the H-1's are members of the professions, admitted individually, but sometimes (as in the case of registered nurses) recruited in substantial numbers.

Other temporary workers. Those in the H-2 classification fill jobs for which the U.S. Department of Labor has certified that U.S. workers are not available. Most of them are assigned to less attractive jobs on the geographical fringes of the United States: dominating the construction industry in Guam, performing much of the

blue-collar and service work in the Virgin Islands, cutting trees in western Maine and sugar cane in southern Florida, and herding sheep in remote pastures in the Mountain States.

The screening process for H-2 workers is more complex than that for any other group of nonimmigrant workers. First, the employer must satisfy the Labor Department that he has genuinely tried to secure resident workers (by offering them appropriate wages and working conditions), has failed in his recruiting efforts, and is thus qualified to hire alien workers (of his own choosing). Employers seeking to import H-2 workers are required to pay a special hourly wage, the adverse effect wage rate, to both their foreign and domestic workers. The 1980 special wage rates for the States using H-2 workers appear in table 1.

Applications for certification are often controversial—as they have been in the East Coast apple harvest, where congressional pressure exists to grant the certifications. (See table 2 for State-by-State certification of H-2's in the apple harvest.) In recent years, the courts have also intervened—generally requiring the certification of the nonimmigrant workers.

The potential H-2 employer, with a labor certification in hand, seeks approval of a petition from the Immigration Service and then secures either visas or visa-equivalents for the workers. He may hire any alien in the world he likes once he has the labor certification.

Exchange visitors. These nonimmigrants secure their J-1 visas in much the same way as students secure F-1 visas. The alien finds an exchange program sponsor approved by the International Communications Agency (an independent Federal agency), and then is admitted into that program by the sponsor, who issues an admissions certificate (like the foreign student's I-20 form). Having obtained a certificate, the exchange visitor may then seek a visa from a consular official.

Table 1. Minimum wage rates for H-2 workers, by State, 1980

States	1980 rates ¹
Arizona	\$3.73
Colorado	3.79
Connecticut	3.32
Florida (sugar cane only)	4.09
Maine	3.43
Maryland	3.23
Massachusetts	3.30
New Hampshire	3.58
New York	3.18
Rhode Island	3.30
Texas	3.54
Vermont	3.53
Virginia	3.51
West Virginia	3.28

¹ Rates are based upon 1978-79 United States Department of Agriculture wage data and the formula published at 20 CFR §653.207(b) (1). Pursuant to 20 CFR §655.207(e), the employer must pay at least \$3.35 per hour in calendar 1981. See 29 U.S.C. 206(a) (1).
Source: Federal Register, Vol. 45, No. 92, May 9, 1980, pp. 30733-30734.

Table 2. Labor certification granted for temporary foreign workers (H-2's) in the apple harvests, 1975-79¹

State	1975	1976	1977 ²	1978 ³	1979
Total	4,742	3,432	4,835	4,931	6,686
Colorado	0	0	0	0	134
Connecticut	96	75	102	121	135
Maine	358	299	389	436	432
Maryland	178	0	30	0	384
Massachusetts	404	360	417	387	447
New Hampshire	245	284	354	331	349
New York	1,587	1,151	1,703	1,716	2,571
Rhode Island	19	13	12	17	18
Vermont	353	252	305	315	331
Virginia	978	621	922	1,036	1,141
West Virginia	524	377	601	572	744

¹ The number of jobs certified does not indicate the actual number of foreign workers admitted for such employment. An employer may choose not to use any or all of the certifications granted, and some foreign workers may work in two or more certified jobs.
² All certifications in 1977 were made pursuant to order from U.S. District Court at Roanoke, Virginia.
³ In compliance with the order of the Fourth U.S. Circuit Court of Appeals in Richmond, Virginia, the Immigration Service admitted 414 more apple pickers than were certified in 1978. These are not included in the 1978 column.
SOURCE: Administrative reports of the Employment and Training Administration, U.S. Department of Labor.

Exchange visitors are an interesting, mixed lot. They include high school students living with American families, college and graduate school students, visiting professors, post-doctoral scholars, and foreign medical graduates performing their internships and residencies in U.S. hospitals.

Some of the J-1's study full time, others work. Some of those who work are bonded employees brought to the United States by a sponsor-employer.

Intracompany transferees. Those with L-1 visas are professionals and managers employed by multinational corporations, who have worked for their companies for at least 1 year and who have been screened through the same process as the H-1 visa holders.

Areas of controversy

Beyond the educational and diplomatic advantages of many of these programs, there are two major controversies surrounding the impact of nonimmigrant workers on U.S. labor markets. One concerns foreign-trained physicians and nurses, and the other involves various groups of farm laborers brought into the United States via the H-2 program.

Foreign health professionals. The issues regarding the foreign medical graduates and the foreign nursing graduates are similar. In both cases, groups representing the competing U.S. work force (such as the American Nurses Association and the American Association of Medical Colleges) contended that it was considerably easier for a foreign-trained health professional to qualify for a professional assignment in the United States than

it was for one who is U.S.-trained, because of a less stringent prearrival competency examination (in the case of the foreign medical graduates) and a deferred examination (in the case of foreign nursing graduates). U.S. physicians and nurses contended that the quality of care provided by the alien workers was not up to U.S. standards. Although rarely mentioned in these arguments, rigorous admission standards for such workers could also tighten the labor market to the benefit of U.S. workers.

The foreign health care professionals admitted to the United States were numerous. During 1964–73, there were more admissions of foreign medical graduates than there were graduates of U.S. medical schools. The steady supply of foreign graduates eased the pressure to expand U.S. medical schools for years, thereby making it more difficult for U.S. blacks and others to secure places. One result of this combination of circumstances (the substantial numbers of foreign medical graduates and the level of support for U.S. medical schools) was that there were more Filipino medical graduates in the United States in 1975 than there were black ones. That balance has since changed; there are now more black than Filipino medical graduates.

Foreign nursing graduates were not as large a factor in the nursing labor force, but approximately one-fifth of the 432,000 increase in the size of the nursing work force during 1969–78 resulted from the admission of foreigners. Most of the foreign nursing graduates had trouble passing examinations (in English) required by the States. The nurses who failed the examinations were then forced to work as nurses aides or licensed practical nurses—an ironic development for nonimmigrants of “distinguished merit and ability.”⁵

Eventually both resident work forces prevailed. During 1976–77, Congress and the Executive created tougher laws regarding physician admissions⁶ and created a more rigorous competency examination for foreign medical graduates.⁷ (Admissions of nonimmigrant medical graduates dropped sharply as a result, as table 3 indicates.) The reaction to the American nurses was less immediate: earlier this year, the Immigration Service

promulgated regulations making passage of an examination in English, equivalent to those of the State boards of nursing examiners, a prerequisite to securing an H–1 visa as a registered nurse.⁸

Foreign farmworkers. The recurrent controversy about the farmworkers among the H–2’s can only be summarized here. Some U.S. growers have maintained that domestic workers are not available at the wages set by the Department of Labor, and that alien workers are needed to prevent crop losses. Representatives of resident farm workers (such as the Migrant Legal Action Program, Inc.) contend that the growers actively prefer the hard working, docile Caribbean workers (largely from Jamaica) and sabotage efforts to recruit U.S. workers. They also point out that agricultural employers obtain, in effect, a 9-percent discount for hiring H–2’s because they are not required to pay social security and unemployment insurance taxes for these workers.

What is rarely discussed is the remarkable power that employers of nonimmigrants have over their workers, particularly those in agriculture. H–2 employers have virtually unlimited power to hire and fire their workers. These employers can, and do, make the kind of highly selective hiring decisions that would be illegal outside the context of the H–2 program. Sugar cane employers of H–2’s, for example, confine their hiring to English-speaking, black men (recruited in Jamaica and, to a lesser extent, in other former British colonies). They insist on young men (in a narrow age range) without a police record and in excellent physical condition. Because there are many more potential cane cutters than are needed, employers secure a remarkably elite work force; for the rates paid (around \$3 an hour in the 1976–77 season), employers probably could not recruit such a work force in the United States. Further, because the H–2 farmworker is bonded to his employer, firing means not only that the worker has lost his opportunity to work at relatively high wages, but it also means his expulsion from the United States. If a Florida sugar cane grower is really annoyed with a worker, he may not only fire him, and expel him from the country, but

Table 3. Nonimmigrant physicians admitted to the United States, by class of admission, fiscal 1970–78

Nonimmigrant class	1970	1971	1972	1973	1974	1975	1976	1977	1978
Total	5,365	5,191	4,283	5,166	5,517	3,466	3,243	2,141	1,169
Temporary workers of distinguished merit and ability (H–1) ..	83	178	231	350	578	426	542	455	180
Other temporary workers (H–2)	100	47	25	0	0	0	0	0	0
Industrial trainees (H–3)	174	173	82	178	149	143	77	65	20
Exchange visitors (J–1)	5,008	4,784	3,935	4,613	4,717	2,849	2,562	1,578	951
Intracompany transferees (L–1)	0	9	10	25	73	48	62	43	18

SOURCE: *INS Annual Reports*, for the years cited, Table 16B.

also blacklist him so that he never can work again as an H-2 farmworker.⁹

As if those powers are not enough to keep the work force in line, the H-2 employer has had additional help. In case of a strike, the Government has obligingly supplied replacements for the striking workers, on the grounds that the strikers have broken their contracts with the employers. However, regulations proposed by the Immigration Service in the spring of 1980, indicate that this practice may not continue.

Impacts on U.S. labor market

The findings in our study were that the labor-market role and impact of specific subsets of nonimmigrant workers vary widely and are strongly influenced by the conditions under which they entered the country. The impacts of the nonimmigrants on specific labor markets fall into three categories:

- The smallest impact is that of the accidental workers (all the F-1's and most J-1's); they generally do not cluster, and they come and go in the labor market with the freedom of immigrant workers; they are not tied to specific employers. Their impact is about the same as that of the addition of a similar number of U.S. workers of similar qualifications to the same labor market.

- The impact of those admitted individually to work (nurse H-1's, L-1's, some J-1's, and some nonrural H-2's) is mixed. In some instances, they fill genuine vacancies in the workplace, and thereby help the economy function more smoothly; in some cases they make the society more cosmopolitan, bringing to the United States exotic skills. In other cases, they may be (and here the argument grows complex and spirited) displacing resident workers or reducing training opportunities for such workers. This is particularly likely if there is a clustering of visiting alien workers.
- The impact of workers admitted in groups or as part of a mass-hiring operation is clear. (These are the rural H-2's, the H-1 nurses, and some of the other H-2's.) Such workers tend to "freeze" the micro-labor markets where they cluster: labor intensive work patterns (such as the hand cutting of sugar cane in Florida) are preserved, and wages do not rise as they might otherwise.

There will continue to be, and there should be, for nonlabor-market reasons, a continued flow of immigrants and nonimmigrants to the United States; that is an important part of our heritage. It is another matter, however, whether part of the nonimmigrant stream should provide bonded workers as a subsidy to a small number of U.S. employers. □

FOOTNOTES

¹ See 1978 *Yearbook of the Immigration and Naturalization Service*, table 16. (To arrive at the total and the percentage used in the text we excluded more than 1 million returning resident aliens included in that table.)

² David S. North, *Nonimmigrant Workers in the U.S.: Current Trends and Future Implications* (Washington, New TransCentury Foundation, 1980). This article is based on that study, which was supported by the Employment and Training Administration, U.S. Department of Labor.

³ Immigration and Nationality Act, Section 101 (a) (15) (A) through (L): S 1101 *et. seq.*

⁴ According to the testimony of Barbara Robinson before the Select Commission on Immigration and Refugee Policy in New York on January 21, 1980, the Vienna State Opera came to Washington, D.C. in 1979 with 494 people on one H-1 visa. Included in this group were 43 laborers who replaced the stagehands at the Kennedy Center.

⁵ Adele Herwitz, *Investigation into the Readiness of Graduates of For-*

ign Nursing Schools to Meet Licensure Requirements in the United States, Comprehensive Final Report (prepared by the Commission on Graduates of Foreign Nursing Schools, Philadelphia, Pa., under contract with the Department of Health, Education and Welfare, Bureau of Health Manpower, Division of Nursing, March 1979).

⁶ Health Professions Educational Assistance Act of 1976 (P.L. 94-484), and the Health Services Extension Act of 1977 (P. L. 95-83).

⁷ The new test is called the Visa Qualifying Examination (VQE) and was first administered worldwide in 1977.

⁸ See the *Federal Register*, Apr. 16, 1980.

⁹ For more on how the growers have used their power to repatriate workers who displease them, see "The Cane Contract: West Indians in Florida," in *NACLA: Report on the Americas*; Peter Kramer, *The Off-Shores: A Study of Foreign Farm Labor in Florida* (St. Petersburg, Fla., 1966); and Philip Shabecoff, "Florida Cane Cutters: Alien, Poor, Afraid," *The New York Times*, Mar. 12, 1973.

Employment patterns of Southeast Asian refugees

Based on the limited data available, most earlier Indochinese refugees found jobs, have had gradual income gains, but work long hours; recent arrivals speak less English and face more employment problems because of economic conditions

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The extraordinary exodus for Vietnam, Laos, and Kampuchea (Cambodia) has brought more than 360,000 refugee settlers to the United States beginning in 1975. Recent arrivals have greatly swollen the numbers. Based on President Carter's June 1979 commitment to admit 14,000 a month, 168,000 Southeast Asian refugees will have entered the United States during fiscal year 1980.¹

The Refugee Act of 1980² was designed primarily to meet the needs of those fleeing political and economic uncertainties as well as military conflicts in Southeast Asia. The new law concluded a long history to temporary, ad hoc legislation (see the box, p. 41) by establishing a permanent and systematic method³ for accepting refugees into the United States and assuring their effective resettlement. Thus, a major goal of the act is the swift and complete integration of the Indochinese refugees into the "mainstream" of American life. Principally, this involves locating and obtaining adequate employment.

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Congress sought to assist the refugees in their employment search. Under the 1980 law, it required the Office of Refugee Resettlement to provide resources for employment and training and job placement.⁴ Congress also provided monetary assistance for up to 3 years—expecting all to be working and economically self-sufficient by then.

Some have questioned whether, within 3 years, the Southeast Asian refugees will gain a level of labor force participation, employment, and income to warrant the label "self-sufficient." However, based on our evaluation of all available data, there is sufficient cause for optimism. The vast majority of refugees have actively joined the U.S. labor force and found jobs relatively quickly. Differences among men and women are substantial in some areas, but these largely reflect similar patterns in the U.S. population. Cultural differences among the three Indochinese nationalities are certainly distinguishable, yet their employment levels are surprisingly similar. And, by far the most promising indicator, both labor force participation and employment evidently increase with each year of residence in the United States.

Still, there are signs that urge caution. Refugees tend

to work longer hours than U.S. workers, while many remain dependent on government subsidies. Significant regional disparities also argue against generalized optimism. Already, for example, an uneven geographical distribution of refugees within the United States has generated concern and controversy, not only because it implies a concentrated and differential impact on local government resources, but because it affects newer refugees' employment opportunities. And, a growing concern is apparent over the characteristics of the recent arrivals and their prospects for employment.

Data on refugees

Our analysis of the employment status of Indochinese refugees presented in this article is based on the two major sources of refugee information available: surveys conducted by Opportunity Systems, Inc., for the Department of Health and Human Services and the annual Alien Address Registration conducted by the Immigration and Naturalization Service. Each provides data on overall employment and demographic differentials, although coverage of the refugee population is quite different, and comparisons are more suggestive than precise.

Opportunity Systems, Inc., conducts a series of telephone surveys that cover a cross section of all Southeast Asian refugees who arrived through December 1977. The sample selects from the 1975 Evacuee Master File and from those admitted under the various temporary programs: the Humanitarian Program (January–May, 1976), the Expanded Parole Program (May–December, 1976), and the 1977 Indochinese Parole Program (August–December).

The most recent available survey, taken during April–June 1979 by Opportunity Systems, and reported in the 13th *Report to Congress*,⁵ included 356 Vietnamese, 175 Cambodian, and 185 Laotian heads of households. These households contained a total of 3,539 persons, or an average of 4.94 per household. Response rates appear to be a recurring problem for the Opportunity Systems surveys, as one might expect from the general difficulty with locating and interviewing immigrants after they enter the United States. For the April–June survey, 716 of an original 1,000 were interviewed successfully, yielding a response rate of only 71.6 percent.

Under the Alien Address Registration, aliens are required by law to register each January with the Immigration and Naturalization Service. They file a postcard form that lists name, address, alien identification number, date of birth, date of entry, and type of visa. In addition, they are to report their employment status and place of employment. Although coverage is typically a problem, Linda Gordon and Stephen Schrof-fel⁶ estimate conservatively that between 85 to 90 percent of the Southeast Asian refugee population regis-

tered from 1976 to 1979. The 1979 registration included 157,509 persons of Vietnamese, Cambodian, or Laotian nationality; about 87 percent of all those admitted to that date.

The Immigration Service data reported here are derived from a 6.8-percent sample, a total of 10,629 persons.⁷ A 10-percent subsample provides information on industry and occupation.

Unfortunately, the employment information from these sources is not directly comparable. Unlike the Opportunity Systems surveys, the alien registration data do not distinguish between those who are out of work but looking for a job ("in the labor force" but unemployed) and those out of work and not searching ("out of the labor force"). Consequently, the Immigration Service data measure only the proportion of refugees who report holding a job at the time of registration. This proportion of refugees employed can be compared, however, with the employment population ratio routinely reported for the U.S. population.⁸ Moreover, a profile of the refugee experience can be constructed by examining several labor market indicators estimated from each source.

Brief reference will also be made to a study conducted by the Office of the Inspector General, U.S. Department of Health and Human Services.⁹ The study was designed to assess the resettlement effort by gathering qualitative information from open-ended discussions with 900 people, including 500 refugees and 335 workers from local communities and voluntary agencies. Although not statistically valid samples, the observations reported will be used here to help fill out an otherwise skeletal profile of the resettlement experience.¹⁰

With the Refugee Act of 1980, Congress anticipated the need for comprehensive and current statistical information to help monitor the resettlement efforts. Thus, the law requires the Secretary of Health and Human Services to develop a reporting capability that will provide Congress an updated profile of the refugees' employment and labor force characteristics, a description of their geographical location, and an account of the activities and policies of the Office of Refugee Resettlement, the voluntary agencies, and those groups and individuals sponsoring refugees. Such a reporting capability is essential because many of the government's existing information systems do not identify refugees as a separate group for reporting purposes.¹¹

Labor force activity

An employment profile of the Indochinese refugees can be sketched by reviewing several indicators of labor market activity.

As shown in the following tabulation, employment-population ratios for the Southeast Asian refugees indicate that approximately 54 percent were employed:

<i>Population</i>	<i>Employment-population ratio</i>		
	<i>Total</i>	<i>Men</i>	<i>Women</i>
U.S. civilian	58.9	72.6	46.6
Refugee:			
Immigration Service	53.3	62.6	42.6
Opportunity Systems, Inc.	54.4	67.7	37.7

The independent estimates are remarkably close, considering the Opportunity Systems survey (April–June 1979) includes only the pre-1978 arrivals, while the Immigration Service registration (January 1979) includes those admitted later. The 54 percent employment ratio for refugees, however, is smaller than the proportion of the U.S. population employed during January 1979.

It is of some importance that the sex differential is similar in both the refugee and U.S. populations. Female employment has been and will likely continue to be a significant factor in raising household incomes for refugees and, thus, in contributing to more rapid resettlement.

These differences in employment ratios are influenced, of course, by both the rate of labor force participation and the unemployment rate. As mentioned previously, the Immigration and Naturalization Service registration data do not permit this essential refinement. However, the comparison of the Opportunity Systems data and U.S. labor force measures helps account for the employment ratio differential.

Opportunity Systems estimates of refugee labor force participation and unemployment rates and the comparable U.S. labor force data are shown in the following tabulation:

<i>Measure</i>	<i>Population</i>	
	<i>U.S.</i>	<i>Refugee</i>
Labor force participation rate		
Men	78.2	70.3
Women	50.2	39.3
Unemployment		
Men	4.9	3.6
Women	7.0	3.5

Clearly, much of the above difference in employment ratios results from the significantly lower rates of labor force participation among the refugees; the difference is essentially the same for both sexes. Comparison of unemployment rates strengthens this conclusion. Once a refugee has entered the labor force, he or she is more likely to have found a job than a U.S. worker. In addition, the importance of female employment among refugees is again highlighted: whereas women in the U.S. labor force are much more likely than men to be unemployed, female and male refugees share similar low rates of unemployment.

Consequently, these data suggest that the lower overall level of employment in the refugee population results from a lower rate of labor force participation, rather

than a greater inability to find employment once searching has begun. Of course, this merely leaves another question: why do refugees have lower labor force participation rates?

The primary answer seems to be that refugees are taking advantage of available educational and training opportunities. Data collected by Opportunity Systems show that 59.8 percent of those interviewed gave school attendance as one of the principal reasons for not searching for a job. Homemaking was mentioned by 26.1 percent; poor English (21.2 percent) and poor health (17.6 percent) were also listed frequently.

The Government interview data¹² corroborates that both training and health affect refugees' labor market behavior. The Inspector General reported that 35 percent of those interviewed cited their inadequate knowledge of English as a major reason for not being employed. Another 19 percent gave health as a contributing factor. The report also noted that, although 41 percent of those interviewed took jobs immediately upon arrival, only 9 percent would advise others to do so. It seems many refugees view training, especially language training, as essential to securing better employment opportunities over the long run.

Such a perspective, if held throughout the refugee population, could substantially affect participation and employment rates in the short run because many of the newer arrivals are sponsored by earlier entries and would receive their advice. In addition, the presence of new government programs, resulting from the provisions of the Refugee Act of 1980, could allow more of the new arrivals to take advantage of training opportunities.

Over the long run, however, the refugees will likely approach levels of labor force activity comparable to the U.S. population. Table 1 demonstrates this with data from both the alien registration and the Opportunity Systems surveys.

The data in columns 1 and 2 of table 1 show that, for those entering before January 1978, each additional year of residence increased the likelihood of employment by an average of about 6 percentage points. The 1975 arrivals are of particular interest because most are eligible for and will become U.S. citizens in 1980. As of January 1979, after 4 years of residence, both men and women have reached virtually the same employment ratio as the U.S. population: 70 percent of male refugees were employed compared to 72.6 percent of U.S. men; 46.1 percent of the female refugees and 46.6 percent of U.S. women were employed.

The Opportunity Systems estimates of refugee labor force participation parallel the above employment counts. Again, each successive year in the United States shows refugees participating at a higher rate. Nevertheless, their participation is still below the overall U.S.

level, with 1975 male refugees about 9 percentage points below their U.S. counterparts.

More recent arrivals

Arrivals within the year preceding the January 1979 alien registration have a rather low employment ratio. This could result merely from their new exposure to the United States. However, such an assumption is unwarranted. There is general agreement, although little documentation, that Southeast Asian refugees arriving before 1978 were positively selected; that is, they had higher educational and occupational status backgrounds in Asia and a greater knowledge of English. For example, a General Accounting Office review of the resettlement program¹³ reported that more recent arrivals are “poorer, less able to speak English, and less exposed to urban life than the earlier wave of refugees.”

The National Governor’s Association holds a similar view, reporting to its members that¹⁴

refugees who arrived after 1978 faced even greater problems of adjustment and employment. They are comparatively less educated, and have fewer marketable skills and poor language ability. In contrast to the earlier refugees who immediately accepted entry-level employment, this second group showed an increasing reliance on cash and medical assistance.

Consequently the lower employment ratios and labor force participation rates of newer arrivals may be caused by either differential time in the United States, lesser background skills, or even divergent opportunities in areas of resettlement. This question remains largely unexplored, however, because a proper research design would require observations of the same individuals over time; a longitudinal study for which there has been only limited time and resources.

Still, a few tentative observations are available. Table 2 shows the 1979 income distribution for refugees entering in 1975, 1976 and 1977. In addition, it includes the 1978 income distribution of the cohort arriving in 1975. The April–June 1979 survey data for the three cohorts support the claim developed in table 1 that the longer a refugee resides in the United States, the higher his or her income. Without additional evidence, this conclu-

Table 2. Monthly income for Southeast Asian refugees, by year of entry, persons age 16 and over

Monthly income	1978 distribution ¹ of refugees who entered in 1975	1979 distribution ² of refugees who entered in		
		1975	1976	1977
Less than \$200	2.1	2.7	3.3	4.6
\$200 to 399	3.1	3.6	4.1	5.6
\$400 to 599	7.6	4.4	6.2	15.8
\$600 to 799	14.7	11.6	15.7	12.4
\$800 or more	70.0	77.6	70.2	60.8
Unknown	2.5	.0	.5	.8

¹ From the November–December 1978 survey.

² From the April–June 1979 survey.

SOURCE: Opportunity Systems, Inc., *Seventh Wave Report: Indochinese Resettlement Operational Feedback*, July 10, 1979.

sion (as noted) is wrought with inference problems. However, the November–December 1978 survey data show that, as the 1975 cohort remained an additional 6 months in the United States, its income distribution shifted upward. This more accurately shows that length of U.S. residence facilitates reaching higher employment and income levels.

Table 2 also reveals that the majority of refugees with jobs receive \$800 or more per month. This is certainly a promising sign. Nevertheless, it is important to note that to earn this monthly income, the refugees were working significantly longer hours than the U.S. labor force. For instance, the 13th Health, Education and Welfare, *Report to Congress*, stated that, compared to 58.7 percent of the U.S. labor force working 40 hours or more per week, at least 85 percent of the refugees labored this long.

The longer workweek, and indications that about a third of all the refugees receive cash assistance, suggests that even the relatively comparable employment levels may not be enough for the refugees to achieve “self-sufficiency.” Still, there is reason to maintain a guarded optimism.

Occupational profile

What jobs have Indochinese refugees found? Table 3 presents two independent estimates and compares them to the U.S. labor force in January 1979. At this writing, table 3 represents the most recent occupational profile available for the Southeast Asian refugees. Still, one must remember that many refugees, suspected of possessing substantially different occupational traits, have entered since these data were collected. The current occupational profile may look very different.

Immigration’s alien registration, covering all those who entered up to 1979, classifies about one-third of the refugees as white-collar workers. This is about 20 percentage points below the white-collar share of the U.S. workforce. In addition, the largest white-collar category of U.S. workers, about a quarter, held clerical and sales jobs; both Immigration and Opportunity Systems data

Table 1. U.S. labor market activity in 1979 of Southeast Asian refugees by year of entry and sex, persons age 16 and over

Year of entry	Employment ratio (Immigration Service)		Labor force participation (Opportunity Systems, Inc.)	
	Men	Women	Men	Women
Pre-1975	74.1	54.2	.....	.....
1975	70.0	46.1	69.1	42.9
1976	64.2	36.2	65.5	34.4
1977	58.8	41.0	58.4	29.6
1978	33.5	19.0	.....	.....
1979	13.8	28.6	.....	.....

report that only 13 percent of the refugees worked at such jobs. However, 22.1 percent of the refugees reporting to Immigration were service workers, which compares to only 13.3 percent of U.S. workers.

Overall, then, the occupational profiles of the two populations seem reasonably similar. Even the lower proportion of refugees in white-collar jobs may result from the inclusion of new arrivals in the Immigration data. Previous research, for example, has shown that new arrivals experience a substantial downward mobility from their occupational status in the country of origin. It takes a number of years to regain even a share of that initial decline.¹⁵

A diverse population

Nationality may also be another source of variability in the employment experience of these refugees. The term "Southeast Asian" obscures many essential differences among those from Vietnam, Cambodia, or Laos: differences include language, religion, culture, occupational histories, and family composition. Even within each nationality, diverse ethnic groups condition the refugees' behavior in sharply distinct ways: the Hmong from Laos and the ethnic Chinese from Vietnam are just two important examples. Therefore, nationality differences among labor market indicators should be considered mere approximations, preliminary introductions, to more complex determinants of these refugees' work experiences.

Some insight into the diversity of the refugee population is gained by contrasting the 1979 employment-population ratio (age 16 and over) for each nationality,¹⁶ as shown in the following tabulation:

Nationality	Employment ratio	Sample size
Total	53.2	6,741
Vietnamese	54.7	5,852
Cambodian	55.7	255
Laotian	38.5	634

Vietnamese and Cambodian refugees have very similar shares of their population employed. The Laotian group, however, reports a much lower share. Because the Laotian subgroup is dominated by the Hmong, a mountain tribal people, this lower employment level may not be surprising. This difference can be explained simply by the age, sex, and arrival date of the Laotians. That is, when one controls statistically for the variation in employment caused by these demographic factors, virtually no difference remains in the employment ratios for these groups.¹⁷

Favored destinations

Federal policy toward the distribution of refugees has aimed at their wide dispersal.¹⁸ In spite of this, the refugees continue to concentrate in several States and counties; either because of the emphasis on family reuni-

fication and sponsorship, or because of secondary migration (after initial resettlement) toward ethnic enclaves.

Table 4 shows the proportion of refugees in several States from 1976 to 1979. The clearest and most important observation from these data is the increasing concentration in both California and Texas. In 1976, both States shared 30.8 percent of the total refugee population; by 1979, they held 43.3 percent. These figures, of course, precede the increased numbers arriving in 1979. Yet, State Department information on place of intended resettlement for those arriving in 1979 indicates that the impact of these newer arrivals on the two States may be greater: California is receiving about 4 of every 10 new arrivals, and Texas about 1 in 10.¹⁹

In addition to the disproportionate share of new arrivals, there is general agreement that California and Texas gain refugees through secondary migration. For instance, David North²⁰ has shown, using data from the 1978 alien registration, that there was a strong net migration to California, Texas, Louisiana, and Virginia. The shift was occasioned, of course, by a reduction in some States: Maine, the Dakotas, and Hawaii. The interstate shift also corresponded with an increased concentration in urban areas.

Table 4 also provides an important implication of this uneven geographical distribution. Matched with the proportion of the total refugee population in each State is the corresponding employment ratio for refugees reporting in January 1979. The first observation of significance is that California, with the largest share of refugees, has the lowest employment ratio among the States listed. However, Texas, the second most popular State for these refugees, has the highest ratio. In each case,

Table 3. Occupational distribution for Southeast Asian refugees and U.S. population, persons age 16 and over

Occupation	U.S. workforce, January 1979	Refugees	
		January 1979 ¹	April-June 1979 ²
White collar			
Total	51.2	32.2	51.8
Professional and technical workers	15.8	16.1	17.7
Managers and administrators	10.9	2.2	21.1
Clerical and sales workers	24.5	13.9	13.0
Blue collar			
Total	48.8	67.8	48.2
Craftworkers	13.2	12.7	22.5
Operatives and transport workers	15.4	24.3	9.7
Farm managers	1.4	.0	.8
Laborers, farm and nonfarm	5.5	8.7	9.5
Service workers	13.3	22.1	5.7

¹ Immigration and Naturalization Service, Alien Address Registration, January 1979.

² Opportunity Systems, Inc., *Seventh Wave Report: Indochinese Resettlement Operational Feedback*, July 10, 1979.

the refugee employment ratio differs from the U.S. population by a significant amount; much lower for California and higher for Texas. The remaining States, with the exception of Louisiana, have employment levels comparable to the total U.S. figure.

The reason for these vast differences between California and Texas is not clear. However, even when the demographic composition of the refugees in each State is accounted for statistically (that is, age, sex, year of entry, and nationality), the chance of a refugee having found work is still significantly greater in Texas than in California.²¹

One possible contributing factor is that California may suffer from a disproportionate influx of secondary migrants who are not employed. This secondary migration effect has not been studied extensively outside its immediate impact on the number of refugees in an area. Even then, the focus is net migration. Consequently, table 5 provides a rare portrait of the demographic characteristics and employment of secondary migrants.

Secondary migration: Los Angeles

The data presented in table 5 derive from the 1978 and 1979 alien registrations and pertain only to Los Angeles. As such, they do not permit a comparison with the Texas experience. Nevertheless, they do explore the assumptions about the difference in a preliminary fashion. Los Angeles forms an important part of the southern California region that attracts a substantial number of secondary migrants. If secondary migrants have a lower employment level there, it becomes more likely that the surrounding areas will have had similar experiences.

The data are part of a 4-percent, systematic random sample of Southeast Asian refugees registering with the Immigration Service in January 1979, who reported their current address as Los Angeles. To determine their residential status, each respondent was checked for

Table 5. The distribution (all ages) and employment-population ratio (ages 16 and over) of Southeast Asian refugees in Los Angeles, by residential status, 1978-79

Residential status	Distribution		Employment-population ratio	
	Percent	Number measured ¹	Percent	Number measured
Total	100.0	183	47.6	124
Stayer	50.8	93	55.1	69
New entry	23.0	42	29.2	24
Mover	11.5	21	60.0	10
Migrant:				
Within California	6.0	11	38.1	21
Outside California	8.7	16		

¹ Twenty persons were excluded as missing.

his or her address 1 year previously, in January 1978. Migrants, consequently, are defined as those moving to Los Angeles during 1978.

The sample shows that 5,902 Southeast Asian refugees lived within the Los Angeles city limits, or about 39.2 percent of the county's total. Most of the city's refugees were Vietnamese and were under age 25. Over half (59.7 percent) entered the United States in 1975, with an additional 21.8 percent arriving in 1978.

For the distribution of respondents by residential status, "stayers" are those who lived at the same address in January of both 1978 and 1979; "new entries" registered in 1979 reported their date of entry as 1978 and could not be located on the 1978 registration list; and, "movers" are persons living in Los Angeles for both registration dates, but reporting different addresses. Migrants moved into Los Angeles during 1978 from either another city in California or from another State. Ten percent of the sample registered in 1979 reported their date of entry as before 1978, but did not file with the Immigration Service in 1978. These are considered "missing" and have been excluded from this part of the analysis.

The data show that Los Angeles gains, at least, an additional 14.7 percent of its refugee population from secondary migration. Of course, it also loses some, which is not indicated here. Only about half of these migrants, however, originated outside the State.

The proportion of new arrivals in the city is of much greater significance than secondary migrants. Almost a quarter of all registered refugees in Los Angeles entered the United States during 1978, far exceeding the proportion of the national total that arrived in that same year.

In addition to this numerical impact, new arrivals also had a significantly lower employment ratio than any of the other three residential groups. New arrivals are only half as likely to be employed as those who have moved within Los Angeles, possibly to find employment, and are almost 10 percentage points less like-

Table 4. Proportion of all Southeast Asian refugees residing in selected States, 1976-79, and their 1979 employment-population ratio

[In percent]

State	Proportion of all Southeast Asian refugees				1979 employment population ratio (age 16 and over)	
	1976	1977	1978	1979	Percent	Rank
California	22.5	24.3	27.8	31.2	46.1	7
Texas	8.3	8.5	9.2	10.1	63.5	1
Pennsylvania	6.0	4.9	4.5	4.2	53.2	5
Louisiana	2.9	4.2	4.5	4.1	62.5	2
Virginia	4.3	4.3	4.3	3.8	55.9	3
Washington	3.8	3.6	3.6	3.6	50.0	6
Illinois	3.2	2.8	2.8	3.0	54.6	4

SOURCE: Immigration and Naturalization Service, Alien Address Reports, adapted from Linda W. Gordon, "Settlement Patterns of Indochinese Refugees in the United States," paper presented at the annual meeting of the Southwestern Social Science Association, Houston, Texas, Apr. 2-5, 1980.

ly than secondary migrants (table 5).

The data also support, however, the argument that secondary migrants contribute to lower employment levels. These migrants are about 30 percent less likely to be employed than persons remaining residentially stable in Los Angeles. Still, there is reason to believe that this negative employment impact may be short-lived. Secondary migrants, more so than those living in Los Angeles during the whole year, tend to be men and have few additional persons listed at their address.²² A reasonable hypothesis would be that, because these migrants have characteristics normally associated with higher employment levels, their continued residence in Los Angeles during the following year would result in substantial employment gains.

Settling old and new issues

Any evaluation of the employment records of the refugees must consider a fundamental point: refugees are not admitted to the United States to perform a special labor supply function. Their import is intended neither to fill temporary gaps in particular corners of the labor market nor to ease a shortage of domestic workers. The Refugee Act of 1980 refers only to accepting those of "special humanitarian concern." As a result, Southeast Asian refugees do not have any advantage that would allow them to displace domestic workers. In fact, the special aid programs made available by the new law are designed to overcome inherent disadvantages, those likely to prohibit refugees from entering the labor market on any terms. Medical assistance, for example, provides a necessary remedy to the effects of long periods in holding camps, to the lingering and devastating consequences of malnutrition, and to the damaging results of open-seas flights.

It is also worth noting that many of the programs open to refugees, as well as much of the interest in research on refugees, is necessary to protect them from unfair labor practices. Inability to speak English, long work hours, inadequate income, and elementary fears of not being self-supporting are precisely the conditions that would permit refugees to be exploited in the labor market—to the detriment of both themselves and U.S. workers. It is important, therefore, that U.S. trade unions continue to support the goals of the resettlement program, and that refugees participate in available training programs.

Of course, it is also essential to recognize that, unlike many previous groups, these refugees enter an American economy strained by double-digit inflation and rising unemployment. In this context, Federal, State, and local governments are less able to provide assistance than in more prosperous times. In their place, the "private sector," primarily the voluntary agencies and the refugee sponsors, has been assigned the major role in the entire

process.

Any future attempt to review the employment-related activities of the resettlement experience, therefore, needs to take account of the whole range of related activities. This should involve conducting and reviewing research in at least three major areas.

First, there is a need to generate data on participation and employment that represent the entire refugee population, are more comparable to standard labor statistics on the U.S. population, and can be made available more quickly than existing reports. In the tradition of the present descriptive exercise, this information—and the analysis it generates—would serve as a national accounts system, measuring how many and who passed through specific sectors of the American economy. It is this type of information Congress seeks through the Refugee Act to gauge how smoothly resettlement progresses.

Although essential for labor market analysis, such inquiries stop short of precisely those questions of particular importance to the refugee program. For example, how and to what extent do the following influence the participation of refugees in the labor market: voluntary agencies, ethnic enclaves, government programs, and community reception.

These issues require a series of more detailed studies which would be conducted at the local level and produce new data. Perhaps the key issue for these studies is the role of ethnic communities in conditioning the participation of refugees in particular sectors of the labor market and in specific training programs. Included within this area of investigation are questions such as: how important will refugee owned, operated, and staffed small businesses become as a means of generating employment for successive waves of arrivals? Is poor English as important to labor force participation where a receptive ethnic enclave can employ the newcomer? And, will the presence of these communities counterbalance the presumed negative effect of the lower status backgrounds of the latest arrivals?

The third area of research focuses specifically on the various programs and services available, and unavailable, to refugees. The key emphasis here should be on the varying philosophies and services of the private voluntary agencies. Indeed, so much of the responsibility for resettlement has been given to this sector, that one would anticipate an outpouring of comparative research projects. Yet, as of this writing, no such studies are underway.²³

Government programs will be studied more completely as part of the normal evaluation process. Such studies usually examine the internal structure of existing or alternative services and their differential outcomes, hopefully including labor market outcomes after several years. Efforts to make these studies more comparative

(that is, contrasting them to programs in various areas of the country), would be a useful step. Integrating these studies with the research on the role of the voluntary agency and ethnic community should also be encouraged.

Finally, there is a serious lack of understanding of

how the refugees view themselves in the resettlement process. Throughout the United States, new communities are emerging, undoubtedly with their own unique perspective on their experiences and future opportunities. These perceptions need to be uncovered, studied, and their messages understood. □

— FOOTNOTES —

¹ Southeast Asians represent 72 percent of the 230,700 refugees and asylum cases sought by the Administration in fiscal year 1980. Overall, the Administration planned to accept 169,200 from Asia, 33,000 from the Soviet Union, 17,000 from Latin America, 5,000 from Eastern Europe, 2,500 from the Middle East, 1,500 from Africa, and 2,500 asylum cases.

² Public law 96-212, signed into law Mar. 17, 1980.

³ The refugee act requires the President to request the number of refugees over 50,000 to be admitted each fiscal year before that year begins and after consultation with Congress. Because the act passed in the middle of fiscal year 1980, the Administration requested and received an extension of the present rate of admission for Indochinese refugees (14,000 monthly).

⁴ The Refugee Act of 1980, Section 442 (A).

⁵ *Indochinese Refugee Assistance Program*, U.S. Department of Health and Human Services, Office of Refugee Affairs, Dec. 31, 1979.

⁶ Linda W. Gordon and Stephen A. Schroffel, "The Indochinese Refugees in America: New Ethnic Groups," presented at the annual meetings of the American Statistical Association, Houston, Tex., Aug. 11-14, 1980.

⁷ The total sample size differs slightly from that reported by Gordon and Schroffel, *op. cit.*, because of the method used to identify Southeast Asian refugees.

⁸ The comparison assumes that few refugees have been institutionalized since arrival.

⁹ "Indochinese Refugee Assessment," Secretarial Report, U.S. Department of Health and Human Services, Sept. 28, 1979.

¹⁰ It should also be remembered that this study took place before the passage of the Refugee Act of 1980. Thus, many of its conclusions may reflect the uncertain budgetary circumstances under which the resettlement program worked for several years.

¹¹ Recently, the Office of Management and Budget turned down a request from the Department of Labor to change the Employment Service reporting form to identify refugees. As a consequence, it will be extremely difficult to determine whether refugees who are not enrolled in other job training or placement services, but receiving cash

assistance, are complying with the law and registering with the Service. In addition, the Secretary of Labor, who has to report to the Coordinator for Refugee Affairs on the steps taken to increase refugee participation in the Department's programs, will not be able to report on their level of Employment Service use.

¹² "Indochinese Refugee Assessment," U.S. Department of Health and Human Services.

¹³ *The Indochinese Exodus: A Humanitarian Dilemma*, U.S. General Accounting Office, Apr. 24, 1979, p. 88.

¹⁴ "A review of the Indochinese Refugee Program," *Labor Notes*, Feb. 22, 1980, p. 8.

¹⁵ For example, see Barry N. Stein, "Occupational Adjustment of Refugees: the Vietnamese in the United States," *International Migration Review*, January 1979, pp. 25-45.

¹⁶ Data are not reported for 379 persons; also excluded are 40 persons claiming nationality in other than the three countries listed.

¹⁷ See Robert L. Bach, "Employment Characteristics of Indochinese Refugees, January 1979," *Migration Today*, forthcoming, 1980.

¹⁸ See, for example, Darrel Montero, *Vietnamese Americans: Patterns of Resettlement and Socioeconomic Adaptation in the United States* (Boulder, Colo., Westview Press, 1979).

¹⁹ Linda W. Gordon, "Settlement Patterns of Indochinese Refugees in the United States," presented at the annual meeting of the Southwestern Social Science Association, Houston, Tex., Apr. 2-5, 1980, p. 8.

²⁰ Julia Valda Taft, David S. North, and David A. Ford, *Refugee Resettlement in the U.S.: Time for a New Focus* (Washington, New TransCentury Foundation, 1979).

²¹ Bach, "Employment Characteristics"

²² Robert L. Bach, "Secondary Migration of Indochinese Refugees to Los Angeles, California," unpublished paper, mimeo, table 8.

²³ As part of our research on refugees, we have been examining the experiences of refugees resettled by the Lutheran Immigration and Refugee Service. However, the design does not allow a comparison with other agencies.

The new Cuban immigrants: their background and prospects

Samples from immigration data show that most early arrivals were young working-age men, that education and skill levels are above average for Cuba, and that the number of ex-offenders is significant but includes many jailed for political reasons

ROBERT L. BACH

In mid-April 1980, the Cuban government, by announcing it had withdrawn "protection from the Florida corridor," triggered the flight of more than 123,000 new Cuban refugees to the United States. This might have been merely the latest addition to the exodus that began in 1959, except that from the outset neither the Cuban nor U.S. governments had control over the character or volume of the immigrants. Cuban President Fidel Castro had evidently underestimated the response to the advertised opportunity to leave. And the U.S. tradition of accepting Cuban refugees with open arms was suddenly strained by the potential burden of unknown numbers of new immigrants landing in south Florida.

Much of the confusion and bewilderment that caught reporters' eyes and overwhelmed some local officials resulted from the international political dilemma and, specifically, the Carter Administration's delay in declaring a legal status for the Cubans. The Administration faced a tough policy question. The historical open-door policy for Cuban immigrants and the Cuban-American community's expectations that this group would be treated the same argued for accepting them quickly and giving them full "refugee status" under the Refugee Act of 1980. Foreign policy reinforced this view: once again, here was a demonstration of the failure of the Castro government.

Yet the Administration was wary not to create in

haste an unwarranted precedent. Unlike the previous flows, this one lacked order and due process, making it impossible to screen undesirables before their departure from Cuba.¹ There was also the possibility that to embrace these migrants as refugees would open the Florida coast to an onslaught of Caribbean poor. Fifteen thousand Haitian "boat people" in Miami were enough to give substance to that concern.

But clearly the most troublesome issue was the cost of resettlement. In a period of fiscal restraint and recession, President Carter decided not to grant the Cubans the generous benefits of refugee status (for example, 100 percent Federal reimbursement of refugee assistance costs). Instead, in late June, the Administration announced that the newcomers would be treated as applicants for asylum, and that special legislation would be sought to resolve both the Cuban and Haitian legal status issue. As a result, Cubans who arrived between April 21 and June 19 (and all Haitians processed by the Immigration and Naturalization Service before June 19) had their parole status extended for 6 months.²

This solution was fashioned in the face of a tough political reality; in part, the consequence of an anti-immigration public sentiment characteristic of bad economic times. A Columbia Broadcasting System-*New York Times* poll, for example, found that almost half of those sampled nationwide opposed admitting more Cubans. Lack of jobs was a primary reason. The State Department received calls and telegrams that ran heavily against the boatlift, and Senator Lawton Chiles (Demo-

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crat-Florida) reported an 80 percent negative constituent response.³

Some responsibility for this public mood must lie with the public characterization of these Cubans. *Granma*, the Cuban Communist party newspaper, charged that those who left were "social dregs," "delinquents," and "scum." "Lumpen," short for lumpenproletariat, became the standard phrase for the new refugees. Many reports in U.S. newspapers echoed the theme, focusing attention on the number of "social undesirables": prisoners, the disabled, mental patients, and others.

Compared to the "Golden Exile" of the 1960's, when wealthy businessmen, professionals, and managers migrated *en masse*, this latest wave of Cubans fared poorly. But how poorly? Did the disorganization of their flight or the current political climate unfairly color our impressions? Based on an analysis of data collected by the Immigration Service during processing, the new arrivals were neither the "upper-crust" nor the bottom layer of Cuban society. They generally possess education and skill levels above the average for those remaining in Cuba and about the same as those who arrived in the 1970's. The sample data examined in the following sections were based on Immigration Service files from two processing centers in Miami and from Eglin Air Force Base, where later (and allegedly less desirable) refugees were processed.

The Miami profile

The registration records of the Cuban Refugee Emergency Center in Coral Gables represent a good starting point. President Eisenhower established the center in 1960 to process the first wave of Cuban immigrants, and President Kennedy expanded the resettlement program (and its facilities) 1 year later. Thus the Center was the logical place to receive this latest group.

The center registered nearly 2,000 of the first to reach Miami. But, as the influx accelerated and processing responsibility passed to the Federal Emergency Management Agency,⁴ processing operations moved to Tamiami Park and, subsequently, to Opa Locke Airport in North Miami. President Carter later opened another processing center in Florida (Eglin Air Force Base), followed by the use of military bases in Arkansas, Pennsylvania, and Wisconsin.

I extracted from the Center's registration records a 50 percent systematic random sample, including information on age, sex, education, and occupation. There were 1,937 records in all, and each person had arrived before April 29. A 10-percent subsample included additional information on marital status, knowledge of English, last place of residence in Cuba, and relatives and friends in the United States.

Because these registrations represented only the earli-

est arrivals, biographical data forms for 633 persons processed at Opa Locke Airport also were examined. These were later arrivals, between May 9 and 13. The Immigration Service prepares these forms only for persons 14 years old and over. Given the pace of processing at the airport, only 10 percent of these records could be used, thus yielding a rather small sample size. Nevertheless, the two samples taken together provide a clear profile of those arriving in the Miami area.⁵

Most of the early arrivals had jumped the gates of the Peruvian Embassy in Havana, thus initiating this latest flight. They were older than those processed at Opa Locke and less likely to have relatives or friends already in the United States. There were also more men in this first group and fewer who were married. But these differences are inconsequential compared to the overall profile. The majority from both samples were working-age men, many came with families, and over 70 percent had relatives or friends awaiting them.

Additional information available only for the earliest arrivals (Coral Gables) indicated that 90 percent had been residing in the province of Havana. Most lived in the capital city. Almost no one (5 percent) could speak or understand English, even though their average years of schooling in Cuba was about the same as earlier Cuban refugees who could. Their 9 years of school, on average, was much lower than the Cuban refugees leaving in the early 1960's, but similar to those arriving in the 1970's.

From a labor force point of view, it is difficult to see how those arriving in Coral Gables could be called "social dregs," "undesirables," or "lumpenproletariat." Only one person sampled among the earliest arrivals was unemployed prior to arrival and only 18 percent would be considered "out of the labor force" by U.S. labor force classifications: 11 percent reported they were students, 6 percent were homemakers, 10 persons were retired, and two were in the military. Nor were many of the arrivals "marginally employed." By U.S. labor force classifications, the majority at Coral Gables were solidly employed: craftworkers, factory laborers, equipment operators, and professionals or technicians. This included mechanics, plumbers, crane and large-equipment operators, carpenters, and masons. Twenty percent of the professionals were teachers and, of those sampled, there were physicians, nurses, professors, accountants, and computer operators. Evidently, many skilled workers were among the first to accept the offer to leave.

