# Employment and unemployment in 1984: a second year of strong growth in jobs

As the economic recovery entered its second year, unemployment showed a further sharp decline amid the substantial increase in employment, but the across-the-board improvement in joblessness faded after midyear

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The employment situation in 1984 reflected extraordinary rates of employment growth in the first 2 quarters, a pause in the summer months, and additional employment growth in the last quarter of the year. Total civilian employment, as measured by the Current Population Survey, stood at 106.0 million in the fourth quarter after seasonal adjustment. Employees on nonagricultural payrolls, as measured by the Current Employment Statistics program, totaled 95.5 million at yearend. Both series were up by about 7 million from the trough of the 1981–82 recession.<sup>1</sup>

With the robust employment growth early in the year, unemployment continued to drop sharply, but, as the job growth slowed, the unemployment decline slowed after midyear. At 8.2 million in the fourth quarter, unemployment was down about 1.3 million from the year before and more than 3.5 million from the recession trough. At year's end, the rate of unemployment in the total labor force was 7.1 percent; it was 7.2 percent for the civilian labor force. These indicators were down 1.3 percentage points from the fourth quarter of 1983.

This article examines the behavior of the key labor force time series, both for 1984 and in relation to the business cycle, and details the effects on various social and economic groups.<sup>2</sup> Special emphasis is placed on such groups as minority workers, as well as on families and their relationship

to the labor market, and selected industries that have had prominent roles in the changing employment structure of the economy.

## Unemployment

As employment growth paused in mid-1984, so faded the rapid reduction in unemployment that had occurred in the first 6 quarters of recovery. The rate of unemployment for civilian workers dropped more than a full percentage point from the fourth quarter of 1983 to the second quarter of 1984 and then showed more modest improvement, ending the year at 7.2 percent. (See table 1.)

Among the major labor force groups by age and ex, men and teenagers showed declines in unemployment in all 4 quarters of 1984. After large decreases in the first and second quarters, the unemployment rate for men edged down slightly in the last two to end the year at 6.2 percent. The rate for women, however, actually edged up a bit in the third quarter after dropping as low as 6.7 percent in the spring; unemployment among women stood at 6.6 percent at the end of the year. Teenage unemployment showed small declines throughout most of 1984 but remained at a persistently high level, ending the year at 18.4 percent.

The continuing decline in unemployment among adult males in the second half reflected improvements among black men, as their rate dropped from 14.8 to 13.1 percent between the second and fourth quarters. Over the same

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Characteristic	1982	1983	"	1984 II  113514 64.5 104985 59.6 8529 7.5  59571 78.3 55637 73.1 3934 6.6 45924 53.9 42838 50.2 3087 6.7  8019 54.3 6510 44.1 1508 18.8  98619 64.8 92233 60.6 6387 6.5	1984		
Characteristic	IV	IV	1	N .	HI	IV	
Total							
Civilian labor force Participation rate Employed. Employment-population ratio Unemployed Unemployert	110892 64.1 99121 57.3 11772 10.6	112100 64.1 102591 58.6 9509 8.5	112650 64.1 103768 59.1 8882 7.9	64.5 104985 59.6 8529	113754 64.4 105306 59.6 8447 7.4	114185 64.5 105951 59.8 8233 7.2	
Men, 20 years and over		:					
Civilian labor force Participation rate Employed. Employment-population ratio Unemployed Unemployment rate	58356 78.7 52570 70.9 5786 9.9	59048 78.4 54457 72.3 4592 7.8	59352 78.3 55199 72.8 4153 7.0	78.3 55637 73.1 3934	59798 78.3 55952 73.3 3846 6.4	60013 78.3 56274 73.4 3738 6.2	
Women, 20 years and over			İ				
Civilian labor force Participation rate Employed. Employment-population ratio Unemployed Unemployment rate	44100 52.9 40141 48.2 3959 9.0	45034 53.3 41764 49.4 3270 7.3	45275 53.3 42117 49.6 3158 7.0	53.9 42838 50.2 3087	46058 53.8 42928 50.2 3129 6.8	46335 53.9 43285 50.4 3051 6.6	
Both sexes, 16 to 19 years							
Civilian labor force Participation rate Employed. Employment-population ratio Unemployed Unemployment rate	8436 54.1 6409 41.1 2027 24.0	8018 53.2 6371 42.3 1647 20.5	8022 53.7 6452 43.2 1570 19.6	54.3 6510 44.1 1508	7898 53.9 6426 43.9 1472 18.6	7837 53.8 6392 43.9 1444 18.4	
White							
Civilian labor force Participation rate Employed. Employednent-population ratio Unemployed Unemployed Unemployment rate	96567 64.4 87460 58.3 9107 9.4	97620 64.5 90467 59.8 7153 7.3	98096 64.5 91437 60.1 6659 6.8	64.8 92233 60.6 6387	98425 64.6 92172 60.5 6253 6.4	98755 64.7 92626 60.7 6129 6.2	
Black							
Civilian labor force Participation rate Employed. Employment-population ratio Unemployed Unemployment rate	11509 61.5 9155 48.9 2354 20.5	11632 61.0 9560 50.2 2072 17.8	11816 61.5 9842 51.2 1973 16.7	61.9 10035 52.0 1907	12102 62.4 10187 52.5 1915 15.8	12263 63.0 10409 53.4 1854	
Hispanic origin	j						
Civilian labor force Participation rate Employed. Employment-population ratio Unemployed Unemployment rate	5970 63.7 5058 53.9 912 15.3	6226 64.1 5476 56.3 750 12.1	6330 63.8 5640 56.8 690	6341 63.6 5657 56.7 683 10.8	6316 64.8 5648 58.0 668 10.6	6440 65.1 5775 58.4 665 10.3	