The Cubans arriving later and registering at Opa Locke reported fewer skilled jobs. There were fewer professionals, more bus, taxi, and truck drivers, and far more service workers. Yet the greatest difference was the proportion who neither held nor sought a job. The Cubans processed at Opa Locke were nearly twice as likely (32 percent) as the earlier group to be homemak-

ers, students, or retired.

The immigrants in both samples generally had occupational experiences in Cuba that are remarkably similar to the types of jobs most likely obtainable in the Miami economy.⁶ This is, as an aside, unlike other groups of recent refugees resettled in the United States, who reportedly lack urban industrial skills.

Skeptics, however, will and should object to the conclusions drawn from these samples. There are at least two reasons why those processed in Miami may be more highly skilled and better educated than most other 1980 arrivals. First, if Castro did empty jails and mental hospitals when the flow was greatest, as the allegations run, these "undesirables" would have arrived later than the period covered by these samples. They also

would be more likely to have been processed at a military base. In addition, Federal officials decided early in the processing operations at Key West to send family groups to Miami and single men and women elsewhere. The larger share of families in the sample from Opa Locke, compared to those registered at the emergency center, is a consequence of this decision.

To check on these probable biases, I examined the Immigration Service biographical data forms for the Cubans processed at Eglin Air Force Base. This represents the first step of a project to document the background characteristics of the approximate 123,000 Cubans who arrived since April 20, 1980. The project is being carried out with the cooperation of the Office of the U.S. Coordinator for Refugee Affairs, the Immigra-

History of U.S. immigration law

Until 1965, U.S. permanent immigration law made no explicit provision for the refugee. All immigration is regulated by the Immigration and Nationality Act of 1952, as amended (most recently in 1980). The predecessor to the 1952 act set a ceiling on immigration and established a system of distributing visas by nationality (defined in most cases by the country of birth). The number, or quota, of visas allotted to each nationality corresponded to the share it had already contributed to the U.S. ethnic make-up. This resulted in a large quota for the United Kingdom and small quotas for southern and Eastern Europe. While the large German quota enabled many refugees from the Hitler regime to enter the United States as regular immigrants, postwar displaced persons and refugees from Eastern Europe who wished to come to the United States had no choice but to wait or accept the terms offered by other countries of immigration.

At first the United States, responding to this need, tried to speed up displaced-person admissions without changing the quota system. About 80,000 Poles, Balts and southern Europeans (about half of them refugees) were admitted under a December 1945 directive by President Truman to use the quota numbers accumulated during the war. And the 215,000 displaced persons admitted under the Displaced Persons Act of 1948 were to be charged against the quotas of future years. It was only with the Refugee Relief Act of 1953 that the United States went outside the quota system by authorizing distribution of 215,000 special nonquota immigrant visas to a number of eligible groups of Europeans and Chinese. The McCarran-Walter Act of 1952, amending the immigration and nationality law, had eliminated the clause excluding Asians as immigrants but had retained the quota system.

Refugees were first mentioned explicitly in the general immigration law in the amendments passed in 1965. The law abolished the national origins quota system and set up in its place a hierarchy of preferences for visa distribution based on personal qualities: that is, relationship with U.S. citizens, accomplishments, labor skills, and so forth. First preference went to the sons and daughters of U.S. citizens; the seventh (and last) to refugees. Hemispheric immigra-

tion ceilings established by this law were put together in 1978 to form a worldwide ceiling of 290,000 immigrants per year. Refugees received 6 percent of the ceiling, or 17,400. Refugees, however, did not enter the country on the same terms as others. [As] conditional entrants, [they had to] wait 2 years [under pre-1980 laws] before they could apply for status as immigrants.

There was a definition of the refugee given in the 1965 law; it was narrower than that [in a] 1951 U.N. convention. Refugee programs dependent upon American initiative and funds spanned the globe. And yet the U.S. immigration law of 1965, following the practice of the 1950's, continued to tie refugee status to communism and turmoil in the Middle East. Thus, under the 1965 law, refugees were persons who "because of persecution on account of race, religion, or political opinion . . . have fled from any Communist or Communist-dominated country or area, or from any country in the general area of the Middle East, and are unable or unwilling to return to such country on account of race, religion, or political opinion."

. . . Thus limited by its immigration laws, the United States could not have admitted as many refugees as it has in the past 14 years if the executive branch had not had use of a special authority known as the parole. Instituted by the McCarran-Walter Act of 1952, the parole clause authorized the Attorney General to admit to the United States temporarily, for "emergent reasons" or for reasons deemed in the national interest, any alien applying for admission. Referring to the use of the parole to admit over 30,000 Hungarian refugees between 1956 and 1958, Congressman Walter said: "We never anticipated anything of this magnitude, but we did know this sort of situation would arise. That is why the provision was put in the law." The parole enabled the United States to admit refugees from non-Communist countries, such as Chile, after 1973. And in the absence of other authority, the executive branch has had to resort to the parole to admit large numbers of refugees in emergency situations.

—HARRY F. YOUNG

*"Refugees—An International Obligation,"
Department of State Bulletin, December 1979, pp. 13–14.*

tion and Naturalization Service, and the Department of Labor.⁷ The data from Eglin Air Force Base are presented here for the first time.

The Eglin profile

Interest in these records was the same: what are the Cubans' background characteristics? Do they differ from previous Cuban refugees now residing in Miami? Do their occupational histories show that few are employable? And if there are a significant number with prison records, who are they and how long had they been incarcerated?

The sample was a 10-percent systematic random selection that identified for study 925 asylum applicants arriving throughout May. As was true of the registration data from Opa Locke, Immigration officials interviewed only persons age 14 or older. Information included age, sex, marital status, last place of residence in Cuba, and occupational histories.

The Eglin sample further documents the familiar observation that these Cubans are young, working-age adults. Sixty-four percent at Eglin were age 20 to 34, compared to 58 percent of all those in Miami. The average age was 33 at Eglin.

Much attention has focused on the predominance of single men in this flow: it is believed that single men are more difficult than family groups to resettle. In fact, and as anticipated by the manner of processing at Coral Gables, there were many single men at Eglin. Men outnumbered women nearly 9 to 1, representing 89.3 percent of the total camp population. At least one-third of both men and women reported they were currently married, with the women more likely to be so than the men: 43.4 percent versus 33.2 percent.

Because most of the new arrivals were in their late twenties and early thirties, they not only have many years ahead in the U.S. labor force, but they also had a chance to accumulate substantial employment experience in Cuba. The nature of this experience is critical to judging them "socially undesirable." How, then, do those sent to Eglin fare?

Whereas unemployment was virtually negligible in both Miami samples, 2.8 percent of the Eglin group reported no employment as their longest held activity in Cuba ("principal job"). This unemployment rate increased to 4.7 percent immediately prior to departure. However, because most were single men, only 15 percent were out of the labor market in Cuba; that is, they were homemakers, students, patients, or soldiers. This compares to one-third of the sample at Opa Locke. Clearly the Cubans at Eglin are used to work and will undoubtedly seek it in the United States.

But what are their occupational experiences? Like those in Miami, they are concentrated in four occupational categories: laborer (25 percent), craftworker (22.7

percent), machine operative (14.1 percent), and transport operative (11.2 percent). The Eglin group also contains nearly the same share of professional and technical workers and service workers. As shown in table 1, the three samples provide a consistent occupational profile.

The Cubans at Eglin had held what would be considered skilled or semiskilled jobs. As craftworkers and laborers, they worked primarily in manufacturing and construction. All three samples show a large number of mechanics, painters, masons, carpenters, heavy equipment operators, electricians, and bakers. Machine operatives at Eglin included lathers, sanders, welders, meat-cutters, and press operators. Of course, transportation workers were mainly drivers of trucks, taxis, and buses.

The proportion of professional and technical workers at Eglin also matched that of the Miami groups. Teachers at all grade levels were the largest number of such workers. This possibly reflects the reported significant cutbacks in educational enrollment in Cuba, especially at the university level. There were also a few doctors, nurses, and medical technicians, as well as a number of entertainers and athletes.

These people can hardly be said to have been marginal to the Cuban economy, nor unemployable in the United States. Yet the charge of "undesirable" does not rest solely on occupational background. The most alarming stories concerned the prevalence of criminals.

Ex-offender data. A key question concerning ex-offenders among the refugees is what does a prison record in Cuba mean. In what manner are they "socially undesirable"? For instance, the United States has accepted political prisoners from Cuba as part of normal immigration for several years. Those admitted in the fall of 1979 averaged 10.4 years in prison. Still it is a reasonable and unanswered question whether those with prison records in this most recent, massive flow committed

Table 1. Last occupation in Cuba for refugees, age 14 and over, processed in Florida

Occupation	Coral Gables Emergency Center		Opa Locke Airport		Eglin Air Force Base	
	Number	Percent	Number	Percent	Number	Percent
Total employed . . .	1 641	100.0	43	100.0	2 732	100.0
Professional and technical	67	10.5	3	7.0	52	7.1
Manager and administrator	11	1.7	1	2.3	11	1.5
Sales	9	1.4	1	2.3	7	1.0
Clerical	45	7.0	4	9.3	45	6.1
Craft	197	30.7	6	14.0	166	22.7
Operative	73	11.4	4	9.3	103	14.1
Transport operative	86	13.4	12	27.8	82	11.2
Laborer	108	16.9	3	7.0	183	25.0
Farm laborer	0	0.0	0	0.0	8	1.1
Farmer	2	0.3	3	7.0	0	0.0
Service	43	6.7	6	14.0	74	10.1
Private household	0	0.0	0	0.0	1	0.1

¹ One occupation unspecified.

² Data unrecorded for 18 persons, 1.9 percent of the total.

similar "political" crimes.

The Immigration Service data show how many refugees reported prison records, as well as the duration of their confinement. An initial screening process separated more than 800 former felons who were sent to Federal prisons. Most other ex-offenders remained with the general refugee population. However, only occasionally is it possible to determine why these persons were in jail. Thus, caution is necessary: the following information refers to all persons in the Eglin sample who reported a former offense, regardless of the reason.

Immigration officials recorded that 16.4 percent, or 152 of the sampled emigrants at Eglin, had spent some time in jail.⁸ Less than half, however, were in prison at the time of departure: 44.1 percent of the ex-offenders, or only 7.2 percent of the total camp population. Evidently, most of these latest refugees left Cuba from their homes, not through prison gates.

The majority (55.2 percent) of the ex-offenders spent less than 3 years in jail: 6.2 percent for less than 60 days, 7.9 percent for less than 1 year, 24.7 percent between 1 and 2 years, and 16.4 percent from 2 to 3 years. Reasons given for these jail terms included robbery (1 to 2 years), drugs (2 to 3 years), vagrancy, refusing military service or to work for the state, and caught trying to escape to the United States.

Six percent of all those with prison records specifically stated they were political prisoners. This is undoubtedly an underestimate. Another 3 percent could be included for refusing service to the state, either military or labor. And a small but significant proportion had been in prison dating from the early 1960's, when many political prisoners were first jailed. But the most important reason for the probable undercount is simply that most ex-offenders did not report the nature of their crime. Consequently, I would argue that between 9 percent and 20 percent of those at Eglin who reported a prior offense could be classified as political prisoners.

Do these ex-offenders account for an identifiable minority? Evidently not. The average age of the ex-offenders was 32.6, virtually the same as the total Eglin sample. Both groups also had a similar proportion married, and only slightly more of the ex-offenders were men. The only significant difference was in their occupational backgrounds. (See table 2.)

Overall, ex-offenders were about as likely as the total Eglin group to be employed in each occupational category, with two exceptions. Just prior to departure, ex-offenders had experienced an overall shift out of operative jobs and into nonfarm laborer positions. There was also a less significant shift out of the professional and service sector and into construction. There could be many reasons for such a shift, but by U.S. standards, this represents a downward slide in skill requirements, status, and wages.

Along with this shift, the ex-offenders encountered a doubling of their unemployment rate (which had already been twice that of the total Eglin group), as shown in the following tabulation:

	<i>Out of labor market</i>		<i>Unemployed</i>	
	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
Total Eglin sample:				
Principal job . . .	152	16.7	21	2.8
Last job	139	15.3	36	4.7
Ex-offenders:				
Principal job . . .	61	40.1	5	5.5
Last job	72	47.7	9	11.4

Evidently, the ex-offenders shared with all the Eglin-bound refugees a significant increase in economic hardship prior to leaving. But ex-offenders suffered doubly, perhaps because of their prior offense.

What can be learned from this background profile? Evidently, the refugees' experiences in Cuba do not jus-

Table 2. Principal and last occupation in Cuba for total Eglin AFB sample and for ex-offenders, age 14 and over

Occupation	Total Eglin				Ex-offenders			
	Principal job		Last job		Principal job		Last job	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total employed	1 756	100.0	² 768	100.0	91	³ 100.0	⁴ 79	100.0
Professional and technical	56	7.4	52	6.8	7	7.7	4	5.1
Manager and administrator	10	1.3	11	1.4	2	2.2	1	1.3
Sales	10	1.3	7	0.9	2	2.2	2	2.5
Clerical	44	5.8	45	5.9	5	5.5	3	3.8
Craft	170	22.5	166	21.6	18	19.8	16	20.2
Operative	115	15.2	103	13.4	13	14.3	4	5.1
Transport operative	82	10.8	82	10.7	10	11.1	8	10.1
Laborer	168	22.2	183	23.8	22	24.2	29	36.7
Farm laborer	8	1.1	8	1.0	1	1.1	0	0.0
Farmer	2	0.3	0	0.0	0	0.0	0	0.0
Service	69	9.1	74	9.7	6	6.5	3	3.8
Private household	1	0.2	1	0.1	0	0.0	0	0.0

¹ Data unrecorded for 17 persons, 1.8 percent of total.
² Data unrecorded for 18 persons, 1.9 percent of total.

³ Detail may not add to totals because of rounding.
⁴ Data unrecorded for 1 person.

tify the alarming charges of social undesirability, especially in terms of their occupational histories. Rather than on the margins of the labor market, the recently arrived Cubans have served the mainstream of the urban Cuban economy. But what of their future in the United States? What jobs are they likely to find?

Role of existing enclave

The future of the 1980 Cuban refugees can not be separated from the history of the entire post-revolution exodus. The Cubans who came before should serve not only as an example of what may come but, given the resettlement program's special emphasis on family reunification and sponsorship, as active participants in the process of adaptation to American life. For many new arrivals, the presence and vitality of the Cuban-American community will cushion the adjustments usually required of those involved in such migrations. In this ethnic enclave, many will find jobs, often without the need to learn English. And, socially, many things will remain the same; for in Miami, you "can be born, or die and be buried, Cuban style."⁹

Like most refugee migrations, the Cuban exodus has developed through a series of outflows, with each group projecting distinct background profiles and encountering diverse experiences in the United States. The importance of this sequential migration is that each wave sets the stage for the next. The earliest Cuban refugees were the landowners, bankers, government officials, and businessmen who benefited greatly from U.S. connections and who, as a result, had much to lose from the revolution. Besides their wealth and status, they also had attained a level of education far exceeding the remainder of the native Cuban population. A 1962 sample showed that 36 percent of this first wave had 12 years or more of formal schooling. At the time, only 4 percent of the entire Cuban population had such advanced education.¹⁰

The Cuban missile crisis stopped the outflow in 1962; it restarted 3 years later, when the two governments agreed to a series of flights—the "aerial bridge"—that would bring any person who desired to the United States (except those of military age and in strategic economic positions). Approximately 40 percent of the total exodus, excluding the most recent group, arrived on these flights from 1965 to 1973.

These aerial-bridge refugees also represented the upper socioeconomic strata of pre-revolutionary Cuba. As one journalist reported it then,

to a great extent these people represent the professional and business class of Cuba; the able, the educated, the successful. The struggle in most Latin American countries is to build a stable middle class; that of Cuba has been gutted. This exodus is the biggest brain drain the Western Hemisphere has known.¹¹

A survey in 1968 added support. The aerial-bridge arrivals had a level of formal schooling that still outstripped the source population. Eleanor Rogg found that virtually the same percentage (37 percent) in 1968 had 12 years or more of education, as in the earlier wave.¹²

The earliest exiles were able, in effect, to transplant their prerevolutionary Cuban social position into fertile U.S. economic soil. Many in the first wave brought money with them or, more likely, had transferred substantial funds to the United States before their departure. Upon arrival, both Federal and private-business loans were readily available, as were substantial Federal funds for education and assistance. Some U.S. employers also rehired their former employees from Cuban subsidiaries.

Nevertheless, many experienced downward social mobility as they took whatever jobs were available—a characteristic common to refugees and immigrants. Professionals also experienced initial licensing problems, forcing many of them to accept jobs well below their level of training. Consequently, much of the apparent success of these early arrivals once in the United States resulted simply from their substantial initial underemployment and the fact that their subsequent upward mobility was merely a return to their former statuses.¹³

The vitality of this Cuban-American enclave today is considerable, as a recent albeit self-congratulatory profile of the Miami enclave testifies.¹⁴ In Dade County, Cubans account for 16 (out of 62) bank presidents, 250 vice presidents, and more than 500 other bank officers. Approximately one-third (18,000) of the businesses in Miami are Cuban owned or operated. On the labor side, 85 percent of the garment industry's factory workforce is Cuban-American. Cubans staff most of the hotels, and their share of construction workers has reportedly reached nearly 75 percent.

But neither should the enclave's success be overstated. The same article notes that the average income of the Cuban head of household in Miami is only \$15,000 per year, with 31 percent earning less than \$12,000. Nationwide, Cubans have an unemployment rate significantly higher than the total civilian labor force, even though they are, on average an older group—typically less subject to joblessness.¹⁵

The Cuban flow has also significantly changed in background composition. Lourdes Casal and Andres Hernandez, for example, have noted a steady decline in the average educational levels of each successive cohort of Cuban refugees. This began in the later years of the aerial bridge and has continued.¹⁶

The compositional change has had an impact on Cuban communities in the United States. The later arrivals have, in a sense, become the working class—lower waged and skilled—for the golden exiles of the 1960's

and early 1970's. Thus, there has been a total transplantation of the prerevolutionary Cuban social structure to Miami, with all the implications of unequal wealth, power, and prestige. The recent emigrants will add to the lower strata.

1973-74 arrivals compared

Insight into how the new Cuban immigrants will progress in the United States may be gained by studying a similar group who entered during 1973-74. This comparison, although not precise, demonstrates not only the changing composition of the Cuban migration, but identifies the ability of the ethnic enclave to incorporate subsequent newcomers.

The comparison group comprises 590 Cuban men who arrived after the close of the aerial-bridge. Most left Cuba several years before and had spent time in Spain. Interviewed for the first time upon arrival, they were tracked and reinterviewed in 1976-77 and again in 1979. The series of interviews provides a profile of their experiences over 6 to 7 years in the United States.¹⁷

The 1973-74 group shares with the recent arrivals a distinctly working-class character. Only 22 percent had attained 12 years of formal schooling. This was significantly lower than the earlier refugees, but still higher than the Cuban population. Their average education, 8.6 years, was virtually the same as those sampled recently in Miami. And, reflecting their lower education, the 1973-74 sample shared with the recent arrivals a significant lack of English knowledge.

The occupational histories of the 1973-74 immigrants correspond to the contemporary economic reforms in Cuba intended to socialize the remaining, smaller scale sectors of the private urban economy. In fact, although political pressures continued to be a primary reason for leaving, they were just as likely to mention the inability of achieving, over a longer period, a higher standard of living. The evidence that many of the Eglin-based Cubans suffered increased economic hardship prior to departure suggests that the motivations of the two groups may be similar, too.

About one-third (32.5 percent) of the 1973-74 group derived their income in Cuba from either government or educational institutions. Wholesale and retail sales accounted for another 21.2 percent, and direct personal services employed 15.1 percent. A rough approximation with U.S. occupational classifications shows that nearly 30 percent were craftworkers or nontransport machine operatives; including supervisors, artisans, plumbers, electricians, carpenters, butchers, and bakers. Service-workers accounted for 19.7 percent. One-quarter held white-collar or professional jobs: a category combining professional and technical workers with clerical workers.

These occupational origins correspond rather closely with the pattern among the 1980 arrivals, especially in

their common concentration in craft and operative jobs. To the extent that these background experiences help in the U.S. labor market, the progress of the 1973-74 group may provide a clue as to the future of the latest arrivals. Both groups, by the way, arrived in the midst of a recession, although the 1974-75 downturn was probably more severe.

Almost all 1973-74 immigrants settled in Miami, where 48 percent found their first employment as craftworkers or machine operatives. This indicates a substantial, overall shift to these categories from other occupations held in Cuba. Another 38 percent were unskilled laborers, and only 5 percent were professionals or managers. The majority located employment in manufacturing (34.3 percent) or construction (22.0 percent).

After 3 years in the United States, most had regained positions comparable to those abandoned in Cuba. They earned, on average, a modest \$7,764 per year. But more importantly, 40 percent were employed by firms that were owned or operated by other Cubans. In fact, preliminary figures from the interviews 6 years later show that the Cuban enclave still employed 40 percent of these refugees.¹⁸

The 1973-74 arrivals were able to utilize their working-class skills in the U.S. labor market.¹⁹ Higher levels of education and English knowledge were particularly associated with greater earnings. But even more important was the positive impact of enclave participation. Within this 1973-74 group, those who worked for Cuban owned or managed firms earned significantly more each month.

By projecting this future on the majority of the recent immigrants, it appears that they will find self-sustaining employment within a relatively short period as part of the Cuban-American working class. Thus, in addition to its outpouring of emergency relief in Miami, the Cuban enclave will also provide employment for a substantial proportion of the new arrivals. This direct contribution of the Cuban enclave is much more important in the present context than before because the current posture of the Carter Administration is to ask more of the affected local communities than ever before.

Resettlement hampered

There are several reasons why this resettlement of Cuban refugees may not succeed as well as previous efforts. Most of the reasons have been well-played in the press and pointed to in this article. The size of the influx within such a short period made orderly processing extremely difficult. Recurring problems locating responsible sponsors were a consequence. Other characteristics of these refugees, or the profiles of those not represented in these samples, may also identify problems. The apparently small but significant proportion of homosexuals in this group is merely another example. And the cur-

rent recession, coupled with conservative fiscal policy to combat inflation, promise difficulties for all job seekers.

In addition, there are two particular changes in progress that will not only have an effect on these Cubans, but because of the timing of this influx, will be pushed along with greater speed—and perhaps less care.

The new Cuban refugees came only weeks after Congress passed legislation finally regularizing the procedure for admitting refugees. (See box, p. 41.) The Cubans, and with them the Haitians, became the first test of perhaps the weakest section of the law, procedures for case by case review of asylum applicants. As if someone had studied the legislation to determine what it did not cover, recent events touched the one area not contemplated in detail beforehand—the United States as a country of first asylum. Indeed, much of the delay in the Carter Administration's deliberations on the Cubans would be attributed to an attempt to conceptualize the United States as a place of first asylum. But searches for other countries to accept large proportions of these Cubans and appeals to the United Nations lacked the urgency of other contemporary moves by countries of first asylum to gain international cooperation. Recall that, in the case of the Vietnamese "boat people," the world responded only after Malaysia and Singapore began towing refugee-laden boats back out to sea.

Also like the Southeast Asian countries of first asylum, the Carter Administration first held that it could not afford to accept the entire flow—thus setting up a monumental dilemma. U.S. refugee policy is traveling in two opposing directions: at once reaching out to compelling international and humanitarian problems, while withdrawing from policies of domestic relief. The result is a series of false steps in both directions and much bewilderment. Even the eventual offer of Federal payment for some services provided Cuban and Haitian refugees ended up as much less than it appeared. The plan to make them eligible for certain social programs apparently did not take into account the fact that Florida has no programs for emergency assistance or medical help.²⁰

The 1980 Cuban influx also occurred at a bad time, not only because the public expressed an anti-immigration mood, with U.S. citizens pressed by unemployment, inflation, and foreign conflict, but because of the effort to reform the immigration law. The combination of these factors elevated the significance of the Cuban immigration to unwarranted importance in relation to other national problems. Immigrants became associated with all kinds of social and economic ills, most commonly unemployment. But refusing to admit 123,000 people as refugees would not even begin to solve the Nation's unemployment problem. □

— FOOTNOTES —

¹ Statement by Victor H. Palmeiri, U.S. Coordinator for Refugee Affairs, in a press release on June 20, 1980.

² Initially, without a status, the new Cuban immigrants were actually undocumented aliens, illegally transported to the United States by U.S. citizens. But, unlike other illegal aliens who are subject to deportation, the Immigration and Naturalization Service promptly accepted their application for status, gave them a visa, and authorization to work.

³ *The Washington Post*, Apr. 26, 1980, p. A22.

⁴ Part of the reason for this change of responsibility was that without a declared refugee status for the Cubans, the Cuban Refugee Emergency Center, which is funded by the Department of Health and Human Services, could not have remained involved.

⁵ For more detail, see Robert L. Bach, "A Profile of the Recent Cuban Refugees Arriving in Miami," *Migration Today*, forthcoming.

⁶ *Ibid.*

⁷ By the time this article is published, the profile of all 123,000 or so will be available from either the author or the Coordinator's office.

⁸ Of course, whether the applicants told the truth is debatable. Although there is no way to check, my impression is that the incentive was there to be truthful. Immigration and Naturalization Service interviewers were instructed to ask for detail if an applicant could not account for blocks of time in his or her occupational history, plus the applicants knew that they would also be interviewed and cleared through the Federal Bureau of Investigations and Central Intelligence Agency.

⁹ Carlos J. Arboleya, "The Cuban Community 1980. Coming of Age, as History Repeats Itself," self-published letter, p. 5.

¹⁰ Alejandro Portes, Juan M. Clark, and Robert L. Bach, "The New Wave: A Statistical Profile of Recent Cuban Exiles to the U.S.," *Cuban Studies*, January 1977, pp. 1–32.

¹¹ Quoted in Reynaldo A. Cue and Robert L. Bach, "The Return of the Clandestine Worker and the End of the Golden Exile: Recent Mexican and Cuban Immigrants in the United States," paper presented at the Conference on the New Immigration, Research Institute on Immigration and Ethnic Studies, Smithsonian Institution, Sept. 15–17, 1976, p. 22.

¹² Eleanor M. Rogg, *The Assimilation of Cuban Exiles: The Role of Community and Class* (New York, Aberdeen Press, 1974).

¹³ Dale Truett, Chapter 5, in University of Kentucky, *Negro Employment in the South*.

¹⁴ Arboleya, "The Cuban Community 1980 . . ."

¹⁵ The data used for this statement are from 1977. See Morris J. Newman, "A Profile of Hispanics in the U.S. work force," *Monthly Labor Review*, December 1978, pp. 3–14. The 1977 data are useful here because they provide sufficient time for the aerial-bridge group to recover from any initial disorientation, but do not include those entering later or those under special arrangements to release political prisoners.

¹⁶ Lourdes Casal and Andres R. Hernandez, "Cubans in the U.S.: A Survey of the Literature," *Cuban Studies*, July 1975, pp. 25–51.

¹⁷ See Portes, et al., "The New Wave: . . .," for a detailed description of the research design.

¹⁸ Alejandro Portes and Juan M. Clark, "Cuban Immigration to the United States, 1972–79: A Preliminary Report of Findings," mimeo, Center for International Studies, Duke University, Durham, N.C., May 13, 1980.

¹⁹ Alejandro Portes and Robert L. Bach, "Immigrant Earnings: Determinants of Economic Attainment Among Cuban and Mexican Immigrants in the United States," *International Migration Review*, forthcoming.

²⁰ *The Tampa Tribune*, June 23, 1980.

Immigration and employment: a need for policy coordination

In coming years, immigrants may constitute as much as 45 percent of U.S. labor-force growth; efforts are needed to ensure that national goals for immigration and employment are complementary

DAVID S. NORTH AND PHILIP L. MARTIN

All nations have immigration policies, usually quite explicit, and all nations have labor market policies, which are at least implicit. In most industrial democracies, the two policies are strongly linked and may even be administered by the same government agency. In the United States, however, there is often little coordination between the two, despite the major impact of international migration on the U.S. labor market.

Logic would seem to suggest that there should be a close relationship between these policies. First, the Government is in a stronger position to alter the size and characteristics of the alien work force than it is to make similar adjustments in the resident labor force.

Secondly, international migrants have made a major contribution to the growth of the U.S. labor force, which increased from 82.3 million in 1968 to 102.5 million in 1978, or by about 2 million per year.¹ In its intermediate growth rate model, the Bureau of Labor Statistics projects that this rate of increase will continue through 1985 and will then drop to 1.2 million annually through 1990.²

Since the beginning of fiscal 1978, the number of legal migrants recorded by the Immigration and Naturalization Service has been about 600,000 per year, a flow which seems destined to remain constant or even increase, given the continuing entry of refugees. About one-half of the immigrants join the labor force within 2 years of their arrival. This proportion will rise in the

following two decades as grown immigrant children join the labor force.³

The 300,000 aliens who become employed soon after arrival (15 percent of the current rate of increase in the labor force) represent only *legal* immigrants. The labor-force impact of foreign-born workers should be adjusted upwards to account for illegal or undocumented workers. These workers may equal or substantially exceed the number of legal immigrants. Thus, 30 to 45 percent of the annual growth of the labor force may consist of newly arrived aliens.

New immigrants, both legal and illegal, are spread unevenly throughout the Nation. They tend, as have previous generations of immigrants, to settle where they expect to find a supporting community, economic opportunities and a familiar climate. For example, in 1975, 38.9 percent of the arriving legal immigrants settled in 10 cities, which accounted for only 9.8 percent of the Nation's resident population.⁴ However, as table 1 indicates, the labor markets in which the migrants cluster often have higher unemployment rates than the national average, which was 5.8 percent in 1979.

With these preliminary observations recorded, we turn to four questions:

1. What are the objectives of U.S. policies regarding immigration and employment?
2. How are these policies made?
3. How do these policies interact with each other?
4. What, if anything, should be done to change the situation?

Policy objectives. U.S. employment policies have multiple goals. The primary objective is full employment—de-

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fined as an economic climate in which anyone "able, willing, and seeking work" can find a job. Employment policies may also be intended to curb inflationary pressure, encourage adequate wages and safe and decent working conditions, increase job satisfaction, and promote production efficiency and more widespread use of collective bargaining. There is an alternative view, that employment policy should seek primarily to increase the gross national product. Those who hold this view feel that the forces of the free market should generally determine the rewards for and the conditions of work.

Employment policy goals are not always mutually compatible at any time. For example, increasing job satisfaction may temporarily slow productivity growth and intensify inflationary pressures. Fortunately, certain policy tools—counseling and training, labor-market information exchanges, wage and training subsidies, and direct public service employment—permit remedial efforts to be concentrated on labor markets experiencing special bottlenecks or on groups of workers with unique economic problems.

The goals of the current *de jure* immigration policy are also multiple: to admit relatives of U.S. citizens and

permanent resident aliens; to recruit a few needed workers; and to absorb some portion of the world's refugee population, generally those fleeing Communist countries. In 1978, the United States admitted 132,780 refugees and 30,877 workers and family members in the occupational preference categories. Virtually all of the remaining 437,785 entrants were accepted because they were relatives of U.S. residents.

The only immigrants screened for labor-market characteristics are the workers for whom the occupational preferences are sought. These workers receive labor certifications from the U.S. Department of Labor if their would-be employers can prove that their skills are needed, and that their presence will not depress the U.S. labor market. However, the state of the labor market is not considered in admitting the great majority of workers. In fact, the total flow of immigrants is affected more by individual decisions of U.S. residents seeking the admission of relatives, and the actions of foreign officials creating flows of refugees than it is by the U.S. Government.

The Nation also has a *de facto* immigration policy, which permits the entry and presence of millions of ille-

Table 1. Major immigrant receiving cities, by immigrant-to-resident ratio, 1978, and by unemployment rate, labor force size, and number of persons unemployed, 1979

[Ranked in ascending order of ratios]

City of intended residence	Ratio of 1978 immigrants to resident population ¹	1979 unemployment rate ² (in percent)	Labor force (in thousands)	Number of unemployed (in thousands)	City of intended residence	Ratio of 1978 immigrants to resident population ¹	1979 unemployment rate ² (in percent)	Labor force (in thousands)	Number of unemployed (in thousands)
Miami, Fla.	1:15	6.8	210.1	14.3	New Orleans, La.	1:152	6.5	232.5	15.0
Elizabeth, N.J.	1:49	8.9	54.6	4.9	Torrance, Calif.	1:152	4.1	73.2	3.0
San Francisco, Calif.	1:57	7.1	326.4	23.2	Tacoma, Wash.	1:155	8.0	75.9	6.1
El Paso, Tex.	1:68	7.8	158.7	12.4	Oakland, Calif.	1:159	7.0	186.5	13.5
Paterson, N.J.	1:78	12.2	67.5	8.2	Hialeah, Fla.	1:162	5.5	65.4	3.6
New York, N.Y.	1:83	8.7	3,019.0	264.0	Sacramento, Calif.	1:164	7.4	148.5	11.0
Pasadena, Calif.	1:83	4.4	58.4	2.5	Berkeley, Calif.	1:170	7.4	68.1	5.1
Santa Ana, Calif.	1:84	4.7	113.8	5.4	Portland, Oreg.	1:171	5.7	230.7	13.2
Alexandria, Va.	1:92	5.3	54.3	2.9	Bridgeport, Conn.	1:175	7.1	69.3	4.9
New Bedford, Mass.	1:92	8.1	50.6	4.1	Long Beach, Calif.	1:175	5.6	172.8	9.7
Glendale, Calif.	1:93	4.0	73.1	2.9	Tampa, Fla.	1:176	5.1	163.3	8.3
Los Angeles, Calif.	1:98	6.2	1,434.9	89.5	Anaheim, Calif.	1:180	4.4	136.9	6.1
San Diego, Calif.	1:98	6.6	387.2	25.4					
Average/total		7.7	6,008.6	459.7	Average/total		6.1	1,623.1	99.1
Hartford, Conn.	1:100	6.9	74.9	5.2	Stamford, Conn.	1:203	5.0	62.7	3.1
Newark, N.J.	1:102	11.7	158.1	18.5	Salt Lake City, Utah	1:205	4.5	106.5	4.8
Jersey City, N.J.	1:105	9.1	101.8	9.3	Yonkers, N.Y.	1:207	5.1	109.6	5.6
Las Vegas, Nev.	1:110	6.2	93.9	5.8	Washington, D.C.	1:208	7.5	320.0	24.0
Dearborn, Mich.	1:114	5.3	47.0	2.5	Denver, Colo.	1:209	5.3	257.3	13.7
Fresno, Calif.	1:114	7.3	111.5	8.2	Rochester, N.Y.	1:219	6.4	144.7	9.2
Seattle, Wash.	1:124	5.3	328.2	17.5	Dallas, Tex.	1:222	3.6	524.9	19.0
Stockton, Calif.	1:124	10.1	60.4	6.1	Hollywood, Fla.	1:234	5.8	67.9	3.9
Houston, Tex.	1:125	3.5	874.0	30.9					
Providence, R.I.	1:129	7.2	78.6	5.7					
San Jose, Calif.	1:136	5.7	281.5	16.1					
Fort Lauderdale, Fla.	1:138	5.0	98.2	4.9					
Chicago, Ill.	1:146	6.4	1,458.0	93.2					
Average/total		5.9	3,766.1	223.9	Average/total		5.2	1,593.6	83.3

¹ Population data are 1977 estimates.

² Data are annual averages. The national annual unemployment rate for 1979 was 5.8 percent. Average unemployment rate calculated by dividing the total labor force for each group of cities into the total number of unemployed for the group.

NOTE: Cities selected were those with populations of more than 100,000 (in 1970), and im-

migrant arrivals totaling more than 500 in fiscal 1978.

SOURCE: Ratio of 1978 arriving immigrants to population computed from *INS Annual Report, 1978*, table 12A (for immigrants), and *Statistical Abstract of the United States, 1979*, table 24 (for population); 1979 labor-market data from computer printout supplied by the Division of Local Area Unemployment Statistics, Bureau of Labor Statistics.

gal migrants. The "goals" of this policy include the creation of a substantial work force without legal rights for the benefit of some U.S. employers, while permitting Mexico and other less developed countries to export a substantial percentage of their excess labor force.

Polymaking. The formation of labor-market policy might be compared with the continuous cooking of a stew; the flavor changes as ingredients are added, but the process is an ongoing one and the changes are not abrupt. Employment policy operates through a series of vehicles, such as the setting of the minimum wage, adjustment of the unemployment insurance and workers' compensation systems, change in the laws and the personnel of the National Labor Relations Board, and variation in the funding and emphasis of the Comprehensive Employment and Training Act (CETA). Many of these decisions are Federal, but some are also made at the State and local levels. Polymaking in this arena involves the interested parties in a never-ending round of legislative, executive, and judicial exercises, alternatively battling and compromising with each other. The focus is essentially domestic, far more concerned with inflation, unemployment, poverty, and productivity than with immigration.

In contrast, immigration policymaking is not continuous, and its focus is heavily influenced by international considerations. The basic structure of the immigration law is changed about once a generation (most recently in 1965, when the 1921 country-of-origin quota system was eliminated). Immigration policy develops in fits and starts, as policymakers react negatively to existing practices and because of its international elements, its results are harder to predict and control.

A further complication is the *locus* of employment and immigration policymaking. The congressional labor and taxation committees dealing with employment policy do not deal with immigration policy, which is handled by the judiciary committees, and vice versa. Similarly, the U.S. Department of Labor plays a lead role in making employment policy, but only a minor one in immigration policy, which is administered by the Departments of State and Justice.

Policy interactions. Given the different objectives of both the *de facto* and *de jure* immigration policies on one hand and operative employment policy on the other, and the different ways in which decisions are made in these fields, it should be no surprise that there is little policy coordination.

The principal area of conflict is between the full employment and improved jobs goals of employment policy and the treatment of illegal immigrants. The U.S. Government devotes \$20 billion annually to unemployment insurance to cope with the short-term effects of

unemployment, and \$8 billion more to CETA in a search for longer term solutions to the problem. Simultaneously, however, it tolerates the presence of perhaps millions of low-wage illegal immigrant workers, who compete with some U.S. residents for jobs, and tend to depress wages and working conditions of millions of others. The distributional effects of immigrant labor, especially if illegal, are not well understood, but it is clear that some employers, workers, and consumers are benefiting while others lose. Even more ambiguous are the consequences of the long-term use of so many illegal migrants.

The alternatives available. Bearing in mind the difficulties inherent in immigration policymaking, the Congress in 1978 created the Select Commission on Immigration and Refugee Policy to address these and other complex issues. The Commission, headed by Father Theodore Hesburgh, president of Notre Dame University, will report its findings to the Congress and the President next year.

Early indications are that the Commission recognizes the conflicts between existing immigration and related labor-market policies, and prefers to diminish them.⁵ With regard to its final recommendations, the Commission appears to have several options:

- One is the preservation of the status quo, unhappy as it may be, as a rough compromise, the best available in an imperfect world.
- Another would be to leave the thrust of *de jure* immigration policy essentially as it is, but to devote more resources to its enforcement.⁶
- A third approach would be, simultaneously, to seek to change the law so that it comes closer to today's realities, while seeking more vigorous enforcement of the new immigration policy.

The third option is the most likely approach, and it would be helpful if the Commission would stress the need for coordination of the Nation's labor-market and immigration policies.

Specific alternatives open to the Commission include: legalizing the presence of some of the undocumented workers currently in the United States, making provisions for larger flows of legal immigrants in the future, and setting up a program of employer sanctions which would make it illegal to hire aliens without proper documentation. Or it might propose a guest- or non-immigrant-worker program, as discussed elsewhere in this issue.

Whatever the Commission decides, it will do so after having faced the complex conflicts in employment and immigration policymaking. That, in itself, is a welcome development.⁷

— FOOTNOTES —

¹ *Employment and Training Report of the President* (U.S. Department of Labor, Employment and Training Administration, 1979), table A-1, p. 233.

² *Ibid.*, table E-2, p. 354.

³ David S. North and Allen LeBel, "Manpower and Immigration Policies in the United States (Washington, National Commission for Manpower Policy, 1978), Special Report 20, pp. 98–103, and pp. 246–49.

⁴ See North and LeBel, *op. cit.*, p. 95. For similar data on the clustering of the Indochinese refugees, see Julia V. Taft, David S. North, and David A. Ford, *Refugee Resettlement in the U.S.: Time for a New Focus* (Washington, New TransCentury Foundation, 1979), pp. 179–87.

⁵ It should be noted that most European nations pursuing "active

manpower policies" place immigration under the jurisdiction of the Ministry of Labor. For a description of the way in which Germany made immigration contingent on unemployment throughout the 1960's, see Philip L. Martin, *Guestworker Programs: Lessons from Europe* (U.S. Department of Labor, 1980).

⁶ The Border Patrol, the uniformed police force of the Immigration and Naturalization Service, had exactly one operative helicopter at this writing. There are more policemen assigned to guard the Capitol and the adjacent buildings of the Congress (1,167) than there are INS investigators to enforce the immigration law in the interior of the Nation (798).

⁷ Reprints of this article will be available from the Giannini Foundation, University of California at Berkeley. No. 593.

Adjusting to democracy

. . . The immigrant must be taught that he must stand straight up on his own feet; that the ward politician is dependent on him—on his vote—and not he on the ward politician. In this way he first learns that he is a part of the Government, and while this is done by indirection, in a large sense, there is no other force that is doing it at all. The Pole, the Bohemian, the Lithuanian, the Slovak, and to a much lesser degree the Galician, have inherited the feeling that somehow government is a thing inimical to their natural development . . . Being weaker than it they must be silent in its presence, and if forced to speak, lie, as for them to tell the truth would mean imprisonment or death.

— CARROLL D. WRIGHT

"Influence of Trade Unions on Immigrants,"
Bulletin of the Bureau of Labor,
January 1905, No. 56, p. 5.

Major Agreements Expiring Next Month



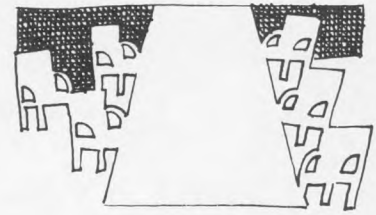
This list of collective bargaining agreements expiring in November is based on contracts on file in the Bureau's Office of Wages and Industrial Relations. The list includes agreements covering 1,000 workers or more.

Employer and location	Industry	Union ¹	Number of workers
Apartment Building Owners and Managers Association of Chicago (Illinois)	Services	Service Employees	3,000
Chicago Dry Cleaners Association (Chicago, Ill.)	Services	Teamsters; and Laundry, Dry Cleaning, and Dye House Workers (Ind.)	4,000
Chicago Real Estate Owners Council (Chicago, Ill.)	Services	Service Employees	4,500
Dana Corp., Parish Frame Division (Reading, Pa.)	Transportation equipment	Steelworkers	1,800
Foster Grant, Inc. (Interstate)	Rubber	Retail, Wholesale, and Department Store Union	1,100
Gibson Products Corp. (Greenville, Mich.)	Electrical products	Auto Workers (Ind.)	3,000
Goulds Pumps, Inc. (Seneca Falls, N.Y.)	Machinery	Steelworkers	1,100
Houston Food Council, Chain Food Stores ² (Houston, Tex.)	Retail trade	Food and Commercial Workers	1,850
ICI United States, Inc. (Charlestown, Ind.)	Instruments	Chemical Workers	1,000
Lockheed Aircraft Corp. (Burbank, Calif.)	Transportation equipment	Engineers and Scientists Guild (Ind.)	2,200
Louisville Gas and Electric Co. (Louisville, Ky.)	Utilities	Independent Protective Association of Utility Workers (Ind.)	2,700
Olin Corp. (East Alton, Ill.)	Instruments	Machinists	3,750
Rohr Industries, Inc. (Chula Vista, Calif.)	Transportation equipment	Machinists	3,000
Rohr Industries, Inc. (Riverside, Calif.)	Transportation equipment	Machinists	1,300
RCA Corp. (Interstate)	Electrical products	Electrical Workers (IUE)	5,650
RCA Corp. (Interstate)	Services	Electrical Workers (IBEW)	2,300
RCA Global Communications Inc., Communications Trade Division (Interstate)	Communication	Teamsters (Ind.)	1,000
Safeway Stores, Inc. (Texas)	Retail trade	Food and Commercial Workers	1,300
Textile Maintenance Institute of Chicagoland (Illinois)	Services	Teamsters; and Laundry, Dry Cleaning and Dye House Workers (Ind.)	5,000
Trane Co. (Clarksville, Tenn.)	Machinery	Machinists	1,300
Tropicana Products, Inc. (Bradenton, Fla.)	Food products	Teamsters (Ind.)	1,500

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

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

Developments in Industrial Relations



Job protection stressed in telephone contracts

A scheduled mid-August strike against American Telephone and Telegraph Co. and its operating and manufacturing arms was averted when the Communications Workers accepted a 3-year offer for the 525,000 workers it represents in the Bell System. As usual, the International Brotherhood of Electrical Workers settled on similar terms for its 119,000 workers, as did the Telecommunications International Union for 56,000 workers. During the bargaining, which began in June, the three labor organizations worked together on formulating demands and in responding to company proposals. Although there were no strikes over national issues, there were several brief strikes over local issues, including a 16-hour walkout and later a 19-hour walkout by 33,000 CWA members employed by the New York Telephone Co., and a 30-hour walkout involving 70,000 CWA members at Pacific Telephone Co. in California and Nevada. The last national strike against the Bell System, lasting 5 days, preceded the 1971 settlement.

CWA President Glenn Watts valued the settlement package at 34.9 percent. Union officials calculated the two wage escalator adjustments (August of 1981 and 1982) on the assumption that the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) would rise 9.5 percent in the year ending May 1981 and 9.7 percent in the year ending 1982. There was no immediate comment on the settlement by the Council on Wage and Price Stability, but Watts said the annual increase in compensation was "comfortably within" the Administration's 7.5 to 9.5 percent annual guideline, which is based on assumed 7.5 percent annual rises in the CPI-W and also permits the exclusion of certain increases in the cost of benefits.

CWA officials estimated that the August 1980 initial wage increase would average 9.24 percent, or \$28.82 a week. Pay rates were not increased for employees in the first step of the progression schedules, but those at the top of the schedules received 10.2 percent increases and those in intermediate steps received a smaller increase.

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

For the 1981 and 1982 increases, workers in the top progression step will receive 3 percent increases; those in the intermediate steps will receive a smaller increase. The union estimated the increases at 2.67 percent, or \$9.16 weekly, in 1981 and 2.68 percent, or \$10.17, in 1982. In addition, telephone operators received a two-stage "upgrading" increase up to a maximum of \$7.50 a week for those at the top step.

The two wage escalator adjustments will be calculated at the new rate of 55 cents a week plus 0.65 percent of the individual's weekly rate for each 1 percent increase in the CPI-W. The previous rate was 50 cents a week plus 0.6 percent of the weekly rate for each 1 percent index rise. According to the union, the new formula will recover about 80 percent of price increases measured by the CPI-W, compared with 75 percent for the previous formula.

The settlement included 14 provisions that, according to the union, dealt with "the interrelated issues of job security and job pressures" stemming from "an ailing economy and the rapidly changing state of technology." Included were:

- Four paid and one unpaid "excused work days" a year for regular employees (instead of three paid and one unpaid), in addition to a one-time excused day on December 26, 1980.
- Three weeks of paid vacation after 7 years of service (formerly 8 years), effective in 1981.
- A new procedure for scheduling vacations.
- Termination of the practice of monitoring some calls handled by operators.
- Establishment of a joint committee to assist employees affected by technological changes.
- Adoption of a plan protecting 15-year employees downgraded because of technological changes from pay reduction for the balance of the contract term, with an increasing reduction to apply afterwards.
- A 50-percent increase in supplemental income protection payments to laid-off workers, bringing the payment rate to 40 percent of the basic weekly wage plus \$8 per year of service (maximum payment of \$18,000). Eligibility was extended to employees who are age 62 with 20 years of service and those whose age plus service total 75.
- An understanding that "traditional" telephone work will not be contracted out if it "will currently and di-

rectly cause layoffs or part-timing of employees.”

- A “successorship memorandum of agreement” providing various income and job security protections for employees transferred because of a reorganization of the Bell System.

Major changes in pensions included provisions for (1) two “guaranteed cost-of-living” adjustments in benefits; (2) retirement at full benefit rates for 30-year employees, (previously, the employee’s pension was reduced 3 percent for each year under age 55 at retirement); (3) an improved and simplified normal pension formula—the October 1980 increases (for employees retiring after August 1980) range from \$12.11 to \$29.85 a month for each year of service, depending on preretirement earnings, August 1981 increases range from \$13.35 to \$32.73, and August 1982 increases range from \$14.78 to \$35.98; and (4) increases in minimum pensions, ranging from 48 percent after 20 years of service to 115 percent after 40 years.

Other provisions called for improvements in health, dental, life insurance, and vision care benefits and an increase in the mileage allowance for authorized use of a personal automobile.

First woman on AFL-CIO Executive Council

The AFL-CIO’s Executive Council selected Joyce D. Miller as its first female member. Miller is a vice president of the Amalgamated Clothing and Textile Workers Union and president of the Coalition of Labor Union Women. In order to elect a woman, the Council waived its rules that a member be a chief officer of a union and that two representatives of the same union could not serve on the 35-member council. Murray Finley, president of the Amalgamated Clothing and Textile Workers, was already a council member. AFL-CIO President Lane Kirkland said he hoped the time would come when women as well as minorities would gain election to union presidencies, making special rules unnecessary.

The chief item of business at the summer session was the Council’s endorsement of President Jimmy Carter for re-election, calling him the “clear choice” for American workers. The Council said it would ask the Federation’s General Board to endorse the Democratic ticket and to plan a vigorous campaign to inform union members about the candidates and issues in the 1980 election campaign.

The Council took steps to direct pension money into “socially desirable” investments beneficial to labor by endorsing the creation of a Government-guaranteed “super” fund of pension assets. The purpose of the fund would be to (1) encourage investments in “job-creating” industries such as construction and transportation; (2) coordinate pension funds proxy votes on issues before

shareholders; (3) provide a clearinghouse to assist investors in avoiding companies with poor labor relations; and (4) encourage unions to press for a larger role in managing pension funds.

Airline workers get new contract

American Airlines and the Transport Workers Union negotiated a 30-month agreement providing for general wage increases of 6 percent retroactive to March 1980, 2 percent in September 1980, 4 percent in March and September of 1981, and 4 percent in March of 1982. The agreement, which covered 12,400 ground service employees, continued the cost-of-living clause, providing annual adjustments of 1 cent for each 0.3-point rise in the Bureau of Labor Statistics Consumer Price Index (1967=100) in September of 1980 and 1981 and August of 1982, with maximum adjustments of 18, 22, and 22 cents, respectively (the previous contract allowed 34 cents over its 30-month term).

Longevity pay was increased to a maximum of 15 cents an hour (from 13 cents). Paid vacation was liberalized by providing for 4 weeks after 10 years of service (formerly 12 years) and 5 weeks after 17 years (formerly 20) beginning in 1981. Employees can accumulate up to 130 days of sick leave effective in 1981 (formerly 120 days) and 140 days in 1982 and will receive \$25 for each day of unused sick leave at retirement (previously, employees received \$12 for each unused day at the end of each year).

Subject to government approval, all previous pension contributions were to be refunded and workers were to receive pension credit for years in which they did not contribute. Other improvements included a 25-cent payment for the first government license held and 20 cents for the second, effective in December 1980 (formerly 20 and 15 cents), increasing to 35 and 30 cents in December 1981. Line-pay for mechanics, fleet, and ground service employees was increased to 10 cents (formerly 5 cents), effective in September 1981.

Initial contract at Southern textile firm

A 9-year dispute between the Clothing and Textile Workers union and Wellman Industries, Inc., ended when the parties agreed on an initial contract for 1,000 workers in Johnsonville, S.C. In addition, the textile firm agreed to an affirmative action plan and cash settlements to workers who were affected by seven National Labor Relations Board findings that Wellman had engaged in unfair labor practices.

Wellman employees voted in April 1972 for representation by the Textile Workers Union of America. However, subsequent efforts to negotiate a contract were unsuccessful and the union complained to the National

Labor Relations Board that Wellman was engaging in unfair labor practices. The Board upheld the charges and rejected the company's contention that it did not have to negotiate with the union because its employees were not permitted to vote on the Textile Workers Union of America and the Clothing Workers merger that resulted in formation of the ACTWU.

Under the settlement, Wellman will pay a total of \$465,000 to employees who lost earnings as a result of layoffs or reductions in pay or who were improperly discharged. Under a consent decree entered in U.S. District Court, the company agreed to increase, within 3 years, the number of black employees to 48 percent of skilled jobs, 35 percent of office jobs, and 15 percent of officials and managers. To help in this effort, Wellman will set up a \$100,000 fund for training employees.

The contract provided for a 9-percent wage increase and for reopening bargaining on wages and benefits in both the second and third years. Other terms included a seventh paid holiday and adoption of funeral leave, jury duty, and military duty pay.

In another development involving ACTWU, the union charged that J. P. Stevens & Co., had not agreed to a July 1980 wage increase for the unionized employees at its Roanoke Rapids, N.C., plant to punish them and to "chill the union organizing activities elsewhere." (See *Monthly Labor Review*, September 1980, p. 60, for information on wage increases that were granted or negotiated at other southern textile companies in July 1980.)

The ACTWU, which for 6 years has been trying to negotiate an initial contract at the plant, recalled that the National Labor Relations Board issued a complaint against Stevens for denying a 1979 wage increase to the 3,000 workers. The complaint asserted that the company had withheld the increase from the employees because they had joined or supported the union for mutual protection and to engage in collective bargaining.

Workers agree to purchase printing firm

Employees agreed to purchase Dayton (Ohio) Press, Inc., to avert a possible closing of the magazine printing firm. The agreement between the parent Charter Co. and 13 unions calls for Charter to receive a \$35-million long-term note. The employees would borrow \$100 million, of which \$70 million would be used for new machinery and \$30 million for operating expenses. To partly offset these costs, the employees agreed to a 14-percent wage reduction. An official of the Graphic Arts union, which represents 850 of the workers, said that the purchase was contingent on obtaining long-term printing contracts, as well as on arranging the financing.

Prior to the decision to sell the plant to the employ-

ees, Charter had considered moving the operation to Tennessee, Virginia, or Georgia; selling the business to another firm; or investing \$70 million in new rotogravure presses necessary for the firm to be competitive with other magazine printers.

The company ruled out buying new presses after the unions refused to accept a wage freeze that Charter said was necessary to equalize labor costs with its competitors. The rejected proposal, made in February 1980, was for a 15-year contract with wages to be frozen until the five competitors' wages equalled those at Dayton Press, which was expected to occur in 1983. During the balance of the 15-year period, employees would have received the average amount of the increases received by the employees of the five companies. According to a union official, straight-time pay for the unionized workers at Dayton Press ranged from \$15,674 to \$20,072 a year at the time of the proposal.

Dayton Press has been losing money for the past 4 years. In February, employment was 2,600, including 700 on layoff, compared with 5,700 in 1970.

Benzene standard overturned

The Supreme Court ruled by a 5 to 4 vote that the U.S. Department of Labor's 1977 standard for worker exposure to benzene was invalid because the Department had not proved it was necessary. Justice John Paul Stevens, writing for four members of the Court, said that the Occupational Safety and Health Administration in issuing the standard had failed to prove that it was "reasonably necessary and appropriate" to remedy a "significant risk of material health impairment." Stevens said OSHA had acted incorrectly in reducing the allowable exposure level to one part of benzene per million parts of air, from 10 ppm, because the agency had not obtained "empirical evidence" or "opinion testimony" that "exposure to benzene at or below the 10 ppm level had ever in fact caused leukemia." He said that OSHA's rationale for tightening the standard was its long-standing position that exposure to cancer-causing agents must be reduced to the lowest possible level because there is no such thing as a "safe level."

Charles Dibona, president of the American Petroleum Institute, said that the court's ruling establishes that "health regulations in this country must be made on the basis of scientific fact rather than pure speculation." Edmund B. Frost, general counsel of the Chemical Manufacturers' Association, said, "Congress did not mandate—nor can OSHA achieve—a perfectly risk-free society. OSHA can now regulate only significant, not theoretical, risks."

Deputy Assistant Secretary of Labor Basil Whiting conceded that the ruling will make it more difficult to set standards but said OSHA will "press forward in regu-

lating benzene, as well as in regulating other cancer-causing and toxic substances.”

The legal challenge to the benzene standard, initiated by the American Petroleum Institute, had resulted in a ruling by the 5th U.S. Circuit Court of Appeals in New Orleans that the standard was unreasonable because of a lack of evidence of significant health benefits. The appeal before the Supreme Court that resulted in the upholding of the lower courts' ruling was *Industrial Union Department (of the AFL-CIO) vs. American Petroleum Institute*. (For a fuller discussion of the case, see “Significant Decisions in Labor Cases,” September 1980, pp. 53–54.)

Minority quotas for U.S. contracts upheld

In one of the most important civil rights cases in recent years, the Supreme Court decided that Congress has constitutional power to earmark Federal funds for minority groups to compensate for discrimination. In rejecting, by a 6 to 3 vote, an appeal of a decision upholding a 1977 law allocating 10 percent of a public works appropriation to minority contractors, the Court said Congress may favor a minority group whenever it finds racial discrimination and tailor the remedy to end that discrimination. The Court said that the findings of discrimination need not be as specific as when a judge imposes a remedy and that the people adversely affected by corrective programs need not have been found guilty of discrimination. (See “Significant Decisions in Labor Cases,” September 1980, pp. 54–56.)

Kahn denounces construction agreements

Construction settlements in California drew attention as a number of unions negotiated 3-year contracts that, according to industry officials, would raise labor costs by more than 40 percent. Alfred E. Kahn, chairman of the Council on Wage and Price Stability, denounced these settlements—and some others in the industry—as inflationary and called on John T. Dunlop, head of the tripartite Pay Advisory Committee, to investigate the problem. Dunlop immediately began discussions with construction industry and union leaders to determine if 1980 settlements alter traditional wage relationships between the various crafts and, thus, create competition among crafts. During his tenure as leader of the former Construction Industry Stabilization Committee, Dunlop worked to stabilize these pay relationships as part of his plan to moderate construction settlements.

Perhaps the most noteworthy settlement was between Plumbers District Council 16 and the various employer associations for 12,000 workers in a 13 county area, including Los Angeles. It provided for an \$8.85 increase in the previous \$20-an-hour wage-benefit cost. Wages

were increased to \$15.25 an hour on July 1, 1980 (from \$13.83), to \$16.85 on July 1, 1981, and to \$18.69 on July 1, 1982. The balance of the package consisted of increases in employer payments into various benefit funds and increases in travel pay and subsistence.

William Deel, head of the Plumbing Contractors Association, said that the association was forced to settle on the \$8.85 package because 500 independent companies continued to work during the 2-week strike, putting the 180 companies in the association at a competitive disadvantage. According to Deel, the independent companies, which employ 7,000 of the 12,000 workers, had signed interim agreements that bound them to accept whatever terms were negotiated by the association.

Deel indicated that the settlement may cause a trend toward nonunion construction because “the nonunion firms pay anything they want, and skimp or even skip entirely the fringe benefits, such as pensions.” However, a plumbers union official said plumbers average about \$20,000 a year, calling that “hardly excessive” for skilled craft workers.

The other settlements involved a number of crafts and generally provided for \$6.37 packages over the 3-year contract duration.

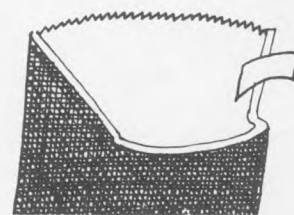
Insurer to yield job data

The U.S. Department of Labor withdrew a 2-day-old order barring Prudential Insurance Co. from holding Federal government contracts after the company agreed to supply the computerized employment data the Department had been seeking. The accord, worked out with the assistance of Federal District Judge Herbert Stern, provided that Prudential will supply the information regarding its employees back to July 1, 1976, on condition that the Government keep the records confidential.

The Department had been seeking the information as part of an investigation to determine if Prudential engaged in any discriminatory employment practices. Prudential had agreed to supply printouts of certain data but not the actual computer tapes, contending that this would have violated the privacy of its employees. This stalemate led to the order that would have cost Prudential more than \$200 million a year in income from Government contracts.

Judge Stern, who heard Prudential's appeal of the order, scheduled a September hearing on the Department's request that Prudential also supply information for earlier years to enable it to make comparisons with the later information. Prudential contended that it was not required to supply the earlier information because it was covered by a 1976 conciliation agreement resolving previous employment matters. □

Book Reviews



American universities: making the grade?

American Academics: Then and Now. By Logan Wilson. New York, Oxford University Press, 1979. 309 pp. \$13.95.

American Higher Education in Decline. By Kenneth H. Ashworth, foreword by Logan Wilson. College Station, Tex., Texas A & M University Press, 1979. 105 pp. \$7.95.

Both distinguished educators, the authors of these books have written rather different accounts of the institutional behavior of higher education in the recent past. Logan Wilson's book, the more scholarly of the two, focuses on the people who staff the classrooms, laboratories, and offices of colleges and universities, while Kenneth H. Ashworth's essay examines the institutions of government, enterprise, and accreditation which, it claims, largely account for higher education's "decline." Though neither author dwells on economic factors, both books provide penetrating glimpses of the firms and markets which generate and channel higher education's economic activity.

Wilson's book is really a sociological profile of American academics—"then," by which Wilson means the early 1940's (when he previously analyzed the academic profession in *The Academic Man*), and "now" in the late 1970's. As in the earlier book, he begins by tracing the life cycle of an average academician as professional recruit, student, and apprentice, staff member, and "professor administrant." Progression through these stages, he observes, is basically a matter of competence rather than political or market power. Thus, in succeeding chapters, Wilson describes the ways that competence is discovered and nurtured in academia and how these processes lead to differentials in status and prestige for institutions as well as individuals.

It is the chapters on status appraisal, professional and economic status, and university and individual prestige that reveal the importance to economic understanding of mastering the sociology of the profession. One finds in universities an intellectual values structure which assumes negligible differences in the "value" of knowledge among the various fields and a commitment to the advancement of knowledge in all disciplines rather than to personal self-interest or pecuniary profit. Ac-

ordingly, faculty are judged by their intellectual quality and scholarly output rather than by the substantial differences between their market prices in nonacademic opportunities. Wilson has laced the last few chapters of the book with illustrations of how this desire for interfield equality has led to shortages and hence potential qualitative declines in specialties where opportunity wages are high, and to institutional reliance on assorted compensatory nonmonetary remuneration schemes designed to widen real incentive structures despite constraints on salaries. Thus, the devices of market adjustment are clearly evident amid the sociological trappings of the Wilson volume.

While Ashworth in *American Higher Education in Decline* does not deny the link between social organization and market performance, he implies that the link is moot so long as three institutional actors continue to undermine academia's values structure: the Federal bureaucrats who "harass" and "subjugate" higher education, the entrepreneurs of "freeze-dried" nontraditional education who, in a new version of Gresham's law, produce the least rigorous off-campus programs, and impotent regional accrediting associations which ought to know better but relax standards anyway. These three actors and their constituencies have become interdependent through Federal largess, which Ashworth argues has propelled American higher education into decline.

Fortunately, in Ashworth's view, the latest cycle of governmental interaction with higher education is drawing to a close as Federal monies for student support dry up. But a new cycle, propelled by urgent public needs for the unique services academia can provide, those services oriented more towards technological research and social understanding than to the current cycle's focus on broadened access, may be just around the corner. If so, Ashworth calls for stiffened backs and wiser choices in the halls of ivy, lest government be allowed to intervene once again into higher education's internal processes and priorities.

Ashworth's attitude towards markets for higher education services, therefore, is ambivalent: he mistrusts the allocative processes of free markets, especially the leveling influence of entrepreneurial activity on standards of academic excellence; yet he abhors the regulatory threat of Federal and State employees who lack understanding of what a university is and how it works.

If not regulation, then what? Self-regulation, he seems to be saying, and *his* objectives in such a system would be merit at the expense of equality, and excellence at the expense of the "prevailing standard of mediocrity."

Both books are written for a general audience, though I suspect that the majority of the readers will be educators or perhaps government bureaucrats who keep files on their enemies. The Wilson book should also appeal to aspiring academicians eager to catch a glimpse of the institution to which they may be committing their life's work.

Both books add marginally to previous literature on the current academic malaise—the Wilson book primarily to the sociology of the academic profession, the Ashworth polemic to the public debate about the quality of educational outcomes. Readers should be warned that Ashworth's tell-it-like-it-is style substitutes opinion for evidence on almost every page; it will not persuade cautious readers unless they already harbor a similar set of prejudices about the roles of government, non-traditional suppliers, and standard-setting in American higher education.

—GORDON K. DOUGLASS
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The work ethic: battered but unbowed

The Work Ethic in Industrial America, 1850–1920. By Daniel T. Rodgers. Chicago, The University of Chicago Press, 1978. 300 pp. \$5.95, paper.

In Daniel T. Rodgers' words, "This is at bottom a study not of work but of ideas about work." The book focuses on the question, "What happened to work values among middle-class northerners when work itself was radically remade?" The issue of the work ethic in early industrial America has obvious appeal to the student of American history, but, because of Rodgers' lucid and concise treatment of this ever controversial issue, it will perhaps reach a wider audience. Although his penetrating analysis of the relationship between workers and their machines draws from a wide-range of literary vehicles and historical figures, he tends to concentrate on a particular genre or a few influential persons in many of his chapters.

The early 19th century marked the beginning of the transformation of the American economy from an agricultural to an industrial base. However, home production, or the "putting-out" system of handmade goods, still flourished. Thus, work was still primarily autonomous and associated with self-fulfillment and personal independence. By the mid-19th century, disparate strands of view, some of which were rooted in the Prot-

estant Reformation and others in the era of the American Revolution, all came together to reaffirm that work was the core of moral life. "Work made men useful in a world of economic scarcity; it staved off the doubts and temptations that preyed on idleness; it opened the way to deserved wealth and status; it allowed one to put the impress of mind and skill on the material world."

Industrialization drove an unbridgeable void between the notion of work for self-fulfillment and work for monetary gain. The debasing and monotonous nature of factory work, together with the issue of wage employment, led to continuous worker efforts, most of which failed, to render industrial toil more humane. "From the cooperatives' attack on hiring wage labor, to the progressive moralists' campaign against factory monotony, to the restless discontent of industrial workers, northerners had tilted against the industrial regime, where time and discipline were screwed to an unfamiliar pitch, skills split and autonomy undermined." To trace these developments, Rodgers leaves no stone unturned, extracting material from sermons, lectures, children's literature, editorials, essays, poems, speeches, and cartoons. To represent the honest workingman, for example, he vividly describes the square-jawed, paper-capped, bare-armed, muscled blacksmith holding the tools of his trade—a commonplace figure of the industrial era.

"The first issue to trouble the moralist was the matter of wage working." To some wage labor seemed little different than slavery if a worker could not realistically aspire to a business of his own. Counterattacks on the wage system included the formation of cooperative workshops, profit-sharing, piecework, and finally an industrial democracy crusade (which in today's international circles would be known as "codetermination"), whereby employees and employers share in the decisionmaking process. Obviously, some of the labor issues of yesterday are still with us today. Piecework points to another example. To individualize payment, it was necessary to find precisely how long a worker should take to do a particular job. This gave birth to the still controversial time and motion studies. What bound all these causes together was an unwillingness to let go of the idea that work, if it was worthwhile, required the self-direction of the worker.

Industrial monotony drove a second wedge between work ideals and work realities and proved to be as vexing and unsettling as the question of a worker's economic freedom. In the chapter, "Mechanicalized Men," Rodgers traces the evolution of the problem and subsequent worker reactions through the works of four leading labor experts or reformers of the factory system. Carroll D. Wright, first Commissioner of the Federal Bureau of Labor in 1885, argued that factories had imposed moral order on moral chaos. In contrast, two

Englishmen—John Ruskin and William Morris—advocated abandoning or severely restricting the machine. This attack eventually led to the short-lived handicraft movement—arts and crafts societies fashioning their wares by hand. Ultimately, Jane Addams concluded that, since machines were inviolable, factory workers might become more happily adjusted if they knew their work was part of something larger. She started the “industrial betterment movement,” with teamwork as the dominant motif. This led to a turn-of-the-century surge in industrial education based on the notion that monotony could be conquered by proper mental preparation. However, against Addams protests, the schools were refashioned along factory lines, and classes were job-focused rather than worker-focused. “So the critics of routinized work turned at last toward leisure.”

“Vacations were a new habit for the suburban middle class in the 1850’s.” In the chapter, “Play, Repose, and Plenty,” Rodgers analyzes 19th century theorizing on rest, relaxation, and consumption. *Play* and recreation are praised by American ministers, most notably Henry Ward Beecher, as an offsetting influence to the excesses of work. As an alternative to play, a growing library of books advocated the power of *repose* to rekindle the mind or to regenerate spiritually troubled souls. *Plenty* refers to the age-old argument that overproduction and underconsumption would result in supply outrunning demand, leading to a general economic glut. This led to the thinking, that still somewhat besets us today, that “the best cure for national impoverishment was not to tighten one’s belt but to let it out a notch” and consume. An era of surplus had arrived.

The erosion of the scarcity ideology was the most evident sign of a shift in values. “Yet the striking phenomenon of the age was not change but persistence amid change,” the endurance of the work ethic, but a work ethic more and more independent from work itself. Rodgers tracks a splintering of the old phrases and old homilies associated with work ideals from the rolling confusion of everyday life through stories written for boys growing up in the 19th- and early 20th-century America. These tales intertwined lessons of work and discipline. Although they moved from instruction to instruction-within-amusement, from stories of work to stories of play and heroic endeavor, the code of duty among heroes endured; a faith in work survived.

There was still the question of “How much of a man’s life should work consume?” In a somewhat less provocative chapter, “Sons of Toil,” Rodgers documents the clashes between employer and employee over worktime. Workers relief from toil was manifested in absenteeism, quits, slowdowns, and a call for a shorter than a sun-to-sun workday. Shouts of “a fair day’s wage and a fair day’s work” became the commonplace cry of the land.

The final chapters deviate from Rodgers’ chronologi-

cal organization scheme to cover the work ethic with regard, first to women, and then to political rhetoric. “We also shall have our share of honored and socially useful toil,” says Olive Schreiner in *Women and Labor* (1911). The theme that binds two influential women of the time—Harriet Beecher Stowe and Charlotte Perkins Gilman, who stand at either end of the industrial years and view women’s status differently—is their repeated insistence on work. Stowe saw work as a way to break down the conventions that often forced single women into marriage. Gilman argued that women’s economic dependence on men was catastrophic, stifling their independence, and the only solution was for women to go to work. However, feminist versions of the work ethic were never more than a single strand of thread in the tangled debate over the status of women. By the early 20th century, the issue of women working outside the home was no longer in doubt among many feminists. Rodgers’ retrospective prediction, “To turn women’s restlessness into a demand for work was to tap an immense reservoir of moral feeling, perhaps the largest that lay open to 19th and 20th century feminists,” has indeed been borne out. Although women have entered the work force in record numbers throughout the post-World War II era, they have only recently begun to make inroads into male-dominated occupations.

Beggars and millionaires, who they were and whence came their unearned incomes, were matters that divided turn-of-the-century northerners into bitterly contending political camps. Rodgers details the evolution of this struggle in “Political Uses of the Work Rhetoric.” An epilogue that discusses Charles W. Eliot’s writings—concerned with work and the conditions both of mind and circumstance that made work a rewarding, energizing, joyful activity, or otherwise—concludes the book.

Today, the work ethic may be reflected in what is called the “linear life plan,” a progression from school in youth, through work during the middle years, to retirement in the later years. (See the Fred Best-Barry Stern article in the July 1977 issue of the *Review*.) It is argued, however, that—given the tremendous changes that have occurred in our society, such as the increases in education, technology, and life expectancy—such a plan may no longer fit, or be optimal for, many workers. More workers than ever before want direct personal involvement in determining when and how they will work. Ergo, the conflict over the work/leisure issue persists as workers continue to strive for more freedom of choice; Rodgers has given us an insightful historical perspective to this struggle.

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Education as an escape from the ghetto

The Education of Black Philadelphia: The Social and Educational History of a Minority Community, 1900–1950. By Vincent P. Franklin. Philadelphia, University of Pennsylvania Press, 1979. 298 pp. \$19.95.

Vincent P. Franklin has written the first historical and social study of education in black Philadelphia, between 1900 and 1950, within the changing social, political, and economic context of the black minority. From the perspective of the black community, the major purpose of public and community educational activities was the advancement of Afro-Americans in the city. Education was perceived as an important vehicle for improving the depressed conditions of black citizens caused by discrimination in employment, housing, and public accommodations. Community educational programs were also geared toward those problems facing the black population. Black leaders, parents, and educators struggled persistently to ensure that the schooling that was made available to black children and adults at public expense also functioned to bring about improvements in the overall social status of black Philadelphians.

The first part of this book concentrates on the period from the turn of the century and the publication of W. E. B. DuBois' *The Philadelphia Negro (1899)* to the *Onset of the Great Depression*. In chapter 1, Franklin discusses the origins and development of the Philadelphia black community in the 18th and 19th centuries and presents a detailed examination of social conditions prior to 1920, especially the impact of the Great Migration. Chapter 2 examines public and private schooling of black Philadelphians in the 19th and early 20th centuries. The progressive education movement had a significant effect on public education in Philadelphia as school officials attempted to come to grips with the problem of increasing black and immigrant enrollments. According to the author, the increase in public school segregation in the wake of the Great Migration led in the 1920's to a campaign by members of the black community to change official school board policies and practices. Chapter 3 examines the social, political, economic, and educational conditions in black Philadelphia during the 1920's, and describes the unsuccessful campaign to end the practice of segregating black students and teachers in the public school system. The lack of black political power in the city meant that demands for desegregation of public schools would not be met in that decade.

Various historical and literary societies, church and fraternal groups, and social improvement associations organized communitywide educational activities to inform black Philadelphians about their heritage and contemporary social issues and problems. Chapter 4

presents an analysis of the educational programs that flourished between 1900 and 1930.

In Part II, the author discusses the effect of the Great Depression, New Deal, World War II, and changing race relations on black Philadelphia. The economic depression of the 1930's caused even greater poverty and discrimination against blacks in the local and national job market. Chapter 5 examines the social, economic, and political changes for black Philadelphia during the decade. The reemergence of the Democratic Party in Philadelphia during the early 1930's led to increased competition between the two major parties for the large black vote. Chapter 6 details the successful campaign for the appointment of a black to the school board and the official desegregation of the public school system. The increase in black political power was extremely important in bringing about a change in the policies of the politically appointed Board of Public Education.

The national defense mobilization in the late 1930's signaled the beginning of a major shift in black-white, majority-minority relations in the United States. In Philadelphia, the increased demand for skilled workers led to the training and hiring of blacks in areas where they were previously barred. Chapter 7 describes race relations in Philadelphia in the 1930's and 1940's and the campaigns to educate black and white citizens in order to bring about greater interracial cooperation and understanding. Chapter 8 examines conditions in the public secondary schools of the city and the vocational training available to black youths. In the last chapter, Franklin examines the question of change and continuity in the social and educational conditions of black Philadelphia.

In this reviewer's opinion, it is important to note that other racial, religious, and cultural minority groups have been the victims of discrimination and have used public schooling and community educational programs to improve their socioeconomic conditions.

This study is richly researched and should take its place along such classic studies as: Cronin, *The Control of Urban Schools* (1973); Drake, *St. Clair Black Metropolis* (1945); Huggins, *Harlem Renaissance* (1971); Lyman, *The Black American in Sociological Thought* (1972); Spear, *Black Chicago* (1967); and Tyack, *One Best System* (1974).

It is the author's hope that this study will stimulate other comparative analyses of the social and educational history of racial and cultural minorities in urban America.

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Three quiet revolutionaries

Moving the Mountain: Women Working for Social Change. By Ellen Cantarow with Susan Gushee O'Malley and Sharon Hartman Strom. Old Westbury, N.Y., The Feminist Press, 1980. 166 pp., bibliography, \$4.75, paper.

Underlying every movement for social reform is a "second echelon" of leadership—the unacclaimed men and women who work behind the scenes to achieve the changes advocated by their more visible colleagues. Ellen Cantarow, Susan Gushee O'Malley, and Sharon Hartman Strom attempt to give credit where credit is due by profiling the careers of three remarkable but little known American activists: suffragette and labor leader Florence Luscomb, civil rights activist Ella Baker, and United Farm Workers organizer Jessie Lopex de la Cruz. All three have participated in an impressive array of progressive organizations and their contributions to their respective causes are, as this book reveals, quite substantial.

To give the reader a greater feeling for these women and their work, the authors have fashioned an "oral history" of the life and times of their subjects. After each woman is sketched in a brief historical and biographical introduction, the story is turned over to the interviewee who reflects on her years of activism. Comments by the authors interspersed with the narrative put these recollections into historical perspective.

Has this innovative approach to biography worked? It has certainly succeeded in drawing colorful and evocative portraits of three delightfully feisty women. Florence Luscomb, born in 1877 to a wealthy Lowell, Mass. family, traces her activism back to the early suffrage movement. She organized the first union for clerical workers in 1937, ran for Congress and the governorship of Massachusetts, and wrote the first anti-Vietnam war pamphlet that appeared in Massachusetts in 1953. She emerges as a reformer in the grand New England tradition: genteel and steely, prim and powerful, she relinquished the privileges of her upper-class background to participate in working-class movements.

Ella Baker, now 77, started her career with an editorial position on the black newspaper *American West Indian News*. In 1938, she began her lifelong association with the National Association for the Advancement of Colored People (NAACP), becoming president of the New York City branch in 1954. In the early sixties, she midwived the birth of the Student Nonviolent Coordinating Committees (SNCC) and worked extensively with the Southern Christian Leadership Conference. She appears as a woman of quiet strength whose activism is tempered by a self-effacing view of her contributions: "The kind of role I tried to play was to pick up pieces

or put together pieces out of which I hoped an organization might come. My theory is, strong people don't need strong leaders."

A visit from Cesar Chavez in 1962 got California-born Jessie Lopex de la Cruz involved in *La Causa*—the efforts to organize migrant farmworkers into a union. By 1967, she had become an official union organizer. The 59-year old de la Cruz now works with her husband and family on a cooperative ranch and is actively engaged in trying to break the power of the corporate growers in the San Joaquin Valley and open the land to small farmers. As these women relate their experiences, the reader grasps something of the inner fire that animates them and their efforts to achieve social reform.

Unfortunately, the editorial commentary does not match the quality of the interviewees' narrative. The authors' enthusiasm and respect for their subjects make this book a lively and readable history, but their admiration overwhelms them on occasion, resulting in an embarrassment of gushing prose. Clichés such as "legendary activist" and "passion for justice," and observations like "It took courage to oppose the Cold War" become tedious and dehumanizing. The three activists might have been better served, and their accomplishments more creditably described in an understated and less partisan style.

A more serious flaw is the authors' tendency to oversimplify historical analysis. Objectivity is sacrificed for polemic and rhetoric, and at times, the tone becomes almost sophomoric. Complex historical developments like the Cold War, the Depression, and the Civil Rights Movement are explained only in the most simplistic terms; little effort is made to give a thoughtful accounting of the social forces behind the events. For example, the Cold War is dismissed in a single sentence as a systematic attack by the United States on the Soviet Union, China, and Western European Communist parties; the Depression is described as a frenzied attempt by big business to expand by overinvesting. One appreciates the authors' wish to keep their own comments brief, but such brevity may not be appropriate to a discussion of intricate social issues.

Despite these drawbacks, the book does achieve its declared goals: it brings to light the contributions of three dynamic reformers whose work has not received the general recognition it deserves. This sharing in the feelings and experiences of those who stand just behind the noisy vanguard of social reform gives the reader a greater appreciation of the patience, courage, and determination required to bring about reform.

—KATE FARRELL
Office of Publications
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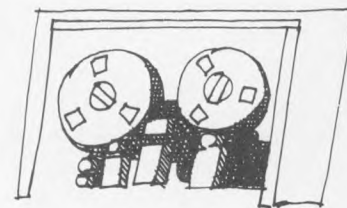
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Organizing to preserve wages

. . . The immigrant is, in the first instance, a wage-reducer, either directly or indirectly, although the extent of his influence upon wages can not well be stated; but as a prospective wage-reducer he is met by the trade union in self-defense, just as the trade union meets female and child labor, except in this, the union seeks to organize the immigrants, while it seeks by legislation to prohibit or limit the work of women and children—that is, the union seeks the aid of the state to prevent wage reductions by means of female and child labor, and it seeks by organizing the immigrants to prevent reduction of wages by immigration.

—Carroll D. Wright
 "Influence of Trade Unions on Immigrants,"
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NOTES ON CURRENT LABOR STATISTICS

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics. A brief introduction to each group of tables provides definitions, notes on the data, sources, and other material usually found in footnotes.

Readers who need additional information are invited to consult the BLS regional offices listed on the inside front cover of this issue of the *Review*. Some general notes applicable to several series are given below.

Seasonal adjustment. Certain monthly and quarterly data are adjusted to eliminate the effect of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might otherwise mask short-term movements of the statistical series. Tables containing these data are identified as "seasonally adjusted." Seasonal effects are estimated on the basis of past experience. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years. For a technical discussion of the method used to make seasonal adjustments, see *X-11 Variant of the Census Method II Seasonal Adjustment Program*, Technical Paper No. 15 (Bureau of the Census, 1967).

Seasonally adjusted labor force data in tables 2-7 were last revised in the February 1980 issue of the *Review* to reflect the preceding year's experience. Beginning in January 1980, the BLS introduced two major modifications in the seasonal adjustment methodology for labor force data. First, the data are being seasonally adjusted with a new procedure called X-11/ARIMA, which was developed at Statistics Canada as an extension of the standard X-11 method. A detailed description of the procedure appears in *The X-11 ARIMA Seasonal Adjustment Method* by Estela Bee Dagum (Statistics Canada Catalogue No. 12-564E, September 1979). The second change is that seasonal factors are now being calculated for use during the first 6 months of the year, rather than for the entire year, and then are calculated at mid-year for the July-December period. Revisions of historical data continue to be made only at the end of each calendar year.

Annual revision of the seasonally adjusted payroll data in tables 11, 13, 16, and 18 begins with the August 1980 issue using the X-11 ARIMA seasonal adjustment methodology. New seasonal factors for productivity data in tables 33 and 34 are usually intro-

duced in the September issue. Seasonally adjusted indexes and percent changes from month to month and from quarter to quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of \$3 and a current price index number of 150, where 1967 = 100, the hourly rate expressed in 1967 dollars is \$2 ($\$3/150 \times 100 = \2). The resulting values are described as "real," "constant," or "1967" dollars.

Availability of information. Data that supplement the tables in this section are published by the Bureau of Labor Statistics in a variety of sources. Press releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule given below. The *Handbook of Labor Statistics 1978*, Bulletin 2000, provides more detailed data and greater historical coverage for most of the statistical series presented in the *Monthly Labor Review*. More information from the household and establishment surveys is provided in *Employment and Earnings*, a monthly publication of the Bureau, and in two comprehensive data books issued annually—*Employment and Earnings, United States* and *Employment and Earnings, States and Areas*. More detailed information on wages and other aspects of collective bargaining appears in the monthly periodical, *Current Wage Developments*. More detailed price information is published each month in the periodicals, the *CPI Detailed Report* and *Producer Prices and Price Indexes*.

Symbols

- p = preliminary. To improve the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.
- r = revised. Generally this revision reflects the availability of later data but may also reflect other adjustments.
- n.e.c. = not elsewhere classified.

Schedule of release dates for major BLS statistical series

Title and frequency (monthly except where indicated)	Release date	Period covered	Release date	Period covered	MLR table number
Employment situation	October 3	September	November 7	October	1-11
Producer Price Index	October 3	September	November 7	October	26-30
Consumer Price Index	October 24	September	November 25	October	22-25
Real earnings	October 24	September	November 25	October	14-20
Productivity and costs (quarterly):					
Nonfarm business and manufacturing	October 27	3d quarter			31-34
Nonfinancial corporations			November 26	3d quarter	31-34
Major collective bargaining settlements (quarterly)	October 27	1st 9 months			35-36
Work stoppages	October 28	September	November 28	October	37
Labor turnover in manufacturing	October 30	September	November 28	October	12-13

EMPLOYMENT DATA FROM THE HOUSEHOLD SURVEY

EMPLOYMENT DATA in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 65,000 households beginning in January 1980, selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

Definitions

Employed persons are (1) those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff or waiting to start new jobs within the next 30 days are also counted among the unemployed. The **unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population; the **total labor force** includes military personnel. Persons **not in the labor force** are

those not classified as employed or unemployed; this group includes persons retired, those engaged in their own housework, those not working while attending school, those unable to work because of longterm illness, those discouraged from seeking work because of personal or job market factors, and those who are voluntarily idle. The **noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy.

Full-time workers are those employed at least 35 hours a week; **part-time workers** are those who work fewer hours. Workers on part-time schedules for economic reasons (such as slack work, terminating or starting a job during the week, material shortages, or inability to find full-time work) are among those counted as being on full-time status, under the assumption that they would be working full time if conditions permitted. The survey classifies unemployed persons in full-time or part-time status by their reported preferences for full-time or part-time work.

Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the preceding years. These adjustments affect the comparability of historical data presented in table 1. A description of these adjustments and their effect on the various data series appear in the Explanatory Notes of *Employment and Earnings*.

Data in tables 2-7 are seasonally adjusted, based on the seasonal experience through December 1979.

Year	Total non-institutional population	Total labor force		Civilian labor force						Not in labor force
		Number	Percent of population	Total	Employed			Unemployed		
					Total	Agriculture	Nonagricultural industries	Number	Percent of labor force	
1950	106,645	63,858	59.9	62,208	58,918	7,160	51,758	3,288	5.3	42,787
1955	112,732	68,072	60.4	65,023	62,170	6,450	55,722	2,852	4.4	44,660
1960	119,759	72,142	60.2	69,628	65,778	5,458	60,318	3,852	5.5	47,617
1964	127,224	75,830	59.6	73,091	69,305	4,523	64,782	3,786	5.2	51,394
1965	129,236	77,178	59.7	74,455	71,088	4,361	66,726	3,366	4.5	52,058
1966	131,180	78,893	60.1	75,770	72,895	3,979	68,915	2,875	3.8	52,288
1967	133,319	80,793	60.6	77,347	74,372	3,844	70,527	2,975	3.8	52,527
1968	135,562	82,272	60.7	78,737	75,920	3,817	72,103	2,817	3.6	53,291
1969	137,841	84,240	61.1	80,734	77,902	3,606	74,296	2,832	3.5	53,602
1970	140,182	85,903	61.3	82,715	78,627	3,462	75,165	4,088	4.9	54,280
1971	142,596	86,929	61.0	84,113	79,120	3,387	75,732	4,993	5.9	55,666
1972	145,775	88,991	61.0	86,542	81,702	3,472	78,230	4,840	5.6	56,785
1973	148,263	91,040	61.4	88,714	84,409	3,452	80,957	4,304	4.9	57,222
1974	150,827	93,240	61.8	91,011	83,935	3,492	82,443	5,076	5.6	57,587
1975	153,449	94,793	61.8	92,613	84,783	3,380	81,403	7,830	8.5	58,655
1976	156,048	96,917	62.1	94,773	87,485	3,297	84,188	7,288	7.7	59,130
1977	158,559	99,534	62.8	97,401	90,546	3,244	87,302	6,855	7.0	59,025
1978	161,058	102,537	63.7	100,420	94,373	3,342	91,031	6,047	6.0	58,521
1979	163,620	104,996	64.2	102,908	96,945	3,297	93,648	5,963	5.8	58,623

2. Employment status by sex, age, and race, seasonally adjusted

[Numbers in thousands]

Employment status	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
TOTAL															
Total noninstitutional population ¹	161,058	163,620	163,891	164,106	164,468	164,682	164,898	165,101	165,298	165,506	165,693	165,886	166,105	166,391	166,578
Total labor force	102,537	104,996	105,218	105,586	105,688	105,744	106,088	106,310	106,346	106,184	106,511	107,230	106,634	107,302	107,139
Civilian noninstitutional population ¹	158,941	161,532	161,801	162,013	162,375	162,589	162,809	163,020	163,211	163,416	163,601	163,799	164,013	164,293	164,464
Civilian labor force	100,420	102,908	103,128	103,494	103,595	103,652	103,999	104,229	104,260	104,094	104,419	105,142	104,542	105,203	105,025
Employed	94,373	96,945	97,004	97,504	97,474	97,608	97,912	97,804	97,953	97,656	97,154	96,988	96,537	96,996	97,006
Agriculture	3,342	3,297	3,315	3,364	3,294	3,385	3,359	3,270	3,326	3,358	3,242	3,379	3,191	3,257	3,180
Nonagricultural industries	91,031	93,648	93,689	94,140	94,180	94,223	94,553	94,534	94,626	94,298	93,912	93,609	93,346	93,739	93,826
Unemployed	6,047	5,963	6,124	5,990	6,121	6,044	6,087	6,425	6,307	6,438	7,265	8,154	8,006	8,207	8,019
Unemployment rate	6.0	5.8	5.9	5.8	5.9	5.8	5.9	6.2	6.0	6.2	7.0	7.8	7.7	7.8	7.6
Not in labor force	50,521	58,623	58,673	58,519	58,780	58,937	58,810	58,791	58,951	59,322	59,182	58,657	59,471	59,091	59,439
Men, 20 years and over															
Civilian noninstitutional population ¹	67,006	68,293	68,417	68,522	68,697	68,804	68,940	69,047	69,140	69,238	69,329	69,428	69,532	69,664	69,756
Civilian labor force	53,464	54,486	54,597	54,735	54,760	54,709	54,781	54,855	55,038	54,996	55,114	55,467	55,220	55,398	55,474
Employed	51,212	52,264	52,311	52,453	52,443	52,374	52,478	52,279	52,531	52,300	51,868	51,796	51,510	51,668	51,792
Agriculture	2,361	2,350	2,375	2,377	2,371	2,438	2,427	2,387	2,435	2,394	2,320	2,384	2,270	2,292	2,286
Nonagricultural industries	48,852	49,913	49,936	50,076	50,072	49,936	50,051	49,892	50,096	49,906	49,548	49,412	49,240	49,376	49,506
Unemployed	2,252	2,223	2,286	2,282	2,317	2,335	2,303	2,577	2,507	2,696	3,246	3,671	3,710	3,730	3,682
Unemployment rate	4.2	4.1	4.2	4.2	4.2	4.3	4.2	4.7	4.6	4.9	5.9	6.6	6.7	6.7	6.6
Not in labor force	13,541	13,807	13,820	13,787	13,937	14,095	14,159	14,192	14,102	14,242	14,215	13,961	14,312	14,266	14,282
Women, 20 years and over															
Civilian noninstitutional population ¹	75,489	76,860	77,006	77,124	77,308	77,426	77,542	77,656	77,766	77,876	77,981	78,090	78,211	78,360	78,473
Civilian labor force	37,416	38,910	39,304	39,239	39,362	39,445	39,659	39,878	39,857	39,751	40,137	40,246	40,125	40,471	40,589
Employed	35,180	36,698	37,000	37,075	37,112	37,248	37,402	37,574	37,604	37,496	37,602	37,576	37,530	37,769	37,961
Agriculture	586	591	600	628	572	612	582	540	567	582	552	616	541	565	548
Nonagricultural industries	34,593	36,107	36,400	36,447	36,540	36,636	36,820	37,034	37,037	36,914	37,051	36,960	36,989	37,204	37,413
Unemployed	2,236	2,213	2,304	2,164	2,250	2,197	2,257	2,304	2,254	2,255	2,534	2,670	2,596	2,702	2,628
Unemployment rate	6.0	5.7	5.9	5.5	5.7	5.6	5.7	5.8	5.7	5.7	6.3	6.6	6.5	6.7	6.5
Not in labor force	38,073	37,949	37,702	37,885	37,946	37,981	37,883	37,778	37,909	38,125	37,844	37,844	38,086	37,889	37,884
Both sexes, 16 - 19 years															
Civilian noninstitutional population ¹	16,447	16,379	16,377	16,367	16,370	16,360	16,326	16,317	16,305	16,302	16,291	16,281	16,271	16,268	16,235
Civilian labor force	9,540	9,512	9,227	9,520	9,473	9,498	9,559	9,497	9,365	9,346	9,168	9,429	9,197	9,334	8,962
Employed	7,981	7,984	7,693	7,976	7,919	7,986	8,032	7,952	7,818	7,859	7,683	7,616	7,497	7,560	7,253
Agriculture	395	356	340	359	351	335	350	344	325	381	370	379	380	401	346
Nonagricultural industries	7,586	7,628	7,353	7,617	7,568	7,651	7,682	7,608	7,493	7,478	7,313	7,237	7,117	7,159	6,907
Unemployed	1,559	1,528	1,534	1,544	1,554	1,512	1,527	1,545	1,547	1,487	1,485	1,813	1,700	1,774	1,709
Unemployment rate	16.3	16.1	16.6	16.2	16.4	15.9	16.0	16.3	16.5	15.9	16.2	19.2	18.5	19.0	19.1
Not in labor force	6,907	6,867	7,150	6,847	6,897	6,862	6,767	6,820	6,940	6,956	7,123	6,852	7,074	6,934	7,273
White															
Civilian noninstitutional population ¹	139,580	141,614	141,822	141,981	142,296	142,461	142,645	142,806	142,951	143,115	143,254	143,403	143,565	143,770	143,900
Civilian labor force	88,456	90,602	90,759	91,082	91,147	91,242	91,579	91,852	91,977	91,821	92,083	92,535	92,096	92,456	92,294
Employed	83,836	86,025	85,976	86,425	86,454	86,571	86,894	86,895	87,081	86,822	86,385	86,148	85,792	86,063	85,981
Unemployed	4,620	4,577	4,783	4,657	4,693	4,671	4,685	4,957	4,896	4,999	5,698	6,386	6,303	6,392	6,313
Unemployment rate	5.2	5.1	5.3	5.1	5.1	5.1	5.1	5.4	5.3	5.4	6.2	6.9	6.8	6.9	6.8
Not in labor force	51,124	51,011	51,161	50,900	51,149	51,219	51,066	50,954	50,975	51,294	51,171	50,868	51,469	51,314	51,606
Black and other															
Civilian noninstitutional population ¹	19,361	19,918	19,979	20,032	20,079	20,128	20,163	20,214	20,261	20,301	20,346	20,395	20,448	20,523	20,564
Civilian labor force	11,964	12,306	12,343	12,404	12,512	12,391	12,432	12,453	12,362	12,266	12,319	12,559	12,446	12,739	12,650
Employed	10,537	10,920	10,982	11,063	11,076	11,044	11,024	10,979	10,937	10,823	10,771	10,813	10,751	10,932	10,930
Unemployed	1,427	1,386	1,361	1,341	1,436	1,347	1,408	1,474	1,424	1,443	1,549	1,746	1,695	1,807	1,719
Unemployment rate	11.9	11.3	11.0	10.8	11.5	10.9	11.3	11.8	11.5	11.8	12.6	13.9	13.6	14.2	13.6
Not in labor force	7,397	7,612	7,639	7,264	7,567	7,737	7,731	7,761	7,899	8,035	8,027	7,836	8,002	7,784	7,914

¹As in table 1, population figures are not seasonally adjusted.

NOTE: The monthly data in this table have been revised to reflect seasonal experience through 1979.

3. Selected employment indicators, seasonally adjusted

[In thousands]

Selected categories	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC															
Total employed, 16 years and over	94,373	96,945	97,004	97,504	97,474	97,608	97,912	97,804	97,953	97,656	97,154	96,988	96,537	96,996	97,006
Men	55,491	56,499	56,408	56,714	56,629	56,580	56,734	56,486	56,732	56,601	55,998	55,823	55,457	55,629	55,551
Women	38,882	40,446	40,596	40,790	40,845	41,028	41,178	41,318	41,221	41,051	41,156	41,165	41,079	41,367	41,455
Married men, spouse present	38,688	39,090	39,180	39,198	39,124	38,845	38,924	38,749	38,955	38,745	38,342	38,147	38,193	37,999	37,910
Married women, spouse present	21,881	22,724	22,869	22,937	22,919	22,940	23,027	23,111	23,178	23,202	23,080	23,155	23,144	23,097	23,162
OCCUPATION															
White-collar workers	47,205	49,342	49,663	49,816	49,738	49,912	49,911	50,313	50,448	50,302	50,405	50,606	50,861	51,114	51,413
Professional and technical	14,245	15,050	15,068	15,141	15,057	15,131	15,272	15,337	15,444	15,397	15,542	15,551	15,712	15,741	15,761
Managers and administrators, except farm	10,105	10,516	10,698	10,659	10,639	10,617	10,535	10,608	10,971	10,755	10,745	10,882	10,911	11,046	11,153
Salesworkers	5,951	6,163	6,145	6,181	6,261	6,362	6,346	6,452	6,185	6,113	5,988	6,022	5,981	6,128	6,124
Clerical workers	16,904	17,613	17,752	17,835	17,781	17,802	17,758	17,915	17,848	18,037	18,129	18,152	18,256	18,199	18,375
Blue-collar workers	31,531	32,066	31,849	32,209	32,205	32,110	32,302	31,882	31,754	31,670	31,127	30,681	30,243	30,149	29,983
Craft and kindred workers	12,386	12,880	12,761	12,993	13,001	12,925	13,041	12,814	12,728	12,767	12,773	12,523	12,301	12,382	12,233
Operatives, except transport	10,875	10,909	10,909	10,964	10,967	10,963	11,042	10,678	10,661	10,579	10,408	10,336	10,131	10,134	10,066
Transport equipment operatives	3,541	3,612	3,604	3,617	3,593	3,628	3,635	3,616	3,571	3,558	3,483	3,421	3,395	3,335	3,474
Nonfarm laborers	4,729	4,665	4,575	4,635	4,644	4,594	4,584	4,774	4,795	4,767	4,463	4,402	4,416	4,299	4,209
Service workers	12,839	12,834	12,621	12,859	12,937	12,899	12,970	12,979	13,080	12,981	13,034	13,932	12,930	13,045	12,917
Farmworkers	2,798	2,703	2,707	2,722	2,695	2,718	2,694	2,660	2,764	2,733	2,658	2,745	2,606	2,689	2,601
MAJOR INDUSTRY AND CLASS OF WORKER															
Agriculture:															
Wage and salary workers	1,419	1,413	1,384	1,399	1,381	1,475	1,451	1,428	1,417	1,449	1,370	1,405	1,365	1,352	1,263
Self-employed workers	1,607	1,580	1,614	1,642	1,602	1,622	1,596	1,554	1,648	1,600	1,591	1,662	1,590	1,631	1,648
Unpaid family workers	316	304	310	325	313	310	310	293	283	300	281	289	269	292	273
Nonagricultural industries:															
Wage and salary workers	84,253	86,540	86,421	86,912	86,982	87,020	87,384	87,578	87,419	87,221	86,741	86,631	86,257	86,407	86,508
Government	15,289	15,369	15,279	15,407	15,423	15,358	15,397	15,414	15,540	15,622	15,668	15,799	15,891	15,760	15,495
Private industries	68,966	71,171	71,142	71,505	71,559	71,662	71,987	72,163	71,879	71,599	71,072	70,832	70,365	70,647	71,014
Private households	1,363	1,240	1,211	1,313	1,261	1,211	1,228	1,132	1,178	1,115	1,123	1,206	1,219	1,245	1,209
Other industries	67,603	69,931	69,931	70,192	70,298	70,451	70,759	71,031	70,702	70,484	69,949	69,625	69,147	69,402	69,805
Self-employed workers	6,305	6,652	6,689	6,731	6,812	6,781	6,737	6,752	6,899	6,825	6,813	6,648	6,666	6,765	6,879
Unpaid family workers	472	455	450	449	430	417	409	379	397	376	363	411	445	441	399
PERSONS AT WORK¹															
Nonagricultural industries	85,693	88,133	88,855	88,723	88,638	88,617	89,180	89,454	88,985	88,585	87,660	87,680	87,910	87,454	88,270
Full-time schedules	70,543	72,647	73,053	73,159	73,204	72,997	73,137	73,223	73,110	72,749	71,807	71,224	71,206	70,649	71,478
Part time for economic reasons	3,216	3,281	3,298	3,167	3,315	3,392	3,519	3,513	3,406	3,418	3,816	4,349	3,999	4,113	4,148
Usually work full time	1,249	1,325	1,401	1,273	1,354	1,413	1,491	1,549	1,380	1,463	1,709	2,064	1,781	1,847	1,692
Usually work part time	1,967	1,956	1,897	1,894	1,961	1,979	2,028	1,964	2,026	1,955	2,107	2,285	2,217	2,266	2,456
Part time for noneconomic reasons	11,934	12,205	12,504	12,397	12,119	12,228	12,524	12,718	12,469	12,418	12,037	12,106	12,706	12,692	12,644

¹Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

NOTE: The monthly data in this table have been revised to reflect seasonal experience through 1979.