Note: Detail for the above racial and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented, and Hispanics are included in both the white and black population groups.

period, white male unemployment edged down to end the year at 5.4 percent. The overall unemployment rate for whites dropped slightly in the second half, to 6.2 percent, following a much stronger improvement in the first half. Among blacks, unemployment dropped from 17.8 to 16.0 percent between the end of 1983 and midyear; at the end of 1984 the black unemployment rate was 15.1 percent. Black teenagers continued to have a very high rate of unemployment. Even after a 6.6-percentage-point drop from fourth quarter 1983 to the end of 1984, unemployment af-

fected about two-fifths of black teens in the labor force. The unemployment rate for workers of Hispanic origin showed a decline of 1.8 percentage points over the year to 10.3 percent, with most of the improvement taking place in the first quarter.

Duration and reasons. The median duration of unemployment fell from 9.3 weeks at the end of 1983 to 7.3 weeks at the end of 1984. Similarly, the average (mean) duration of unemployment fell 2.9 weeks to end the year

at 17.1 weeks. These declines reflected a sharp reduction in the number of the unemployed who had been out of work for a long time. The number of persons jobless for 6 months or longer declined by three-quarters of a million over the year. Nevertheless, at yearend there were still 1.4 million persons who had been unemployed for half a year or more. Protracted unemployment is particularly a problem for men 55 years and older.

The number of job losers among the unemployed dropped by about a million between the end of 1983 and the fourth quarter of 1984 as their share of the unemployed fell from 55 to 51 percent. It should be noted, however, that this cyclically important indicator showed virtually no change from the third quarter to the fourth. Many observers treat a higher proportion of those who leave jobs voluntarily as an indicator of worker confidence in the economy; that proportion of the unemployed rose irregularly from 8.9 percent at the end of 1983 to 10.3 at yearend.

## **Total employment**

The first 2 quarters of 1984 extended the unusually rapid growth of total employment experienced in 1983. From the fourth quarter of 1983 to the second quarter of 1984, civilian employment grew by 2.4 million, or 2.3 percent. In contrast, from the second to the fourth quarters, employment grew by less than a million, or 0.9 percent. This declining rate of employment growth was reflected in other quarterly economic statistics, such as real Gross National Product (computed at a seasonally adjusted annual rate) and the Index of Industrial Production:

Quarter	Civilian employment	Real GNP	Industrial production
I	1.1	10.1	2.8
II	1.2	7.1	2.1
Ш	0.3	1.6	1.5
IV	0.6	2.8	-0.2

Overall employment growth for the year was 3.3 percent, measured from the fourth quarter of 1983 to the fourth quarter of 1984. Men accounted for about 54 percent of the increase in employment, women for more than 45 percent, with virtually no change in teenage employment. Most of the gains for women occurred in the first half of the year, while gains among men were more evenly spread.