4. Selected unemployment indicators, seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
CHARACTERISTIC															
Total, 16 years and over	6.0	5.8	5.9	5.8	5.9	5.8	5.9	6.2	6.0	6.2	7.0	7.8	7.7	7.8	7.6
Men, 20 years and over	4.2	4.1	4.2	4.2	4.2	4.3	4.2	4.7	4.6	4.9	5.9	6.6	6.7	6.7	6.6
Women, 20 years and over	6.0	5.7	5.9	5.5	5.7	5.6	5.7	5.8	5.7	5.7	6.3	6.6	6.5	6.7	6.5
Both sexes, 16-19 years	16.3	16.1	16.6	16.2	16.4	15.9	16.0	16.3	16.5	15.9	16.2	19.2	18.5	19.0	19.1
White, total	5.2	5.1	5.3	5.1	5.1	5.1	5.1	5.4	5.3	5.4	6.2	6.9	6.8	6.9	6.8
Men, 20 years and over	3.7	3.6	3.7	3.7	3.7	3.7	3.7	4.1	4.0	4.4	5.3	5.9	6.0	6.0	5.9
Women, 20 years and over	5.2	5.0	5.2	4.8	5.0	4.9	5.0	5.1	5.2	4.9	5.5	5.8	5.8	5.9	5.8
Both sexes, 16-19 years	13.9	13.9	14.8	14.3	14.1	13.9	13.9	14.0	13.8	13.8	14.6	17.4	16.4	16.7	17.0
Black and other, total	11.9	11.3	11.0	10.8	11.5	10.9	11.3	11.8	11.5	11.8	12.6	13.9	13.6	14.2	13.6
Men, 20 years and over	8.6	8.4	8.1	8.0	8.6	8.4	8.6	9.6	9.2	9.3	10.9	12.0	12.6	12.7	12.7
Women, 20 years and over	10.6	10.1	10.3	9.8	10.2	9.5	10.0	10.0	9.0	10.5	11.4	11.9	10.9	11.5	10.6
Both sexes, 16-19 years	36.3	33.5	32.6	32.3	35.1	32.8	34.3	34.6	37.9	33.0	29.8	35.2	34.4	36.6	37.4
Married men, spouse present	2.8	2.7	2.9	2.9	2.9	2.9	2.8	3.4	3.1	3.4	4.1	4.7	4.9	5.1	4.9
Married women, spouse present	5.5	5.1	5.3	4.8	5.2	4.8	5.0	5.2	5.4	5.3	5.7	6.3	6.1	6.2	6.1
Women who head families	8.5	8.3	7.9	7.7	8.4	8.4	8.4	9.2	8.5	8.7	9.3	8.3	8.4	8.9	8.9
Full-time workers	5.5	5.3	5.4	5.3	5.4	5.4	5.4	5.7	5.6	5.8	6.6	7.5	7.4	7.6	7.4
Part-time workers	9.0	8.7	8.8	8.4	8.9	8.3	8.5	8.7	8.9	8.3	8.9	9.3	8.8	8.7	8.6
Unemployed 15 weeks and over	1.4	1.2	1.1	1.1	1.2	1.1	1.2	1.3	1.2	1.3	1.6	1.6	1.7	1.8	2.1
Labor force time lost ¹	6.5	6.3	6.4	6.2	6.4	6.4	6.4	6.7	6.6	6.8	7.5	8.8	8.3	8.5	8.3
OCCUPATION															
White-collar workers	3.5	3.3	3.5	3.3	3.4	3.2	3.3	3.4	3.4	3.3	3.7	3.9	3.7	3.7	3.7
Professional and technical	2.6	2.4	2.5	2.4	2.7	2.4	2.3	2.2	2.3	2.3	2.4	2.7	2.6	2.4	2.3
Managers and administrators, except farm	2.1	2.1	2.3	2.2	2.2	1.9	2.0	1.9	2.2	2.4	2.6	2.7	2.4	2.5	2.4
Salesworkers	4.1	3.9	4.0	3.8	3.8	3.7	3.8	4.4	4.5	4.0	4.7	4.5	4.4	4.2	4.1
Clerical workers	4.9	4.6	4.9	4.5	4.7	4.4	4.6	4.8	4.7	4.5	5.1	5.4	5.3	5.4	5.4
Blue-collar workers	6.9	6.9	7.3	7.1	7.2	7.5	7.2	8.0	7.7	8.0	9.7	11.3	11.5	11.5	11.4
Craft and kindred workers	4.6	4.5	4.7	4.3	4.6	4.9	4.4	4.9	4.8	5.4	6.7	8.1	8.0	7.4	8.1
Operatives, except transport	8.1	8.4	8.9	9.0	9.1	9.0	9.0	9.9	9.2	9.3	11.6	14.0	13.8	14.6	13.6
Transport equipment operatives	5.2	5.4	6.2	6.1	5.6	5.2	5.0	6.9	6.7	6.6	8.9	9.0	10.5	10.5	10.0
Nonfarm laborers	10.7	10.8	11.3	11.0	10.7	12.2	12.2	12.3	12.0	13.0	14.1	15.4	16.2	16.1	16.5
Service workers	7.4	7.1	7.1	6.7	6.8	6.6	6.6	6.9	6.9	7.1	8.0	8.5	8.1	8.4	8.6
Farmworkers	3.8	3.8	3.9	4.1	4.3	4.5	4.3	4.4	3.9	4.0	5.0	4.8	4.2	4.8	5.6
INDUSTRY															
Nonagricultural private wage and salary workers ²	5.9	5.7	6.0	5.8	5.9	5.8	5.8	6.2	6.0	6.2	7.1	8.2	8.3	8.2	8.0
Construction	10.6	10.2	10.1	9.6	9.9	10.2	10.3	10.8	10.5	13.0	15.1	17.5	16.5	16.1	18.3
Manufacturing	5.5	5.5	5.9	6.0	6.0	5.9	5.9	6.7	6.4	6.5	7.9	9.9	9.9	10.3	9.3
Durable goods	4.9	5.0	5.4	5.3	5.5	5.6	5.5	6.7	6.3	6.4	8.3	10.5	11.2	11.2	10.2
Nondurable goods	6.3	6.4	6.8	7.1	6.8	6.3	6.4	6.8	6.7	6.7	7.4	8.8	8.0	8.8	7.9
Transportation and public utilities	3.7	3.7	3.7	4.0	3.8	4.2	4.1	4.4	4.4	3.8	4.6	5.1	5.2	5.8	5.7
Wholesale and retail trade	6.9	6.5	6.5	6.4	6.4	6.5	6.4	6.6	6.4	6.3	7.0	7.6	8.0	7.5	7.6
Finance and service industries	5.1	4.9	5.2	4.7	4.9	4.6	4.7	4.6	4.6	4.9	5.1	5.7	5.7	5.7	5.6
Government workers	3.9	3.7	3.7	3.3	4.0	3.6	3.6	3.8	4.0	4.2	4.4	4.2	3.5	4.1	4.0
Agricultural wage and salary workers	8.8	9.1	9.9	10.0	9.9	10.1	9.4	10.3	9.2	10.2	11.9	11.7	9.7	10.8	13.8

¹ Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.

² Includes mining, not shown separately.

NOTE: The monthly data in this table have been revised to reflect seasonal experience through 1979.

5. Unemployment rates, by sex and age, seasonally adjusted

Sex and age	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Total, 16 years and over	6.0	5.8	5.9	5.8	5.9	5.8	5.9	6.2	6.0	6.2	7.0	7.8	7.7	7.8	7.6
16 to 19 years	16.3	16.1	16.6	16.2	16.4	15.9	16.0	16.3	16.5	15.9	16.2	19.2	18.5	19.0	19.1
16 to 17 years	19.3	18.1	18.5	16.9	18.4	17.3	18.0	19.0	18.7	17.4	18.7	21.7	19.8	20.9	22.8
18 to 19 years	14.2	14.6	15.4	15.6	15.0	14.7	14.5	14.0	15.1	14.7	14.4	17.7	18.0	17.7	16.6
20 to 24 years	9.5	9.0	9.3	9.2	9.6	8.8	9.8	10.1	9.5	9.7	11.4	12.7	12.4	12.3	11.9
25 years and over	4.0	3.9	4.0	3.9	4.0	4.0	3.8	4.2	4.1	4.4	5.0	5.5	5.5	5.7	5.5
25 to 54 years	4.2	4.1	4.2	4.1	4.2	4.3	4.1	4.4	4.5	4.7	5.4	5.9	6.0	6.1	5.9
55 years and over	3.2	3.0	3.1	2.9	3.0	2.7	2.7	3.5	2.8	2.8	3.4	3.6	3.4	3.5	3.6
Men, 16 years and over	5.2	5.1	5.2	5.2	5.2	5.2	5.2	5.7	5.5	5.7	6.7	7.7	7.8	7.8	7.7
16 to 19 years	15.7	15.8	16.3	16.1	15.7	15.8	15.6	16.2	15.6	14.8	16.1	19.7	19.5	19.7	20.2
16 to 17 years	19.2	17.9	18.0	16.7	17.1	17.8	17.9	19.0	18.0	15.9	18.3	22.0	21.8	20.8	24.6
18 to 19 years	13.2	14.2	15.1	15.3	14.4	14.0	13.6	13.9	14.1	14.0	14.2	17.9	19.3	18.7	17.0
20 to 24 years	9.1	8.6	8.8	8.8	9.5	8.4	9.4	10.4	9.9	10.4	12.3	13.7	13.8	13.4	13.9
25 years and over	3.3	3.3	3.4	3.3	3.4	3.5	3.2	3.7	3.6	3.9	4.7	5.3	5.5	5.6	5.4
25 to 54 years	3.4	3.4	3.5	3.6	3.5	3.8	3.4	3.8	3.8	4.2	5.0	5.7	5.8	6.1	5.7
55 years and over	3.1	2.9	3.1	2.8	2.8	2.6	2.6	3.5	2.6	2.7	3.4	3.5	3.8	3.9	4.0
Women, 16 years and over	7.2	6.8	7.0	6.6	6.9	6.6	6.8	6.8	6.8	6.8	7.3	7.8	7.5	7.8	7.6
16 to 19 years	17.0	16.4	17.0	16.4	17.2	16.1	16.4	16.3	17.6	17.3	16.3	18.7	17.3	18.2	17.8
16 to 17 years	19.5	18.3	19.0	17.2	19.8	16.7	18.0	19.1	19.5	19.2	19.1	21.4	17.6	20.9	20.7
18 to 19 years	15.3	15.0	15.7	15.9	15.6	15.5	15.5	14.2	16.2	15.6	14.6	17.5	16.6	16.6	16.1
20 to 24 years	10.1	9.6	9.8	9.6	9.7	9.3	10.2	9.8	9.1	9.0	10.2	11.6	10.8	11.1	9.7
25 years and over	5.1	4.8	4.9	4.6	4.9	4.7	4.7	4.9	4.9	5.0	5.5	5.7	5.6	5.7	5.7
25 to 54 years	5.4	5.2	5.3	5.0	5.2	5.0	5.1	5.2	5.4	5.5	6.0	6.1	6.1	6.2	6.2
55 years and over	3.3	3.2	3.2	2.9	3.4	2.9	2.9	3.4	3.0	2.9	3.4	3.6	2.8	3.0	3.0

6. Unemployed persons, by reason for unemployment, seasonally adjusted

[Numbers in thousands]

Reason for unemployment	1979					1980								
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	
NUMBER OF UNEMPLOYED														
Lost last job	2,680	2,632	2,731	2,729	2,728	2,988	2,907	3,047	3,611	4,301	4,625	4,558	4,360	
On layoff	915	855	929	987	944	1,019	1,031	1,129	1,424	1,944	2,117	1,975	1,692	
Other job losers	1,765	1,777	1,802	1,742	1,784	1,969	1,876	1,918	2,188	2,357	2,508	2,583	2,668	
Left last job	875	825	835	845	800	779	813	788	926	992	898	857	897	
Reentered labor force	1,788	1,760	1,762	1,698	1,771	1,797	1,784	1,803	1,967	2,015	1,822	1,868	1,895	
Seeking first job	745	801	804	736	858	811	827	805	743	884	863	930	867	
PERCENT DISTRIBUTION														
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Job losers	44.0	43.7	44.5	45.4	44.3	46.9	45.9	47.3	49.8	52.5	56.3	55.5	54.4	
On layoff	15.0	14.2	15.2	16.4	15.3	16.0	16.3	17.5	19.6	23.7	25.8	24.0	21.1	
Other job losers	29.0	29.5	29.4	29.0	29.0	30.9	29.6	29.8	30.2	28.8	30.6	31.5	33.3	
Job leavers	14.4	13.7	13.6	14.1	13.0	12.2	12.8	12.2	12.8	12.1	10.9	10.4	11.2	
Reentrants	29.4	29.2	28.7	28.3	28.8	28.2	28.2	28.0	27.1	24.6	22.2	22.7	23.6	
New entrants	12.2	13.3	13.1	12.3	13.9	12.7	13.1	12.5	10.3	10.8	10.5	11.3	10.8	
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE														
Job losers	2.6	2.5	2.6	2.6	2.6	2.9	2.8	2.9	3.5	4.1	4.4	4.3	4.2	
Job leavers	.8	.8	.8	.8	.8	.7	.8	.8	.9	.9	.9	.8	.9	
Reentrants	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.9	1.9	1.7	1.8	1.8	
New entrants	.7	.8	.8	.7	.8	.8	.8	.8	.7	.8	.8	.9	.8	

7. Duration of unemployment, seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Less than 5 weeks	2,793	2,869	3,168	2,778	2,955	2,919	2,916	3,184	2,995	2,995	3,309	3,872	3,333	3,363	3,268
5 to 14 weeks	1,875	1,892	1,738	2,035	1,963	1,869	1,966	1,907	2,081	2,169	2,391	2,697	2,922	2,700	2,490
15 weeks and over	1,379	1,202	1,185	1,152	1,195	1,191	1,230	1,334	1,286	1,363	1,629	1,722	1,766	1,915	2,184
15 to 26 weeks	746	684	658	644	678	660	711	795	790	776	953	1,014	1,027	1,057	1,259
27 weeks and over	633	518	527	508	517	531	519	539	496	587	676	709	739	858	925
Average (mean) duration, in weeks	11.9	10.8	10.7	10.7	10.5	10.6	10.5	10.5	10.7	11.0	11.3	10.5	11.7	11.6	12.6

NOTE: The monthly data in these tables have been revised to reflect seasonal experience through 1979.

EMPLOYMENT, HOURS, AND EARNINGS DATA FROM ESTABLISHMENT SURVEYS

EMPLOYMENT, HOURS, AND EARNINGS DATA in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by 166,000 establishments representing all industries except agriculture. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

LABOR TURNOVER DATA in this section are compiled from personnel records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies. A sample of 40,000 establishments represents all industries in the manufacturing and mining sectors of the economy.

Definitions

Employed persons are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

Production workers in manufacturing include blue-collar worker supervisors and all nonsupervisory workers closely associated with production operations. Those workers mentioned in tables 14-20 include production workers in manufacturing and mining; construction workers in construction; and nonsupervisory workers in transportation and public utilities, in wholesale and retail trade, in finance, insurance, and real estate, and in services industries. These groups account for about four-fifths of the total employment on private nonagricultural payrolls.

Earnings are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to eliminate the effects of price change. The **Hourly Earnings Index** is calculated from average hourly earnings data adjusted to exclude the effects of two types of changes that are unrelated to underlying wage-rate developments: fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes and seasonal factors in the proportion of workers in high-wage and low-wage industries. **Spendable earnings** are earnings from which estimated social security and Federal income taxes have been deducted. The

Bureau of Labor Statistics computes spendable earnings from gross weekly earnings for only two illustrative cases: (1) a worker with no dependents and (2) a married worker with three dependents.

Hours represent the average weekly hours of production or nonsupervisory workers for which pay was received and are different from standard or scheduled hours. **Overtime hours** represent the portion of gross average weekly hours which were in excess of regular hours and for which overtime premiums were paid.

Labor turnover is the movement of all wage and salary workers from one employment status to another. **Accession rates** indicate the average number of persons added to a payroll in a given period per 100 employees; **separation rates** indicate the average number dropped from a payroll per 100 employees. Although month-to-month changes in employment can be calculated from the labor turnover data, the results are not comparable with employment data from the employment and payroll survey. The labor turnover survey measures changes during the calendar month while the employment and payroll survey measures changes from midmonth to midmonth.

Notes on the data

Establishment data collected by the Bureau of Labor Statistics are periodically adjusted to comprehensive counts of employment (called "benchmarks"). The latest complete adjustment was made with the release of June 1980 data, published in the August 1980 issue of the *Review*. Consequently, data published in the *Review* prior to that issue are not necessarily comparable to current data. Complete comparable historical unadjusted and seasonally adjusted data are published in a Supplement to Employment and Earnings (unadjusted data from April 1977 through March 1980 and seasonally adjusted data from January 1974 through March 1980) and in *Employment and Earnings, United States, 1909-78*, BLS Bulletin 1312-11 (for prior periods).

Data on recalls were shown for the first time in tables 12 and 13 in the January 1978 issue of the *Review*. For a detailed discussion of the recalls series, along with historical data, see "New Series on Recalls from the Labor Turnover Survey," *Employment and Earnings*, December 1977, pp. 10-19.

A comprehensive discussion of the differences between household and establishment data on employment appears in Gloria P. Green, "Comparing employment estimates from household and payroll surveys," *Monthly Labor Review*, December 1969, pp. 9-20. See also *BLS Handbook of Methods for Surveys and Studies*, Bulletin 1910 (Bureau of Labor Statistics, 1976).

The formulas used to construct the spendable average weekly earnings series reflect the latest provisions of the Federal income tax and social security tax laws. For the spendable average weekly earnings formulas for the years 1978-80, see *Employment and Earnings*, March 1980, pp. 10-11. Real earnings data are adjusted using the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

8. Employment by industry, 1950-79

[Nonagricultural payroll data, in thousands]

Year	Total	Mining	Construction	Manufacturing	Transportation and public utilities	Wholesale and retail trade	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government		
											Total	Federal	State and local
1950	45,197	901	2,364	15,241	4,034	9,386	2,635	6,751	1,888	5,357	6,026	1,928	4,098
1951	47,819	929	2,637	16,393	4,226	9,742	2,727	7,015	1,956	5,547	6,389	2,302	4,087
1952	48,793	898	2,668	16,632	4,248	10,004	2,812	7,192	2,035	5,699	6,609	2,420	4,188
1953	50,202	866	2,659	17,549	4,290	10,247	2,854	7,393	2,111	5,835	6,645	2,305	4,340
1954	48,990	791	2,646	16,314	4,084	10,235	2,867	7,368	2,200	5,969	6,751	2,188	4,563
1955	50,641	792	2,839	16,882	4,141	10,535	2,926	7,610	2,298	6,240	6,914	2,187	4,727
1956	52,369	822	3,039	17,243	4,244	10,858	3,018	7,840	2,389	6,497	7,278	2,209	5,069
1957	52,853	828	2,962	17,174	4,241	10,886	3,028	7,858	2,438	6,708	7,616	2,217	5,399
1958	51,324	751	2,817	15,945	3,976	10,750	2,980	7,770	2,481	6,765	7,839	2,191	5,648
1959 ¹	53,268	732	3,004	16,675	4,011	11,127	3,082	8,045	2,549	7,087	8,083	2,233	5,850
1960	54,189	712	2,926	16,796	4,004	11,391	3,143	8,248	2,629	7,378	8,353	2,270	6,083
1961	53,999	672	2,859	16,326	3,903	11,337	3,133	8,204	2,688	7,620	8,594	2,279	6,315
1962	55,549	650	2,948	16,853	3,906	11,566	3,198	8,368	2,754	7,982	8,890	2,340	6,550
1963	56,653	635	3,010	16,995	3,903	11,778	3,248	8,530	2,830	8,277	9,225	2,358	6,868
1964	58,283	634	3,097	17,274	3,951	12,160	3,337	8,823	2,911	8,660	9,596	2,348	7,248
1965	60,765	632	3,232	18,062	4,036	12,716	3,466	9,250	2,977	9,036	10,074	2,378	7,696
1966	63,901	627	3,317	19,214	4,158	13,245	3,597	9,648	3,058	9,498	10,784	2,564	8,220
1967	65,803	613	3,248	19,447	4,268	13,606	3,689	9,917	3,185	10,045	11,391	2,719	8,672
1968	67,897	606	3,350	19,781	4,318	14,099	3,779	10,320	3,337	10,567	11,839	2,737	9,102
1969	70,384	619	3,575	20,167	4,442	14,705	3,907	10,798	3,512	11,169	12,195	2,758	9,437
1970	70,880	623	3,588	19,367	4,515	15,040	3,993	11,047	3,645	11,548	12,554	2,731	9,823
1971	71,214	609	3,704	18,623	4,476	15,352	4,001	11,351	3,772	11,797	12,881	2,696	10,185
1972	73,675	628	3,889	19,151	4,541	15,949	4,113	11,836	3,908	12,276	13,334	2,684	10,649
1973	76,790	642	4,097	20,154	4,656	16,607	4,277	12,329	4,046	12,857	13,732	2,663	11,068
1974	78,265	697	4,020	20,077	4,725	16,987	4,433	12,554	4,148	13,441	14,170	2,724	11,446
1975	76,945	752	3,525	18,323	4,542	17,060	4,415	12,645	4,165	13,892	14,686	2,748	11,937
1976	79,382	779	3,576	18,997	4,582	17,755	4,546	13,209	4,271	14,551	14,871	2,733	12,138
1977	82,471	813	3,851	19,682	4,713	18,516	4,708	13,808	4,467	15,303	15,127	2,727	12,399
1978	86,697	851	4,229	20,505	4,923	19,542	4,969	14,573	4,724	16,252	15,672	2,753	12,919
1979	89,886	960	4,483	21,062	5,141	20,269	5,204	15,066	4,974	17,078	15,920	2,773	13,147

¹Data include Alaska and Hawaii beginning in 1959.

9. Employment by State

[Nonagricultural payroll data, in thousands]

State	July 1979	June 1980	July 1980	State	July 1979	June 1980	July 1980
Alabama	1,369.8	1,345.2	1,332.1	Montana	291.9	292.8	281.9
Alaska	180.8	173.7	173.7	Nebraska	630.5	632.9	622.2
Arizona	952.3	981.1	964.4	Nevada	388.0	400.3	403.3
Arkansas	748.0	744.8	737.5	New Hampshire	382.8	386.1	384.7
California	9,602.5	9,820.5	9,673.0	New Jersey	3,077.1	3,089.7	3,076.6
Colorado	1,219.2	1,258.8	1,249.8	New Mexico	465.4	477.2	475.4
Connecticut	1,406.4	1,417.8	1,395.8	New York	7,220.4	7,240.3	7,183.8
Delaware	261.1	258.2	256.3	North Carolina	2,355.4	2,429.9	2,479.9
District of Columbia	635.5	622.1	622.1	North Dakota	248.0	250.0	247.9
Florida	3,339.0	3,515.3	3,474.0	Ohio	4,511.1	4,436.6	4,363.1
Georgia	2,106.0	2,127.1	2,125.8	Oklahoma	1,094.7	1,142.2	1,136.0
Hawaii	403.7	410.4	415.8	Oregon	1,053.7	1,043.2	1,019.4
Idaho	338.5	330.7	326.0	Pennsylvania	4,852.6	4,831.1	4,831.1
Illinois	4,930.8	4,831.2	4,819.3	Rhode Island	397.1	395.0	395.0
Indiana	2,280.2	2,217.0	2,201.3	South Carolina	1,177.4	1,188.5	1,164.0
Iowa	1,125.0	1,109.1	1,090.3	South Dakota	244.5	245.9	241.1
Kansas	941.4	953.6	936.7	Tennessee	1,787.9	1,765.7	1,740.7
Kentucky	1,244.0	1,203.6	1,189.4	Texas	5,628.0	5,775.6	5,777.0
Louisiana	1,494.7	1,534.3	1,541.4	Utah ¹	550.5	559.8	554.5
Maine	427.1	425.2	414.3	Vermont	197.8	198.6	196.4
Maryland	1,635.7	1,639.8	1,642.3	Virginia	2,116.3	2,132.7	2,113.0
Massachusetts	2,612.4	2,689.8	2,705.8	Washington	1,582.5	1,632.1	1,619.7
Michigan	3,614.6	3,431.8	3,327.7	West Virginia	650.9	634.3	636.2
Minnesota	1,790.9	1,814.8	1,793.1	Wisconsin	1,979.5	1,991.6	1,974.4
Mississippi	841.6	820.2	813.5	Wyoming	207.0	219.7	219.8
Missouri	2,011.4	1,983.8	1,964.5	Virgin Islands	35.9	36.7	36.2

¹ Revised series, not strictly comparable with previously published data.

10. Employment by industry division and major manufacturing group

[Nonagricultural payroll data, in thousands]

Industry division and group	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July P	Aug. P
TOTAL	86,697	89,886	90,093	90,629	91,062	91,288	91,394	89,630	89,781	90,316	90,761	90,849	91,049	89,815	90,009
MINING	851	960	989	983	984	986	985	982	987	996	1,006	1,024	1,049	1,028	1,033
CONSTRUCTION	4,229	4,483	4,863	4,801	4,792	4,698	4,536	4,194	4,109	4,150	4,311	4,471	4,611	4,630	4,708
MANUFACTURING	20,505	21,062	21,096	21,295	21,193	21,055	20,987	20,777	20,730	20,793	20,533	20,250	20,201	19,737	20,021
Production workers	14,734	15,085	15,048	15,265	15,170	15,034	14,964	14,738	14,678	14,727	14,466	14,172	14,093	13,653	1,939
Durable goods	12,274	12,772	12,683	12,891	12,824	12,744	12,733	12,600	12,599	12,647	12,414	12,150	12,065	11,761	11,811
Production workers	8,805	9,120	8,979	9,190	9,131	9,054	9,040	8,885	8,869	8,909	8,672	8,409	8,307	8,022	8,072
Lumber and wood products	754.7	766.1	788.2	785.0	780.0	757.2	737.4	717.4	718.9	716.9	678.4	654.8	668.0	661.9	679.6
Furniture and fixtures	494.1	499.3	497.1	499.6	502.5	503.1	501.8	498.0	494.6	494.1	488.7	469.1	460.8	437.7	444.0
Stone, clay, and glass products	698.2	709.7	726.5	721.6	718.6	710.3	697.4	678.2	674.7	679.0	675.5	668.1	666.2	657.5	665.1
Primary metal industries	1,214.9	1,250.2	1,250.6	1,250.6	1,231.4	1,222.6	1,209.9	1,207.2	1,205.1	1,203.7	1,193.8	1,149.8	1,112.9	1,056.7	1,055.9
Fabricated metal products	1,672.6	1,723.7	1,711.7	1,731.4	1,733.8	1,733.3	1,725.2	1,696.8	1,699.4	1,703.8	1,671.4	1,619.8	1,598.6	1,535.2	1,565.2
Machinery, except electrical	2,325.5	2,481.6	2,489.7	2,513.8	2,465.1	2,458.7	2,471.6	2,538.5	2,536.5	2,539.9	2,523.5	2,509.3	2,486.1	2,440.3	2,425.6
Electric and electronic equipment	2,006.1	2,124.3	2,105.7	2,152.8	2,162.0	2,164.0	2,171.9	2,162.9	2,157.7	2,167.7	2,156.2	2,120.2	2,102.2	2,066.0	2,057.6
Transportation equipment	2,002.8	2,082.8	1,965.5	2,087.4	2,076.5	2,044.2	2,079.3	1,975.8	1,983.1	2,005.6	1,891.1	1,835.1	1,847.0	1,804.0	1,802.4
Instruments and related products	653.1	688.9	693.7	691.6	694.6	694.9	698.8	697.7	700.5	703.6	702.2	699.4	702.9	697.9	695.9
Miscellaneous manufacturing	451.5	445.6	454.5	457.1	459.7	455.5	439.4	427.7	428.8	432.9	433.0	424.6	420.1	403.9	419.4
Nondurable goods	8,231	8,290	8,413	8,404	8,369	8,311	8,254	8,177	8,131	8,146	8,119	8,100	8,136	7,976	8,210
Production workers	5,929	5,965	6,069	6,075	6,039	5,980	5,924	5,853	5,809	5,818	5,794	5,763	5,786	5,631	5,867
Food and kindred products	1,724.1	1,728.1	1,828.8	1,834.5	1,781.8	1,736.3	1,706.2	1,659.9	1,644.1	1,641.1	1,626.2	1,638.5	1,676.8	1,711.7	1,783.6
Tobacco manufactures	70.6	69.9	73.8	77.5	77.4	68.6	70.8	69.1	67.1	64.4	62.9	62.7	64.6	62.5	70.4
Textile mill products	899.1	888.5	886.8	885.0	886.1	890.4	889.7	884.0	884.6	886.9	882.1	870.6	853.2	819.5	854.1
Apparel and other textile products	1,332.3	1,312.5	1,308.1	1,308.8	1,317.3	1,305.8	1,287.1	1,282.0	1,305.8	1,318.4	1,304.2	1,299.0	1,310.5	1,234.9	1,307.7
Paper and allied products	698.7	706.7	715.6	710.5	709.3	707.8	705.9	703.5	701.9	701.8	698.8	692.4	695.0	682.3	689.2
Printing and publishing	1,192.0	1,239.5	1,242.5	1,243.0	1,251.4	1,262.0	1,268.5	1,266.3	1,270.4	1,272.1	1,270.4	1,267.8	1,271.3	1,263.4	1,262.0
Chemicals and allied products	1,095.5	1,110.7	1,119.0	1,112.7	1,113.7	1,113.9	1,114.2	1,113.1	1,112.1	1,118.1	1,120.6	1,119.5	1,122.2	1,109.8	1,105.3
Petroleum and coal products	207.7	210.0	214.1	213.7	213.5	212.6	210.6	208.6	155.9	153.1	173.6	203.4	209.1	211.0	211.4
Rubber and miscellaneous plastics products	754.5	775.6	774.1	770.2	770.8	765.9	755.6	750.3	746.3	746.5	737.2	702.4	688.5	659.5	682.7
Leather and leather products	256.8	248.0	250.4	247.9	247.9	247.6	245.2	240.3	242.6	243.4	243.3	243.2	244.7	220.9	243.2
TRANSPORTATION AND PUBLIC UTILITIES	4,923	5,141	5,197	5,229	5,233	5,243	5,240	5,136	5,130	5,143	5,147	5,167	5,185	5,141	5,136
WHOLESALE AND RETAIL TRADE	19,542	20,269	20,296	20,425	20,474	20,756	21,114	20,325	20,155	20,226	20,373	20,497	20,562	20,488	20,545
WHOLESALE TRADE	4,969	5,204	5,243	5,239	5,266	5,282	5,264	5,241	5,250	5,269	5,265	5,263	5,287	5,271	5,278
RETAIL TRADE	14,573	15,066	15,053	15,186	15,208	15,474	15,850	15,084	14,905	14,957	15,108	15,234	15,275	15,217	15,267
FINANCE, INSURANCE, AND REAL ESTATE	4,724	4,974	5,068	5,015	5,025	5,039	5,047	5,052	5,061	5,085	5,104	5,137	5,201	5,228	5,223
SERVICES	16,252	17,078	17,315	17,238	17,297	17,284	17,271	17,135	17,317	17,478	17,636	17,747	17,846	17,961	17,951
GOVERNMENT	15,672	15,920	15,269	15,643	16,064	16,227	16,214	16,029	16,292	16,445	16,651	16,556	16,394	15,602	15,392
Federal	2,753	2,773	2,844	2,751	2,756	2,760	2,770	2,763	2,803	2,869	3,103	2,963	2,995	2,949	2,874
State and local	12,919	13,147	12,425	12,892	13,308	13,467	13,444	13,266	13,489	13,576	13,548	13,593	13,399	12,653	12,518

11. Employment by industry division and major manufacturing group, seasonally adjusted

[Nonagricultural payroll data, in thousands]

Industry division and group	1979					1980							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
TOTAL	90,222	90,283	90,441	90,552	90,678	91,031	91,186	91,144	90,951	90,468	90,047	89,865	90,066
MINING	974	976	982	985	992	999	1,007	1,009	1,012	1,023	1,029	1,011	1,017
CONSTRUCTION	4,499	4,507	4,529	4,553	4,615	4,745	4,659	4,529	4,467	4,436	4,379	4,319	4,355
MANUFACTURING	21,055	21,071	21,043	20,966	20,983	20,971	20,957	20,938	20,642	20,286	20,014	19,812	19,903
Production workers	15,046	15,058	15,025	14,948	14,956	14,911	14,871	14,850	14,550	14,186	13,931	13,757	13,846
Durable goods	12,782	12,822	12,764	12,693	12,706	12,681	12,715	12,707	12,442	12,140	11,947	11,807	11,829
Production workers	9,103	9,129	9,069	9,001	9,009	8,953	8,967	8,961	8,686	8,386	8,205	8,082	8,101
Lumber and wood products	764	767	768	757	746	743	745	737	689	654	648	645	659
Furniture and fixtures	499	497	498	498	497	497	495	494	491	472	461	448	445
Stone, clay, and glass products	710	708	709	704	704	705	705	700	680	663	647	642	650
Primary metal industries	1,250	1,242	1,236	1,230	1,219	1,215	1,214	1,209	1,193	1,144	1,096	1,050	1,055
Fabricated metal products	1,713	1,723	1,723	1,722	1,718	1,707	1,711	1,711	1,678	1,620	1,584	1,548	1,567
Machinery, except electrical	2,509	2,518	2,478	2,460	2,459	2,532	2,529	2,530	2,518	2,517	2,476	2,448	2,445
Electric and electronic equipment	2,109	2,140	2,149	2,150	2,163	2,169	2,168	2,176	2,167	2,127	2,094	2,078	2,060
Transportation equipment	2,089	2,090	2,063	2,033	2,057	1,970	2,006	2,006	1,885	1,819	1,831	1,836	1,842
Instruments and related products	693	693	696	695	698	699	702	705	703	700	696	697	695
Miscellaneous manufacturing	446	444	444	444	445	444	440	439	438	424	414	415	411
Non-durable goods	8,273	8,249	8,279	8,273	8,277	8,290	8,242	8,231	8,200	8,146	8,067	8,005	8,074
Production workers	5,943	5,929	5,956	5,947	5,947	5,958	5,904	5,889	5,864	5,800	5,726	5,675	5,745
Food and kindred products	1,722	1,712	1,723	1,725	1,724	1,716	1,713	1,704	1,690	1,691	1,677	1,685	1,679
Tobacco manufactures	70	70	70	64	66	67	68	68	69	70	71	68	67
Textile mill products	883	881	885	887	889	888	888	888	884	869	843	832	851
Apparel and other textile products	1,305	1,298	1,302	1,294	1,296	1,305	1,313	1,316	1,302	1,291	1,287	1,274	1,304
Paper and allied products	708	708	709	708	708	710	709	708	702	692	685	680	682
Printing and publishing	1,244	1,245	1,251	1,259	1,261	1,269	1,273	1,274	1,272	1,268	1,269	1,265	1,263
Chemicals and allied products	1,110	1,110	1,114	1,116	1,118	1,121	1,121	1,123	1,123	1,120	1,112	1,101	1,097
Petroleum and coal products	209	211	212	212	213	214	161	157	175	203	205	206	207
Rubber and miscellaneous plastics products	774	767	766	762	756	755	751	749	740	703	681	663	683
Leather and leather products	248	247	247	246	246	245	245	244	243	239	237	231	241
TRANSPORTATION AND PUBLIC UTILITIES	5,182	5,185	5,203	5,216	5,212	5,202	5,198	5,202	5,178	5,167	5,134	5,110	5,121
WHOLESALE AND RETAIL TRADE	20,301	20,352	20,414	20,479	20,448	20,529	20,637	20,610	20,531	20,487	20,459	20,487	20,555
WHOLESALE TRADE	5,222	5,228	5,246	5,269	5,251	5,278	5,302	5,301	5,286	5,268	5,245	5,240	5,257
RETAIL TRADE	15,079	15,124	15,168	15,210	15,197	15,251	15,335	15,309	15,245	15,219	15,214	15,247	15,298
FINANCE, INSURANCE, AND REAL ESTATE	5,019	5,017	5,033	5,049	5,064	5,091	5,101	5,115	5,119	5,137	5,150	5,166	5,171
SERVICES	17,152	17,192	17,264	17,308	17,362	17,462	17,540	17,580	17,618	17,659	17,652	17,748	17,773
GOVERNMENT	16,040	15,983	15,973	15,996	16,002	16,032	16,087	16,161	16,384	16,273	16,230	16,212	16,171
Federal	2,811	2,762	2,769	2,773	2,773	2,791	2,826	2,886	3,115	2,960	2,951	2,893	2,840
State and local	13,229	13,221	13,204	13,223	13,229	13,241	13,261	13,275	13,269	13,313	13,279	13,319	13,331

12. Labor turnover rates in manufacturing, 1977 to date

[Per 100 employees]

Year	Annual average	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accessions													
1977	4.0	3.7	3.7	4.0	3.8	4.6	4.9	4.3	5.3	4.6	3.9	3.1	2.4
1978	4.1	3.8	3.2	3.8	4.0	4.7	4.9	4.4	5.4	4.9	4.3	3.3	2.4
1979	4.0	4.0	3.4	3.8	3.9	4.7	4.8	4.3	5.0	4.5	4.1	3.0	2.2
1980	...	3.8	3.3	3.5	3.1	3.4	3.9	P3.8	...	...	...	...	...
New hires													
1977	2.8	2.2	2.1	2.6	2.7	3.5	3.7	3.0	4.0	3.5	3.0	2.2	1.6
1978	3.1	2.5	2.2	2.7	2.9	3.6	3.9	3.3	4.2	3.9	3.5	2.6	1.7
1979	2.9	2.8	2.5	2.8	2.9	3.6	3.8	3.1	3.7	3.4	3.1	2.2	1.5
1980	...	2.4	2.2	2.3	2.1	2.1	2.4	P2.1	...	...	...	...	...
Recalls													
1977	.9	1.2	1.3	1.1	.9	.8	.8	.9	1.0	.8	.6	.6	.6
1978	.7	1.0	.7	.8	.8	.8	.7	.8	.9	.7	.6	.5	.5
1979	.7	.9	.7	.7	.7	.8	.7	.9	.9	.8	.7	.5	.5
1980	...	1.1	.9	.9	.8	1.0	1.2	P1.4	...	...	...	...	...
Total separations													
1977	3.8	3.9	3.4	3.4	3.4	3.5	3.5	4.3	5.1	4.9	3.8	3.4	3.4
1978	3.9	3.6	3.1	3.5	3.6	3.7	3.8	4.1	5.3	4.9	4.1	3.5	3.4
1979	4.0	3.8	3.2	3.6	3.7	3.8	3.9	4.3	5.7	4.7	4.2	3.8	3.5
1980	...	4.1	3.5	3.7	4.7	4.8	4.4	P4.2	...	...	...	...	...
Quits													
1977	1.8	1.4	1.3	1.6	1.7	1.9	1.9	1.9	3.1	2.8	1.9	1.5	1.2
1978	2.1	1.5	1.4	1.8	2.0	2.1	2.2	2.1	3.5	3.1	2.3	1.7	1.3
1979	2.0	1.8	1.6	1.9	2.0	2.1	2.1	2.0	3.3	2.7	2.1	1.6	1.1
1980	...	1.6	1.5	1.6	1.5	1.5	1.4	P1.4	...	...	...	...	...
Layoffs													
1977	1.1	1.7	1.4	1.0	.9	.8	.8	1.5	1.0	1.1	1.1	1.1	1.5
1978	.9	1.2	.9	.9	.8	.7	.7	1.1	.8	.8	.9	1.0	1.4
1979	1.1	1.1	.8	.8	.9	.7	.9	1.4	1.3	1.1	1.2	1.5	1.7
1980	...	1.6	1.2	1.3	2.3	2.5	2.2	P2.0	...	...	...	...	...

13. Labor turnover rates in manufacturing, by major industry group

[Per 100 employees]

Major industry group	Accession rates									Separation rates								
	Total			New hires			Recalls			Total			Quits			Layoffs		
	July 1979	June 1980	July 1980 ^P	July 1979	June 1980	July 1980 ^P	July 1979	June 1980	July 1980 ^P	July 1979	June 1980	July 1980 ^P	July 1979	June 1980	July 1980 ^P	July 1979	June 1980	July 1980 ^P
MANUFACTURING	4.3	3.9	3.8	3.1	2.4	2.1	0.9	1.2	1.4	4.3	4.4	4.2	2.0	1.4	1.4	1.4	2.2	2.0
Seasonally adjusted	3.9	3.3	3.4	2.8	1.8	1.9	...	...	...	3.9	5.1	3.8	1.9	1.4	1.3	1.3	2.9	1.7
Durable goods	3.7	3.5	3.2	2.7	1.9	1.6	.7	1.2	1.4	4.0	4.5	4.0	1.7	1.1	1.1	1.1	2.6	2.1
Lumber and wood products	5.7	6.6	6.3	5.0	3.1	3.3	6	3.3	2.7	5.5	5.4	5.0	3.6	2.1	2.3	.7	2.4	1.8
Furniture and fixtures	5.8	3.2	3.8	4.4	2.0	2.1	1.3	1.0	1.5	5.9	4.6	5.5	3.2	1.7	1.7	1.5	2.2	2.9
Stone, clay, and glass products	4.3	4.2	4.1	3.4	2.2	2.0	.8	1.6	1.8	3.8	4.9	3.8	2.1	1.2	1.2	.8	2.7	1.8
Primary metal industries	2.5	2.9	3.3	1.7	.8	6	5	1.9	2.4	3.1	6.7	5.2	1.0	.5	5	1.1	5.4	3.7
Fabricated metal products	4.1	3.9	3.9	3.1	2.1	1.9	.8	1.5	1.8	4.5	5.1	4.4	2.1	1.2	1.3	1.5	3.0	2.4
Machinery, except electrical	3.0	2.6	2.2	2.3	1.8	1.3	.4	.5	6	2.8	3.5	3.1	1.3	.9	.9	.7	1.8	1.5
Electric and electronic equipment	3.5	2.9	2.6	2.5	1.9	1.3	6	5	9	3.7	4.0	3.3	1.6	1.1	1.0	1.1	2.0	1.6
Transportation equipment	3.3	3.9	3.1	1.9	1.5	1.4	.9	1.8	1.3	5.0	4.9	4.4	1.2	.8	.8	2.9	3.2	2.9
Instruments and related products	2.7	3.5	2.4	2.2	2.9	1.8	.3	.3	5	2.3	2.7	2.6	1.3	1.1	1.1	.4	.8	.9
Miscellaneous manufacturing	6.2	4.7	5.3	4.4	3.0	3.0	1.5	1.5	2.2	6.1	5.0	5.5	2.6	1.7	1.9	2.2	2.4	2.5
Nondurable goods	5.2	4.5	4.5	3.8	3.1	2.8	1.2	1.2	1.5	4.8	4.2	4.6	2.5	1.8	1.8	1.4	1.6	1.9
Food and kindred products	9.2	7.9	7.6	6.5	5.2	4.8	2.5	2.4	2.7	6.0	5.0	5.8	3.3	2.3	2.4	1.8	1.9	2.6
Tobacco manufacturers	4.2	2.8	5.2	.9	1.1	1.2	2.1	.8	2.1	2.3	2.1	2.2	.6	.3	.5	1.2	1.0	.9
Textile mill products	5.1	3.5	4.1	3.8	2.6	2.6	1.0	6	1.0	5.5	4.2	5.4	3.1	2.0	2.1	1.3	1.2	1.8
Apparel and other products	6.0	4.9	5.4	3.9	3.3	3.3	1.8	1.4	1.9	7.1	5.4	6.3	3.4	2.6	2.7	2.7	2.0	2.6
Paper and allied products	2.8	3.0	2.9	2.2	1.8	1.3	.5	1.0	1.4	2.7	3.4	3.1	1.3	.8	.8	.6	1.9	1.5
Printing and publishing	3.5	3.5	2.9	2.9	2.9	2.3	.4	.5	5	3.3	3.3	3.1	2.1	1.8	1.7	.6	.9	.8
Chemicals and allied products	1.9	2.2	1.5	1.5	1.7	1.1	2	.3	3	1.6	2.0	1.9	.8	.6	.6	.3	.8	.8
Petroleum and coal products	2.5	3.7	2.6	2.3	2.9	2.0	.1	.7	4	1.8	1.8	1.9	.8	.6	.7	.4	.7	.5
Rubber and miscellaneous plastics products	5.2	4.0	4.7	4.0	2.2	2.0	.9	1.4	2.3	5.5	6.2	5.4	2.9	1.7	1.6	1.3	3.5	2.7
Leather and leather products	7.7	5.8	7.8	4.7	4.3	4.4	2.6	1.2	3.1	11.4	5.7	9.0	4.2	2.9	3.3	5.9	1.9	4.7

14. Hours and earnings, by industry division, 1949-79

[Gross averages, production or nonsupervisory workers on nonagricultural payrolls]

Year	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings	Average weekly earnings	Average weekly hours	Average hourly earnings
	Total private			Mining			Construction			Manufacturing		
1949	\$50.24	39.4	\$1.275	\$62.33	36.3	\$1.717	\$67.56	37.7	\$1.792	\$53.88	39.1	\$1.378
1950	53.13	39.8	1.335	67.16	37.9	1.772	69.68	37.4	1.863	58.32	40.5	1.440
1951	57.86	39.9	1.45	74.11	38.4	1.93	76.96	38.1	2.02	63.34	40.6	1.56
1952	60.65	39.9	1.52	77.59	38.6	2.01	82.86	38.9	2.13	66.75	40.7	1.64
1953	63.76	39.6	1.61	83.03	38.8	2.14	86.41	37.9	2.28	70.47	40.5	1.74
1954	64.52	39.1	1.65	82.60	38.6	2.14	88.91	37.2	2.39	70.49	39.6	1.78
1955	67.72	39.6	1.71	89.54	40.7	2.20	90.90	37.1	2.45	75.30	40.7	1.85
1956	70.74	39.3	1.80	95.06	40.8	2.33	96.38	37.5	2.57	78.78	40.4	1.95
1957	73.33	38.8	1.89	98.25	40.1	2.45	100.27	37.0	2.71	81.19	39.8	2.04
1958	75.08	38.5	1.95	96.08	38.9	2.47	103.78	36.8	2.82	82.32	39.2	2.10
1959 ¹	78.78	39.0	2.02	103.68	40.5	2.56	108.41	37.0	2.93	88.26	40.3	2.19
1960	80.67	38.6	2.09	105.04	40.4	2.60	112.67	36.7	3.07	89.72	39.7	2.26
1961	82.60	38.6	2.14	106.92	40.5	2.64	118.08	36.9	3.20	92.34	39.8	2.32
1962	85.91	38.7	2.22	110.70	41.0	2.70	122.47	37.0	3.31	96.56	40.4	2.39
1963	88.46	38.8	2.28	114.40	41.6	2.75	127.19	37.3	3.41	99.23	40.5	2.45
1964	91.33	38.7	2.36	117.74	41.9	2.81	132.06	37.2	3.55	102.97	40.7	2.53
1965	95.45	38.8	2.46	123.52	42.3	2.92	138.38	37.4	3.70	107.53	41.2	2.61
1966	98.82	38.6	2.56	130.24	42.7	3.05	146.26	37.6	3.89	112.19	41.4	2.71
1967	101.84	38.0	2.68	135.89	42.6	3.19	154.95	37.7	4.11	114.49	40.6	2.82
1968	107.73	37.8	2.85	142.71	42.6	3.35	164.49	37.3	4.41	122.51	40.7	3.01
1969	114.61	37.7	3.04	154.80	43.0	3.60	181.54	37.9	4.79	129.51	40.6	3.19
1970	119.83	37.1	3.23	164.40	42.7	3.85	195.45	37.3	5.24	133.33	39.8	3.35
1971	127.31	36.9	3.45	172.14	42.4	4.06	211.67	37.2	5.69	142.44	39.9	3.57
1972	136.90	37.0	3.70	189.14	42.6	4.44	221.19	36.5	6.06	154.71	40.5	3.82
1973	145.39	36.9	3.94	201.40	42.4	4.75	235.89	36.8	6.41	166.46	40.7	4.09
1974	154.76	36.5	4.24	219.14	41.9	5.23	249.25	36.6	6.81	176.80	40.0	4.42
1975	163.53	36.1	4.53	249.31	41.9	5.95	266.08	36.4	7.31	190.79	39.5	4.83
1976	175.45	36.1	4.86	273.90	42.4	6.46	283.73	36.8	7.71	209.32	40.1	5.22
1977	189.00	36.0	5.25	301.20	43.4	6.94	295.65	36.5	8.10	228.90	40.3	5.68
1978	203.70	35.8	5.69	332.88	43.4	7.67	318.69	36.8	8.66	249.27	40.4	6.17
1979	219.30	35.6	6.16	365.50	43.0	8.50	342.99	37.0	9.27	268.94	40.2	6.69
	Transportation and public utilities			Wholesale and retail trade			Finance, insurance, and real estate			Services		
1949				\$42.93	40.5	\$1.060	\$47.63	37.8	\$1.260			
1950				44.55	40.5	1.100	50.52	37.7	1.340			
1951				47.79	40.5	1.18	54.67	37.7	1.45			
1952				49.20	40.0	1.23	57.08	37.8	1.51			
1953				51.35	39.5	1.30	59.57	37.7	1.58			
1954				53.33	39.5	1.35	62.04	37.6	1.65			
1955				55.16	39.4	1.40	63.92	37.6	1.70			
1956				57.48	39.1	1.47	65.68	36.9	1.78			
1957				59.60	38.7	1.54	67.53	36.7	1.84			
1958				61.76	38.6	1.60	70.12	37.1	1.89			
1959 ¹				64.41	38.8	1.66	72.74	37.3	1.95			
1960				66.01	38.6	1.71	75.14	37.2	2.02			
1961				67.41	38.3	1.76	77.12	36.9	2.09			
1962				69.91	38.2	1.83	80.94	37.3	2.17			
1963				72.01	38.1	1.89	84.38	37.5	2.25			
1964	\$118.78	41.1	\$2.89	74.66	37.9	1.97	85.79	37.3	2.30	\$70.03	36.1	\$1.94
1965	125.14	41.3	3.03	76.91	37.7	2.04	88.91	37.2	2.39	73.60	35.9	2.05
1966	128.13	41.2	3.11	79.39	37.1	2.14	92.13	37.3	2.47	77.04	35.5	2.17
1967	130.82	40.5	3.23	82.35	36.6	2.25	95.72	37.1	2.58	80.38	35.1	2.29
1968	138.85	40.6	3.42	87.00	36.1	2.41	101.75	37.0	2.75	83.97	34.7	2.42
1969	147.74	40.7	3.63	91.39	35.7	2.56	108.70	37.1	2.93	90.57	34.7	2.61
1970	155.93	40.5	3.85	96.02	35.3	2.72	112.67	36.7	3.07	96.66	34.4	2.81
1971	168.82	40.1	4.21	101.09	35.1	2.88	117.85	36.6	3.22	103.06	33.9	3.04
1972	187.86	40.4	4.65	106.45	34.9	3.05	122.98	36.6	3.36	110.85	33.9	3.27
1973	203.31	40.5	5.02	111.76	34.6	3.23	129.20	36.6	3.53	117.29	33.8	3.47
1974	217.48	40.2	5.41	119.02	34.2	3.48	137.61	36.5	3.77	126.00	33.6	3.75
1975	233.44	39.7	5.88	126.45	33.9	3.73	148.19	36.5	4.06	134.67	33.5	4.02
1976	256.71	39.8	6.45	133.79	33.7	3.97	155.43	36.4	4.27	143.52	33.3	4.31
1977	278.90	39.9	6.99	142.52	33.3	4.28	165.26	36.4	4.54	153.45	33.0	4.65
1978	302.80	40.0	7.57	153.64	32.9	4.67	178.00	36.4	4.89	163.67	32.8	4.99
1979	325.98	39.9	8.17	164.96	32.6	5.06	190.77	36.2	5.27	175.27	32.7	5.36

¹ Data include Alaska and Hawaii beginning in 1959.