The proportion of the civilian noninstitutional population with jobs (the employment-population ratio) rose more than a full percentage point over the year to 59.8 percent in the fourth quarter. This was very close to the quarterly high of 60.0 percent reached in 1979. Employment growth exceeded population growth for men and women. Among teenagers, the decline in population coupled with fairly steady employment levels also resulted in a higher employment-population ratio.

There has been some concern over the composition of employment growth over the course of the current recovery.

Such concerns are often based on the fact that the service-producing industries are growing at a faster rate than goods-producing industries. It is also useful to analyze the occupational distribution of job growth over the past year. While some analysts maintain that the changing industrial composition of employment implies an unfavorable trend toward "dead-end" service and clerical jobs, and thus away from "good" managerial/professional and industrial craft jobs, the figures for 1984 demonstrate that the latter occupational groups were the fastest growing, and the former occupations were among the slower. Employment growth by occupational group:

	Emplo	yment	Percent
Occupation		1984 IV	change
Managerial and			
professional specialty	24,071	25,305	5.1
Technical, sales, and		•	
administrative support	31,843	32,849	3.2
Service occupations	14,115	14,239	0.9
Precision production,			
craft, and repair	12,814	13,268	3.5
Operators, fabricators,			
and laborers	16,618	17,132	3.1
Farming, forestry, and			
fishing	3,365	3,393	0.8

The administrative support subsector, which includes clerical workers, grew by only about 2 percent over the year, while, in a development linked to recovery in the industrial sector, handlers, equipment cleaners, helpers, and laborers saw an employment increase of 5.1 percent.

# Nonfarm payroll employment

The number of nonagricultural jobs surged in the first half of 1984, sustained by the strong cyclical recovery. Growth continued at a somewhat slower pace during the second half, as the job total reached 95.5 million by yearend, surpassing the recession trough by 6.8 million employees. All in all, 2 years of economic recovery added about two and one-half times the number of payroll jobs lost during the 1981–82 recession. Virtually all of that recession loss, however, occurred in the goods-producing sector, while two-thirds of the recovery gains took place in the service-producing sector. Indeed, goods-sector jobs were still slightly short of their pre-recession peak at the end of 1984. Employment growth in the goods sector essentially stalled during the second half, as the service sector accounted for almost 85 percent of payroll additions. (See table 2.)

Despite a less heady pace of job growth, the recovery was still producing solid job gains, particularly when viewed in comparison with other post-World War II recoveries. Because the depth and duration of the 1973–75 recession were quite similar to those of the 1981–82 recession, the recovery beginning in 1975 provides a useful benchmark