15. Weekly hours, by industry division and major manufacturing group

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
TOTAL PRIVATE	35.8	35.6	36.0	35.8	35.7	35.6	35.9	35.1	35.1	35.2	35.0	35.0	35.3	35.3	35.5
MINING	43.4	43.0	43.1	43.4	43.7	43.6	43.9	43.4	43.2	43.4	42.8	42.7	43.2	41.6	41.4
CONSTRUCTION	36.8	37.0	38.1	38.0	37.7	36.6	37.2	35.3	35.7	36.2	36.7	36.9	37.9	37.7	37.2
MANUFACTURING	40.4	40.2	40.0	40.3	40.2	40.3	40.9	39.8	39.8	39.8	39.4	39.3	39.4	38.9	39.5
Overtime hours	3.6	3.3	3.3	3.6	3.4	3.4	3.4	3.0	2.9	3.0	2.7	2.5	2.5	2.4	2.8
Durable goods	41.1	40.8	40.4	40.8	40.8	40.8	41.6	40.3	40.3	40.3	39.9	39.7	39.8	39.1	39.9
Overtime hours	3.8	3.5	3.4	3.6	3.5	3.4	3.5	3.1	3.0	3.1	2.7	2.5	2.4	2.3	2.8
Lumber and wood products	39.8	39.4	39.9	40.1	39.8	38.8	39.2	38.1	38.5	38.3	37.1	37.6	38.4	38.1	39.5
Furniture and fixtures	39.3	38.7	38.8	39.0	39.3	39.3	39.9	38.4	38.4	38.5	37.9	37.3	37.3	36.5	38.1
Stone, clay, and glass products	41.6	41.5	41.8	41.7	41.7	41.7	41.8	40.1	40.1	40.7	40.4	40.6	41.0	40.3	40.5
Primary metal industries	41.8	41.4	40.8	41.3	40.9	40.7	40.9	40.7	40.7	40.7	40.6	39.3	39.1	38.6	39.6
Fabricated metal products	41.0	40.7	40.5	40.8	40.9	41.0	41.9	40.6	40.4	40.6	40.2	39.9	40.1	39.2	40.0
Machinery except electrical	42.1	41.8	41.2	41.8	41.5	41.8	42.7	41.5	41.5	41.5	41.1	40.8	40.8	40.0	40.5
Electric and electronic equipment	40.3	40.3	39.7	40.5	40.3	40.8	41.3	40.2	40.2	40.0	39.6	39.3	39.4	38.7	39.5
Transportation equipment	42.2	41.1	40.5	40.7	41.3	40.8	42.7	43.0	40.4	40.4	39.8	39.9	39.9	39.4	40.2
Instruments and related products	40.9	40.8	40.4	40.7	40.8	41.4	41.7	41.0	40.8	40.6	40.4	40.3	40.5	39.5	40.4
Miscellaneous manufacturing	38.8	38.8	38.8	39.2	39.1	39.4	39.5	38.8	38.6	38.8	38.4	38.2	38.3	37.9	38.5
Nondurable goods	39.4	39.3	39.4	39.6	39.4	39.6	39.9	39.0	38.9	38.9	38.7	38.7	38.8	38.6	38.9
Overtime hours	3.2	3.1	3.2	3.5	3.2	3.3	3.2	2.9	2.8	2.9	2.7	2.5	2.5	2.6	2.8
Food and kindred products	39.7	39.9	40.3	40.6	40.0	40.2	40.4	39.5	39.1	39.0	38.9	39.7	39.6	40.0	40.4
Tobacco manufactures	38.1	38.0	37.6	39.2	38.9	38.8	39.4	37.3	36.9	37.7	38.2	38.7	38.3	36.7	37.2
Textile mill products	40.4	40.4	40.3	40.8	40.8	41.3	41.5	40.9	40.8	40.9	39.9	39.8	39.6	38.7	39.1
Apparel and other textile products	35.6	35.3	35.6	35.3	35.5	35.6	35.9	35.2	35.4	35.4	35.3	35.3	35.6	35.3	35.5
Paper and allied products	42.9	42.6	42.6	42.7	42.7	42.9	43.5	42.7	42.4	42.4	42.2	41.6	41.7	41.5	41.8
Printing and publishing	37.6	37.5	37.9	37.9	37.5	37.9	38.1	37.2	37.0	37.2	36.8	36.9	36.7	36.8	37.1
Chemicals and allied products	41.9	41.9	41.8	41.8	41.7	42.2	42.2	41.7	41.6	41.7	41.6	41.3	41.2	40.7	40.9
Petroleum and coal products	43.6	43.8	43.6	44.7	44.1	44.8	43.5	36.2	39.7	39.4	41.1	42.3	42.3	42.8	42.3
Rubber and miscellaneous plastics products	40.9	40.5	40.0	40.5	40.5	40.3	40.7	40.3	39.9	40.0	39.7	39.0	39.3	38.8	40.0
Leather and leather products	37.1	36.5	36.6	36.8	36.5	36.8	37.3	36.7	36.8	36.4	36.7	37.0	37.4	36.1	36.8
TRANSPORTATION AND PUBLIC UTILITIES	40.0	39.9	40.3	39.9	40.0	40.2	40.0	39.5	39.4	39.5	39.5	39.3	39.6	39.9	40.1
WHOLESALE AND RETAIL TRADE	32.9	32.6	33.2	32.6	32.4	32.4	32.9	31.9	31.9	32.0	31.8	31.9	32.3	32.5	32.6
WHOLESALE TRADE	38.8	38.8	39.0	38.8	38.9	38.9	39.1	38.5	38.4	38.4	38.4	38.5	38.2	38.2	38.2
RETAIL TRADE	31.0	30.6	31.4	30.6	30.4	30.4	31.0	29.8	29.8	29.9	29.7	29.9	30.4	30.7	30.8
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.2	36.1	36.1	36.2	36.3	36.4	36.2	36.3	36.3	36.2	36.1	36.4	36.2	36.4
SERVICES	32.8	32.7	33.2	32.7	32.6	32.6	32.8	32.5	32.5	32.5	32.4	32.3	32.8	33.0	33.0

16. Weekly hours, by industry division and major manufacturing group, seasonally adjusted

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	1979					1980							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
TOTAL PRIVATE	35.7	35.6	35.6	35.6	35.7	35.6	35.5	35.4	35.3	35.1	35.0	34.9	35.1
MINING	43.1	43.4	43.7	43.6	43.9	43.4	43.2	43.4	42.8	42.7	43.2	41.6	41.4
CONSTRUCTION	37.3	37.5	36.8	37.0	37.2	37.3	37.1	36.6	36.7	36.8	37.1	36.8	36.4
MANUFACTURING	40.1	40.1	40.1	40.1	40.2	40.3	40.1	39.8	39.8	39.3	39.1	39.1	39.6
Overtime hours	3.3	3.2	3.2	3.3	3.2	3.2	3.0	3.1	3.0	2.6	2.4	2.5	2.8
Durable goods	40.7	40.7	40.7	40.6	40.7	40.8	40.6	40.3	40.3	39.7	39.5	39.4	40.1
Overtime hours	3.4	3.3	3.3	3.3	3.2	3.3	3.1	3.2	3.0	2.5	2.4	2.4	2.8
Lumber and wood products	39.6	39.6	39.2	38.9	39.0	39.4	39.1	38.7	37.3	37.5	37.6	38.0	39.2
Furniture and fixtures	38.6	38.7	38.8	38.9	38.9	39.2	39.0	38.5	38.5	37.6	37.0	36.9	37.9
Stone, clay, and glass products	41.4	41.5	41.3	41.4	41.5	41.4	41.2	40.9	40.6	40.3	40.4	40.2	40.1
Primary metal industries	41.0	41.1	41.1	40.8	40.7	40.8	40.8	40.7	40.6	39.2	38.8	38.6	39.8
Fabricated metal products	40.6	40.7	40.8	40.7	40.9	40.9	40.8	40.7	40.8	39.9	39.7	39.6	40.1
Machinery, except electrical	41.6	41.7	41.5	41.5	41.5	41.6	41.5	41.3	41.5	41.0	40.7	40.6	40.9
Electric and electronic equipment	39.9	40.3	40.3	40.4	40.5	40.5	40.3	40.0	39.9	39.5	39.2	39.2	39.7
Transportation equipment	41.5	40.6	41.0	40.5	40.9	40.9	40.8	40.4	40.5	39.7	39.5	39.5	41.1
Instruments and related products	40.6	40.7	40.7	41.0	41.0	41.4	40.9	40.4	40.7	40.3	40.4	40.0	40.6
Miscellaneous manufacturing	38.9	39.0	38.9	38.9	39.0	39.2	39.1	38.6	38.5	38.3	38.2	38.4	38.6
Nondurable goods	39.3	39.3	39.3	39.4	39.4	39.5	39.4	39.0	39.1	38.9	38.6	38.6	38.8
Overtime hours	3.1	3.1	3.1	3.2	3.1	3.1	2.9	3.0	3.0	2.6	2.5	2.6	2.7
Food and kindred products	39.8	40.0	39.9	39.9	39.9	39.8	39.7	39.3	39.6	39.9	39.6	39.8	39.9
Tobacco manufactures	38.1	38.4	38.3	37.8	38.5	38.5	37.9	37.7	38.2	38.2	37.3	38.8	37.7
Textile mill products	40.3	40.7	40.8	41.0	41.0	41.5	41.1	40.8	40.3	39.7	39.1	39.1	39.1
Apparel and other textile products	35.3	35.2	35.4	35.3	35.6	36.0	35.9	35.3	35.8	35.3	35.2	35.1	35.2
Paper and allied products	42.6	42.5	42.6	42.7	42.8	43.0	42.9	42.6	42.5	41.7	41.4	41.5	41.8
Printing and publishing	37.8	37.5	37.4	37.5	37.4	37.8	37.4	37.2	37.2	37.1	36.8	36.9	37.0
Chemicals and allied products	41.9	41.8	41.7	42.0	41.8	42.0	41.9	41.8	41.5	41.3	41.1	40.8	41.0
Petroleum and coal products	43.6	44.0	43.5	44.4	43.4	36.9	40.7	39.7	41.1	42.5	42.3	42.3	42.3
Rubber and miscellaneous plastics products	40.2	40.3	40.2	40.0	40.0	40.7	40.0	39.9	40.1	39.3	39.2	39.2	40.2
Leather and leather products	36.5	36.8	36.5	36.6	37.0	37.2	37.2	36.9	37.3	36.7	36.7	35.8	36.7
TRANSPORTATION AND PUBLIC UTILITIES	40.3	39.9	40.0	40.2	40.0	39.5	39.4	39.5	39.5	39.3	39.6	39.9	40.1
WHOLESALE AND RETAIL TRADE	32.6	32.6	32.6	32.6	32.6	32.6	32.4	32.3	32.0	32.1	31.9	31.8	31.9
WHOLESALE TRADE	38.8	38.8	38.8	38.9	38.9	38.9	38.8	38.5	38.5	38.6	38.0	38.0	38.0
RETAIL TRADE	30.6	30.6	30.6	30.6	30.6	30.6	30.4	30.3	30.0	30.1	30.0	29.8	30.0
FINANCE, INSURANCE, AND REAL ESTATE	36.1	36.1	36.2	36.3	36.4	36.2	36.3	36.3	36.2	36.1	36.4	36.2	36.4
SERVICES	32.7	32.7	32.6	32.7	32.8	32.7	32.7	32.7	32.6	32.5	32.6	32.5	32.5

17. Hourly earnings, by industry division and major manufacturing group

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July P	Aug. P
TOTAL PRIVATE	\$5.69	\$6.16	\$6.18	\$6.30	\$6.31	\$6.34	\$6.38	\$6.42	\$6.46	\$6.51	\$6.53	\$6.57	\$6.61	\$6.64	\$6.66
MINING	7.67	8.50	8.50	8.59	8.59	8.73	8.75	8.88	8.90	8.95	9.10	9.08	9.16	9.12	9.15
CONSTRUCTION	8.66	9.27	9.34	9.52	9.50	9.52	9.58	9.49	9.61	9.68	9.69	9.77	9.81	9.92	10.01
MANUFACTURING	6.17	6.69	6.70	6.80	6.82	6.87	6.97	6.96	7.00	7.06	7.09	7.13	7.20	7.29	7.31
Durable goods	6.58	7.13	7.13	7.24	7.25	7.29	7.42	7.39	7.46	7.54	7.56	7.60	7.69	1.76	7.80
Lumber and wood products	5.60	6.08	6.22	6.30	6.23	6.22	6.24	6.21	6.33	6.35	6.28	6.40	6.56	6.68	6.72
Furniture and fixtures	4.68	5.06	5.09	5.18	5.19	5.21	5.26	5.27	5.32	5.37	5.39	5.42	5.49	5.52	5.56
Stone, clay, and glass products	6.33	6.85	6.90	6.99	7.01	7.08	7.11	7.06	7.14	7.27	7.34	7.45	7.53	7.59	7.61
Primary metal industries	8.20	8.97	9.10	9.16	9.11	9.26	9.28	9.30	9.44	9.45	9.53	9.61	9.65	9.81	9.86
Fabricated metal products	6.35	6.84	6.85	6.95	6.98	7.01	7.14	7.09	7.14	7.24	7.27	7.32	7.42	7.43	7.50
Machinery, except electrical	6.78	7.32	7.35	7.48	7.44	7.50	7.63	7.66	7.69	7.76	7.81	7.91	7.97	8.04	8.08
Electric and electronic equipment	5.82	6.32	6.37	6.47	6.49	6.52	6.64	6.67	6.71	6.78	6.79	6.78	6.87	6.96	7.01
Transportation equipment	7.91	8.54	8.45	8.59	8.70	8.72	8.93	8.81	8.86	9.04	9.04	9.06	9.24	9.34	9.39
Instruments and related products	5.71	6.17	6.15	6.21	6.32	6.39	6.50	6.57	6.59	6.63	6.63	6.72	6.80	6.87	6.91
Miscellaneous manufacturing	4.69	5.03	5.02	5.06	5.10	5.13	5.20	5.28	5.30	5.34	5.37	5.40	5.42	5.47	5.49
Nondurable goods	5.53	6.00	6.04	6.11	6.14	6.21	6.26	6.28	6.27	6.30	6.36	6.42	6.48	6.60	6.62
Food and kindred products	5.80	6.27	6.28	6.32	6.35	6.50	6.55	6.61	6.64	6.68	6.75	6.82	6.84	6.90	6.89
Tobacco manufactures	6.13	6.65	6.51	6.43	6.33	6.97	6.98	7.08	7.36	7.57	7.79	7.64	7.97	8.11	7.80
Textile mill products	4.30	4.66	4.77	4.82	4.83	4.86	4.87	4.90	4.90	4.92	4.91	4.90	4.93	5.05	5.18
Apparel and other textile products	3.94	4.23	4.21	4.27	4.31	4.32	4.38	4.44	4.45	4.49	4.46	4.45	4.51	4.49	4.60
Paper and allied products	6.52	7.13	7.24	7.33	7.36	7.43	7.50	7.49	7.52	7.55	7.63	7.65	7.79	7.98	7.98
Printing and publishing	6.51	6.95	6.98	7.08	7.10	7.13	7.21	7.24	7.29	7.34	7.34	7.44	7.46	7.54	7.63
Chemicals and allied products	7.02	7.60	7.66	7.74	7.83	7.88	7.92	7.97	8.01	8.05	8.12	8.17	8.24	8.35	8.39
Petroleum and coal products	8.63	9.36	9.34	9.50	9.48	9.56	9.48	9.46	9.37	9.29	9.83	10.07	10.22	10.32	10.32
Rubber and miscellaneous plastics products	5.52	5.96	5.94	6.03	6.12	6.14	6.21	6.25	6.25	6.27	6.30	6.34	6.39	6.50	6.56
Leather and leather products	3.89	4.22	4.21	4.29	4.31	4.33	4.35	4.45	4.47	4.51	4.52	4.53	4.54	4.56	4.56
TRANSPORTATION AND PUBLIC UTILITIES	7.57	8.17	8.31	8.44	8.43	8.51	8.54	8.55	8.58	8.62	8.71	8.72	8.75	8.83	8.86
WHOLESALE AND RETAIL TRADE	4.67	5.06	5.06	5.13	5.15	5.18	5.18	5.34	5.36	5.40	5.40	5.42	5.43	5.46	5.46
WHOLESALE TRADE	5.88	6.39	6.42	6.52	6.52	6.58	6.69	6.72	6.77	6.83	6.87	6.89	6.95	6.98	6.98
RETAIL TRADE	4.20	4.53	4.52	4.57	4.59	4.62	4.61	4.78	4.78	4.81	4.80	4.82	4.83	4.86	4.86
FINANCE, INSURANCE, AND REAL ESTATE	4.89	5.27	5.28	5.37	5.35	5.41	5.48	5.53	5.60	5.68	5.68	5.70	5.77	5.77	5.77
SERVICES	4.99	5.36	5.31	5.45	5.48	5.55	5.61	5.65	5.70	5.75	5.75	5.79	5.81	5.80	5.81

18. Hourly Earnings Index for production or nonsupervisory workers on private nonagricultural payrolls, by industry division

[Seasonally adjusted data: 1967=100]

Industry	1979					1980								July 1980 to Aug. 1980	Aug. 1979 to Aug. 1980
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July P	Aug. P		
TOTAL PRIVATE (in current dollars)	232.3	234.3	235.0	237.3	239.4	240.3	242.4	245.2	246.2	248.3	250.9	251.7	253.1	0.6	9.0
Mining	264.7	265.6	267.7	272.0	274.6	277.0	278.5	280.9	283.7	284.2	286.3	286.1	288.4	8	9.0
Construction	223.2	224.5	224.7	226.5	228.1	225.8	229.8	232.2	233.0	234.2	235.3	236.8	237.9	5	6.6
Manufacturing	237.0	238.6	239.9	241.9	244.1	245.2	247.8	250.2	252.4	255.0	258.3	260.4	262.1	7	10.6
Transportation and public utilities	252.4	255.1	255.8	258.7	260.1	260.8	262.4	265.9	267.2	268.7	270.6	270.5	270.2	-1	7.1
Wholesale and retail trade	225.5	227.2	227.6	229.7	231.4	234.2	235.2	237.8	238.0	239.0	241.8	242.9	244.2	5	8.3
Finance, insurance, and real estate	211.4	244.0	212.9	215.7	217.9	218.4	221.1	225.7	224.9	226.3	230.2	228.8	230.8	9	9.2
Services	228.7	231.6	232.3	234.9	237.8	237.7	239.7	242.7	243.0	245.7	248.4	248.0	249.8	7	9.2
TOTAL PRIVATE (in constant dollars)	105.1	104.9	104.1	104.1	103.8	102.7	102.2	102.0	101.4	101.4	101.5	101.8	(²)	(²)	(²)

19. Weekly earnings, by industry division and major manufacturing group

[Gross averages, production or nonsupervisory workers on private nonagricultural payrolls]

Industry division and group	Annual average		1979					1980							
	1978	1979	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
TOTAL PRIVATE	\$203.70	\$219.30	\$222.48	\$225.54	\$225.27	\$225.70	\$229.04	\$225.34	\$226.75	\$229.15	\$228.55	\$229.95	\$233.33	\$234.39	\$236.43
MINING	332.88	365.50	366.35	372.81	375.38	380.63	384.13	385.39	384.48	388.43	389.48	387.72	395.71	379.39	378.81
CONSTRUCTION	318.69	342.99	355.85	361.76	358.15	348.43	356.38	335.00	343.08	350.42	355.62	360.51	371.80	373.98	372.37
MANUFACTURING	249.27	268.94	268.00	274.04	274.16	276.86	285.07	277.01	278.60	280.99	279.35	280.21	283.68	283.58	288.75
Durable goods	270.44	290.90	288.05	295.39	295.80	297.43	308.67	297.82	300.64	303.86	301.64	301.72	306.06	303.42	311.22
Lumber and wood products	222.88	239.55	248.18	252.63	247.95	241.34	244.61	236.60	243.71	243.21	232.99	240.64	251.90	254.51	265.44
Furniture and fixtures	183.92	195.82	197.49	202.02	203.97	204.75	209.87	202.37	204.29	206.75	204.28	202.17	204.78	201.48	211.84
Stone, clay, and glass products	263.33	284.28	288.42	291.48	292.32	295.24	297.20	283.11	286.31	295.89	296.54	302.47	308.73	305.88	308.21
Primary metal industries	342.76	371.36	371.28	378.31	372.60	376.88	379.55	378.51	384.21	384.62	386.92	377.67	377.32	378.67	390.46
Fabricated metal products	260.35	278.39	277.43	283.56	285.48	287.41	299.17	287.85	288.46	293.94	292.25	292.07	297.54	291.26	300.00
Machinery except electrical	285.44	305.98	302.82	312.66	308.76	313.50	325.80	317.89	319.14	322.04	320.21	322.73	325.18	321.60	327.24
Electric and electronic equipment	234.55	254.70	252.89	262.04	261.55	266.02	274.23	268.13	269.74	271.20	268.88	266.45	270.68	269.35	276.90
Transportation equipment	333.80	350.99	342.23	349.61	359.31	355.78	381.31	352.40	357.94	365.22	359.79	361.49	368.68	368.00	377.48
Instruments and related products	233.54	251.74	248.46	252.75	257.86	264.55	271.05	269.37	268.87	269.18	267.85	270.82	275.40	271.37	279.16
Miscellaneous manufacturing	181.97	195.16	194.78	198.35	199.41	202.12	205.40	204.86	204.58	207.19	206.21	206.28	207.59	207.31	211.37
Nondurable goods	217.88	235.80	237.98	241.96	241.92	245.92	249.77	244.92	243.90	245.07	246.13	248.45	251.42	254.76	257.52
Food and kindred products	230.26	250.17	253.08	256.59	254.00	261.30	264.62	261.10	259.62	260.52	262.58	270.75	270.86	276.00	278.36
Tobacco manufactures	238.55	252.70	244.78	252.06	246.24	270.44	275.01	264.08	271.58	285.39	297.58	295.67	305.25	297.64	290.16
Textile mill products	173.72	188.26	192.23	196.66	197.06	200.72	202.11	200.41	199.92	201.23	195.91	195.02	195.23	195.44	202.54
Apparel and other textile products	140.26	149.32	149.88	150.73	153.01	153.79	157.24	156.29	157.53	158.95	157.44	157.09	160.56	158.50	163.30
Paper and allied products	279.71	303.74	308.42	312.99	314.27	318.75	326.25	319.82	318.85	320.12	321.99	318.24	324.84	331.17	333.56
Printing and publishing	244.78	260.63	264.54	268.33	266.25	270.23	274.70	269.33	269.73	273.05	270.11	274.54	273.78	277.47	283.07
Chemicals and allied products	294.14	318.44	320.19	323.53	326.51	332.54	334.22	332.35	333.22	335.69	337.79	337.42	339.49	339.85	343.15
Petroleum and coal products	376.27	409.97	407.22	424.65	418.07	428.29	412.38	342.45	371.99	366.03	404.01	425.96	432.31	441.70	436.54
Rubber and miscellaneous plastics products	225.77	241.38	237.60	244.22	247.86	247.44	252.75	251.88	249.38	250.80	250.11	247.26	251.13	252.20	262.40
Leather and leather products	144.32	154.03	154.09	157.87	157.32	159.34	162.26	163.32	164.50	164.16	165.88	167.61	169.80	164.62	167.81
TRANSPORTATION AND PUBLIC UTILITIES	302.80	325.98	334.89	336.76	337.20	342.10	341.60	337.73	338.05	340.49	344.05	342.70	346.50	352.32	355.29
WHOLESALE AND RETAIL TRADE	153.64	164.96	167.99	167.24	166.86	167.83	170.42	170.35	170.98	172.80	171.72	172.90	175.39	177.45	178.00
WHOLESALE TRADE	228.14	247.93	250.38	252.98	253.63	255.96	261.58	258.72	259.97	262.27	263.81	265.27	265.49	266.64	266.64
RETAIL TRADE	130.20	138.62	141.93	139.84	139.54	140.45	142.91	142.44	142.44	143.82	142.56	144.12	146.83	149.20	149.69
FINANCE, INSURANCE, AND REAL ESTATE	178.00	190.77	190.61	193.86	193.67	196.38	199.47	200.19	203.28	206.18	205.62	205.77	210.03	208.87	210.03
SERVICES	163.67	175.27	176.29	178.22	178.65	180.93	184.01	183.63	185.25	186.88	186.30	187.02	190.57	191.40	191.73

20. Gross and spendable weekly earnings, in current and 1967 dollars, 1960 to date

[Averages for production or nonsupervisory workers on private nonagricultural payrolls]

Year and month	Private nonagricultural workers						Manufacturing workers					
	Gross average weekly earnings		Spendable average weekly earnings				Gross average weekly earnings		Spendable average weekly earnings			
			Worker with no dependents		Married worker with 3 dependents				Worker with no dependents		Married worker with 3 dependents	
	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars	Current dollars	1967 dollars
1960	\$80.67	\$90.95	\$65.59	\$73.95	\$72.96	\$82.25	\$89.72	\$101.15	\$72.57	\$81.82	\$80.11	\$90.32
1961	82.60	92.19	67.08	74.87	74.48	83.13	92.34	103.06	74.60	83.26	82.18	91.72
1962	85.91	94.82	69.56	76.78	76.99	84.98	96.56	106.58	77.86	85.94	85.53	94.40
1963	88.46	96.47	71.05	77.48	78.56	85.67	99.23	108.21	79.51	86.71	87.25	95.15
1964	91.33	98.31	75.04	80.78	82.57	88.88	102.97	110.84	84.40	90.85	92.18	99.22
1965	95.45	101.01	79.32	83.94	86.63	91.67	107.53	113.79	89.08	94.26	96.78	102.41
1966	98.82	101.67	81.29	83.63	88.66	91.21	112.19	115.42	91.45	94.08	99.33	102.19
1967	101.84	101.84	83.38	83.38	90.86	90.86	114.49	114.49	92.97	92.97	100.93	100.93
1968	107.73	103.39	86.71	83.21	95.28	91.44	122.51	117.57	97.70	93.76	106.75	102.45
1969	114.61	104.38	90.96	82.84	99.99	91.07	129.51	117.95	101.90	92.81	111.44	101.49
1970	119.83	103.04	96.21	82.73	104.90	90.20	133.33	114.64	106.32	91.42	115.58	99.38
1971	127.31	104.95	103.80	85.57	112.43	92.69	142.44	117.43	114.97	94.78	124.24	102.42
1972	136.90	109.26	112.19	89.54	121.68	97.11	154.71	123.47	125.34	100.03	135.57	108.20
1973	145.39	109.23	117.51	88.29	127.38	95.70	166.46	125.06	132.57	99.60	143.50	107.81
1974	154.76	104.78	124.37	84.20	134.61	91.14	176.80	119.70	140.19	94.92	151.56	102.61
1975	163.53	101.45	132.49	82.19	145.65	90.35	190.79	118.36	151.61	94.05	166.29	103.16
1976	175.45	102.90	143.30	84.05	155.87	91.42	209.32	122.77	167.83	98.43	181.32	106.35
1977	189.00	104.13	155.19	85.50	169.93	93.63	228.90	126.12	183.80	101.27	200.06	110.23
1978	203.70	104.30	165.39	84.69	180.71	92.53	249.27	127.63	197.40	101.08	214.87	110.02
1979	219.30	100.73	177.55	81.56	194.35	89.27	268.94	123.54	212.43	97.58	232.07	106.60
1979: August	222.48	100.44	179.87	81.21	196.83	88.86	268.00	120.99	211.79	95.62	231.36	104.45
September	225.54	100.82	182.10	81.40	199.15	89.03	274.04	122.50	215.89	96.51	235.94	105.47
October	225.27	99.85	181.90	80.63	198.94	88.18	274.16	121.52	215.97	95.73	236.04	104.63
November	225.70	99.17	182.22	80.06	199.27	87.55	276.86	121.64	217.80	95.69	238.08	104.60
December	229.04	9.58	184.59	80.26	201.80	87.74	285.07	123.94	223.38	97.12	244.31	106.22
1980: January	225.34	96.59	181.96	77.99	199.00	85.30	277.01	118.74	217.91	93.40	238.20	102.10
February	226.75	95.88	182.98	77.37	200.07	84.60	278.60	117.80	218.99	92.60	239.40	101.23
March	229.15	95.52	184.67	76.98	201.89	84.16	280.99	117.13	220.61	91.96	241.22	100.55
April	228.55	94.21	184.25	75.95	201.43	83.03	279.35	115.15	219.49	90.47	239.97	98.92
May	229.95	93.82	185.23	75.57	202.49	82.62	280.21	114.32	220.08	89.79	240.63	98.18
June	233.33	94.16	187.59	75.70	205.06	82.75	283.68	114.48	222.43	89.76	243.26	98.17
July ^p	234.39	94.51	188.33	75.94	205.86	83.01	283.58	114.35	222.37	89.67	243.18	98.06
Aug. ^p	236.43	(¹)	189.75	(¹)	207.41	(¹)	288.75	(¹)	225.87	(¹)	247.10	(¹)

¹Not available.

NOTE: The earnings expressed in 1967 dollars have been adjusted for changes in price level as measured by the Bureau's Consumer Price Index for Urban Wage Earners and Clerical Workers. These series are described in "The Spendable Earnings Series: A Technical Note on its Cal-

ulation," *Employment and Earnings and Monthly Report on the Labor Force*, February 1969, pp. 6-13. See also "Spendable Earnings Formulas, 1978-80," *Employment and Earnings*, March 1980, pp. 10-11.

UNEMPLOYMENT INSURANCE DATA

UNEMPLOYMENT INSURANCE DATA are compiled monthly by the Employment and Training Administration of the U.S. Department of Labor from records of State and Federal unemployment insurance claims filed and benefits paid. Railroad unemployment insurance data are prepared by the U.S. Railroad Retirement Board.

Definitions

Data for all programs represent an unduplicated count of insured unemployment under State programs, Unemployment Compensation for Ex-Servicemen, and Unemployment Compensation for Federal Employees, and the Railroad Insurance Act.

Under both State and Federal unemployment insurance programs for civilian employees, insured workers must report the completion of at least 1 week of unemployment before they are defined as unem-

ployed. Persons not covered by unemployment insurance (about one-third of the labor force) and those who have exhausted or not yet earned benefit rights are excluded from the scope of the survey. **Initial claims** are notices filed by persons in unemployment insurance programs to indicate they are out of work and wish to begin receiving compensation. A claimant who continued to be unemployed a full week is then counted in the insured unemployment figure. The **rate of insured unemployment** expresses the number of insured unemployed as a percent of the average insured employment in a 12-month period.

An **application** for benefits is filed by a railroad worker at the beginning of his first period of unemployment in a benefit year; no application is required for subsequent periods in the same year. **Number of payments** are payments made in 14-day registration periods. The **average amount of benefit payment** is an average for all compensable periods, not adjusted for recovery of overpayments or settlement of underpayments. However, **total benefits** paid have been adjusted.

21. Unemployment Insurance and employment service operations

[All items except average benefits amounts are in thousands]

Item	1979						1980						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All programs:													
Insured unemployment	2,429	2,377	2,164	2,236	2,559	3,047	3,740	3,730	3,652	3,627	3,680	3,790	4,140
State unemployment insurance program: ¹													
Initial claims ²	1,978	1,545	1,219	1,641	1,827	2,263	2,837	1,818	1,705	2,192	P 2,249	.....	.....
Insured unemployment (average weekly volume)	2,300	2,245	2,024	2,057	2,384	2,864	3,537	3,518	3,356	3,278	3,343	3,456	3,692
Rate of insured unemployment	2.8	2.7	2.4	2.4	2.8	3.4	4.1	4.1	3.9	3.8	3.9	4.0	4.3
Weeks of unemployment compensated	7,889	8,830	6,993	7,638	8,107	9,171	13,792	12,801	13,170	12,689	P 12,302	.....	.....
Average weekly benefit amount for total unemployment	\$86.40	\$88.56	\$89.07	\$90.59	\$92.39	\$94.54	\$96.41	\$98.39	\$99.15	\$99.52	P \$99.74	.....	.....
Total benefits paid	\$665,687	\$767,025	\$606,095	\$673,965	\$728,370	\$843,869	\$1,283,946	\$1,229,877	\$1,218,231	\$1,232,173	\$1,196,836	.....	.....
Unemployment compensation for ex-servicemen: ³													
Initial claims ¹	28	28	23	26	24	24	25	21	21	21	P 20	.....	.....
Insured unemployment (average weekly volume)	51	52	52	52	54	56	60	58	63	52	50	45	58
Weeks of unemployment compensated	216	234	211	236	232	233	299	255	249	246	P 220	.....	.....
Total benefits paid	\$20,965	\$23,861	\$19,634	\$23,325	\$23,093	\$23,093	\$29,635	\$25,308	\$24,928	\$24,518	\$22,025	.....	.....
Unemployment compensation for Federal civilian employees: ⁴													
Initial claims	16	13	13	18	15	15	19	11	12	11	P 12	.....	.....
Insured unemployment (average weekly volume)	2.5	2.5	2.5	2.8	2.9	3.1	3.4	3.2	3.0	2.5	2.2	2.0	2.6
Weeks of unemployment compensated	96	107	91	109	118	118	150	129	123	108	P 88	.....	.....
Total benefits paid	\$8,802	\$9,829	\$8,453	\$10,093	\$11,063	\$11,047	\$14,118	\$12,226	\$11,901	\$10,323	\$8,280	.....	.....
Railroad unemployment insurance:													
Applications	15	8	13	11	10	11	22	7	5	4	6	24	.....
Insured unemployment (average weekly volume)	11	12	21	18	20	19	40	39	30	27	23	27	.....
Number of payments	20	26	32	51	36	41	80	71	68	62	54	55	.....
Average amount of benefit payment	\$190.10	\$195.61	\$189.08	\$189.61	\$183.38	\$197.22	\$199.01	\$208.73	\$210.79	\$201.87	\$193.44	\$199.06	.....
Total benefits paid	\$3,699	\$3,767	\$5,747	\$8,003	\$6,462	\$8,065	\$14,967	\$14,573	\$13,884	\$13,002	\$9,953	\$10,140	.....
Employment service: ⁵													
New applications and renewals	13,186	14,479	15,525	1,855	3,183	4,378	5,980	7,285	8,708	10,021	11,319	.....	.....
Nonfarm placements	3,482	3,935	4,349	458	768	1,044	1,314	1,561	1,853	2,143	2,383	.....	.....

¹ Initial claims and State insured unemployment include data under the program for Puerto Rican sugarcane workers.

² Includes interstate claims for the Virgin Islands. Excludes transition claims under State programs.

³ Excludes data on claims and payments made jointly with other programs.

⁴ Includes the Virgin Islands. Excludes data on claims and payments made jointly with State programs.

⁵ Cumulative total for fiscal year (October 1 - ps.6 September 30).

NOTE: Date for Puerto Rico included. Dashes indicate data not available.

PRICE DATA

PRICE DATA are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period (1967 = 100, unless otherwise noted).

Definitions

The **Consumer Price Index** is a monthly statistical measure of the average change in prices in a fixed market basket of goods and services. Effective with the January 1978 index, the Bureau of Labor Statistics began publishing CPI's for two groups of the population. One index, a new CPI for All Urban Consumers, covers 80 percent of the total noninstitutional population; and the other index, a revised CPI for Urban Wage Earners and Clerical Workers, covers about half the new index population. The All Urban Consumers index includes, in addition to wage earners and clerical workers, professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctor's and dentist's fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items is kept essentially unchanged between major revisions so that only price changes will be measured. Prices are collected from over 18,000 tenants, 24,000 retail establishments, and 18,000 housing units for property taxes in 85 urban areas across the country. All taxes directly associated with the purchase and use of items are included in the index. Because the CPI's are based on the expenditures of two population groups in 1972-73, they may not accurately reflect the experience of individual families and single persons with different buying habits.

Though the CPI is often called the "Cost-of-Living Index," it measures only price change, which is just one of several important factors affecting living costs. Area indexes do not measure differences in the level of prices among cities. They only measure the average change in prices for each area since the base period.

Producer Price Indexes measure average changes in prices received in primary markets of the United States by producers of commodities in all stages of processing. The sample used for calculating these indexes contains about 2,800 commodities and about 10,000 quotations per month selected to represent the movement of prices of all commodities produced in the manufacturing, agriculture, forestry, fishing, mining, gas and electricity, and public utilities sectors. The universe includes all commodities produced or imported for sale in commercial transactions in primary markets in the United States.

Producer Price Indexes can be organized by stage of processing or by commodity. The stage of processing structure organizes products by degree of fabrication (that is, finished goods, intermediate or semifinished goods, and crude materials). The commodity structure organizes products by similarity of end-use or material composition.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States, from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire.

Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

In calculating Producer Price Indexes, price changes for the various commodities are averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1972. The detailed data are aggregated to obtain indexes for stage of processing groupings, commodity groupings, durability of product groupings, and a number of special composite groupings.

Price indexes for the output of selected SIC industries measure average price changes in commodities produced by particular industries, as defined in the *Standard Industrial Classification Manual 1972* (Washington, U.S. Office of Management and Budget, 1972). These indexes are derived from several price series, combined to match the economic activity of the specified industry and weighted by the value of shipments in the industry. They use data from comprehensive industrial censuses conducted by the U.S. Bureau of the Census and the U.S. Department of Agriculture.

Notes on the data

Beginning with the May 1978 issue of the *Review*, regional CPI's cross classified by population size, were introduced. These indexes will enable users in local areas for which an index is not published to get a better approximation of the CPI for their area by using the appropriate population size class measure for their region. The cross-classified indexes will be published bimonthly. (See table 24.)

For further details about the new and the revised indexes and a comparison of various aspects of these indexes with the old unrevised CPI, see *Facts About the Revised Consumer Price Index*, a pamphlet in the Consumer Price Index Revision 1978 series. See also *The Consumer Price Index: Concepts and Content Over the Years*. Report 517, revised edition (Bureau of Labor Statistics, May 1978).

For interarea comparisons of living costs at three hypothetical standards of living, see the family budget data published in the *Handbook of Labor Statistics, 1977*, Bulletin 1966 (Bureau of Labor Statistics, 1977), tables 122-133. Additional data and analysis on price changes are provided in the *CPI Detailed Report* and *Producer Prices and Price Indexes*, both monthly publications of the Bureau.

As of January 1976, the Wholesale Price Index (as it was then called) incorporated a revised weighting structure reflecting 1972 values of shipments. From January 1967 through December 1975, 1963 values of shipments were used as weights.

For a discussion of the general method of computing consumer, producer, and industry price indexes, see *BLS Handbook of Methods for Surveys and Studies*, Bulletin 1910 (Bureau of Labor Statistics, 1976), chapters 13-15. See also John F. Early, "Improving the measurement of producer price change," *Monthly Labor Review*, April 1978, pp. 7-15. For industry prices, see also Bennett R. Moss, "Industry and Sector Price Indexes," *Monthly Labor Review*, August 1965, pp. 974-82.

22. Consumer Price Index for Urban Wage Earners and Clerical Workers, annual averages and changes, 1967-79

[1967=100]

Year	All items		Food and beverages		Housing		Apparel and upkeep		Transportation		Medical care		Entertainment		Other goods and services	
	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change
1967	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...	100.0	...
1968	104.2	4.2	103.6	3.6	104.0	4.0	105.4	5.4	103.2	3.2	106.1	6.1	105.7	5.7	105.2	5.2
1969	109.8	5.4	108.8	5.0	110.4	6.2	111.5	5.8	107.2	3.9	113.4	6.9	111.0	5.0	110.4	4.9
1970	116.3	5.9	114.7	5.4	118.2	7.1	116.1	4.1	112.7	5.1	120.6	6.3	116.7	5.1	116.8	5.8
1971	121.3	4.3	118.3	3.1	123.4	4.4	119.8	3.2	118.6	5.2	128.4	6.5	122.9	5.3	122.4	4.8
1972	125.3	3.3	123.2	4.1	128.1	3.8	122.3	2.1	119.9	1.1	132.5	3.2	126.5	2.9	127.5	4.2
1973	133.1	6.2	139.5	13.2	133.7	4.4	126.8	3.7	123.8	3.3	137.7	3.9	130.0	2.8	132.5	3.9
1974	147.7	11.0	158.7	13.8	148.8	11.3	136.2	7.4	137.7	11.2	150.5	9.3	139.8	7.5	142.0	7.2
1975	161.2	9.1	172.1	8.4	164.5	10.6	142.3	4.5	150.6	9.4	168.6	12.0	152.2	8.9	153.9	8.4
1976	170.5	5.8	177.4	3.1	174.6	6.1	147.6	3.7	165.5	9.9	184.7	9.5	159.8	5.0	162.7	5.7
1977	181.5	6.5	188.0	6.0	186.5	6.8	154.2	4.5	177.2	7.1	202.4	9.6	167.7	4.9	172.2	5.8
1978	195.3	7.6	206.2	9.7	202.6	8.6	159.5	3.4	185.8	4.9	219.4	8.4	176.2	5.1	183.2	6.4
1979	217.7	11.5	228.7	10.9	227.5	12.3	166.4	4.3	212.8	14.5	240.1	9.4	187.6	6.5	196.3	7.2

23. Consumer Price Index for All Urban Consumers and revised CPI for Urban Wage Earners and Clerical Workers, U.S. city average—general summary and groups, subgroups, and selected items

[1967=100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979		1980					1979		1980				
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
All items	218.9	236.4	239.8	242.5	244.9	247.6	247.8	219.4	236.5	239.9	242.6	245.1	247.8	248.0
Food and beverages	230.7	238.6	241.0	242.8	244.1	245.7	248.3	230.9	239.0	241.2	243.2	244.7	246.4	249.1
Housing	228.4	250.5	254.5	257.9	261.7	266.7	265.1	228.4	250.5	254.4	257.8	261.7	266.9	265.1
Apparel and upkeep	164.3	171.9	176.0	177.3	177.5	177.2	176.2	164.5	171.5	175.1	176.1	176.8	176.0	175.4
Transportation	216.6	239.6	243.7	246.8	249.0	249.7	251.0	217.8	240.2	244.3	247.7	249.9	250.6	251.9
Medical care	239.9	257.9	260.2	262.0	263.4	264.7	266.6	240.5	258.7	260.9	263.1	264.9	265.9	267.8
Entertainment	189.1	197.8	200.6	202.5	204.0	205.3	206.6	188.6	196.2	199.5	201.3	202.4	204.0	204.4
Other goods and services	195.2	208.1	208.9	209.8	211.2	212.5	213.5	195.1	207.7	208.3	209.2	210.6	212.1	212.9
Commodities	210.5	225.2	228.0	229.9	231.4	232.8	234.1	211.0	225.3	228.1	230.1	231.7	233.0	234.4
Commodities less food and beverages	198.4	215.5	218.4	220.4	222.0	223.2	224.0	198.8	215.7	218.7	220.6	222.3	223.4	224.2
Nondurables less food and beverages	204.2	231.8	237.5	239.5	240.3	241.1	241.4	205.6	234.1	238.8	241.7	242.6	243.2	243.5
Durables	192.6	202.1	203.0	204.9	207.1	208.6	209.8	192.2	200.3	201.2	203.3	205.4	206.8	208.0
Services	234.7	256.8	261.3	265.3	269.2	274.2	272.4	235.1	257.3	261.7	265.8	269.9	275.1	273.1
Rent, residential	175.9	185.6	186.6	187.0	188.9	191.1	192.1	175.8	185.5	186.4	186.9	188.7	190.8	191.8
Household services less rent	268.6	300.2	307.3	313.4	319.6	328.8	323.3	269.8	302.4	309.6	315.8	322.2	331.9	325.9
Transportation services	212.6	229.6	233.4	238.1	241.5	242.6	243.8	213.3	229.3	232.7	238.0	241.5	242.7	243.9
Medical care services	258.5	279.0	281.5	283.4	284.7	285.9	288.0	258.8	279.8	282.2	284.5	286.3	287.3	289.3
Other services	199.3	211.1	212.9	214.5	215.9	216.9	218.1	200.1	211.4	213.5	214.6	216.5	217.9	218.6
Special indexes:														
All items less food	214.2	233.5	237.1	239.9	242.6	245.5	245.1	214.6	233.7	237.3	240.2	242.9	245.7	245.3
All items less mortgage interest costs	213.0	227.1	229.8	231.8	233.7	235.4	236.8	213.7	227.6	230.2	232.4	234.2	235.7	237.2
Commodities less food	197.0	213.8	216.7	218.6	220.2	221.4	222.2	197.4	214.0	216.9	218.9	220.5	221.6	222.4
Nondurables less food	201.1	227.3	232.6	234.6	235.5	236.3	236.6	202.5	229.4	234.8	236.7	237.7	238.3	238.7
Nondurables less food and apparel	222.8	258.2	264.1	266.5	267.9	269.3	270.3	223.9	260.1	266.3	268.7	270.0	271.4	272.2
Nondurables	218.3	236.3	240.3	242.2	243.2	244.5	245.9	219.2	237.4	241.4	243.3	244.6	245.7	247.2
Services less rent	245.6	270.2	275.4	280.0	284.4	290.0	287.6	246.1	270.8	275.9	280.8	285.4	291.2	288.6
Services less medical care	230.6	252.7	257.4	261.5	265.7	271.0	268.9	231.0	253.1	257.7	261.9	266.3	271.8	269.4
Domestically produced farm foods	225.9	229.1	231.2	232.7	233.6	234.8	235.5	225.8	229.2	231.0	232.4	233.4	234.7	238.4
Selected beef cuts	267.8	267.2	270.2	268.0	265.6	264.8	269.2	270.1	270.3	272.3	269.5	267.5	267.1	271.2
Energy	287.1	344.6	355.0	358.8	363.2	367.8	370.4	289.2	348.7	359.6	363.3	367.3	371.8	373.9
All items less energy	213.8	228.0	230.8	233.4	235.7	238.3	238.3	213.9	227.3	230.0	232.7	235.1	237.6	237.6
All items less food and energy	207.3	222.8	225.7	228.5	231.0	233.7	233.1	207.2	221.8	224.6	227.5	230.0	232.7	232.1
Commodities less food and energy	185.6	194.9	196.5	198.2	199.9	201.2	202.0	185.4	193.5	195.1	196.9	198.6	199.8	200.6
Energy commodities	300.8	385.0	398.5	402.3	403.0	404.1	404.8	301.9	386.4	400.3	404.0	404.7	405.6	406.1
Services less energy	232.4	255.2	259.6	263.5	267.0	271.5	269.1	232.7	255.7	260.0	264.2	267.8	272.5	269.8
Purchasing power of the consumer dollar, 1967 = \$1	\$0.462	\$0.423	\$0.417	\$0.412	\$0.408	\$0.404	\$0.404	\$0.456	\$0.423	\$0.417	\$0.412	\$0.408	\$0.404	\$0.403

23. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979	1980						1979	1980					
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
FOOD AND BEVERAGES	230.7	238.6	241.0	242.8	244.1	245.7	248.3	230.9	239.0	241.2	243.2	244.7	246.4	249.1
Food	236.9	244.9	247.3	249.1	250.4	252.0	254.8	237.1	245.2	247.5	249.5	251.0	252.7	255.5
Food at home	235.5	241.3	243.6	245.3	246.5	248.0	251.5	235.0	241.1	243.1	245.0	246.1	247.7	251.1
Cereals and bakery products	220.1	236.8	238.6	242.0	244.5	245.9	247.8	221.1	237.4	239.3	242.2	244.4	245.7	248.0
Cereals and cereal products (12/77 = 100)	116.6	125.8	126.6	129.4	131.5	133.1	135.0	117.0	127.2	127.7	130.1	132.4	133.9	135.5
Flour and prepared flour mixes (12/77 = 100)	119.4	125.7	126.6	127.8	129.0	131.1	132.9	120.3	127.3	127.5	128.9	129.9	131.4	132.8
Cereal (12/77 = 100)	117.0	124.9	126.0	129.4	131.5	133.0	135.5	117.4	125.5	126.6	129.7	132.0	133.3	135.5
Rice, pasta, and cornmeal (12/77 = 100)	113.6	127.4	127.6	130.8	133.8	135.2	136.2	113.4	129.2	129.4	131.9	135.2	137.0	137.9
Bakery products (12/77 = 100)	116.4	125.1	126.1	127.6	128.7	129.1	129.8	117.0	125.1	126.2	127.5	128.3	128.8	129.8
White bread	194.2	210.7	212.0	215.1	216.7	216.9	218.4	194.3	209.7	212.1	215.1	216.0	215.4	217.5
Other breads (12/77 = 100)	116.2	124.6	125.6	127.0	128.3	128.1	129.4	118.5	127.5	129.3	129.3	130.6	130.8	132.3
Fresh biscuits, rolls, and muffins (12/77 = 100)	116.1	126.2	127.0	126.9	127.8	129.5	129.2	115.8	124.3	124.9	125.3	126.4	127.9	128.1
Fresh cakes and cupcakes (12/77 = 100)	114.8	122.8	124.4	126.5	127.4	127.6	127.9	115.9	122.2	123.2	125.4	126.5	126.9	127.3
Cookies (12/77 = 100)	114.8	122.8	124.4	126.5	126.1	126.3	127.1	117.2	124.0	125.6	126.3	126.8	126.9	127.3
Crackers and bread and cracker products (12/77 = 100)	112.7	119.9	120.2	122.0	122.2	123.6	125.5	112.9	121.0	121.8	122.2	123.0	124.5	125.7
Fresh sweetrolls, coffee cake, and donuts (12/77 = 100)	116.0	123.8	125.0	126.6	128.4	129.1	129.5	117.8	125.4	126.2	128.0	129.2	130.0	130.0
Frozen and refrigerated bakery products and fresh pies, tarts, and turnovers (12/77 = 100)	119.8	127.2	127.9	129.7	131.0	131.2	131.5	116.5	123.8	124.0	125.3	126.0	127.2	129.6
Meats, poultry, fish, and eggs	239.0	236.2	237.8	235.1	231.5	231.2	236.7	238.3	236.4	237.1	234.3	230.7	230.4	236.1
Meats, poultry, and fish	245.0	242.6	243.8	241.1	238.2	237.9	243.4	244.2	242.8	243.0	240.2	237.2	237.1	242.8
Meats	248.0	244.1	245.7	242.6	239.2	238.1	243.3	247.4	244.3	245.0	241.3	238.1	237.5	242.8
Beef and veal	266.4	266.2	269.1	267.0	264.8	263.8	267.9	268.4	268.9	270.8	268.2	266.3	265.6	269.6
Ground beef other than canned	274.5	273.3	275.3	272.9	269.4	266.9	266.6	274.7	276.2	278.7	274.7	270.6	269.0	268.7
Chuck roast	280.5	277.7	286.2	277.9	273.0	268.6	277.7	288.7	288.7	293.4	286.1	280.0	275.0	285.3
Round roast	239.1	244.5	244.2	242.7	243.4	240.9	243.2	242.7	245.8	244.5	242.1	245.5	243.8	246.2
Round steak	248.1	252.3	254.2	253.5	250.6	247.4	253.2	246.4	250.5	251.1	249.6	250.2	247.3	253.6
Sirloin steak	260.7	251.1	254.3	256.1	256.2	264.8	270.2	260.7	253.0	256.0	257.8	257.5	268.3	274.2
Other beef and veal (12/77 = 100)	151.8	152.2	153.8	153.3	152.4	152.5	155.9	152.8	152.8	153.7	153.1	152.2	152.4	155.2
Pork	215.1	202.8	202.6	197.1	191.8	190.4	200.3	214.9	204.1	203.0	196.7	191.8	190.5	200.7
Bacon	200.0	190.1	187.6	182.1	177.4	173.1	186.3	201.6	193.8	189.4	183.9	177.7	175.6	189.1
Pork chops	207.7	189.7	190.7	187.0	182.4	182.7	193.1	209.2	191.0	190.5	184.7	180.9	180.6	193.3
Ham other than canned (12/77 = 100)	97.2	95.7	95.8	90.6	87.4	87.8	92.1	96.1	95.2	94.7	98.7	85.4	86.1	90.5
Sausage	270.4	255.1	257.6	255.1	250.2	246.2	249.2	269.5	257.0	259.8	258.0	253.9	249.6	252.0
Canned ham	224.4	219.5	219.3	213.5	210.0	208.1	208.6	222.3	218.9	217.4	214.5	213.0	210.1	207.6
Other pork (12/77 = 100)	124.2	114.3	113.6	110.7	107.1	106.3	115.1	123.2	114.6	113.7	110.0	106.5	105.9	114.9
Other meats	245.1	244.7	245.8	243.9	240.2	239.4	239.1	241.0	240.9	241.5	239.0	235.6	235.9	236.5
Frankfurters	243.2	242.7	244.6	240.6	234.8	230.9	229.1	243.0	242.1	242.8	239.3	234.0	231.0	231.5
Bologna, liverwurst, and salami (12/77 = 100)	135.4	135.6	135.5	134.9	133.5	133.4	135.1	132.3	132.3	132.2	131.1	129.5	130.7	131.4
Other luncheon meats (12/77 = 100)	122.0	120.7	121.8	121.9	121.4	121.0	120.6	119.4	118.6	118.8	118.4	117.6	118.1	118.8
Lamb and organ meats (12/77 = 100)	141.0	142.4	142.3	140.1	136.3	137.6	137.2	141.1	143.4	144.3	141.3	138.4	139.3	138.2
Poultry	186.2	182.6	180.7	177.2	176.5	177.9	187.9	184.0	118.1	177.4	176.0	173.8	175.7	186.0
Fresh whole chicken	184.1	183.6	179.5	174.7	172.9	176.3	193.6	179.6	178.9	172.5	170.6	168.0	170.7	189.1
Fresh and frozen chicken parts (12/77 = 100)	119.4	116.8	116.8	114.5	114.4	115.7	120.9	119.1	117.0	116.3	114.7	112.7	115.6	120.8
Other poultry (12/77 = 100)	123.6	118.8	118.2	117.3	117.4	115.9	117.0	123.2	119.4	117.7	117.8	117.1	116.1	116.6
Fish and seafood	304.3	320.4	322.6	325.3	324.5	329.1	330.1	298.3	317.9	320.2	325.1	323.0	324.9	326.4
Canned fish and seafood (12/77 = 100)	111.4	120.3	120.4	122.9	125.4	127.3	129.2	110.2	119.7	119.5	121.8	124.0	125.7	127.3
Fresh and frozen fish and seafood (12/77 = 100)	118.6	123.0	124.3	124.5	122.5	124.2	123.7	115.7	122.0	123.5	125.1	122.4	122.6	122.5
Eggs	165.8	157.2	164.5	161.2	148.4	147.9	154.2	165.4	156.7	164.3	161.5	148.9	147.2	153.5
Dairy products	206.3	219.5	220.3	222.4	226.2	227.2	228.6	206.7	219.8	221.1	223.1	226.9	227.8	229.2
Fresh milk and cream (12/77 = 100)	116.1	123.7	124.1	124.7	127.0	127.1	127.7	116.3	123.6	124.2	124.9	127.2	127.4	128.0
Fresh whole milk	190.0	203.2	204.0	204.9	208.5	208.6	209.4	190.3	202.7	203.8	204.8	208.4	208.7	209.8
Other fresh milk and cream (12/77 = 100)	116.3	122.7	122.7	123.5	125.9	126.0	126.9	116.5	123.0	123.1	124.1	126.8	127.2	127.5
Processed dairy products (12/77 = 100)	117.3	124.5	125.1	127.0	129.1	130.4	131.4	117.6	125.1	126.2	128.0	129.9	130.7	131.9
Butter	200.6	218.3	218.3	219.9	222.2	225.0	226.9	202.6	220.9	220.9	222.7	225.3	227.2	229.7
Cheese (12/77 = 100)	117.7	124.2	124.9	126.2	127.8	128.8	130.0	117.4	124.4	125.5	126.8	128.5	129.0	130.1
Ice cream and related products (12/77 = 100)	117.0	124.6	125.1	128.6	131.9	133.7	134.6	118.4	125.6	127.2	130.4	132.9	133.8	135.5
Other dairy products (12/77 = 100)	114.5	120.9	121.6	124.0	126.1	127.3	127.5	114.3	121.3	121.9	123.6	125.7	127.4	127.7
Fruits and vegetables	238.1	228.3	232.4	240.9	246.6	250.1	253.9	236.6	225.9	230.1	239.8	245.5	250.2	253.0
Fresh fruits and vegetables	249.4	223.1	229.9	245.2	255.1	260.0	265.8	248.1	220.6	227.4	244.8	254.4	261.4	265.2
Fresh fruits	278.2	235.8	245.4	257.0	264.7	273.9	282.7	278.2	234.7	245.4	255.6	263.8	274.9	282.3
Apples	250.2	239.6	250.2	265.5	276.3	293.3	316.6	248.4	237.6	249.0	264.4	277.3	297.4	318.7
Bananas	221.0	238.5	243.9	242.8	249.7	242.6	232.6	218.5	234.6	240.8	243.5	244.5	237.7	228.7
Oranges	313.5	231.1	238.1	240.6	243.9	264.4	273.9	306.1	228.4	240.9	234.3	237.6	251.0	261.5
Other fresh fruits (12/77 = 100)	151.3	121.4	127.4	136.5	140.8	143.7	147.5	154.2	121.3	126.9	135.7	140.9	146.5	148.7
Fresh vegetables	222.4	211.2	215.5	234.2	246.2	247.0	250.1	221.0	207.9	211.3	235.2	246.0	249.4	249.4
Potatoes	225.7	203.3	203.3	201.7	210.1	246.3	310.5	227.9	199.8	200.3	198.2	205.6	244.4	309.8
Lettuce	200.0	198.7	208.3	271.9	279.9	238.8	205.9	195.9	191.7	203.8	281.9	288.6	241.7	200.6
Tomatoes	185.8	184.9	201.4	201.2	230.8	230.6	209.2	189.4	184.3	197.2	197.7	228.4	228.6	210.8
Other fresh vegetables (12/77 = 100)	132.1	125												

23. Continued—Consumer Price Index—U.S. city average

[1967=100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979	1980					1979	1980						
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
FOOD AND BEVERAGES—Continued														
Food—Continued														
Food at home—Continued														
Fruits and vegetables—Continued														
Cut corn and canned beans except lima (12/77=100)	114.3	115.2	116.0	115.6	116.0	116.6	118.1	102.4	113.4	115.4	114.3	114.2	115.2	117.0
Other canned and dried vegetables (12/77=100)	108.8	113.9	114.8	114.7	115.1	115.9	117.0	107.5	111.9	112.3	112.7	113.3	114.2	115.6
Other foods at home	269.5	288.0	292.0	295.1	298.1	301.8	304.3	268.7	287.3	290.9	294.6	298.0	301.4	303.7
Sugar and sweets	279.4	297.5	313.5	319.5	326.8	342.0	353.1	278.3	297.1	314.1	320.8	328.0	342.9	354.6
Candy and chewing gum (12/77=100)	118.5	122.4	123.8	126.3	128.9	130.5	131.6	118.1	122.2	123.9	126.5	129.0	130.8	132.0
Sugar and artificial sweeteners (12/77=100)	115.4	131.5	153.0	156.9	161.4	180.3	194.2	115.4	131.6	153.8	158.6	163.3	180.7	194.5
Other sweets (12/77=100)	113.8	119.5	120.4	121.3	123.6	125.8	127.2	112.6	118.5	119.3	120.0	122.2	124.6	126.5
Fats and oils (12/77=100)	227.4	235.9	236.8	238.3	239.5	240.0	239.3	227.6	236.5	236.8	238.3	240.1	240.5	240.6
Margarine	240.2	247.9	248.8	249.9	246.1	249.0	247.0	239.7	247.9	248.3	248.3	248.4	249.4	248.6
Nondairy substitutes and peanut butter (12/77=100)	113.7	116.4	117.9	119.8	121.4	123.1	123.6	113.6	117.2	118.5	120.0	121.6	123.5	124.0
Other fats, oils, and salad dressings (12/77=100)	118.3	123.6	123.7	124.8	125.8	124.9	124.6	118.5	123.8	123.4	124.4	125.5	124.9	125.0
Nonalcoholic beverages	354.6	384.5	387.1	390.3	393.0	395.9	397.4	353.6	383.0	384.4	389.2	392.3	395.1	396.2
Cola drinks, excluding diet cola	238.3	255.9	259.3	261.7	265.4	267.8	268.4	236.5	253.6	255.4	260.1	263.2	267.1	265.6
Carbonated drinks, including diet cola (12/77=100)	115.6	122.3	123.5	125.6	126.2	128.3	129.2	113.0	120.2	121.1	123.4	124.8	125.2	127.4
Roasted coffee	376.5	439.6	437.6	434.0	433.5	432.4	435.3	375.1	436.8	432.3	430.4	430.0	429.2	432.3
Freeze dried and instant coffee	335.6	382.2	381.7	380.2	381.9	380.2	381.0	336.2	380.4	380.3	379.2	380.4	378.7	379.2
Other noncarbonated drinks (12/77=100)	113.1	118.3	118.6	120.7	120.7	121.8	122.1	112.2	117.5	118.1	119.6	120.0	120.8	121.1
Other prepared foods	209.1	221.8	224.1	226.6	229.1	230.9	232.3	208.8	221.7	224.0	226.6	229.6	230.8	232.1
Canned and packaged soup (12/77=100)	113.2	118.1	118.0	120.5	122.0	122.9	123.3	113.1	117.9	117.6	120.6	122.5	123.7	123.5
Frozen prepared foods (12/77=100)	121.4	126.6	128.2	130.4	131.3	132.0	132.4	119.5	125.5	127.1	128.8	131.0	130.8	131.3
Snacks (12/77=100)	114.0	123.4	124.1	124.8	126.1	127.2	128.3	114.8	124.7	125.3	126.0	127.3	127.9	128.5
Seasonings, olives, pickles, and relish (12/77=100)	115.0	123.6	124.9	125.2	125.4	127.5	128.0	114.2	123.1	124.0	124.5	125.5	127.3	127.3
Other condiments (12/77=100)	114.3	123.7	126.0	127.1	127.9	128.8	130.2	115.2	124.6	126.6	128.1	129.2	129.9	131.6
Miscellaneous prepared foods (12/77=100)	115.3	120.7	122.2	124.4	127.6	128.6	129.3	115.2	120.5	122.2	123.7	127.0	128.3	128.9
Other canned and packaged prepared foods (12/77=100)	115.8	121.2	122.2	123.1	124.6	125.2	126.0	115.3	120.3	122.0	123.3	124.3	124.1	125.4
Food away from home	244.9	258.3	260.9	263.0	264.6	266.6	267.8	246.5	260.1	262.7	265.3	267.6	269.9	271.2
Lunch (12/77=100)	119.6	125.9	127.0	127.9	128.5	129.3	130.0	120.4	126.7	127.6	128.9	129.9	130.7	131.1
Dinner (12/77=100)	118.9	125.8	127.0	127.9	128.7	129.5	130.1	119.7	126.8	128.1	129.1	130.5	131.0	132.0
Other meals and snacks (12/77=100)	117.3	123.2	124.9	126.4	127.4	129.0	129.3	118.2	124.4	126.2	127.7	128.6	131.1	131.6
Alcoholic beverages	172.7	180.4	181.7	183.9	185.4	186.4	187.2	173.3	181.1	182.8	185.0	186.9	188.0	189.2
Alcoholic beverages at home (12/77=100)	112.2	117.4	118.2	119.9	120.9	121.4	122.1	113.3	118.3	119.3	120.8	122.0	122.7	123.6
Beer and ale	170.3	179.9	182.0	185.9	187.7	188.2	189.2	170.5	179.9	181.7	185.1	187.5	188.8	189.7
Whiskey	127.4	132.6	132.8	133.4	133.9	134.7	135.2	129.2	133.8	134.4	134.6	135.1	135.4	136.6
Wine	194.1	202.5	204.1	206.6	208.5	211.5	212.6	197.8	206.1	208.4	209.8	212.0	213.7	217.4
Other alcoholic beverages (12/77=100)	105.2	107.3	107.4	108.2	109.0	108.7	109.6	105.0	106.7	107.2	107.8	108.7	108.9	109.6
Alcoholic beverages away from home (12/77=100)	114.5	119.2	120.0	120.5	121.5	122.3	122.5	112.3	117.6	119.1	120.5	121.7	122.5	122.9
HOUSING														
Shelter	240.1	267.2	271.6	276.0	280.2	286.3	282.9	240.7	268.3	272.7	277.2	281.6	288.0	284.3
Rent, residential	175.9	185.6	186.6	187.0	188.9	191.1	192.1	175.8	185.5	186.4	186.9	188.7	190.8	191.8
Other rental costs	236.0	255.7	258.6	260.7	261.9	264.2	265.7	235.2	255.6	258.6	260.5	261.7	263.9	265.5
Lodging while out of town	248.8	272.8	276.8	279.3	279.9	282.1	283.8	246.7	271.6	275.7	278.0	278.6	280.8	282.3
Tenants' insurance (12/77=100)	110.9	117.8	118.6	119.9	121.2	122.6	123.1	111.5	118.5	119.3	120.1	121.4	122.7	123.3
Homeownership	263.0	296.3	302.0	307.7	312.9	320.4	315.4	264.2	298.4	304.0	310.0	315.4	323.4	317.9
Home purchase	224.0	243.0	244.0	246.5	249.7	252.6	253.9	224.0	243.0	243.8	246.5	249.8	253.0	254.3
Financing, taxes, and insurance	308.6	367.7	379.9	390.6	399.7	416.1	399.6	310.6	371.6	384.1	395.3	404.9	422.0	405.0
Property insurance	312.6	333.7	335.7	338.9	344.9	351.8	355.5	312.1	335.2	337.4	340.4	346.4	352.7	357.2
Property taxes	181.8	188.2	188.2	188.4	187.6	187.7	188.3	183.3	189.9	189.9	190.1	189.3	189.4	190.0
Contracted mortgage interest cost	375.6	464.0	483.0	499.4	513.6	538.9	512.2	375.8	465.0	484.1	500.9	515.6	541.5	514.6
Mortgage interest rates	164.9	187.5	194.4	199.4	202.4	210.3	199.0	164.9	187.8	194.8	199.8	202.8	210.8	199.6
Maintenance and repairs	257.9	273.7	278.8	282.9	284.9	285.9	287.6	259.1	274.4	278.2	281.7	283.4	283.8	285.1
Maintenance and repair services	280.0	297.1	303.2	307.9	310.1	310.6	312.1	282.8	299.3	303.5	307.7	309.1	308.5	309.0
Maintenance and repair commodities	206.1	218.9	221.4	224.3	225.8	228.0	230.3	206.5	219.5	222.3	224.3	226.5	228.8	231.3
Paint and wallpaper, supplies, tools, and equipment (12/77=100)	112.5	123.5	125.0	126.6	128.7	131.3	133.4	112.8	122.3	123.6	126.0	128.7	130.9	132.2
Lumber, awnings, glass, and masonry (12/77=100)	113.7	115.8	117.6	118.8	118.0	118.9	119.1	114.4	119.3	119.9	119.7	118.4	118.5	119.3
Plumbing, electrical, heating, and cooling supplies (12/77=100)	110.1	115.3	116.4	119.1	119.3	119.9	121.1	110.2	117.9	119.3	120.0	122.0	123.8	125.9
Miscellaneous supplies and equipment (12/77=100)	110.3	116.4	117.0	118.2	118.7	119.1	120.1	109.5	114.5	118.2	119.4	120.1	120.7	122.5
Fuel and other utilities	243.5	263.8	268.0	270.5	275.9	282.2	285.5	244.1	264.4	268.7	271.0	276.4	283.0	286.1
Fuels	293.8	327.1	333.9	337.8	346.4	355.8	360.8	293.9	327.0	333.9	337.6	346.0	355.8	360.3
Fuel oil, coal, and bottled gas	412.9	539.1	553.4	556.4	556.0	558.7	560.4	413.5	540.3	554.1	557.1	557.1	559.8	561.9
Fuel oil	429.5	561.9	577.9	580.7	580.4	583.2	585.1	430.0	562.5	577.9	580.7	580.5	583.3	585.6
Other fuels (6/78 = 100)	106.2	136.6	138.3	139.6	139.4	140.1	140.4	106.5	137.9	139.5	140.8	141.3	141.9	142.1
Gas (pipel) and electricity	264.5	278.8	284.0	288.0	298.2	308.8	314.3	264.6	278.5	283.9	287.6	297.5	308.5	313.5
Electricity	227.4	233.8	237.9	241.5	248.1	261.9	267.4	228.0	233.9	238.1	241.5	248.0	262.3	267.6
Utility (pipel) gas	307.7	336.8	343.9	347.9	364.6	366.7	371.8	306.5	335.4	342.6	346.4	362.3	364.9	368.6

23. Continued—Consumer Price Index—U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979	1980					1979	1980						
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
HOUSING—Continued														
Fuel and other utilities—Continued														
Other utilities and public services	159.4	161.3	161.9	162.3	163.1	164.9	165.9	159.4	161.4	161.9	162.3	163.1	164.9	165.9
Telephone services	132.1	132.8	133.2	133.4	134.0	135.5	136.3	132.2	132.8	133.1	133.2	133.9	135.4	136.1
Local charges (12/77 = 100)	100.1	102.7	103.3	103.5	104.3	105.3	105.4	100.2	102.7	103.2	103.3	104.0	105.1	105.2
Interstate toll calls (12/77 = 100)	98.4	97.4	97.4	97.3	97.3	99.5	101.6	98.5	97.5	97.5	97.4	97.4	99.5	101.6
Intrastate toll calls (12/77 = 100)	101.3	98.8	98.7	99.0	99.4	99.6	99.5	101.2	98.7	98.6	98.9	99.3	99.5	99.3
Water and sewerage maintenance	244.0	252.3	253.9	255.2	256.5	259.3	261.3	244.0	253.0	254.7	256.2	257.6	260.5	262.4
Household furnishings and operations	190.4	199.0	201.3	203.0	204.2	205.5	206.2	189.0	196.8	199.2	200.7	201.9	202.9	203.5
Housefurnishings	162.9	169.3	171.5	172.7	173.4	174.6	174.7	162.5	167.9	170.4	171.5	172.2	172.9	172.9
Textile household furnishings	173.6	182.9	187.2	188.2	187.3	189.4	188.2	171.6	181.2	185.3	186.3	186.1	189.6	188.7
Household linens (12/77 = 100)	104.3	110.1	113.9	114.8	114.4	116.0	114.6	103.1	109.8	113.2	113.8	113.4	116.2	114.8
Curtains, drapes, slipcovers, and sewing materials (12/77 = 100) ..	112.4	118.2	119.7	119.9	119.3	120.1	120.2	111.4	116.6	118.2	118.9	119.0	120.5	121.0
Furniture and bedding	176.8	185.2	189.2	190.9	191.9	193.6	192.8	177.2	184.3	187.9	189.4	190.1	190.8	189.7
Bedroom furniture (12/77 = 100)	113.2	120.5	122.5	124.3	125.0	126.2	125.4	112.1	117.5	119.2	120.9	121.7	123.1	122.6
Sofas (12/77 = 100)	106.2	108.5	110.9	111.6	111.4	113.0	112.2	108.7	110.3	112.7	111.8	112.0	112.7	111.7
Living room chairs and tables (12/77 = 100)	104.5	110.0	110.8	110.9	110.8	110.6	110.7	106.2	111.2	111.9	112.6	112.6	111.7	111.3
Other furniture (12/77 = 100)	113.3	118.3	122.6	124.0	125.6	127.1	126.6	112.5	117.5	121.3	123.1	123.5	123.9	123.0
Appliances including TV and sound equipment	135.4	138.3	138.8	139.3	139.9	140.2	140.5	135.0	137.8	139.3	139.7	140.2	140.1	140.1
Television and sound equipment (12/77 = 100)	103.9	105.4	105.7	105.7	105.7	105.6	105.8	103.3	104.9	105.5	105.4	105.4	105.2	105.0
Television	102.6	103.7	104.0	104.0	104.1	104.2	104.4	101.6	102.3	102.9	102.8	102.8	103.1	102.7
Sound equipment (12/77 = 100)	106.1	108.1	108.3	108.3	108.3	107.9	108.2	105.8	108.2	107.6	108.7	108.7	108.0	108.0
Household appliances	155.1	159.4	160.2	161.4	162.6	163.4	163.7	154.9	158.8	160.7	162.3	163.4	163.6	163.8
Refrigerators and home freezer	152.9	156.5	157.9	160.7	162.7	163.2	163.6	157.3	159.7	161.4	163.5	166.0	166.8	166.4
Laundry equipment (12/77 = 100)	110.7	115.0	116.8	117.5	118.2	119.1	119.6	110.1	114.7	116.6	117.8	118.5	118.9	118.7
Other household appliances (12/77 = 100)	108.7	111.3	111.2	111.5	112.1	112.7	112.6	107.1	109.5	110.7	111.6	111.8	111.7	112.1
Stoves, dishwashers, vacuums, and sewing machines (12/77 = 100)	109.0	110.8	110.9	110.0	110.3	111.2	111.6	107.6	110.5	111.1	111.6	111.9	111.4	112.8
Office machines, small electric appliances, and air conditioners (12/77 = 100)	108.5	112.0	111.6	113.1	114.2	114.4	113.8	106.5	108.4	110.2	111.6	111.7	112.0	111.3
Other household equipment (12/77 = 100)	110.3	115.9	117.3	118.4	119.0	120.2	121.3	110.4	114.4	116.0	117.0	117.8	118.5	119.7
Floor and window coverings, infants' laundry cleaning and outdoor equipment (12/77 = 100) ..	109.1	114.5	116.4	118.2	117.6	120.2	120.8	104.6	109.4	110.8	113.1	113.2	114.3	114.7
Clocks, lamps, and decor items (12/77 = 100)	107.5	112.7	114.9	115.6	117.6	118.8	119.0	107.2	109.8	112.3	112.6	114.4	115.9	116.6
Tableware, serving pieces, and nonelectric kitchenware (12/77 = 100)	114.4	121.4	122.6	123.4	124.1	125.4	126.4	114.1	118.9	120.8	121.4	121.7	122.2	124.0
Lawn equipment, power tools, and other hardware (12/77 = 100) ..	107.6	111.7	112.2	113.5	114.0	113.7	115.9	111.0	114.2	115.0	115.9	117.4	117.6	118.7
Housekeeping supplies	222.3	235.0	238.0	240.7	243.6	245.4	247.3	220.7	232.8	235.5	238.1	241.2	243.0	245.2
Soaps and detergents	210.9	228.9	232.1	233.2	235.0	234.9	237.2	210.5	226.5	230.0	231.1	232.1	232.3	234.4
Other laundry and cleaning products (12/77 = 100)	111.3	117.2	117.0	117.6	119.8	121.1	122.3	111.3	117.1	116.9	118.1	119.5	120.8	122.4
Cleaning and toilet tissue, paper towels and napkins (12/77 = 100) ..	116.5	121.2	123.9	126.2	128.6	129.4	130.2	116.9	123.4	125.8	128.1	130.8	131.5	132.7
Stationery, stationery supplies, and gift wrap (12/77 = 100)	108.9	112.7	113.8	115.6	116.3	116.9	117.6	107.5	112.3	113.6	114.9	116.0	116.5	117.9
Miscellaneous household products (12/77 = 100)	112.3	119.4	120.9	122.0	123.0	124.4	125.4	110.5	116.6	118.3	119.2	120.9	122.1	123.5
Lawn and garden supplies (12/77 = 100)	113.0	119.4	121.4	123.8	125.2	126.8	127.6	110.4	113.3	114.0	116.5	118.9	121.0	120.7
Housekeeping services	249.7	261.6	263.6	266.0	267.6	269.1	270.4	248.6	261.1	262.7	264.3	265.6	267.0	268.1
Postage	257.3	257.3	257.3	257.3	257.3	257.3	257.3	257.2	257.2	257.2	257.3	257.3	257.3	257.3
Moving, storage, freight, household laundry, and drycleaning services (12/77 = 100)	116.3	124.2	125.4	128.3	129.4	130.5	131.0	116.5	124.6	126.1	127.8	128.5	129.2	129.7
Appliance and furniture repair (12/77 = 100)	109.5	114.7	115.8	116.5	117.2	117.7	118.7	109.4	115.5	116.0	116.2	116.7	117.4	117.8
APPAREL AND UPKEEP	164.3	171.9	176.0	177.3	177.5	177.2	176.2	164.5	171.5	175.1	176.1	176.8	176.0	175.4
Apparel commodities	158.6	165.1	169.2	170.2	170.1	169.7	168.5	159.1	165.2	168.7	169.5	169.8	168.8	168.0
Apparel commodities less footwear	155.6	161.8	166.2	167.2	166.9	166.4	165.0	156.0	161.9	165.7	166.3	166.4	165.3	164.4
Men's and boys'	159.2	162.7	165.6	166.9	168.0	166.8	165.9	160.6	162.9	166.0	167.3	168.9	168.1	167.2
Men's (12/77 = 100)	100.0	102.3	104.3	105.0	105.7	104.8	103.9	101.3	102.4	104.4	105.2	106.3	105.5	104.7
Suits, sport coats, and jackets (12/77 = 100)	96.8	98.2	99.9	101.1	101.2	99.7	97.1	95.8	94.4	96.4	97.3	97.1	95.4	93.2
Coats and jackets (12/77 = 100)	94.4	93.6	96.9	96.5	97.3	96.3	96.0	97.6	92.2	96.9	97.0	97.2	97.1	97.1
Furnishings and special clothing (12/77 = 100)	108.4	112.7	115.0	116.6	117.9	118.2	118.4	106.6	111.1	113.2	114.2	116.4	115.4	115.7
Shirts (12/77 = 100)	100.9	109.3	111.9	111.5	112.2	110.8	110.7	104.1	109.4	112.0	111.7	113.7	112.9	111.2
Dungarees, jeans, and trousers (12/77 = 100)	99.0	97.7	98.7	99.4	100.2	99.5	99.2	101.5	102.2	102.7	104.2	105.2	105.0	104.8
Boys' (12/77 = 100)	104.2	106.3	107.5	108.9	109.7	109.5	110.0	103.5	105.9	107.5	108.7	109.6	109.8	110.0
Coats, jackets, sweaters, and shirts (12/77 = 100)	101.7	99.9	102.5	104.4	105.2	104.6	104.4	101.3	101.9	105.0	107.2	107.7	107.8	107.4
Furnishings (12/77 = 100)	108.0	110.9	112.0	113.3	114.3	114.6	114.7	107.1	109.5	110.7	111.6	112.7	113.3	113.3
Suits, trousers, sport coats, and jackets (12/77 = 100)	104.8	109.5	109.8	110.7	111.3	111.3	112.6	103.9	107.7	108.2	108.8	109.9	110.1	110.9
Women's and girls'	147.8	151.1	155.5	155.9	154.1	153.0	150.6	147.5	151.3	154.9	154.7	154.1	151.2	149.9
Women's (12/77 = 100)	98.4	100.8	103.8	103.9	102.4	101.7	99.8	98.7	101.4	103.7	103.3	103.0	100.8	99.6
Coats and jackets	162.1	163.1	167.6	168.3	162.0	158.1	158.8	166.8	162.4	167.0	167.8	162.4	155.2	157.5
Dresses	157.2	160.6	169.3	167.8	163.9	163.3	153.9	152.8	151.2	157.5	154.1	154.5	152.5	146.2
Separates and sportswear (12/77 = 100)	95.0	97.1	99.8	101.1	100.3	99.5	96.8	95.7	99.2	101.0	101.6	101.2	99.2	97.1
Underwear, nightwear, and hosiery (12/77 = 100)	105.6	110.2	111.0	111.5	111.8	112.1	113.2	106.1	110.6	111.5	111.7	112.2	112.3	112.8
Suits (12/77 = 100)	87.3	88.2	91.6	90.4	88.0	86.5	85.5	87.9	96.8	100.2	98.2	98.2	91.7	90.1
Girls (12/77 = 100)	98.1	98.9	101.8	102.6	102.7	102.1	102.0	95.5	97.3	100.1	101.1	100.5	99.6	100.0
Coats, jackets, dresses, and suits (12/77 = 100)	98.7	95.7	98.9	99.8	99.4	98.1	98.9	94.6	92.6	95.7	96.8	95.3	93.8	95.6
Separates and sportswear (12/77 = 100)	93.9	98.2	100.8	101.4	101.8	100.7	99.7	92.5	98.1	99.8	100.5	99.9	98.5	98.2
Underwear, nightwear, hosiery, and accessories (12/77 = 100)	104.6	105.6	108.4	109.5	110.0	111.4	111.4	102.0	103.5	107.8	108.9	110.0	110.9	110.4

23. Continued — Consumer Price Index — U.S. city average

[1967 = 100 unless otherwise specified]

General summary	All Urban Consumers						Urban Wage Earners and Clerical Workers (revised)							
	1979	1980					1979	1980						
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
APPAREL AND UPKEEP — Continued														
Apparel commodities — Continued														
Apparel commodities less footwear — Continued														
Infants' and toddlers'	219.0	226.6	231.4	234.3	237.4	240.9	243.0	221.9	232.7	237.3	241.1	242.8	246.8	249.2
Other apparel commodities	167.9	191.4	199.9	201.9	202.7	205.3	205.5	168.4	191.8	197.8	198.5	197.4	201.0	200.8
Sewing materials and notions (12/77 = 100)	101.3	106.3	107.1	107.9	109.1	110.2	109.3	95.6	105.7	107.2	106.9	108.6	110.9	108.8
Jewelry and luggage (12/77 = 100)	111.7	131.2	138.6	140.1	140.4	142.2	142.8	114.9	132.3	137.3	138.1	136.3	138.6	139.4
Footwear	176.6	184.6	187.0	188.3	189.3	189.0	189.5	176.6	183.9	186.3	188.1	189.3	188.9	189.3
Men's (12/77 = 100)	113.4	118.3	119.0	119.7	120.0	121.3	121.1	114.5	119.4	120.9	122.4	122.6	123.6	123.2
Boys' and girls' (12/77 = 100)	111.0	117.9	119.5	119.5	121.3	121.0	123.5	111.2	118.0	119.5	119.5	121.5	121.3	123.1
Womens' (12/77 = 100)	108.3	112.1	114.2	115.6	115.8	114.6	113.8	106.9	109.5	110.9	112.6	112.9	111.7	111.3
Apparel services	205.7	222.9	225.9	230.0	232.2	233.6	234.4	204.9	219.8	223.5	226.0	230.8	231.8	232.6
Laundry and drycleaning other than coin operated (12/77 = 100)	120.6	130.6	132.5	135.5	136.9	137.5	137.7	120.3	130.6	132.3	134.1	135.6	137.3	137.5
Other apparel services (12/77 = 100)	111.2	120.7	122.1	123.3	124.5	125.5	126.3	111.2	116.9	119.6	120.4	125.0	123.9	124.7
TRANSPORTATION	216.6	239.6	243.7	246.8	249.0	249.7	251.0	217.8	240.2	244.3	247.7	249.9	250.6	251.9
Private	217.4	239.8	244.0	247.0	249.2	249.7	250.5	218.3	240.4	244.6	248.0	250.1	250.8	251.5
New cars	166.7	175.3	175.0	177.0	178.9	178.5	179.2	166.6	175.4	175.4	177.7	179.6	179.4	180.0
Used cars	209.2	195.3	195.2	196.7	199.3	200.7	203.4	209.2	195.3	195.2	196.8	199.3	200.8	203.4
Gasoline	280.0	357.6	370.9	374.7	375.4	376.2	376.7	281.0	359.0	372.7	376.3	377.1	377.6	377.8
Automobile maintenance and repair	244.0	258.2	260.9	264.1	266.1	267.3	268.0	244.2	259.2	261.7	264.3	266.1	268.0	269.7
Body work (12/77 = 100)	117.4	126.5	127.3	129.1	130.6	131.4	131.8	117.6	126.1	127.2	128.4	129.7	130.8	131.3
Automobile drive train, brake, and miscellaneous mechanical repair (12/77 = 100)	116.7	123.2	124.1	126.1	126.6	127.5	128.1	117.5	124.8	126.1	127.4	127.8	128.8	129.9
Maintenance and servicing (12/77 = 100)	115.9	121.3	123.1	124.7	125.9	126.1	127.3	115.3	121.3	122.8	124.2	125.4	126.2	127.2
Power plant repair (12/77 = 100)	114.8	122.5	123.5	124.4	125.1	125.9	126.4	115.2	123.1	124.0	124.6	125.4	126.2	126.6
Other private transportation	198.5	212.6	216.5	221.3	224.5	225.0	224.5	199.1	213.6	217.1	223.1	226.7	227.3	226.7
Other private transportation commodities	173.3	191.2	192.7	194.1	195.3	195.5	197.7	174.4	191.7	193.2	195.8	196.7	196.8	200.1
Motor oil, coolant, and other products (12/77 = 100)	110.5	123.9	126.4	129.8	132.2	134.1	136.3	109.9	124.0	126.1	129.1	131.5	133.6	135.5
Automobile parts and equipment (12/77 = 100)	112.3	123.5	124.3	124.8	125.4	125.3	126.6	113.2	123.9	124.7	126.2	126.5	126.3	128.4
Tires	153.7	168.5	170.1	171.2	172.6	172.3	174.9	155.7	170.6	172.5	174.9	175.6	174.9	178.9
Other parts and equipment (12/77 = 100)	114.8	127.3	127.2	127.1	126.5	126.8	126.6	114.3	125.0	124.4	125.1	125.0	124.5	125.7
Other private transportation services	207.1	220.4	225.0	230.6	234.5	235.0	233.8	207.6	221.5	225.7	232.6	236.8	237.6	236.0
Automobile insurance	229.1	240.2	244.0	245.2	247.1	248.5	249.1	229.0	239.7	243.8	244.9	246.9	248.2	248.7
Automobile finance charges (12/77 = 100)	116.8	132.1	137.4	148.6	155.0	153.7	149.7	116.4	131.3	135.2	147.8	153.8	153.5	149.1
Automobile rental, registration, and other fees (12/77 = 100)	106.9	109.8	110.8	111.5	112.1	112.9	113.3	107.3	110.9	111.6	112.2	113.1	114.0	114.7
State registration	144.0	145.2	145.3	146.4	146.4	146.4	146.4	143.9	145.3	145.5	146.5	146.5	146.5	146.5
Drivers' license (12/77 = 100)	104.5	104.8	104.7	104.7	104.7	104.7	104.9	104.3	104.5	104.4	104.4	104.4	104.4	104.6
Vehicle inspection (12/77 = 100)	114.6	119.0	119.7	119.7	120.4	121.5	122.6	115.5	119.7	120.2	120.3	121.0	122.1	123.3
Other vehicle related fees (12/77 = 100)	114.0	119.6	122.0	122.7	124.0	126.1	126.8	116.9	125.4	127.0	127.8	130.0	132.7	134.6
Public	197.1	229.5	232.1	235.9	239.5	242.2	250.5	197.6	223.9	226.1	229.7	232.9	234.9	245.8
Airline fare	198.5	255.4	259.9	264.3	270.0	275.5	276.9	198.4	255.2	259.3	263.9	270.0	275.4	275.5
Intercity bus fare	258.8	288.5	290.7	293.5	293.6	293.8	294.2	258.5	288.2	290.2	291.0	293.4	293.6	293.9
Intracity mass transit	189.8	199.7	200.8	203.0	204.6	204.4	222.6	189.7	197.6	198.6	200.8	202.0	201.9	221.8
Taxi fare	220.6	244.0	245.6	256.4	259.9	262.0	263.3	226.5	249.3	251.2	261.6	265.7	267.6	269.2
Intercity train fare	216.1	237.2	237.2	237.3	250.0	255.2	255.3	217.1	237.0	237.1	237.2	265.1	255.4	255.4
MEDICAL CARE	239.9	257.9	260.2	262.0	263.4	264.7	266.6	240.5	258.7	260.9	263.1	264.9	265.9	267.8
Medical care commodities	154.1	162.1	163.5	164.9	166.4	167.9	169.1	155.3	162.7	164.4	166.0	167.2	168.5	169.7
Prescription drugs	141.9	149.8	150.9	152.2	153.5	154.8	155.6	143.0	150.7	152.0	153.5	154.6	155.8	156.6
Anti-infective drugs (12/77 = 100)	112.0	117.2	117.9	118.5	118.7	120.5	121.2	113.0	119.8	120.1	120.4	120.7	122.0	122.3
Tranquillizers and sedatives (12/77 = 100)	114.0	121.3	122.2	122.9	124.1	124.9	125.5	114.4	121.0	122.2	122.7	123.5	124.2	124.7
Circulatories and diuretics (12/77 = 100)	108.6	113.4	113.3	114.2	114.6	115.1	115.4	109.1	114.2	114.7	115.9	116.8	117.3	117.6
Hormones, diabetic drugs, biologicals, and prescription and supplies (12/77 = 100)	118.9	128.7	130.0	131.3	133.2	134.3	135.5	119.3	127.8	129.6	131.3	132.4	133.7	134.8
Pain and symptom control drugs (12/77 = 100)	113.1	119.7	120.5	121.4	122.9	124.2	124.5	114.7	120.1	121.3	122.6	124.2	125.5	126.1
Supplements, cough and cold preparations, and respiratory agents (12/77 = 100)	109.5	113.7	115.5	117.1	118.2	118.6	119.3	111.0	115.2	116.5	118.5	119.5	120.2	120.9
Nonprescription drugs and medical supplies (12/77 = 100)	110.8	116.3	117.3	118.4	119.5	120.6	121.7	111.9	116.6	118.0	119.2	120.1	121.0	122.0
Eyeglasses (12/77 = 100)	108.2	112.9	114.1	115.0	116.5	118.2	118.7	108.5	112.6	114.5	115.3	116.3	117.3	117.8
Internal and respiratory over-the-counter drugs	171.3	180.4	182.2	184.4	186.0	187.3	189.1	173.2	180.8	183.0	185.4	186.9	188.4	190.1
Nonprescription medical equipment and supplies (12/77 = 100)	109.7	114.6	115.1	115.3	116.5	117.5	119.1	110.7	115.6	116.1	116.3	117.1	117.5	119.0
Medical care services	258.5	279.0	281.5	283.4	284.7	285.9	288.0	258.8	279.8	282.2	284.5	286.3	287.3	289.3
Professional services	227.6	242.9	245.3	248.2	250.3	251.8	253.5	229.3	245.5	247.8	251.2	253.5	255.1	256.1
Physicians' services	244.7	260.2	262.3	264.8	267.5	269.2	270.9	246.8	264.1	266.2	269.7	272.3	273.9	275.4
Dental services	215.2	231.5	234.1	237.2	238.8	240.3	241.1	217.1	233.4	235.7	238.9	241.2	243.1	243.0
Other professional services (12/77 = 100)	111.5	118.1	119.5	121.7	122.2	122.9	125.0	111.0	117.4	119.3	121.1	121.6	122.2	123.6
Other medical care services	295.8	322.7	325.3	325.8	326.3	327.2	329.7	294.9	322.1	324.4	325.3	326.5	326.5	329.8
Hospital and other medical services (12/77 = 100)	117.3	127.8	128.8	129.7	130.4	131.4	133.4	116.6	126.8	127.7	128.6	129.7	130.3	132.6
Hospital room	369.7	403.4	405.8	408.0	410.1	412.6	418.2	367.5	398.8	401.2	403.6	406.7	408.5	414.9
Other hospital and medical care services	116.4	126.5	127.8	128.8	129.5	130.6	132.8	115.6	125.9	126.9	128.0	129.1	129.7	132.3

23. Continued — Consumer Price Index — U.S. city average

[1967=100 unless otherwise specified]

General summary	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979	1980						1979	1980					
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
ENTERTAINMENT	189.1	197.8	200.6	202.5	204.0	205.3	206.6	188.6	196.2	199.5	201.3	202.4	204.0	204.4
<i>Entertainment commodities</i>	189.7	200.4	203.4	205.7	207.0	208.3	209.3	188.2	196.9	200.3	202.8	203.4	204.5	204.8
Reading materials (12/77 = 100)	110.0	117.4	119.4	120.1	121.5	122.3	123.0	109.5	117.0	119.1	119.7	121.1	121.8	122.5
Newspapers	212.6	227.7	232.4	234.8	237.2	239.0	240.0	212.2	227.3	232.0	234.3	236.4	238.2	239.3
Magazines, periodicals, and books (12/77 = 100)	112.0	119.2	120.8	120.8	122.4	123.1	124.1	111.7	118.9	120.7	120.6	122.3	122.8	123.7
Sporting goods and equipment (12/77 = 100)	110.0	115.9	117.2	118.7	118.5	118.6	119.5	107.0	110.8	112.4	114.1	114.0	114.2	114.2
Sport vehicles (12/77 = 100)	110.8	117.4	118.7	120.6	119.9	119.8	120.7	106.9	109.1	110.8	113.0	112.5	112.6	112.5
Indoor and warm weather sport equipment (12/77 = 100)	106.7	108.3	109.5	111.3	112.0	111.1	112.4	104.7	107.8	109.3	110.5	110.3	110.2	110.6
Bicycles	162.2	174.5	177.2	178.6	179.7	180.6	181.6	161.8	174.9	177.8	179.8	180.9	181.4	181.4
Other sporting goods and equipment (12/77 = 100)	107.8	112.4	112.9	113.1	113.7	114.6	115.0	106.5	112.6	113.4	114.0	114.6	115.3	116.1
Toys, hobbies, and other entertainment (12/77 = 100)	109.4	115.1	116.9	118.4	119.4	120.6	121.0	109.6	114.3	116.4	118.0	118.1	119.0	119.1
Toys, hobbies, and music equipment (12/77 = 100)	109.3	114.1	115.7	117.3	118.5	119.6	119.0	109.1	112.3	114.9	116.5	115.8	117.0	115.9
Photographic supplies and equipment (12/77 = 100)	108.4	114.1	118.2	120.1	120.8	121.8	122.8	107.7	114.2	116.9	118.9	120.5	121.1	122.4
Pet supplies and expense (12/77 = 100)	110.3	117.6	118.2	119.2	120.1	121.7	123.2	111.6	117.9	119.0	120.0	120.9	121.4	122.9
Entertainment services	188.6	194.5	197.0	198.5	200.1	201.4	203.1	109.1	196.0	199.1	199.9	201.8	204.3	204.8
Fees for participant sports (12/77 = 100)	111.9	116.0	117.5	119.0	120.2	120.9	122.1	112.1	116.3	118.8	119.3	120.5	121.5	121.9
Admissions (12/77 = 100)	114.3	118.3	119.1	118.7	118.8	120.4	121.3	115.3	119.7	120.0	120.1	121.0	123.2	123.2
Other entertainment services (12/77 = 100)	109.1	111.4	113.2	114.8	116.4	116.6	117.4	110.5	111.8	113.9	115.1	116.5	118.2	118.8
OTHER GOODS AND SERVICES	195.2	208.1	208.9	209.8	211.2	212.5	213.5	195.1	207.7	208.3	209.2	210.6	212.1	212.9
Tobacco products	186.8	198.1	198.4	198.8	200.4	203.4	203.8	186.9	198.3	198.6	198.9	200.5	203.6	204.0
Cigarettes	189.2	200.9	201.2	201.4	202.9	206.0	206.4	189.4	201.3	201.6	201.6	203.2	206.4	206.8
Other tobacco products and smoking accessories (12/77 = 100)	110.8	115.6	116.3	117.6	119.0	120.2	120.7	110.3	114.8	115.7	117.2	118.5	119.5	120.3
Personal care	196.4	206.5	208.1	209.7	211.6	212.4	214.4	196.0	206.6	207.7	209.5	210.9	211.8	213.1
Toilet goods and personal care appliances	188.6	198.6	200.2	201.8	204.1	205.1	207.9	188.1	198.3	199.6	201.8	203.9	204.5	206.6
Products for the hair, hairpieces and wigs (12/77 = 100)	109.4	116.1	116.6	117.9	120.0	120.7	121.4	108.5	114.9	114.9	117.9	120.0	119.7	120.5
Dental and shaving products (12/77 = 100)	113.2	118.6	119.2	120.5	121.0	122.3	124.0	111.0	116.8	118.4	119.3	118.8	120.4	122.0
Cosmetics, bath and nail preparations, manicure and eye makeup implements (12/77 = 100)	109.5	114.2	115.1	115.7	116.5	116.7	119.1	109.0	114.0	114.8	115.2	116.2	116.6	117.9
Other toilet goods and small personal care appliances (12/77 = 100)	106.2	112.9	114.7	115.4	117.4	117.6	119.4	108.8	115.6	116.6	117.2	119.0	119.1	120.4
Personal care services	203.9	214.2	215.7	217.2	218.8	219.6	220.9	204.0	215.0	215.8	217.2	218.1	219.1	219.8
Beauty parlor services for women	205.2	216.1	217.9	218.6	220.4	220.6	222.1	205.9	216.6	217.8	218.6	219.4	220.2	221.0
Haircuts and other barber shop services for men (12/77 = 100)	114.1	119.3	119.7	121.7	122.2	123.4	123.9	113.6	120.0	120.1	121.5	122.0	122.8	123.0
Personal and educational expenses	209.3	228.0	228.3	228.7	229.2	229.5	229.9	209.8	227.8	228.2	228.7	229.4	229.8	230.3
School books and supplies	191.6	206.5	206.9	207.1	207.1	207.1	207.2	194.2	210.4	210.7	210.9	210.9	210.9	210.9
Personal and educational services	213.8	233.3	233.6	234.0	234.7	235.0	235.5	214.0	232.5	232.9	233.4	234.2	234.8	235.4
Tuition and other school fees	108.9	118.5	118.6	118.6	118.6	118.6	118.7	108.8	118.6	118.7	118.7	118.7	118.7	118.8
College tuition (12/77 = 100)	109.2	117.8	117.9	117.9	117.9	117.9	118.0	109.2	117.8	117.9	117.9	117.9	117.9	118.0
Elementary and high school tuition (12/77 = 100)	107.5	120.9	120.9	120.9	120.9	120.9	120.9	107.4	120.7	120.7	120.7	120.7	120.7	120.7
Personal expenses (12/77 = 100)	113.0	124.4	125.0	126.1	127.8	128.7	129.5	113.0	121.4	122.1	123.3	125.1	126.4	127.4
Special indexes:														
Gasoline, motor oil, coolant, and other products	276.6	352.5	365.5	369.3	370.1	370.9	371.5	277.5	353.8	367.2	370.8	371.6	372.2	372.5
Insurance and finance	272.8	316.7	326.3	335.2	342.6	353.8	342.3	272.5	316.2	325.6	335.2	342.8	354.0	342.6
Utilities and public transportation	215.3	227.9	230.9	233.4	238.9	244.8	249.1	215.9	227.2	230.2	232.6	237.9	244.0	248.4
Housekeeping and home maintenance services	272.5	287.6	292.0	295.7	297.6	298.6	300.1	273.7	288.7	292.0	295.1	296.5	296.7	297.5