		1983	1984				
Industry	IV	IV	ı	11	111	IV <sup>1</sup>	
Total	88,713	91,686	92,765	93,790	94,560	95,480	
Total private	72,877	75,817	76,896	77,884	78.562	79,365	
Goods-producing	22,968	24,050	24,518	24,862	25,056	25,147	
MiningOil and gas extraction	1,030 652	967 603	977 607	994 618	1,015 636	1,009 645	
ConstructionGeneral building contractors	3,828 959	4,068 1,065	4,177 1,103	4,292 1,124	4,362 1,135	4,407 1,148	
Manufacturing	18,110	19,016	19,364	19,576	19,679	19,731	
Dirable goods Lumber and wood products Furniture and fixtures. Stone, clay, and glass products Primary metal industries. Blast furnaces and basic steel products Fabricated metal products Chinery, except electrical Currical and electronic equipment Fransportation equipment Motor vehicles and equipment Struments and related products Scellaneous manufacturing	10,484 596 425 558 824 343 1,349 2,052 1,951 1,663 660 698 367	11, 169 694 466 589 870 351 1,420 2,102 2,109 1,836 825 705 379	11,432 707 479 602 875 347 1,448 2,151 2,176 1,893 862 715 386	11,600 712 483 605 883 346 1,469 2,206 2,226 1,909 853 721 386	11,719 706 483 604 875 333 1,489 2,246 2,261 1,942 872 726 388	11,784 713 491 609 864 320 1,499 2,252 2,275 1,961 881 731 389	
Nondurable goods Food and kindred products Tobacco manufactures Textile mill products Apparel and other textile products Paper and allied products Printing and publishing Chemical and allied products Petroleum and coal products Rubber and miscellaneous plastics products Pather and leather products	7,627 1,627 68 728 1,137 654 1,271 1,055 199 679 209	7,847 1,628 67 760 1,194 672 1,316 1,050 192 757 210	7,932 1,638 66 768 1,213 679 1,333 1,054 190 783 210	7,976 1,645 67 762 1,217 682 1,355 1,059 188 794	7,960 1,642 67 750 1,196 684 1,371 1,065 187 800 199	7,947 1,647 66 732 1,181 1,385 1,066 185 809	
Service-p-oducing	65,745	67,636	68,247	68,928	69,504	70,333	
Transportation and public utilities Transportation Communication and public utilities	5,022 2,734 2,288	5,050 2,772 2,279	5,104 2,828 2,276	5,145 2,872 2,273	5,197 2,919 2,278	5,229 2,957 2,272	
Wholesale trade Durable goods Nondurable goods	5,215 3,034 2,180	5,346 3,129 2,216	5,434 3,189 2,245	5,489 3,233 2,256	5,553 3,280 2,274	5,629 3,318 2,311	
Retail trade General merchandise stores Food stores. Automotive dealers and service stations Eating and drinking places.	15,188 2,141 2,512 1,633 4,869	15,800 2,188 2,594 1,703 5,083	15,975 2,217 2,623 1,738 5,123	16,169 2,273 2,635 1,748 5,179	16,307 2,307 2,645 1,758 5,235	16,586 2,366 2,693 1,771 5,304	
Finance, insurance, and real estate Finance Insurance Real estate	5,350 2,655 1,716 979	5,529 2,778 1,728 1,023	5,593 2,813 1,740 1,040	5,659 2,857 1,747 1,055	5,680 2,853 1,763 1,064	5,727 2,877 1,779 1,071	

ag the strength of the current expansion. When for see at growth in each recovery is indexed to the reemp special e cyclical trough, we find that relative employment growth for the current recovery has increasingly exceeded the post-1975 experience with each successive month. The pattern varies markedly by sector, however. In the goodsproducing sector, the post-1982 recovery had an extended ar growth than the earlier recovery, but it was period of f. marked by a pause in the rate of growth some 20 months into the recovery. In contrast, indices for the resilient ser-

vice-producing sector tracked closely until early 1984, when the rate of growth in this recovery quickened and surpassed the post-1975 index. The service-producing index accelerated again in the fourth quarter after hesitating slightly in the third. (See chart 1.)

20,560 3,968

6,066

15,906

2,778 3,697

21,047

4.138

6,105

16,115

2,792 3,728

20,770

4.063

6,066

15,998

2,789 3,712

20,273

3.839

6,041

15,869

2,764 3,679

20,042

6,016

15,869

2,760 3,668

19,134

3.288

5,888

15,837 2,743 3,642

9,451

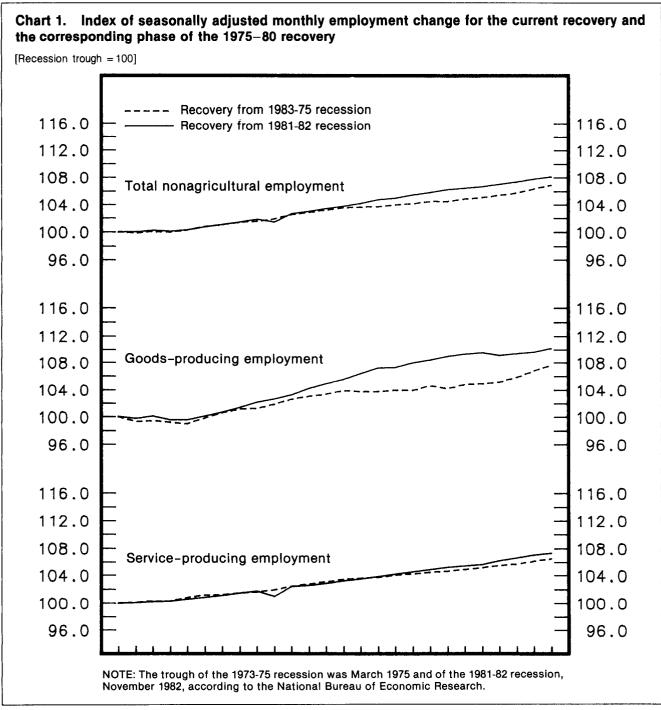
Service-producing sector. The service-producing sector gained 2.7 million jobs between the fourth quarters of 1983 and 1984, contributing 70 percent of the additions to total employment. This increase was led by vigorous growth in

Services

Government . .

Health services . .

<sup>1</sup>Data are preliminary



services and retail trade. The services division created more than a million jobs, well over one-third of the sector's increase. This division encompasses a diversity of industries—from hotels, entertainment, and recreation to business, health, educational, social, and legal services. While the services division as a whole continued its historical trend of secular growth, health services exhibited a lower rate of employment growth than in previous years. An actual decline in hospital employment in 1984 explains the slower pace, as hospitals streamlined management and staff in response to lower demand and pressure for more cost-effective health services.

Business services, one of the more cyclically sensitive of the service industries, led the division in both magnitude and rate of growth, making up 40 percent of the division's employment gain in 1984. A continuing upward trend in personnel supply services—particularly in temporary help—explained a substantial proportion of business services' growth, although the pace of growth in this industry was a bit slower than in 1983. The temporary help industry contributed about 1 in 30 of the additional private payroll jobs in 1984, down from 1 in 20 during earlier stages of the economic recovery. Temporaries are used by a variety of industries, not only to meet short-term labor shortages but

also to meet labor needs when employers are uncertain of the staying power of product demand. The use of temporaries declines as employers reassess their needs and add to their permanent work force.

Jobs in retail trade increased by 785,000 over the year. Eating and drinking places and general merchandise stores contributed about half the increase, with general merchandise showing the higher growth rate. Employment gains were particularly strong in the first and second quarters but tapered off in the third quarter as consumer spending flattened and retail sales lagged. By yearend, the pace picked up once again in anticipation of strong holiday sales.

In wholesale trade, a 280,000-increase was dominated by additional workers involved in the sale of durable goods, particularly in commercial and industrial equipment. First-quarter employment gains were particularly strong for cyclically sensitive durables and remained steady throughout 1984, despite a drop in the volume of sales after the second quarter.

Elsewhere in the service-producing sector, employment in transportation and public utilities added 180,000 jobs in 1984, bringing the industry total above its pre-recession peak. All of the increase occurred in transportation, with about half of it coming from trucking. Finance, insurance, and real estate jobs were also up 200,000. In contrast to previous years, employment in State and local government picked up as the economic recovery fueled greater tax revenues, but Federal employment remained essentially unchanged.

Goods-producing sector. The goods sector—construction and manufacturing, in particular—enjoyed a strong cyclical rebound early in the recovery and exhibited a higher rate of growth than the service-producing sector in the recovery's second through sixth quarters. The pace of growth moderated in the latter half of 1984, however, after a midyear climb in mortgage interest rates and an increasing volume of factory-made imports. By yearend, only construction had fully recovered the number of jobs lost during the previous recession, as manufacturing employment had recouped 75 percent of its job loss, and mining employment was still below the level recorded at the recession trough.

The moderation in goods-producing employment growth was reflected in the Bureau of Labor Statistics' diffusion index, which is heavily weighted toward manufacturing. Between 70 and 80 percent of the 186 composite industries registered job gains (over 3-month spans) during the first 2 quarters; the index hovered around 60 percent during the second half.