24. Consumer Price Index for All Urban Consumers: Cross classification of region and population size class by expenditure category and commodity and service group

[December 1977 = 100]

Category and group	Size class A (1.25 million or more)			Size class B (385,000 - 1.250 million)			Size class C (75,000 - 385,000)			Size class D (75,000 or less)		
	1980			1980			1980			1980		
	Feb.	Apr.	June	Feb.	Apr.	June	Feb.	Apr.	June	Feb.	Apr.	June
Northeast												
EXPENDITURE CATEGORY												
All items	122.1	125.0	127.1	125.6	129.0	131.0	129.1	132.7	135.6	124.2	127.4	131.0
Food and beverages	122.1	124.5	126.2	124.3	127.1	128.6	128.8	130.5	123.4	125.2	127.6	
Housing	122.9	126.1	129.6	126.7	130.0	133.1	135.5	140.2	144.9	124.8	127.9	133.5
Apparel and upkeep	109.5	112.5	111.5	107.1	111.1	111.3	107.3	112.7	113.2	106.8	113.0	115.0
Transportation	129.9	133.8	135.3	135.0	140.8	141.7	133.1	136.2	138.2	133.5	138.1	140.2
Medical care	120.6	122.4	123.0	121.6	122.4	123.2	121.3	122.5	123.5	121.4	122.7	124.4
Entertainment	114.4	116.7	117.7	115.7	117.9	120.2	112.2	115.7	116.5	118.9	121.5	123.8
Other goods and services	114.4	114.7	116.1	116.5	117.5	119.0	119.2	119.6	121.9	114.8	116.0	116.8
COMMODITY AND SERVICE GROUP												
Commodities	124.1	126.5	128.4	127.5	130.8	132.1	128.5	131.6	133.8	125.6	128.0	131.5
Commodities less food and beverages	125.3	127.8	129.7	129.1	132.5	133.8	129.7	132.9	135.4	126.6	129.3	133.3
Services	119.5	122.9	125.4	122.5	126.3	129.2	129.9	134.5	138.5	122.2	126.5	130.2
North Central												
EXPENDITURE CATEGORY												
All items	129.6	133.2	136.7	127.2	130.9	134.4	126.4	128.9	131.9	125.8	128.7	131.9
Food and beverages	124.9	126.8	128.1	122.6	124.9	126.7	124.8	127.0	128.7	126.9	128.9	129.6
Housing	136.7	141.1	147.5	131.5	135.8	141.2	127.6	130.4	135.6	125.9	129.1	134.5
Apparel and upkeep	105.2	109.2	108.5	107.1	111.2	111.0	109.0	110.7	111.0	110.4	113.6	114.6
Transportation	133.5	138.1	140.1	133.4	137.6	140.7	135.8	139.3	140.4	132.6	137.4	139.8
Medical care	123.2	125.3	126.1	122.2	125.0	125.8	124.5	125.7	126.6	126.8	127.4	128.9
Entertainment	116.9	118.9	120.1	111.5	114.0	117.1	116.2	118.7	121.3	115.9	116.1	117.3
Other goods and services	115.4	116.2	117.9	119.4	121.5	123.2	115.5	116.7	117.5	119.1	119.8	121.6
COMMODITY AND SERVICE GROUP												
Commodities	128.1	130.9	132.9	124.5	127.9	129.9	125.9	128.1	129.7	124.3	126.0	128.0
Commodities less food and beverages	129.6	132.8	135.2	125.2	129.2	131.2	126.4	128.5	130.1	123.1	124.8	127.3
Services	131.8	136.6	142.3	131.6	135.6	141.7	127.1	130.3	135.5	128.2	132.9	138.1
South												
EXPENDITURE CATEGORY												
All items	127.1	130.7	133.5	128.0	131.7	134.7	127.9	131.3	133.1	125.9	128.3	131.4
Food and beverages	125.0	126.4	128.5	124.4	127.0	127.9	126.0	127.8	129.1	124.0	126.2	128.1
Housing	129.1	133.9	138.5	131.9	136.7	141.4	131.8	136.6	138.9	127.7	129.7	134.0
Apparel and upkeep	112.5	116.4	116.4	109.6	112.9	112.6	105.5	108.2	107.3	100.9	104.7	107.2
Transportation	135.7	139.7	140.9	134.7	138.4	140.6	133.7	137.2	139.7	133.1	136.5	138.7
Medical care	119.7	121.9	124.1	121.6	123.3	125.8	124.8	126.4	127.5	129.0	131.2	133.9
Entertainment	114.5	115.7	116.3	115.4	119.8	122.5	115.9	118.3	120.3	121.6	124.4	128.0
Other goods and services	118.5	119.3	120.9	117.7	118.1	119.5	117.5	118.8	120.2	121.5	121.9	123.9
COMMODITY AND SERVICE GROUP												
Commodities	126.7	129.3	130.9	125.9	129.0	130.6	126.4	128.7	129.7	124.7	127.2	129.0
Commodities less food and beverages	127.5	130.6	132.0	126.6	129.8	131.7	126.5	129.1	130.0	125.0	127.7	129.3
Services	127.7	132.6	137.2	131.1	135.8	140.9	130.2	135.3	138.4	127.7	129.8	135.1
West												
EXPENDITURE CATEGORY												
All items	129.6	132.8	136.1	130.6	134.1	136.0	128.1	131.4	133.6	127.1	130.4	134.3
Food and beverages	124.2	126.5	127.7	126.9	128.8	130.2	123.8	125.7	127.6	125.7	128.0	128.6
Housing	132.9	136.3	142.5	134.6	139.1	141.4	131.0	134.8	137.9	127.1	129.7	135.9
Apparel and upkeep	113.6	115.7	114.5	112.4	115.8	118.4	104.2	107.7	107.4	114.7	121.8	123.6
Transportation	137.4	141.2	141.1	135.8	139.2	140.7	137.1	141.2	142.1	134.8	139.6	141.7
Medical care	125.6	128.8	129.5	124.8	126.9	127.9	124.6	126.7	129.4	126.2	128.9	132.5
Entertainment	113.5	117.8	119.5	118.6	123.1	123.9	117.8	121.0	122.4	123.6	127.5	130.3
Other goods and services	119.2	121.2	121.7	120.3	121.5	124.3	116.3	117.7	119.0	119.7	122.5	124.4
COMMODITY AND SERVICE GROUP												
Commodities	127.0	129.5	130.4	128.8	131.5	132.5	126.7	129.0	130.1	126.7	129.8	131.7
Commodities less food and beverage	128.1	130.8	131.6	129.6	132.7	133.5	127.8	130.4	131.1	127.2	130.6	132.6
Services	133.2	137.2	143.6	133.0	137.7	140.8	130.0	134.8	138.5	127.6	131.2	138.2

25. Consumer Price Index—U.S. city average, and selected areas

[1967=100 unless otherwise specified]

Area ¹	All Urban Consumers							Urban Wage Earners and Clerical Workers (revised)						
	1979	1980						1979	1980					
	July	Feb.	Mar.	Apr.	May	June	July	July	Feb.	Mar.	Apr.	May	June	July
U.S. city average ²	218.9	236.4	239.8	242.5	244.9	247.6	247.8	219.4	236.5	239.9	242.6	245.1	247.8	248.0
Anchorage, Alaska (10/67=100)	207.4	...	223.5	...	226.5	...	228.4	206.4	...	220.2	...	223.1	...	224.8
Atlanta, Ga. ....	...	230.3	...	235.3	...	242.2	...	...	233.5	...	239.3	...	244.7	...
Baltimore, Md.	221.0	...	245.0	...	249.1	...	252.4	221.4	...	243.9	...	247.8	...	250.8
Boston, Mass.	214.2	...	234.2	...	236.9	...	240.9	213.7	...	234.2	...	236.8	...	240.9
Buffalo, N.Y. ....	...	227.9	...	233.7	...	235.4	...	...	227.9	...	233.3	...	234.6	...
Chicago, Ill.-Northwestern Ind.	217.4	232.7	235.5	240.1	243.1	248.2	246.8	216.8	232.5	235.2	239.8	243.0	248.0	247.0
Cincinnati, Ohio-Ky.-Ind.	224.8	...	247.8	...	251.6	...	256.7	226.5	...	249.7	...	252.9	...	259.1
Cleveland, Ohio ....	...	243.5	...	247.3	...	250.1	...	...	244.1	...	248.4	...	250.5	...
Dallas-Ft. Worth, Tex. ....	...	241.7	...	251.4	...	256.4	...	...	240.9	...	249.6	...	254.5	...
Denver-Boulder, Colo.	236.5	...	255.2	...	258.0	...	261.6	239.3	...	259.4	...	262.4	...	265.8
Detroit, Mich.	219.5	240.4	242.9	248.2	248.4	256.7	253.7	219.8	239.9	242.4	248.0	248.9	255.8	252.1
Honolulu, Hawaii ....	...	220.9	...	227.4	...	227.5	...	...	221.3	...	228.4	...	228.0	...
Houston, Tex. ....	...	255.9	...	260.8	...	266.5	...	...	251.9	...	257.3	...	262.8	...
Kansas City, Mo.-Kansas ....	...	238.7	...	243.8	...	247.8	...	...	236.6	...	242.2	...	246.3	...
Los Angeles-Long Beach, Anaheim, Calif.	214.7	237.6	241.3	244.6	249.1	250.1	248.7	216.8	240.0	243.9	247.8	252.6	253.4	251.5
Miami, Fla. (11/77=100)	115.7	...	127.7	...	129.7	...	133.6	116.9	...	128.8	...	130.9	...	134.7
Milwaukee, Wis.	222.7	...	242.7	...	250.3	...	251.6	225.0	...	247.8	...	255.2	...	255.9
Minneapolis-St. Paul, Minn.-Wis. ....	...	237.9	...	244.3	...	246.4	...	...	239.6	...	245.7	...	248.4	...
New York, N.Y.-Northeastern N.J.	214.0	228.0	231.2	233.1	234.5	237.2	238.9	214.1	227.7	230.8	232.4	234.1	236.7	238.4
Northeast, Pa. (Scranton)	211.7	...	229.0	...	232.5	...	239.8	213.4	...	231.3	...	235.8	...	243.2
Philadelphia, Pa.-N.J.	216.1	231.1	234.6	237.4	239.4	242.5	244.1	216.9	231.6	235.1	237.9	239.9	243.8	245.3
Pittsburgh, Pa. ....	...	235.5	...	240.9	...	246.1	...	...	235.9	...	242.2	...	246.8	...
Portland, Oreg.-Wash.	227.4	...	253.6	...	257.3	...	252.7	227.9	...	251.7	...	255.9	...	252.2
St. Louis, Mo.-Ill.	216.9	...	238.1	...	241.8	...	245.0	217.4	...	238.5	...	242.6	...	245.9
San Diego, Calif.	236.1	...	258.3	...	269.7	...	269.9	233.1	...	255.6	...	264.8	...	265.7
San Francisco-Oakland, Calif. ....	...	240.7	...	243.5	...	248.0	...	...	240.0	...	242.8	...	247.7	...
Seattle-Everett, Wash.	217.5	...	243.8	...	249.6	...	255.1	215.9	...	241.3	...	246.8	...	251.6
Washington, D.C.-Md.-Va.	220.4	...	238.8	...	241.2	...	247.2	221.9	...	239.2	...	242.0	...	248.7

¹The areas listed include not only the central city but the entire portion of the Standard Metropolitan Statistical Area, as defined for the 1970 Census of Population, except that the Standard Consolidated Area is used for New York and Chicago.

²Average of 85 cities.

26. Producer Price Indexes, by stage of processing

[1967=100]

Commodity grouping	Annual average 1979	1979						1980						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb	Mar.	Apr.	May	June	July
FINISHED GOODS														
Finished goods	216.1	216.2	217.3	220.7	224.2	226.3	228.1	232.4	235.7	238.5	240.0	241.0	242.6	246.6
Finished consumer goods	215.7	215.6	217.5	221.7	224.7	227.1	229.1	233.5	237.6	240.8	241.6	242.8	244.5	249.1
Finished consumer foods	226.3	224.9	223.5	228.1	226.7	230.5	232.1	231.4	231.6	233.1	228.7	230.0	231.0	239.5
Crude	231.4	224.9	231.7	214.0	215.5	228.1	227.9	226.0	220.1	230.9	222.2	227.7	223.4	230.7
Processed	223.8	222.8	220.7	227.0	225.5	228.6	230.3	229.7	230.4	231.1	227.1	228.1	229.4	238.0
Nondurable goods less foods	225.9	227.1	233.4	239.0	243.3	245.5	247.9	254.7	262.7	270.9	276.5	279.1	280.3	282.8
Durable goods	181.9	181.6	181.6	182.9	189.0	190.0	191.8	199.1	202.1	200.3	200.3	199.7	202.7	205.3
Capital equipment	216.7	217.2	216.5	217.8	222.8	223.9	225.3	229.3	230.5	232.2	235.8	236.0	237.5	240.2
INTERMEDIATE MATERIALS														
Intermediate materials, supplies, and components	242.8	244.6	247.5	251.0	255.0	256.3	258.7	265.9	271.6	273.7	274.5	275.8	277.7	280.3
Materials and components for manufacturing	234.1	236.0	238.0	240.7	244.3	245.5	247.8	255.5	259.8	259.5	259.7	261.8	263.9	264.7
Materials for food manufacturing	223.6	226.7	225.1	228.9	225.5	227.8	230.4	226.0	245.6	240.1	238.7	255.4	260.2	262.6
Materials for nondurable manufacturing	220.1	222.5	225.3	227.6	231.4	233.4	235.3	241.1	244.0	247.4	251.8	254.9	256.0	256.9
Materials for durable manufacturing	271.3	273.3	275.2	278.8	284.7	284.6	287.8	303.7	306.5	301.4	296.2	295.1	298.3	297.9
Components for manufacturing	206.8	207.7	209.3	211.3	213.2	214.8	216.3	219.2	223.2	225.3	227.4	228.0	229.6	231.2
Materials and components for construction	246.9	247.4	249.2	252.5	254.7	254.0	253.7	257.7	262.1	265.5	265.3	265.3	267.3	269.2
Processed fuels and lubricants	360.9	364.8	384.6	399.4	410.6	416.5	424.6	444.0	464.0	481.0	486.7	488.3	489.6	504.9
Manufacturing industries	298.9	304.0	311.2	317.2	322.5	325.2	332.2	340.5	351.4	356.6	358.4	363.6	368.2	378.4
Nonmanufacturing industries	422.9	425.5	458.8	483.0	500.6	510.0	519.1	550.3	579.9	609.5	619.5	617.0	614.7	635.3
Containers	235.3	235.4	237.6	237.9	242.6	243.8	247.1	250.9	251.6	253.8	262.5	263.7	265.3	267.1
Supplies	217.6	219.6	219.6	221.2	224.9	226.4	229.2	232.5	239.0	240.8	240.7	240.8	242.3	246.2
Manufacturing industries	204.4	204.2	208.6	208.4	212.2	213.7	216.3	220.9	222.5	223.7	226.8	228.4	230.2	232.3
Nonmanufacturing industries	224.7	227.8	225.4	227.5	231.7	233.3	236.1	238.7	247.8	249.8	248.1	247.5	248.8	253.6
Feeds	224.1	241.3	220.8	224.0	228.9	226.9	230.4	224.4	223.3	218.9	207.1	210.6	208.1	223.0
Other supplies	221.5	221.5	223.1	224.9	228.9	231.2	233.9	238.3	249.6	252.9	253.5	251.9	254.1	256.6
CRUDE MATERIALS														
Crude materials for further processing	282.2	287.1	281.7	288.3	289.5	290.8	296.2	296.8	308.4	303.5	296.9	300.7	299.5	316.3
Foodstuffs and feedstuffs	247.2	254.1	243.7	248.7	247.5	246.4	249.7	243.0	252.6	245.9	235.5	242.4	242.5	263.3
Nonfood materials	(¹)	349.3	353.6	363.1	368.9	374.9	384.2	398.9	414.3	412.7	413.5	410.4	407.9	416.8
Nonfood materials except fuel	284.5	285.2	286.1	293.3	298.1	304.6	311.6	330.1	341.7	339.8	336.9	329.2	324.4	331.3
Manufacturing industries	293.3	294.0	294.9	302.8	307.8	314.9	322.5	342.1	354.9	352.5	349.0	340.2	334.6	342.3
Construction	207.0	207.2	208.6	209.9	212.6	214.8	216.6	226.0	228.7	229.9	232.4	232.9	234.2	235.3
Crude fuel	568.2	570.7	586.2	604.0	612.9	617.4	634.5	636.3	664.8	664.1	677.4	690.4	695.5	711.0
Manufacturing industries	607.6	610.4	629.2	651.8	662.5	667.8	688.3	690.3	725.7	724.5	740.8	756.7	762.6	781.9
Nonmanufacturing industries	548.3	550.7	563.6	577.8	585.5	589.3	603.9	605.7	628.8	628.8	639.8	650.6	655.1	667.8
SPECIAL GROUPINGS														
Finished goods excluding foods	(¹)	211.4	213.2	216.2	221.3	222.8	224.6	230.5	234.6	237.8	241.2	242.0	243.8	246.4
Finished consumer goods excluding foods	208.2	208.4	212.3	216.3	220.6	223.1	225.3	232.3	238.3	242.3	245.5	246.8	248.8	251.4
Intermediate materials less foods and feeds	244.0	245.4	249.0	252.5	256.8	258.1	260.5	268.4	273.7	276.2	277.4	278.0	279.9	282.3
Intermediate foods and feeds	223.2	231.0	223.1	226.6	226.0	226.9	229.8	224.8	237.5	232.4	227.5	239.7	242.1	248.7
Crude materials less agricultural products	390.5	391.7	396.9	408.6	417.0	424.1	435.0	452.9	469.3	469.0	469.4	464.6	463.7	470.5

¹ Not available.

27. Producer Price Indexes, by commodity groupings

[1967 = 100 unless otherwise specified]

Code	Commodity group and subgroup	Annual average 1979	1979						1980						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
	All commodities	235.6	236.9	238.3	242.0	245.6	247.2	249.7	254.9	260.2	261.9	262.3	263.7	265.2	269.8
	All commodities (1957-59 = 100)	250.0	251.4	252.8	256.7	260.6	262.3	267.3	270.2	275.6	277.4	278.3	279.7	282.5	286.3
	Farm products and processed foods and feeds	229.8	232.2	227.5	231.8	230.6	232.3	234.6	231.9	237.0	234.9	229.2	233.9	234.2	246.1
	Industrial commodities	236.5	237.5	240.6	244.2	249.0	250.6	253.1	260.6	265.9	268.6	270.7	271.2	273.0	275.6
	FARM PRODUCTS AND PROCESSED FOODS AND FEEDS														
01	Farm products	241.4	246.8	238.5	241.0	239.6	240.2	242.5	236.4	242.3	239.3	228.9	233.6	233.4	253.9
01-1	Fresh and dried fruits and vegetables	229.0	226.7	241.7	208.3	218.0	216.5	210.7	219.0	220.6	218.5	223.0	243.8	233.4	247.5
01-2	Grains	214.8	247.4	229.1	224.4	229.0	226.6	227.9	214.6	223.3	217.9	210.8	219.0	215.3	244.8
01-3	Livestock	260.3	256.0	240.2	256.4	251.7	248.3	252.5	247.8	257.2	251.8	230.5	233.3	240.0	260.5
01-4	Live poultry	194.3	183.8	171.9	173.5	162.0	195.5	194.7	195.2	184.6	180.1	171.9	171.3	166.6	227.2
01-5	Plant and animal fibers	209.9	207.6	207.9	211.3	212.9	215.4	222.0	239.0	269.5	254.9	266.9	272.7	247.0	267.0
01-6	Fluid milk	250.1	247.6	250.0	258.5	260.8	262.5	264.0	262.3	263.8	263.1	265.4	265.4	265.5	265.8
01-7	Eggs	176.5	167.6	166.8	175.4	155.9	178.7	198.4	165.6	150.4	184.2	153.3	145.7	146.8	159.3
01-8	Hay, hayseeds, and oilseeds	244.3	260.1	251.9	240.9	235.6	229.8	230.3	218.1	224.7	215.9	205.1	206.7	207.4	251.4
01-9	Other farm products	289.0	311.9	310.8	315.9	313.6	318.3	319.4	301.1	304.7	311.5	304.8	311.0	309.4	292.4
02	Processed foods and feeds	222.5	223.3	220.5	225.8	224.8	227.1	229.3	228.5	233.1	231.6	228.5	233.1	233.8	241.1
02-1	Cereal and bakery products	210.3	212.4	216.0	218.7	219.8	222.5	223.6	225.4	229.9	231.8	231.5	233.5	233.1	234.6
02-2	Meats, poultry, and fish	242.0	237.7	225.5	239.9	234.2	239.3	242.8	239.6	239.6	239.2	226.0	224.8	226.6	248.5
02-3	Dairy products	211.2	209.0	215.2	218.3	218.1	219.3	219.9	221.0	220.8	223.0	227.8	228.9	229.9	230.5
02-4	Processed fruits and vegetables	221.9	223.6	224.6	225.1	223.4	222.4	222.6	222.9	223.3	223.7	224.5	225.2	227.3	229.5
02-5	Sugar and confectionery	214.7	215.7	218.3	217.2	218.9	222.9	234.4	235.0	264.1	287.5	264.1	274.8	327.4	313.7
02-6	Beverages and beverage materials	210.7	214.1	216.5	217.9	218.9	221.2	221.6	224.0	224.8	225.9	227.9	231.4	233.6	234.4
02-7	Fats and oils	243.3	253.2	251.7	253.3	246.0	241.9	235.6	225.1	226.4	222.6	214.7	212.1	213.0	221.7
02-8	Miscellaneous processed foods	216.5	212.7	217.6	219.0	220.8	222.2	223.1	225.4	223.5	224.7	225.1	223.2	223.0	223.6
02-9	Manufactured animal feeds	219.4	234.9	216.2	219.2	224.0	222.4	224.9	219.7	219.8	216.6	205.4	207.3	205.4	220.6
	INDUSTRIAL COMMODITIES														
03	Textile products and apparel	168.7	169.3	170.5	171.3	172.0	172.8	173.1	175.2	176.5	179.3	180.6	181.5	182.4	184.3
03-1	Synthetic fibers (12/75 = 100)	119.0	119.5	120.6	123.6	124.7	124.2	124.7	127.0	127.2	129.1	130.7	133.5	134.8	136.3
03-2	Processed yarns and threads (12/75 = 100)	109.2	109.5	110.6	111.7	112.1	112.5	112.7	114.6	118.0	119.3	122.1	123.5	122.4	121.9
03-3	Gray fabrics (12/75 = 100)	127.1	128.3	128.7	128.7	129.7	130.7	132.3	132.7	132.3	136.8	136.1	135.3	133.7	134.8
03-4	Finished fabrics (12/75 = 100)	107.4	108.2	109.0	109.1	108.9	109.7	109.9	110.5	111.1	113.2	114.5	115.2	115.5	116.5
03-81	Apparel	160.4	160.3	161.4	161.6	162.2	163.1	162.6	165.5	166.8	168.0	169.1	169.7	172.0	174.1
03-82	Textile housefurnishings	190.4	189.9	190.9	193.5	196.3	196.5	197.1	199.0	199.7	201.3	201.6	202.6	202.7	210.7
04	Hides, skins, leather, and related products	252.4	261.9	257.9	251.1	253.9	248.9	249.2	255.7	250.9	246.8	243.6	240.7	241.0	244.9
04-1	Hides and skins	535.4	566.5	511.9	465.3	478.8	447.6	443.9	468.8	404.8	348.7	328.6	289.7	315.7	356.6
04-2	Leather	356.7	385.2	365.9	330.0	343.6	319.8	324.8	347.6	340.3	311.0	297.6	290.4	284.4	292.2
04-3	Footwear	218.0	221.8	225.4	226.9	227.5	227.9	227.9	229.1	228.0	231.8	231.9	231.9	232.1	232.9
04-4	Other leather and related products	205.0	212.1	210.9	210.1	209.7	208.4	208.0	213.1	214.8	217.8	216.3	217.5	216.0	216.3
05	Fuels and related products and power	408.1	411.8	432.8	454.8	468.5	476.9	487.9	508.0	532.7	553.5	566.3	571.9	574.8	585.4
05-1	Coal	450.9	452.5	454.2	452.5	454.6	455.1	458.6	459.3	459.6	461.7	463.3	464.8	466.9	467.8
05-2	Coke	429.2	430.6	430.6	430.6	431.2	431.2	431.2	430.6	430.6	430.6	430.6	430.6	430.6	430.6
05-3	Gas fuels ¹	544.1	548.4	572.4	603.4	619.9	637.0	662.4	677.5	716.6	716.6	730.2	744.8	750.1	763.3
05-4	Electric power	270.2	274.8	278.8	280.5	283.5	281.9	287.0	290.5	299.3	305.5	310.4	316.4	320.5	331.4
05-61	Crude petroleum ²	376.5	370.6	385.7	422.1	436.7	450.4	470.8	513.6	515.1	522.8	533.9	540.1	549.0	550.9
05-7	Petroleum products, refined ³	444.8	448.8	482.8	513.7	533.7	545.4	555.2	583.3	620.4	659.0	677.3	680.6	681.1	693.3
06	Chemicals and allied products	222.3	225.0	228.5	230.8	234.2	236.0	238.2	246.0	248.7	252.8	258.1	261.1	261.7	262.7
06-1	Industrial chemicals ⁴	264.0	270.4	277.1	280.0	285.7	288.4	292.3	302.9	307.9	313.3	316.8	324.8	327.3	327.8
06-21	Prepared paint	204.4	205.3	205.3	206.0	206.7	209.4	210.7	223.3	223.3	228.7	231.5	236.8	236.8	236.8
06-22	Paint materials	241.2	246.7	247.9	252.0	253.6	256.6	256.8	259.9	263.4	267.5	271.1	272.9	274.0	277.0
06-3	Drugs and pharmaceuticals	159.4	159.2	159.6	161.0	162.8	163.0	164.4	166.5	167.6	168.9	172.8	171.8	173.0	175.4
06-4	Fats and oils, inedible	376.7	381.6	376.4	379.9	366.9	344.3	327.1	325.6	302.2	299.9	298.2	294.7	255.8	260.0
06-5	Agricultural chemicals and chemical products	214.4	211.2	215.3	219.4	224.3	229.5	232.9	241.9	248.0	256.1	258.3	258.3	257.7	258.2
06-6	Plastic resins and materials	235.9	244.5	250.1	252.0	260.0	261.4	262.5	270.4	272.1	274.5	285.6	287.8	287.9	286.2
06-7	Other chemicals and allied products	191.8	191.8	194.4	195.8	197.0	198.8	201.4	209.4	211.3	215.0	223.3	225.0	226.3	228.0
07	Rubber and plastic products	194.3	195.5	198.8	200.7	203.0	204.9	205.9	207.8	210.7	212.7	214.6	215.1	217.1	218.3
07-1	Rubber and rubber products	209.2	209.5	214.6	217.1	220.3	223.7	224.3	226.1	231.5	231.5	234.6	235.3	237.6	239.4
07-11	Crude rubber	221.4	226.1	233.0	232.2	236.5	237.2	240.2	252.7	263.9	255.8	263.8	263.0	263.2	262.5
07-12	Tires and tubes	205.9	206.2	211.6	215.0	218.3	223.1	223.1	225.1	231.6	231.6	231.3	231.8	234.6	237.0
07-13	Miscellaneous rubber products	206.4	205.4	209.4	211.9	214.7	217.1	217.7	215.9	217.8	220.6	225.9	227.5	229.7	231.8
07-2	Plastic products (6/78 = 100)	110.0	111.2	112.2	113.0	114.0	114.3	115.2	116.3	116.7	119.0	119.5	119.6	120.8	121.1
08	Lumber and wood products	300.4	300.1	304.7	309.7	308.8	298.9	290.1	290.0	294.7	294.9	275.2	271.6	279.8	288.9
08-1	Lumber	354.3	355.0	365.3	373.9	370.3	355.6	339.5	336.3	341.4	340.6	310.1	301.3	313.0	327.3
08-2	Millwork	254.3	252.5	249.6	250.9	255.6	252.3	250.3	254.1	258.0	262.2	256.2	250.9	253.0	255.9
08-3	Plywood	250.5	249.7	254.3	257.9	254.0	242.2	237.9	238.2	243.4	240.0	219.6	229.9	241.6	251.1
08-4	Other wood products	235.4	237.6	237.4	238.0	237.7	239.9	240.5	242.2	243.4	243.1	241.7	240.7	238.7	236.9

See footnotes at end of table.

27. Continued—Producer Price Indexes, by commodity groupings

[1967=100 unless otherwise specified]

Code	Commodity group and subgroup	Annual average 1979	1979						1980						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
INDUSTRIAL COMMODITIES—Continued															
09	Pulp, paper, and allied products	219.0	218.3	222.2	223.0	227.5	229.5	231.7	237.4	239.2	242.6	246.5	248.9	251.3	252.4
09-1	Pulp, paper, and products, excluding building paper and board	220.7	219.6	223.6	224.3	229.0	231.1	233.4	239.2	240.8	244.1	248.0	250.3	252.7	253.7
09-11	Woodpulp	314.3	320.3	320.6	320.6	337.5	338.0	338.0	356.6	356.4	356.8	386.8	388.0	388.0	388.6
09-12	Wastepaper	206.6	207.9	206.6	206.7	206.7	220.0	221.2	222.9	223.4	224.9	242.5	226.1	206.6	194.0
09-13	Paper	229.6	228.2	229.5	230.3	238.7	241.8	242.7	245.5	247.2	250.3	253.6	256.5	258.3	258.5
09-14	Paperboard	202.1	201.7	206.4	209.6	211.3	212.8	215.4	221.8	223.7	227.4	230.2	232.9	242.7	237.5
09-15	Converted paper and paperboard products	209.9	209.0	214.4	214.6	217.3	219.0	221.9	227.7	229.5	233.0	234.6	236.1	239.3	242.4
09-2	Building paper and board	182.4	178.0	179.1	182.6	183.5	183.6	184.6	186.2	191.7	198.7	201.3	206.8	208.9	211.8
10	Metals and metal products	259.3	260.8	261.8	263.7	269.6	271.1	273.6	284.6	288.9	286.8	284.6	281.9	282.4	281.5
10-1	Iron and steel	283.5	286.8	286.1	285.5	289.2	292.0	292.8	297.4	300.3	301.8	307.0	304.7	303.1	300.4
10-13	Steel mill products	280.4	284.6	284.7	284.8	288.3	288.8	289.3	293.6	294.2	295.5	304.1	305.5	305.8	301.0
10-2	Nonferrous metals	261.7	262.3	263.1	269.3	283.1	284.1	291.9	326.3	337.7	321.4	298.9	289.8	290.6	289.0
10-3	Metal containers	269.2	267.2	268.4	268.7	279.9	280.9	280.9	283.3	284.4	288.5	301.1	302.7	302.7	303.0
10-4	Hardware	218.7	218.5	220.1	221.5	224.0	225.5	226.2	228.2	230.4	231.5	236.9	238.2	239.7	241.9
10-5	Plumbing fixtures and brass fittings	217.1	219.6	222.4	223.0	223.5	225.4	226.5	232.8	236.7	242.4	243.7	247.4	248.5	249.6
10-6	Heating equipment	187.1	186.0	188.1	191.3	192.2	193.1	195.6	199.5	202.6	202.6	204.2	204.0	205.1	206.1
10-7	Fabricated structural metal products	248.9	250.5	252.2	253.7	256.3	256.7	257.7	258.9	259.7	265.1	268.2	269.4	270.0	271.9
10-8	Miscellaneous metal products	231.4	231.8	235.6	236.7	238.5	238.6	239.1	240.6	241.6	244.2	247.1	247.7	251.4	251.8
11	Machinery and equipment	213.9	214.8	216.0	217.7	220.0	221.3	223.4	227.6	230.2	232.5	235.8	237.0	238.8	241.3
11-1	Agricultural machinery and equipment	232.1	231.2	233.3	237.4	240.0	243.4	244.2	248.4	249.9	252.0	252.8	254.9	255.7	257.3
11-2	Construction machinery and equipment	256.2	257.0	258.5	258.9	263.9	265.4	268.8	276.0	278.3	279.5	282.9	284.2	286.8	290.9
11-3	Metalworking machinery and equipment	241.3	241.4	243.5	246.4	249.6	252.2	254.6	258.9	261.8	264.1	269.9	272.6	275.4	278.0
11-4	General purpose machinery and equipment	236.4	237.1	238.3	240.2	242.8	244.2	247.6	251.0	253.3	256.7	260.0	262.3	264.3	265.8
11-6	Special industry machinery and equipment	247.0	249.8	251.0	251.2	253.8	254.9	256.1	260.6	263.2	265.5	271.9	273.1	274.5	277.2
11-7	Electrical machinery and equipment	178.9	179.9	181.2	182.5	184.3	184.9	186.6	190.6	194.3	196.5	198.7	199.2	201.2	203.5
11-9	Miscellaneous machinery	208.9	209.7	209.7	212.0	213.6	214.9	216.3	220.3	221.1	223.2	226.8	226.9	227.8	230.7
12	Furniture and household durables	171.3	170.7	171.5	172.7	175.1	176.4	177.9	183.4	185.6	185.7	183.1	184.1	185.3	186.7
12-1	Household furniture	186.3	185.8	186.2	188.5	190.1	193.0	194.8	197.4	198.5	198.9	198.9	200.3	202.0	204.3
12-2	Commercial furniture	221.8	222.7	222.7	223.3	223.3	225.1	226.9	231.4	232.8	233.5	233.8	235.5	237.1	
12-3	Floor coverings	147.9	149.1	150.0	150.4	152.1	152.8	152.9	159.0	158.5	160.8	161.7	163.6	162.2	163.2
12-4	Household appliances	160.9	161.1	162.2	162.7	163.2	164.5	165.3	166.5	168.9	169.9	170.2	172.1	174.7	174.8
12-5	Home electronic equipment	91.3	90.2	90.2	90.3	90.3	90.3	90.5	91.0	91.2	91.3	89.9	89.1	89.3	89.3
12-6	Other household durable goods	228.2	223.7	226.6	231.0	245.6	248.2	254.4	287.4	295.3	288.3	266.8	265.2	266.1	271.1
13	Nonmetallic mineral products	248.6	249.5	249.9	254.6	256.2	257.4	259.6	268.4	274.0	276.5	282.8	282.9	283.2	284.0
13-11	Flat glass	183.9	184.1	184.1	184.5	184.7	185.4	186.4	191.0	191.0	191.4	191.4	191.4	193.6	194.3
13-2	Concrete ingredients	244.0	245.1	245.9	246.7	248.3	249.6	251.0	265.0	266.6	267.5	270.5	271.1	271.9	272.5
13-3	Concrete products	244.1	245.2	246.3	248.7	250.1	250.6	253.2	265.4	266.7	269.1	273.0	275.0	275.9	275.9
13-4	Structural clay products excluding refractories	217.9	220.3	222.3	223.7	221.1	221.8	226.7	229.6	231.0	231.4	234.4	229.5	230.2	230.2
13-5	Refractories	236.5	240.8	241.7	242.4	244.6	247.4	248.0	248.5	251.1	253.9	262.6	265.2	266.7	269.6
13-6	Asphalt roofing	325.3	328.4	325.9	333.0	337.5	347.4	346.5	356.6	372.5	388.8	404.7	398.2	400.7	412.0
13-7	Gypsum products	252.3	251.8	252.3	254.9	255.3	256.2	255.0	255.4	262.2	267.6	264.0	256.5	257.1	253.1
13-8	Glass containers	261.1	265.2	265.2	265.2	265.2	265.2	274.2	274.3	274.3	274.3	294.6	294.6	294.6	294.6
13-9	Other nonmetallic minerals	313.7	310.5	309.9	336.0	341.2	342.2	342.2	351.8	381.7	387.0	399.5	399.5	399.5	396.1
14	Transportation equipment (12/68 = 100)	188.1	188.4	185.9	186.6	194.2	194.8	195.6	198.7	198.2	198.8	202.6	201.1	202.2	204.9
14-1	Motor vehicles and equipment	190.5	190.8	187.8	188.6	197.1	197.4	198.2	200.7	200.1	200.7	204.9	203.1	204.4	207.1
14-4	Railroad equipment	277.3	280.6	280.9	281.6	286.3	288.2	289.0	297.5	299.3	302.1	303.9	304.6	306.2	316.4
15	Miscellaneous products	208.7	207.0	208.9	213.1	218.9	221.4	227.4	242.9	262.9	256.1	252.2	250.9	257.4	261.3
15-1	Toys, sporting goods, small arms, ammunition	176.2	176.9	177.6	179.8	181.1	181.2	183.0	190.9	193.5	194.5	195.3	196.4	197.2	200.3
15-2	Tobacco products	217.8	214.8	221.3	221.9	222.1	222.2	226.6	236.6	237.2	237.3	237.6	244.6	245.1	247.6
15-3	Notions	191.8	192.0	191.9	191.9	195.7	195.8	196.8	203.1	203.2	207.2	216.8	217.0	217.0	221.7
15-4	Photographic equipment and supplies	153.7	152.0	152.2	154.3	157.4	161.2	164.3	165.9	218.6	219.1	212.6	200.0	203.4	202.0
15-51	Mobile homes (12/74 = 100)	138.1	138.2	139.5	140.7	142.9	144.0	144.1	144.7	146.8	147.1	148.9	149.9	150.6	151.2
15-9	Other miscellaneous products	263.7	261.4	261.4	272.5	288.3	293.3	308.8	351.6	378.3	351.3	339.2	339.1	358.8	369.4

¹ Prices for natural gas are lagged 1 month.

² Includes only domestic production.

³ Most prices for refined petroleum products are lagged 1 month.

⁴ Some prices for industrial chemicals are lagged 1 month.

28. Producer Price Indexes, for special commodity groupings

[1967 = 100 unless otherwise specified]

Commodity grouping	Annual average 1979	1979						1980						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
All commodities — less farm products	234.4	235.4	237.5	241.4	245.3	247.0	249.5	255.7	260.9	262.9	264.3	265.4	267.0	270.3
All foods	226.4	225.4	224.7	228.5	226.9	230.0	232.2	231.2	235.8	234.8	231.7	237.4	237.7	245.4
Processed foods	227.2	226.4	224.8	230.8	228.9	231.8	234.2	233.3	238.6	236.9	234.0	239.0	239.9	247.1
Industrial commodities less fuels	218.3	219.0	220.3	222.0	225.9	226.9	228.5	234.7	238.0	238.9	239.9	239.9	241.6	243.3
Selected textile mill products (Dec. 1975 = 100)	113.9	114.0	115.1	115.8	116.4	117.0	117.2	118.9	119.3	121.3	122.1	123.1	123.5	125.4
Hosiery	112.6	114.1	113.0	112.7	113.3	114.6	115.3	119.2	119.4	120.3	120.7	121.5	122.2	123.1
Underwear and nightwear	168.9	168.5	170.8	170.8	171.2	171.6	172.9	175.3	177.4	182.1	182.0	182.8	187.4	188.5
Chemicals and allied products, including synthetic rubber and manmade fibers and yarns	212.4	215.0	218.6	220.9	224.3	226.3	228.7	236.3	239.2	243.2	248.4	251.6	252.8	253.8
Pharmaceutical preparations	152.0	151.7	152.0	153.6	155.6	155.4	156.9	159.2	160.3	161.7	165.9	164.7	166.1	167.8
Lumber and wood products, excluding millwork and other wood products	325.0	325.3	333.9	341.0	337.3	323.3	310.8	308.6	313.9	312.2	284.5	281.7	293.5	306.4
Special metals and metal products	234.6	235.5	234.9	236.4	243.4	244.5	246.3	253.7	256.0	255.1	255.6	253.4	254.2	254.9
Fabricated metal products	236.8	237.4	239.8	241.1	244.0	244.6	245.3	247.2	248.4	252.0	256.0	257.0	258.9	260.0
Copper and copper products	299.3	191.9	197.1	200.5	212.2	213.8	217.1	227.7	260.7	240.9	224.7	212.3	208.7	211.7
Machinery and motive products	207.0	207.7	207.2	208.5	213.4	214.3	215.9	219.7	220.9	222.5	226.1	226.1	227.7	230.2
Machinery and equipment, except electrical	234.2	235.1	236.2	238.2	240.8	242.5	244.8	249.1	251.1	253.5	257.5	259.0	260.8	263.2
Agricultural machinery, including tractors	237.4	235.8	238.4	243.6	246.3	250.8	251.5	256.1	257.2	260.0	259.7	261.7	262.5	264.1
Metalworking machinery	259.1	260.1	261.7	265.6	269.5	272.7	276.0	281.9	284.4	287.5	294.3	296.8	299.9	303.6
Numerically controlled machine tools (Dec. 1971 = 100)	199.8	202.2	204.2	206.5	208.5	208.8	211.2	213.1	215.4	216.7	223.9	227.0	228.7	228.7
Total tractors	251.6	251.2	253.8	256.0	261.2	262.5	266.2	273.0	275.1	276.6	278.4	280.0	281.8	286.1
Agricultural machinery and equipment less parts	232.7	231.4	233.7	238.4	241.0	244.9	245.8	250.0	251.5	254.1	254.2	256.1	256.8	258.9
Farm and garden tractors less parts	236.1	233.9	237.6	244.1	247.6	250.5	251.1	256.0	257.5	261.5	261.0	262.0	262.7	264.9
Agricultural machinery excluding tractors less parts	238.7	237.6	239.2	243.5	245.4	251.3	252.0	256.4	257.3	258.9	259.0	261.7	262.6	263.7
Industrial valves	256.0	257.0	258.2	260.1	261.8	263.1	266.1	271.0	273.5	280.0	283.5	286.6	288.6	289.5
Industrial fittings	261.7	260.8	262.3	264.3	272.6	276.8	276.8	276.8	280.4	282.8	289.9	291.5	295.9	295.9
Abrasive grinding wheels	226.2	222.8	224.6	224.6	239.0	239.0	239.0	239.0	244.0	244.0	258.4	261.3	261.3	261.3
Construction materials	251.4	252.3	254.3	256.6	258.5	256.7	255.4	259.3	262.6	265.1	262.1	261.4	264.1	266.5

29. Producer Price Indexes, by durability of product

[1967=100]

Commodity grouping	Annual average 1979	1979						1980						
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
Total durable goods	226.9	227.6	228.0	230.1	234.6	235.3	237.0	243.8	247.1	247.0	247.2	246.4	248.3	250.3
Total nondurable goods	241.7	243.7	245.8	251.1	253.7	256.2	259.3	263.2	270.2	273.4	274.0	277.3	278.4	285.3
Total manufactures	228.8	229.8	231.7	235.2	239.0	240.6	242.6	248.4	253.2	255.2	256.5	257.8	259.4	262.5
Durable	226.1	226.6	227.2	229.4	234.0	234.6	236.2	242.9	245.7	245.6	246.2	245.9	248.2	250.1
Nondurable	231.1	232.5	235.9	241.0	244.0	246.6	249.0	253.9	260.8	265.2	267.3	270.3	271.3	275.6
Total raw or slightly processed goods	270.4	274.3	272.1	276.9	278.7	281.0	285.9	287.6	295.9	295.4	290.4	292.7	293.0	307.5
Durable	262.1	265.4	259.8	255.7	259.2	265.8	267.8	282.8	305.3	303.4	286.0	262.2	249.9	253.9
Nondurable	270.1	274.0	272.0	277.5	279.2	281.2	286.3	286.9	294.2	293.8	289.7	294.0	295.3	310.4

30. Producer Price Indexes for the output of selected SIC industries

[1967=100 unless otherwise specified]

1972 SIC code	Industry description	Annual average 1979	1979						1980					
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
MINING														
1011	Iron ores (12/75 = 100)	134.8	136.0	138.8	138.1	140.2	140.2	142.0	142.0	147.3	152.6	152.6	152.6	155.8
1092	Mercury ores (12/75 = 100)	234.4	270.8	245.8	252.1	275.0	252.1	300.0	308.3	335.4	330.0	337.5	332.9	331.2
1211	Bituminous coal and lignite	451.3	453.1	454.8	452.9	455.1	455.5	458.9	459.2	459.6	461.7	462.9	464.4	467.2
1311	Crude petroleum and natural gas	459.8	457.5	476.0	508.4	522.1	533.9	551.3	582.7	598.0	600.6	612.3	620.2	631.3
1442	Construction sand and gravel	217.6	219.3	220.1	221.0	224.0	224.7	225.6	238.8	243.2	243.9	248.4	249.4	249.6
1455	Kaolin and ball clay (6/76 = 100)	125.8	125.5	125.5	125.5	126.7	124.2	129.3	136.6	136.6	136.6	136.6	136.6	136.6
MANUFACTURING														
2011	Meat packing plants	247.4	243.8	229.3	247.2	238.9	241.5	243.9	240.8	240.1	238.9	225.6	227.4	229.9
2013	Sausages and other prepared meats	219.6	214.7	203.4	211.7	211.9	213.4	220.0	211.9	207.8	209.4	197.7	194.7	190.6
2016	Poultry dressing plants	187.1	178.4	169.6	171.2	163.1	188.3	188.5	186.1	178.2	173.5	164.5	164.7	164.2
2021	Creamery butter	228.8	227.5	237.9	240.6	240.1	241.7	243.1	241.8	242.8	243.4	252.8	253.7	255.7

See footnote at end of table.

30. Continued—Producer Price Indexes for the output of selected SIC industries

[1967 = 100 unless otherwise specified]

1972 SIC code	Industry description	Annual average 1979	1979						1980						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
MANUFACTURING—Continued															
2022	Cheese natural and processed (12/72 = 100)	189.2	186.3	195.4	200.8	196.8	193.6	193.9	195.4	192.9	195.7	203.6	203.6	204.2	205.1
2024	Ice cream and frozen desserts (12/72 = 100)	172.5	171.5	175.0	176.1	177.5	179.9	180.1	180.9	181.5	185.0	191.4	192.1	195.2	195.2
2033	Canned fruits and vegetables	208.6	209.9	210.5	212.0	212.9	212.2	212.2	213.4	213.6	214.7	216.3	217.4	220.1	222.6
2034	Dehydrated food products (12/73 = 100)	174.2	182.0	180.7	170.0	158.2	156.2	157.3	157.6	159.0	156.4	157.5	156.4	156.3	157.7
2041	Flour mills (12/71 = 100)	173.1	190.9	176.9	183.5	184.2	184.4	184.1	181.7	183.6	181.6	175.9	183.3	181.8	189.6
2044	Rice milling	204.0	206.8	218.7	223.5	227.3	231.8	218.1	217.5	233.0	258.0	260.4	254.5	236.0	225.3
2048	Prepared foods, n.e.c. (12/75 = 100)	120.4	128.1	119.4	120.9	123.6	124.3	125.0	122.0	122.6	121.5	116.8	117.2	116.6	122.6
2061	Raw cane sugar	210.3	209.0	216.8	216.7	224.3	223.3	248.4	260.5	374.9	276.0	320.2	456.1	402.4	381.8
2063	Beet sugar	202.6	202.0	199.4	200.0	204.7	210.6	223.2	224.6	293.2	305.7	295.4	338.0	343.9	343.5
2067	Chewing gum	245.8	242.9	242.9	242.9	242.9	262.3	262.3	262.3	262.3	281.9	281.9	282.0	282.0	282.4
2074	Cottonseed oil mills	207.4	224.5	214.1	217.9	214.9	204.7	205.6	182.4	184.4	170.4	154.8	150.5	155.1	190.1
2075	Soybean oil mills	245.0	262.8	250.0	248.6	244.7	242.4	241.9	235.1	230.4	222.3	212.6	212.5	209.1	224.6
2077	Animal and marine fats and oils	338.4	352.0	321.4	333.8	333.7	315.2	300.7	298.1	292.6	297.4	274.0	263.0	238.3	274.4
2083	Malt	203.7	201.4	201.4	214.9	214.9	228.2	228.2	244.1	244.1	244.1	244.1	244.1	244.1	244.1
2085	Distilled liquor, except brandy (12/75 = 100)	113.7	113.6	115.7	117.1	117.1	118.1	118.1	118.6	118.7	118.7	118.7	118.9	118.9	118.9
2091	Canned and cured seafoods (12/73 = 100)	146.4	148.5	148.2	154.0	154.3	155.6	159.8	160.9	164.0	165.7	170.2	173.2	173.5	175.9
2092	Fresh or frozen packaged fish	381.6	403.7	391.5	389.2	400.1	391.4	388.4	389.7	385.5	391.6	371.5	361.6	362.8	365.2
2095	Roasted coffee (12/72 = 100)	254.5	271.0	279.2	279.2	280.0	287.5	287.5	281.3	273.9	274.0	273.9	273.9	283.1	274.5
2098	Macaroni and spaghetti	199.7	203.5	210.4	210.4	210.4	221.5	227.7	227.7	227.7	230.5	230.5	230.5	230.5	230.5
2111	Cigarettes	225.0	221.5	228.9	229.1	229.2	229.2	234.3	245.8	245.9	246.0	246.1	254.2	254.3	257.2
2121	Cigars	147.3	149.8	150.1	150.1	149.8	150.4	150.4	151.2	154.2	154.4	152.7	152.7	157.1	157.2
2131	Chewing and smoking tobacco	248.4	246.4	246.4	255.8	260.4	260.8	260.8	260.9	265.1	267.3	274.3	274.6	274.7	274.7
2211	Weaving mills, cotton (12/72 = 100)	195.3	196.1	196.5	198.7	201.1	201.6	201.9	204.4	206.9	209.5	210.9	211.6	211.9	217.4
2221	Weaving mills, synthetic (12/77 = 100)	115.0	116.2	116.3	116.2	116.8	117.3	117.2	118.1	118.3	122.7	122.4	121.8	120.4	122.3
2251	Women's hosiery, except socks (12/75 = 100)	97.5	96.6	98.1	97.5	98.2	100.3	100.2	103.3	103.3	104.3	104.4	105.4	105.4	105.4
2254	Knit underwear mills	173.3	172.9	174.0	174.0	174.3	174.6	178.3	182.5	184.1	186.5	186.4	187.1	190.5	192.5
2257	Circular knit fabric mills (6/76 = 100)	95.2	96.1	96.4	96.2	96.9	98.4	98.6	99.3	100.4	103.4	103.6	104.1	104.7	105.1
2261	Finishing plants, cotton (6/76 = 100)	121.8	122.5	123.2	124.0	126.1	126.3	126.6	128.7	129.6	131.9	131.9	133.2	133.7	137.2
2262	Finishing plants, synthetics, silk (6/76 = 100)	107.2	107.5	108.2	108.3	109.3	109.7	109.8	110.3	109.4	110.4	111.3	112.1	111.5	117.3
2272	Tufted carpets and rugs	128.0	127.6	128.6	129.0	129.8	130.1	130.1	134.7	134.5	137.0	135.9	138.7	137.5	137.6
2281	Yarn mills, except wool (12/71 = 100)	176.7	177.5	177.4	179.4	181.2	183.0	183.7	188.0	197.8	199.5	203.8	204.5	202.9	203.0
2282	Throwing and winding mills (6/76 = 100)	107.4	108.5	109.7	111.2	110.4	109.6	109.2	110.1	110.6	112.0	114.8	116.3	114.8	113.4
2284	Thread mills (6/76 = 100)	123.7	120.5	128.1	128.1	128.4	128.4	128.6	138.7	129.2	130.0	133.9	142.2	142.1	143.0
2298	Cordage and twine (12/77 = 100)	107.0	105.4	113.5	115.1	114.9	114.9	114.9	115.0	117.2	118.5	123.6	123.8	125.0	125.0
2311	Men's and boys' suits and coats	204.2	205.8	206.5	206.5	206.6	206.8	206.7	209.0	208.1	208.3	205.7	207.0	207.4	214.9
2321	Men's and boys' shirts and nightwear	194.0	194.7	195.9	196.0	196.1	196.6	196.3	197.7	196.2	199.3	202.9	203.5	204.9	205.4
2322	Men's and boys' underwear	188.9	188.7	190.0	190.0	190.0	190.0	194.0	199.8	202.0	204.0	204.2	204.3	208.5	211.1
2323	Men's and boys' neckwear (12/75 = 100)	106.5	103.4	110.9	110.9	110.9	110.9	110.9	112.4	112.4	112.4	106.3	106.3	106.3	106.3
2327	Men's and boys' separate trousers	161.5	162.5	162.7	162.7	162.9	163.4	163.5	164.2	174.2	174.3	174.8	174.9	175.1	175.3
2328	Men's and boys' work clothing	208.6	208.9	210.7	210.9	213.4	219.1	219.6	225.1	233.6	235.4	240.9	241.7	242.5	244.8
2331	Women's and misses' blouses and waists (6/78 = 100)	102.0	102.6	102.7	102.8	103.0	105.9	106.8	107.1	106.6	106.7	107.6	107.7	107.8	111.4
2335	Women's and misses' dresses (12/77 = 100)	107.0	106.4	108.3	108.3	107.7	108.8	108.8	112.9	113.8	113.8	113.9	113.9	114.0	114.0
2341	Women's and children's underwear (12/72 = 100)	144.3	144.2	145.3	145.3	146.7	147.4	147.7	149.4	150.0	153.1	152.4	153.2	155.2	155.4
2342	Brasseries and allied garments (12/75 = 100)	116.9	117.5	117.8	117.8	117.8	117.8	118.8	119.7	122.9	124.9	125.4	125.4	127.0	128.2
2361	Children's dresses and blouses (12/77 = 100)	104.8	102.4	102.4	103.7	105.7	105.7	105.6	105.3	105.3	105.5	106.0	106.0	106.7	112.4
2381	Fabric dress and work gloves	241.4	245.4	245.4	245.4	245.4	246.9	246.9	257.7	261.7	265.0	267.5	271.1	271.1	271.1
2394	Canvas and related products (12/77 = 100)	109.3	108.4	111.0	111.4	112.3	112.1	120.1	122.1	128.8	123.4	123.4	123.4	123.4	123.4
2396	Automotive and apparel trimmings (12/77 = 100)	111.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	122.3	122.3	122.3	122.3	122.3
2421	Sawmills and planing mills (12/71 = 100)	251.0	251.3	259.1	265.6	262.2	250.2	237.9	234.8	239.5	239.1	215.7	209.3	218.1	228.8
2436	Softwood veneer and plywood (12/75 = 100)	152.3	148.1	153.4	156.0	153.1	142.9	138.9	138.5	143.7	139.8	121.4	129.6	140.5	148.7
2439	Structural wood members, n.e.c. (12/75 = 100)	151.2	150.0	149.9	150.8	158.2	158.2	158.2	158.2	158.2	158.3	158.2	152.1	152.1	152.1
2448	Wood pallets and skids (12/75 = 100)	166.5	166.9	166.8	167.9	167.9	171.0	170.5	169.8	167.0	166.3	164.6	162.8	159.7	157.1
2451	Mobile homes (12/74 = 100)	138.2	138.2	139.6	140.7	143.0	144.0	144.1	144.8	146.9	147.2	149.0	150.0	150.6	151.2
2492	Particleboard (12/75 = 100)	139.1	134.3	134.7	138.5	139.5	136.8	134.5	136.9	150.7	158.9	161.9	167.3	171.7	168.7
2511	Wood household furniture (12/71 = 100)	165.5	164.5	164.6	168.0	169.3	172.3	174.5	177.5	178.2	178.9	179.7	180.8	182.4	183.8
2512	Upholstered household furniture (12/71 = 100)	150.0	150.0	150.2	151.6	151.8	153.8	155.7	155.9	158.7	158.7	158.7	158.9	160.3	163.3
2515	Mattresses and bedsprings	165.7	164.5	165.8	165.8	168.9	172.3	172.3	169.9	170.5	170.5	171.5	174.8	174.8	180.7
2521	Wood office furniture	215.3	216.8	216.8	216.8	217.6	217.6	221.9	226.2	233.8	233.8	233.9	233.9	233.9	236.1
2611	Pulp mills (12/73 = 100)	200.6	205.4	205.7	205.8	213.5	213.9	213.9	225.2	225.1	225.5	244.9	246.0	246.0	246.6
2621	Paper mills, except building (12/74 = 100)	130.2	130.2	131.0	131.4	135.1	136.5	136.8	139.0	139.8	142.5	145.1	146.1	146.6	146.7
2631	Paperboard mills (12/74 = 100)	119.8	119.7	121.9	123.4	125.4	126.3	127.6	131.3	132.3	134.6	137.0	141.5	143.1	140.4
2647	Sanitary paper products	277.7	276.4	285.9	285.4	286.3	288.4	290.9	295.8	303.9	311.7	312.2	318.1	321.1	328.4
2654	Sanitary paper containers	188.7	189.6	189.6	191.8	195.8	198.2	199.9	202.6	204.8	208.9	212.9	216.7	218.3	219.4
2655	Fiber cans, drums, and similar products (12/75 = 100)	134.8	136.6	136.6	136.6	138.5	138.5	142.3	143.2	143.2	143.3	145.7	147.8	150	

30. Continued — Producer Price Indexes for the output of selected SIC industries

[1967=100 unless otherwise specified]

1972 SIC code	Industry description	Annual average 1979	1979						1980						
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July
3021	Rubber and plastic footwear (12/71 = 100)	171.1	171.0	173.4	173.4	173.5	173.5	173.5	173.5	173.6	173.6	173.8	173.8	173.9	181.9
3031	Reclaimed rubber (12/73 = 100)	170.0	169.2	169.2	177.7	178.8	179.2	179.5	179.7	180.0	184.9	183.7	184.3	184.3	184.4
3079	Miscellaneous plastic products (6/78 = 100)	109.9	111.4	112.3	113.1	114.3	114.6	115.6	116.6	117.0	119.1	120.1	120.3	121.6	121.9
3111	Leather tanning and finishing (12/77 = 100)	167.5	181.8	172.9	155.2	161.9	150.8	153.5	164.3	160.8	146.7	140.8	137.9	134.6	137.7
3142	House slippers (12/75 = 100)	135.8	135.0	135.0	135.0	135.8	135.9	135.9	143.5	145.4	145.4	146.8	146.8	146.8	152.5
3143	Men's footwear, except athletic (12/75 = 100)	152.7	155.4	158.2	160.1	160.4	160.3	160.3	160.3	157.9	158.5	158.4	158.4	158.6	158.6
3144	Women's footwear, except athletic	194.5	198.7	201.5	201.6	202.3	204.0	204.0	205.6	206.3	213.5	213.8	213.8	213.8	214.3
3171	Women's handbags and purses (12/75 = 100)	128.9	131.8	131.8	131.8	131.8	131.8	131.8	131.9	131.9	132.1	132.1	140.8	140.9	140.9
3211	Flat glass (12/71 = 100)	151.7	151.9	151.9	152.3	152.6	153.3	153.9	157.6	157.6	157.9	157.9	157.9	158.9	159.5
3221	Glass containers	261.1	265.2	265.2	265.2	265.2	265.2	274.2	274.3	274.3	274.3	294.5	294.5	294.5	294.5
3241	Cement, hydraulic	283.1	285.4	285.4	285.4	285.4	285.5	286.2	305.7	305.9	306.3	309.8	310.7	310.8	310.5
3251	Brick and structural clay tile	256.6	261.0	263.3	265.9	261.3	261.3	262.7	268.3	270.4	271.9	276.4	278.5	278.5	278.5
3253	Ceramic wall and floor tile (12/75 = 100)	117.2	120.2	120.2	120.2	120.2	120.2	130.3	130.4	130.4	130.4	130.4	117.6	117.6	117.6
3255	Clay refractories	242.1	246.5	246.7	247.1	251.0	252.9	254.0	255.1	259.4	263.7	275.4	277.1	277.5	280.7
3259	Structural clay products, n.e.c.	189.2	188.2	192.1	192.1	192.8	192.3	196.5	196.3	198.1	196.4	200.6	201.6	204.9	205.1
3261	Vitreous plumbing fixtures	207.4	210.1	212.4	213.1	214.5	215.7	217.3	219.2	224.6	226.7	227.6	236.1	235.8	237.2
3262	Vitreous china food utensils	295.2	297.5	297.5	298.0	298.0	305.4	308.2	308.2	308.2	308.2	313.4	313.4	318.6	318.2
3263	Fine earthenware food utensils	244.9	238.8	238.8	246.0	246.0	248.4	294.3	294.3	294.3	294.3	294.8	293.6	294.4	294.3
3269	Pottery products, n.e.c. (12/75 = 100)	132.5	131.0	131.0	133.3	133.3	135.5	150.1	150.1	150.1	150.1	151.3	151.4	152.6	152.6
3271	Concrete block and brick	233.0	232.7	235.7	237.8	240.0	240.0	240.2	249.5	250.6	252.3	259.3	259.4	259.4	259.4
3273	Ready-mixed concrete	248.2	249.6	250.5	252.4	254.0	254.6	257.0	270.8	272.6	275.5	278.9	281.6	282.5	282.5
3274	Lime (12/75 = 100)	141.0	141.8	142.9	144.2	144.6	144.3	144.6	149.5	153.5	155.6	156.7	156.9	157.4	159.6
3275	Gypsum products	252.8	252.3	252.8	255.4	255.9	256.8	255.6	255.9	262.8	268.1	264.6	257.0	257.5	253.5
3291	Abrasive products (12/71 = 100)	187.8	187.7	188.6	190.4	195.1	195.3	196.5	199.4	203.3	203.9	210.1	211.9	213.5	215.2
3297	Nonclay refractories (12/74 = 100)	145.6	148.1	149.1	149.7	150.1	152.3	152.3	152.3	153.3	154.2	157.4	159.7	161.2	162.8
3312	Blast furnaces and steel mills	288.8	292.8	293.0	293.2	296.4	297.1	297.7	302.4	302.9	304.1	311.9	313.2	313.4	308.5
3313	Electrometallurgical products (12/75 = 100)	111.9	116.5	116.5	116.0	116.2	117.5	117.6	117.8	118.7	118.0	118.7	118.5	118.7	117.0
3316	Cold finishing of steel shapes	265.5	270.6	270.8	270.9	271.7	273.4	273.9	274.1	277.1	277.2	285.9	288.1	288.2	282.2
3317	Steel pipes and tubes	268.6	271.9	271.3	271.3	272.7	273.1	273.2	280.5	281.0	283.2	286.9	286.9	290.5	292.5
3321	Gray iron foundries (12/68 = 100)	255.8	253.9	253.8	254.8	267.1	269.6	269.7	273.7	276.9	277.2	278.4	279.0	279.9	280.4
3333	Primary zinc	265.7	281.4	265.5	264.2	265.2	257.8	265.7	266.1	272.4	279.6	274.2	268.2	268.6	255.8
3334	Primary aluminum	243.1	244.9	247.4	248.2	256.0	263.2	266.6	267.0	267.0	267.8	276.0	287.0	288.6	293.3
3351	Copper rolling and drawing	213.2	211.2	213.6	216.7	226.3	222.6	225.0	231.0	253.1	238.6	230.1	222.9	220.4	223.3
3353	Aluminum sheet plate and foil (12/75 = 100)	148.9	149.6	149.8	150.0	150.7	151.3	151.7	153.2	153.5	155.5	158.0	157.6	157.7	158.2
3354	Aluminum extruded products (12/75 = 100)	149.3	150.3	151.9	151.9	155.2	157.4	158.0	158.8	158.9	160.9	167.6	167.7	167.7	168.3
3355	Aluminum rolling, drawing, n.e.c. (12/75 = 100)	132.4	132.7	133.1	133.5	136.9	139.9	140.5	140.7	141.0	141.1	143.8	145.2	146.5	147.2
3411	Metal cans	264.1	262.2	262.9	263.5	273.8	274.6	274.7	276.6	277.3	279.9	295.1	295.2	294.9	295.6
3425	Hand saws and saw blades (12/72 = 100)	163.3	162.8	166.3	166.4	167.1	169.5	169.8	173.1	174.6	176.4	177.8	181.3	181.7	183.3
3431	Metal sanitary ware	224.8	226.4	228.9	229.2	230.1	231.7	232.9	237.8	242.1	243.1	245.5	249.7	249.9	250.9
3465	Automotive stampings (12/75 = 100)	128.5	127.8	130.9	131.6	132.4	132.4	132.4	132.4	132.4	132.7	133.8	134.1	138.1	138.1
3482	Small arms ammunition (12/75 = 100)	132.2	134.0	134.0	134.0	133.2	133.6	143.2	143.2	143.2	142.6	146.3	147.1	150.2	149.8
3493	Steel springs, except wire	219.8	221.6	222.1	222.8	223.7	224.1	225.6	226.1	226.6	228.6	228.9	228.9	230.1	230.1
3494	Valves and pipe fittings (12/71 = 100)	204.8	205.3	206.2	207.5	210.4	212.5	214.3	216.9	219.6	223.1	227.3	229.1	231.2	231.8
3498	Fabricated pipe and fittings	289.2	294.8	294.8	294.9	297.3	297.4	297.4	301.7	301.8	303.5	306.8	306.9	313.8	317.2
3519	Internal combustion engines, n.e.c.	243.3	242.3	245.7	251.8	254.2	254.9	254.9	260.5	261.8	266.1	269.2	270.2	270.3	275.1
3531	Construction machinery (12/76 = 100)	125.1	125.6	126.3	126.5	128.9	129.4	130.9	134.6	135.7	136.3	138.0	138.7	140.0	141.5
3532	Mining machinery (12/72 = 100)	229.4	231.2	231.5	232.7	233.1	235.4	236.4	245.8	247.1	247.8	254.1	256.2	257.1	259.4
3533	Offfield machinery and equipment	291.6	292.0	293.3	296.8	300.5	302.8	309.1	314.2	316.2	318.9	329.5	332.9	337.4	342.6
3534	Elevators and moving stairways	215.9	215.4	214.6	219.1	219.4	220.6	220.9	225.6	226.1	229.1	232.6	234.1	242.5	244.2
3542	Machine tools, metal forming types (12/71 = 100)	242.8	244.6	245.1	247.9	249.8	253.7	256.7	266.1	268.1	269.4	276.1	275.7	279.8	284.9
3546	Power driven hand tools (12/76 = 100)	119.3	119.2	120.2	120.4	122.0	122.8	124.4	126.3	126.6	127.4	128.6	130.4	130.6	133.5
3552	Textile machinery (12/69 = 100)	194.7	195.0	197.5	198.2	199.3	200.6	200.6	202.6	205.2	207.0	212.5	210.0	217.0	222.1
3553	Woodworking machinery (12/72 = 100)	185.4	185.9	187.7	190.0	192.6	192.7	192.9	201.2	201.6	205.1	212.7	212.5	214.0	216.3
3576	Scales and balances, excluding laboratory	194.2	194.8	195.4	195.4	195.7	199.5	201.0	204.2	205.8	206.6	205.1	208.2	208.6	208.8
3592	Carburetors, pistons, rings, valves (6/76 = 100)	139.6	139.2	139.6	140.7	142.8	145.1	145.3	147.5	147.8	148.6	152.5	152.8	153.2	158.3
3612	Transformers	168.1	167.9	167.6	168.4	171.2	170.4	171.6	172.9	176.6	177.5	180.0	181.7	183.2	186.2
3623	Welding apparatus, electric (12/72 = 100)	192.2	193.5	194.1	195.1	196.9	198.6	200.3	201.3	203.3	206.0	207.3	209.8	211.0	212.3
3631	Household cooking equipment (12/75 = 100)	122.2	122.0	123.4	124.3	124.4	125.9	126.3	128.7	129.3	129.4	129.6	132.5	133.4	134.7
3632	Household refrigerators, freezers (6/76 = 100)	113.6	113.6	114.3	115.1	115.1	115.7	116.3	117.0	118.5	118.6	119.0	119.0	121.5	121.7
3633	Household laundry equipment (12/73 = 100)	148.8	148.8	149.9	150.6	150.9	152.3	153.5	154.0	156.6	158.3	159.0	159.7	162.8	160.1
3635	Household vacuum cleaners	141.7	141.6	141.7	141.9	144.5	144.7	145.8	146.1	149.7	151.3	150.2	149.2	149.6	151.9
3636	Sewing machines (12/75 = 100)	121.4	121.8	122.2	122.2	122.6	122.6	122.6	122.6	129.2	129.2	128.6	128.6	128.6	129.4
3641	Electric lamps	235.2	240.8	244.3	242.7	244.8	238.7	240.8	248.5	252.4	251.8	252.4	252.3	260.0	266.4
3644	Noncurrent-carrying wiring devices (12/72 = 100)	204.6	203.7	207.7	209.1	210.5	211.9	215.0	212.9	215.2	215.3	219.7	220.3	222.5	222.3
3646	Commercial lighting fixtures (12/75 = 100)	126.5	127.9	127.9	130.5	131.4	131.6	131.9	133.4	134.3	136.2	138.4	138.9	139.6	139.6
3648	Lighting equipment, n.e.c. (12/75 = 100)	126.0	127.6	128.2	128.5	129.6	129.8	130.5	133.0	133.2	134.6	138.6	139.4	140.4	140.5
3671	Electron tubes receiving type	220.3	226.5	226.6	227.2	227.2	227.4	227.7	229.1	229.4	229.7	253.9	254.3	254.8	255.1
3674	Semiconductors and related devices	84.8	84.2	84.3	84.7	85.1	85.6	86.4	86.8	88.5	89.3	89.7	90.7	91.0	91.6
3675	Electronic capacitors (12/75 = 100)	125.2	126.7	129.3	134.1	133.9	135.8	138.0	147.7	149.1	151.3	155.6	156.4	156.2	164.3
3676	Electronic resistors (12/75 = 100)	124.4	124.0	124.6	125.2	126.6	126.6	127.3	127.4	128.8	131.8	131.9	132.8	135.0	135.1
3678	Electronic connectors (12/75 = 100)	131.7	133.4	134.1	137.6	138.9	140.7	142.1	145.1	146.4	146.7	147.3</			

PRODUCTIVITY DATA

PRODUCTIVITY DATA are compiled by the Bureau of Labor Statistics from establishment data and from estimates of compensation and output supplied by the U.S. Department of Commerce and the Federal Reserve Board.

Definitions

Output is the constant dollar gross domestic product produced in a given period. Indexes of **output per hour of labor input**, or labor productivity, measure the value of goods and services produced per hour of labor. **Compensation per hour** includes wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. The data also include an estimate of wages, salaries, and supplementary payments for the self-employed, except for nonfinancial corporations, in which there are no self-employed. **Real compensation per hour** is compensation per hour adjusted by the Consumer Price Index for All Urban Consumers.

Unit labor cost measures the labor compensation cost required to produce one unit of output and is derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from the current dollar gross domestic product and dividing by output. In these tables, **Unit nonlabor costs** contain all the components of unit nonlabor payments except unit profits. **Unit profits** include corporate profits and inventory valuation adjustments per unit of output.

The **implicit price deflator** is derived by dividing the current dollar estimate of gross product by the constant dollar estimate, making the deflator, in effect, a price index for gross product of the sector reported.

The use of the term "man-hours" to identify the labor component of productivity and costs, in tables 31 through 34, has been discontinued. **Hours of all persons** is now used to describe the labor input of payroll workers, self-employed persons, and unpaid family workers. **Output per all-employee hour** is now used to describe labor productivity in nonfinancial corporations where there are no self-employed.

Notes on the data

In the private business sector and the nonfarm business sector, the basis for the output measure employed in the computation of output per hour is Gross Domestic Product rather than Gross National Product. Computation of hours includes estimates of nonfarm and farm proprietor hours.

Output data are supplied by the Bureau of Economic Analysis, U.S. Department of Commerce, and the Federal Reserve Board. Quarterly manufacturing output indexes are adjusted by the Bureau of Labor Statistics to annual estimates of output (gross product originating) from the Bureau of Economic Analysis. Compensation and hours data are from the Bureau of Economic Analysis and the Bureau of Labor Statistics.

Beginning with the September 1976 issue of the *Review*, tables 31-34 were revised to reflect changeover to the new series—private business sector and nonfarm business sector—which differ from the previously published total private economy and nonfarm sector in that output imputed for owner-occupied dwellings and the household and institutions sectors, as well as the statistical discrepancy, are omitted. For a detailed explanation, see J. R. Norsworthy and L. J. Fulco, "New sector definitions for productivity series," *Monthly Labor Review*, October 1976, pages 40-42.

31. Annual indexes of productivity, hourly compensation, unit costs, and prices, 1950-79

[1967 = 100]

Item	1950	1955	1960	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979
Private business sector:													
Output per hour of all persons	61.2	70.6	79.0	95.1	104.4	111.5	113.6	110.2	112.6	116.6	118.7	119.3	118.3
Compensation per hour	42.6	56.1	72.2	88.7	123.3	139.8	151.3	165.2	181.7	197.6	213.3	231.4	253.1
Real compensation per hour	59.2	69.9	81.4	93.9	106.0	111.6	113.6	111.8	112.7	115.9	117.5	118.4	116.4
Unit labor cost	69.6	79.4	91.4	93.3	118.2	125.4	133.2	149.8	161.3	169.5	179.7	194.0	214.0
Unit nonlabor payments	73.1	80.4	85.4	95.9	105.8	118.9	124.9	130.3	150.3	157.9	165.5	174.3	184.4
Implicit price deflator	70.8	79.8	89.3	94.2	113.9	123.2	130.3	143.1	157.5	165.5	174.8	187.2	203.8
Nonfarm business sector:													
Output per hour of all persons	67.2	74.6	81.2	96.0	103.2	110.1	112.0	108.6	110.7	114.6	116.4	116.9	115.7
Compensation per hour	45.6	59.0	74.5	89.4	121.9	138.4	149.2	163.0	179.3	194.2	209.6	227.5	247.9
Real compensation per hour	63.3	73.6	84.1	94.6	104.8	110.5	112.1	110.4	111.2	113.9	115.5	116.4	114.0
Unit labor cost	68.0	79.1	91.7	93.2	118.1	125.7	133.2	150.1	161.9	169.5	180.1	194.6	214.4
Unit nonlabor payments	71.4	80.1	84.4	95.8	106.0	117.4	117.8	124.7	145.9	156.0	163.8	169.9	178.6
Implicit price deflator	69.1	79.4	89.2	94.1	114.0	122.9	127.9	141.4	156.4	164.8	174.5	186.1	202.1
Nonfinancial corporations:													
Output per hour of all employees	(¹)	(¹)	80.6	96.9	103.7	110.6	112.9	108.7	112.2	115.8	117.0	118.0	117.5
Compensation per hour	(¹)	(¹)	76.0	90.1	121.8	136.7	147.6	161.7	177.9	192.7	208.0	225.0	244.9
Real compensation per hour	(¹)	(¹)	85.7	95.3	104.7	109.1	110.9	109.5	110.4	113.0	114.6	115.2	112.7
Unit labor cost	(¹)	(¹)	94.3	93.0	117.4	123.7	130.7	148.8	158.6	166.4	177.7	190.6	208.4
Unit nonlabor payments	(¹)	(¹)	90.8	100.1	103.5	114.8	116.8	124.8	148.1	156.8	164.4	170.6	179.5
Implicit price deflator	(¹)	(¹)	93.1	95.5	112.5	120.5	125.8	140.2	154.9	163.0	173.0	183.5	198.1
Manufacturing:													
Output per hour of all persons	65.8	75.0	79.8	98.4	105.0	115.7	118.9	113.0	118.8	124.0	127.7	128.2	129.2
Compensation per hour	45.6	61.2	78.0	91.1	122.3	136.6	146.5	161.7	181.1	196.1	212.7	229.9	250.8
Real compensation per hour	63.3	76.3	88.0	96.4	105.1	109.0	110.1	109.5	112.3	115.0	117.2	117.6	115.3
Unit labor cost	69.4	81.6	97.7	92.6	116.5	118.1	123.2	143.1	152.4	158.2	166.6	179.4	194.1
Unit nonlabor payments	82.3	88.6	92.3	103.3	96.2	107.4	106.4	105.6	128.4	139.6	147.4	152.4	154.4
Implicit price deflator	73.3	83.8	96.1	95.9	110.3	114.8	118.0	131.6	145.1	152.5	160.7	171.1	181.9

¹ Not available.

32. Annual changes in productivity, hourly compensation, unit costs, and prices, 1969-79

Item	Year											Annual rate of change	
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1950-79	1960-79
Private business sector:													
Output per hour of all persons	0.2	0.7	3.3	3.4	1.9	-3.0	2.1	3.5	1.8	0.5	-0.8	2.5	2.1
Compensation per hour	6.9	7.2	6.7	6.2	8.2	9.2	10.0	8.8	8.0	8.5	9.4	5.9	6.9
Real compensation per hour	1.4	1.2	2.3	2.8	1.9	-1.6	.8	2.8	1.4	0.8	-1.7	2.5	2.0
Unit labor cost	6.6	6.4	3.3	2.8	6.2	12.5	7.7	5.0	6.0	8.0	10.3	3.3	4.7
Unit nonlabor payments	1.0	1.2	6.8	5.3	5.0	4.4	15.3	5.1	4.8	5.3	5.8	3.0	4.2
Implicit price deflator	4.7	4.7	4.4	3.6	5.8	9.8	10.1	5.0	5.6	7.1	8.9	3.2	4.5
Nonfarm business sector:													
Output per hour of all persons	-2	.2	3.0	3.6	1.7	-3.1	2.0	3.5	1.5	5	-1.1	2.1	1.9
Compensation per hour	6.4	6.8	6.7	6.4	7.8	9.2	10.0	8.3	7.9	8.6	9.0	5.6	6.7
Real compensation per hour	1.0	.8	2.3	3.0	1.5	-1.6	.8	2.4	1.4	.8	-2.1	2.2	1.7
Unit labor cost	6.7	6.5	3.5	2.7	6.0	12.7	7.9	4.7	6.3	8.0	10.2	3.4	4.7
Unit nonlabor payments	.4	1.6	6.7	3.8	.3	5.9	17.0	6.9	5.0	3.7	5.1	2.9	4.0
Implicit price deflator	4.5	4.9	4.5	3.1	4.1	10.5	10.6	5.4	5.9	6.6	8.6	3.3	4.5
Nonfinancial corporations:													
Output per hour of all employees	.4	.0	3.3	3.1	2.1	-3.7	3.2	3.2	1.1	.9	-4	(¹)	1.9
Compensation per hour	6.8	6.8	6.2	5.7	7.9	9.6	10.0	8.3	7.9	8.2	8.9	(¹)	6.5
Real compensation per hour	1.3	.8	1.8	2.4	1.6	-1.3	.8	2.4	1.4	.5	-2.2	(¹)	1.6
Unit labor cost	6.3	6.8	2.7	2.5	5.7	13.8	6.6	4.9	6.8	7.3	9.3	(¹)	4.5
Unit nonlabor payments	0	.5	7.3	3.3	1.8	6.8	18.7	5.8	4.9	3.8	5.2	(¹)	3.6
Implicit price deflator	4.1	4.6	4.2	2.8	4.4	11.5	10.5	5.2	6.1	6.1	7.9	(¹)	4.2
Manufacturing:													
Output per hour of all persons	1.3	-.1	5.2	4.8	2.8	-5.0	5.1	4.4	3.0	.4	.8	2.5	2.5
Compensation per hour	6.6	7.1	6.2	5.2	7.2	10.4	12.0	8.3	8.4	8.1	9.1	5.5	6.4
Real compensation per hour	1.2	1.1	1.9	1.8	.9	-.5	2.6	2.4	1.9	.4	-2.0	2.1	1.5
Unit labor cost	5.2	7.2	.9	4	4.3	16.1	6.6	3.8	5.3	7.7	8.2	2.9	3.9
Unit nonlabor payments	-4.4	-3.2	9.2	2.3	-1.0	-.7	21.6	8.8	5.5	3.4	1.3	1.9	2.5
Implicit price deflator	2.3	4.2	3.1	1.0	2.8	11.5	10.2	5.1	5.4	6.5	6.3	2.6	3.5

¹ Not available.

r = revised.

33. Quarterly indexes of productivity, hourly compensation, unit costs, and prices, seasonally adjusted

[1967=100]

Item	Annual average		Quarterly indexes										
			1977	1978				1979				1980	
	1978	1979	IV	I	II	III	IV	I	II	III	IV	I	II P
Private business sector:													
Output per hour of all persons	119.3	118.3	119.0	118.5	119.1	119.7	119.8	118.9	118.3	117.8	117.7	117.7	¹ 117.1
Compensation per hour	231.4	253.1	218.8	224.6	228.8	233.7	238.4	244.8	250.4	255.7	260.3	267.6	275.3
Real compensation per hour	118.4	116.4	117.9	118.8	118.3	118.2	117.9	117.0	115.8	114.2	114.2	112.9	¹ 112.4
Unit labor cost	194.0	214.0	183.9	189.4	192.1	195.2	199.0	205.9	211.7	217.0	221.1	227.5	¹ 235.1
Unit nonlabor payments	174.3	184.4	168.5	164.8	173.9	177.0	181.3	180.8	183.7	185.6	188.3	190.0	¹ 193.1
Implicit price deflator	187.2	203.8	178.6	180.9	185.8	188.9	192.9	197.2	202.0	206.1	209.7	214.5	¹ 220.6
Nonfarm business sector:													
Output per hour of all persons	116.9	115.7	116.4	116.2	116.7	117.4	117.6	116.6	115.4	115.0	115.2	114.9	¹ 114.1
Compensation per hour	227.5	247.9	219.6	221.0	224.9	229.5	234.4	240.2	244.9	249.9	255.6	262.2	269.0
Real compensation per hour	116.4	114.0	115.5	116.9	116.3	116.1	115.9	115.7	114.4	113.2	112.1	110.6	109.9
Unit labor cost	194.6	214.4	180.1	190.2	192.8	195.6	199.3	206.0	212.2	217.3	221.8	228.2	¹ 235.8
Unit nonlabor payments	169.9	178.6	163.8	161.1	169.1	173.0	176.1	174.3	177.6	180.5	182.5	185.9	¹ 191.1
Implicit price deflator	186.1	202.1	174.5	180.2	184.7	187.8	191.4	195.1	200.3	204.7	208.4	213.7	¹ 220.5
Nonfinancial corporations:													
Output per hour of all employees	118.0	117.5	116.9	116.9	118.0	118.5	118.8	118.1	117.3	117.2	117.1	117.1	^P 116.7
Compensation per hour	225.0	244.9	213.2	219.0	222.6	226.9	231.3	237.3	242.1	247.1	252.1	258.8	^P 265.7
Real compensation per hour	115.2	112.7	114.9	115.8	115.1	114.8	114.4	114.3	113.1	111.9	110.6	109.2	^P 108.5
Total unit costs	193.3	210.4	186.3	190.8	191.6	194.0	196.8	202.3	208.0	213.2	218.0	224.3	^P 233.2
Unit labor cost	190.6	208.4	182.3	187.3	188.7	191.5	194.8	201.0	206.4	210.8	215.3	221.1	^P 227.6
Unit nonlabor costs	201.8	216.6	198.7	201.5	200.8	201.6	203.1	206.5	213.2	220.5	226.1	234.4	^P 250.7
Unit profits	127.2	127.8	122.2	107.1	129.2	132.7	138.7	130.3	129.2	127.5	124.0	120.5	^P 110.9
Implicit price deflator	183.5	198.1	176.8	178.3	182.3	184.9	188.2	191.6	196.3	200.4	204.0	208.9	^P 215.0
Manufacturing:													
Output per hour for all persons	128.2	129.2	128.3	126.3	127.7	129.3	129.5	128.3	128.8	129.6	129.1	128.4	¹ 127.0
Compensation per hour	229.9	250.8	218.3	223.9	227.1	231.7	236.6	242.3	248.0	252.7	258.0	264.6	¹ 274.1
Real compensation per hour	117.6	115.3	117.6	118.4	117.5	117.2	117.0	116.7	115.9	114.4	113.2	111.6	¹ 112.0
Unit labor cost	179.4	194.1	170.1	177.2	177.9	179.1	182.7	189.0	192.6	195.0	199.8	206.0	¹ 215.9

¹ Not available.

r = revised.

34. Percent change from preceding quarter and year in productivity, hourly compensation, unit costs, and prices, seasonally adjusted at annual rate

[1967=100]

Item	Quarterly percent change at annual rate						Percent change from same quarter a year ago					
	IV 1978 to I 1979	I 1979 to II 1979	II 1979 to III 1979	III 1979 to IV 1979	IV 1979 to I 1980 ^P	I 1980 to II 1980 ^P	I 1978 to I 1979	II 1978 to II 1979	III 1978 to III 1979	IV 1978 to IV 1979	I 1979 to I 1980 ^P	II 1979 to II 1980 ^P
Private business sector:												
Output per hour of all persons	-3.1	-2.0	-1.4	-0.3	-0.3	r -1.9	0.3	-0.7	-1.6	-1.7	-1.0	r -1.0
Compensation per hour	11.0	9.5	8.7	7.5	11.7	r 11.9	9.0	9.4	9.4	9.2	9.3	r 19.9
Real compensation per hour	-2	-2.9	-4.1	-5.4	-4.5	r -1.6	-0.8	-1.1	-2.1	-3.2	-4.2	-3.9
Unit labor cost	14.6	11.8	10.3	7.8	12.1	r 14.1	8.7	10.2	11.2	11.1	10.5	r 11.0
Unit nonlabor payments	-1.0	6.5	4.2	5.9	3.8	r 6.6	9.7	5.7	4.8	3.9	5.1	r 5.1
Implicit price deflator	9.3	10.1	8.3	7.2	9.4	r 11.8	9.0	8.7	9.1	8.7	8.8	r 9.2
Nonfarm business sector:												
Output per hour of all persons	-3.3	-3.9	-1.5	0.8	-1.1	r -2.9	.4	-1.1	-2.0	-2.0	-1.4	r -1.2
Compensation per hour	10.2	8.1	8.5	9.5	10.7	r 10.7	8.7	8.9	8.9	9.1	9.2	9.8
Real compensation per hour	-9	-4.2	-4.4	-3.6	-5.3	-2.6	-1.0	-1.6	-2.5	-3.3	-4.4	-4.0
Unit labor cost	14.0	12.5	10.1	8.6	12.0	r 14.1	8.3	10.1	11.1	11.3	10.8	r 11.2
Unit nonlabor payments	-3.9	7.7	6.6	4.6	7.5	r 11.7	8.2	5.0	4.3	3.7	6.6	r 7.6
Implicit price deflator	8.1	11.0	9.0	7.4	10.6	r 13.3	8.3	8.5	9.0	8.9	9.5	r 10.1
Nonfinancial corporations:												
Output per hour of all employees	-2.3	-2.7	-0.3	-0.4	-0.1	P -1.1	1.0	-6	-1.1	-1.4	-0.9	P -0.5
Compensation per hour	10.8	8.3	8.5	8.4	11.0	P 11.1	8.4	8.7	8.9	9.0	9.0	P 9.7
Real compensation per hour	-4	-4.1	-4.3	-4.5	-5.1	P -2.3	-1.3	-1.8	-2.6	-3.3	-4.5	P -4.1
Total unit costs	11.7	11.8	10.2	9.3	12.2	P 16.8	6.1	8.6	9.9	10.8	10.9	P 12.1
Unit labor costs	13.4	11.2	8.8	8.9	11.1	P 12.3	7.3	9.4	10.1	10.6	10.0	P 10.3
Unit nonlabor costs	6.8	13.5	14.6	10.6	15.4	P 31.0	2.5	6.2	9.4	11.3	13.5	P 17.6
Unit profits	-22.1	-3.4	-5.3	-10.4	-10.9	P -28.2	21.7	0	-3.9	-10.6	-7.6	P 14.2
Implicit price deflator	7.6	10.2	8.6	7.3	9.9	P 12.3	7.5	7.7	8.4	8.4	9.0	P 9.5
Manufacturing:												
Output per hour of all persons	-3.8	1.7	2.5	-1.4	-2.2	r -4.5	1.5	.9	0.2	-0.3	0.1	r -1.4
Compensation per hour	10.1	9.6	7.8	8.8	10.5	r 15.2	8.2	9.2	9.1	9.1	9.2	r 10.5
Real compensation per hour	-9	-2.8	-4.9	-4.2	-5.5	r 1.3	-1.5	-1.3	-2.4	-3.3	-4.4	r -3.4
Unit labor cost	14.5	7.9	5.2	10.3	13.0	r 20.7	6.6	8.2	8.9	9.4	9.0	r 12.1

r = revised.

LABOR-MANAGEMENT DATA

MAJOR COLLECTIVE BARGAINING DATA are obtained from contracts on file at the Bureau of Labor Statistics, direct contact with the parties, and from secondary sources. Additional detail is published in *Current Wage Developments*, a monthly periodical of the Bureau. Data on work stoppages are based on confidential responses to questionnaires mailed by the Bureau of Labor Statistics to parties involved in work stoppages. Stoppages initially come to the attention of the Bureau from reports of Federal and State mediation agencies, newspapers, and union and industry publications.

Definitions

Data on wage changes apply to private nonfarm industry agreements covering 1,000 workers or more. Data on wage and benefit changes *combined* apply only to those agreements covering 5,000 workers or more. **First-year wage settlements** refer to pay changes going into effect within the first 12 months after the effective date of

the agreement. **Changes over the life of the agreement** refer to total agreed upon settlements (exclusive of potential cost-of-living escalator adjustments) expressed at an average annual rate. **Wage-rate changes** are expressed as a percent of straight-time hourly earnings, while **wage and benefit changes** are expressed as a percent of total compensation.

Effective wage-rate adjustments going into effect in major bargaining units measure changes actually placed into effect during the reference period, whether the result of a newly negotiated increase, a deferred increase negotiated in an earlier year, or as a result of a cost-of-living escalator adjustment. Average adjustments are affected by workers receiving no adjustment, as well as by those receiving increases or decreases.

Work stoppages include all known strikes or lockouts involving six workers or more and lasting a full shift or longer. Data cover all workers idle one shift or more in establishments directly involved in a stoppage. They do not measure the indirect or secondary effect on other establishments whose employees are idle owing to material or service shortages.

35. Wage and benefit settlements in major collective bargaining units, 1975 to date

[In percent]

Sector and measure	Annual average					Quarterly average							
	1975	1976	1977	1978	1979	1978		1979				1980 ^P	
						III	IV	I	II	III	IV	I	II
Wage and benefit settlements, all industries:													
First-year settlements	11.4	8.5	9.6	8.3	9.0	7.2	6.1	2.8	10.5	9.0	8.5	8.6	10.1
Annual rate over life of contract	8.1	6.6	6.2	6.3	6.6	5.9	5.2	5.3	7.8	6.1	6.0	6.4	6.8
Wage rate settlements, all industries:													
First-year settlements	10.2	8.4	7.8	7.6	7.4	7.5	7.4	5.7	8.9	6.8	6.3	7.8	8.7
Annual rate over life of contract	7.8	6.4	5.8	6.4	6.0	6.4	5.9	6.6	7.2	5.1	5.3	6.3	6.8
Manufacturing:													
First-year settlements	9.8	8.9	8.4	8.3	6.9	8.4	9.5	8.7	9.7	6.3	5.6	7.0	6.6
Annual rate over life of contract	8.0	6.0	5.5	6.6	5.4	7.2	7.4	7.7	8.1	4.7	4.2	5.6	4.9
Nonmanufacturing (excluding construction):													
First-year settlements	11.9	8.6	8.0	8.0	7.6	7.4	6.4	3.2	8.5	9.4	7.8	9.1	10.4
Annual rate over life of contract	8.0	7.2	5.9	6.5	6.2	5.9	5.1	5.6	5.8	6.5	7.4	7.1	8.6
Construction:													
First-year settlements	8.0	6.1	6.3	6.5	8.8	7.0	8.4	9.7	8.7	9.7	7.5	9.6	12.7
Annual rate over life of contract	7.5	6.2	6.3	6.2	8.3	7.2	7.1	8.2	8.3	8.5	7.6	9.3	10.3

36. Effective wage adjustments going into effect in major collective bargaining units, 1975 to date

[In percent]

Sector and measure	Average annual changes					Average quarterly changes								
	1975	1976	1977	1978	1979	1978			1979				1980 ^P	
						II	III	IV	I	II	III	IV	I	II
Total effective wage rate adjustment, all industries	8.7	8.1	8.0	8.2	9.1	2.6	2.7	1.4	1.4	2.6	3.3	1.6	1.4	2.6
Change resulting from —														
Current settlement	2.8	3.2	3.0	2.0	3.0	.6	.5	.4	.2	1.1	1.0	.5	.4	.7
Prior settlement	3.7	3.2	3.2	3.7	3.0	1.4	1.2	.5	.6	1.0	1.0	.4	.5	1.2
Escalator provision	2.2	1.6	1.7	2.4	3.1	.6	1.0	.5	.6	.5	1.2	.7	.6	.6
Manufacturing	8.5	8.5	8.4	8.6	9.6	2.2	2.9	1.9	1.5	2.3	3.2	2.4	1.7	2.9
Nonmanufacturing	8.9	7.7	7.6	7.9	8.8	2.9	2.5	1.1	1.4	2.8	3.4	1.0	1.2	2.2

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

37. Work stoppages, 1947 to date

Month and year	Number of stoppages		Workers involved		Days idle	
	Beginning in month or year	In effect during month	Beginning in month or year (thousands)	In effect during month (thousands)	Number (thousands)	Percent of estimated working time
1947	3,693		2,170		34,600	30
1948	3,419		1,960		34,100	28
1949	3,606		3,030		50,500	44
1950	4,843		2,410		38,800	33
1951	4,737		2,220		22,900	18
1952	5,117		3,540		59,100	48
1953	5,091		2,400		28,300	22
1954	3,468		1,530		22,600	18
1955	4,320		2,650		28,200	22
1956	3,825		1,900		33,100	24
1957	3,673		1,390		16,500	12
1958	3,694		2,060		23,900	18
1959	3,708		1,880		69,000	50
1960	3,333		1,320		19,100	14
1961	3,367		1,450		16,300	11
1962	3,614		1,230		18,600	13
1963	3,362		941		16,100	11
1964	3,655		1,640		22,900	15
1965	3,963		1,550		23,300	15
1966	4,405		1,960		25,400	15
1967	4,595		2,870		42,100	25
1968	5,045		2,649		49,018	28
1969	5,700		2,481		42,869	24
1970	5,716		3,305		66,414	37
1971	5,138		3,280		47,589	26
1972	5,010		1,714		27,066	15
1973	5,353		2,251		27,948	14
1974	6,074		2,778		47,991	24
1975	5,031		1,746		31,237	16
1976	5,648		2,420		37,859	19
1977	5,506		2,040		35,822	17
1978	4,230		1,623		36,922	17
1979: July	471		168		3,001	16
August	463		119		3,152	15
September	464		135		2,319	13
October	443		230		2,968	15
November	257		91		2,720	15
December	134		42		1,976	11
1980: January ^P	352	441	207	292	3,142	16
February ^P	354	590	114	332	3,025	17
March ^P	396	631	123	310	2,705	14
April	425	663	116	231	2,786	14
May	505	752	139	214	2,464	13
June	435	714	164	201	2,553	13
July	491	768	270	394	4,030	21

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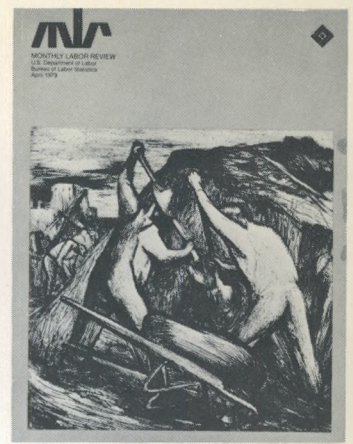
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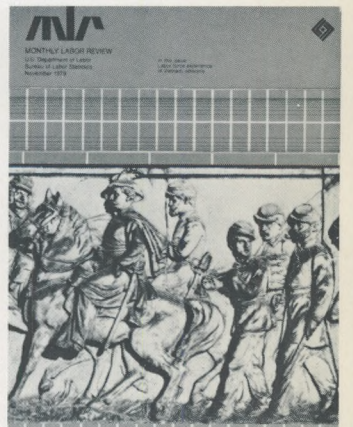
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