New jobs in construction grew at a less rapid pace in the second half, after a strong performance in the first and second quarters. The major weak spot in the construction market was in traditional single-family housing. Mortgage interest rates rose sharply in the spring, resulting in slower sales in the summer and a stalling in housing starts. These

factors weakened the demand for construction labor. Cushioning the construction slowdown in the last two quarters was a backlog in orders for new homes left over from the pent-up demand from recession years. Moreover, home mortgage rates had edged down by yearend, and an expansion in multifamily housing reflected some of the demand from new households that would have otherwise been for single-family dwellings.<sup>4</sup>

The construction industry added 340,000 workers to its payrolls over the course of 1984. Four-fifths of the increase was in the special trades industry, which includes plumbing, painting, electrical work, masonry, or concrete work. The pattern of job growth in special trades dominated the trend for construction as a whole, and most of the employment gains for both series occurred in the first half. At yearend, construction employment had regained 170 percent of the jobs lost during the recession.

The rebound in manufacturing employment by the end of 1984 had been almost entirely within durable goods, while most of the less cyclical nondurables industries showed little or no growth. The moderation of job gains in the last half appeared to be associated with the widening merchandise trade deficit. Stimulated by the strength of the dollar abroad, the volume of imports grew throughout 1984, with virtually all of the increase in factory-made products. Paradoxically, the usual efforts of domestic manufacturers to remain competitive did not stimulate factory job growth at home as much as might have been expected. The investment in more modern equipment to increase productivity would normally benefit industries such as machinery, electrical and electronic equipment, and fabricated metal products because of increased demand for their products. In 1984, however, the capital investment dollar was worth more when spent on equipment produced overseas.

Foreign competition alone, however, did not explain the pause in durable goods' job growth. The overriding factor was the cooling of a heated recovery. New orders for durable goods failed to post big gains after the first quarter, and factory output flattened, particularly in durables. The rate of growth in gross national product faltered with industrial production. Durable goods employment increased 430,000 from fourth quarter 1983 to second quarter 1984, or 3.9 percent; the second-to-fourth quarter increase was only 180,000 workers, or 1.6 percent.

Despite the weakness in the hard-goods sector during the second half, durables posted a 600,000-gain in jobs over the year. Eighty-five percent of the increase came from additions in fabricated metal products, machinery, electrical and electronic equipment, and transportation equipment. The electrical equipment and machinery industries added the most workers, both numerically and on a percentage basis. Employment gains in machinery reflected the increased demand for construction, metalworking, and general industrial machinery, as well as for office equipment. The iob gain in the electrical and electronic equipment industry

was concentrated in electronic components and accessories, a "feeder" industry to other high technology products. Spurred by growth in this component, the employment level in electrical and electronic equipment continued to set new records in 1984, while other major growth industries within durables made marked progress toward previous peaks. For example, the transportation equipment industry added 125,000 workers over the year. Reflecting the economy's deceleration, three-fifths of employment increases in the four fast-growing durable industries were added in the first half.

Foreign competition played a more obvious role in the primary metals industry, the only major durable goods industry to post a decline in jobs over the year. There was a noticeable loss of around 30,000 jobs over the year in the struggling steel and blast furnace products industry. While steel demand was blunted only briefly by the short auto strikes in the third quarter, the decline in employment was fairly steady throughout the year.

Employment in construction-related industries was not particularly strong, despite a booming first half in the construction industry itself. Lumber and wood products, furniture and fixtures, and stone, clay and glass added few workers to payrolls after the first quarter. By yearend, lumber and furniture industries had recovered more jobs than were lost in the 1981–82 recession, but levels in all three industries remained below historical peaks.

Nondurables as a whole showed virtually no job growth, as small gains in the first half were countered by actual declines in the second half. Four industries—textiles, apparel, petroleum, and leather—experienced employment declines for the year. Demand for domestic products in these industries was also abated by the increasing volume of imports. Employment increases in printing, along with rubber and miscellaneous plastics, helped to offset the stagnation in other nondurables. Gains in printing were steady throughout the year. Employment in rubber and miscellaneous plastics, however, is driven by demand in the construction and auto industries; as a result, growth was concentrated in the first half.

Unlike other industries in the goods-producing sector, mining experienced moderate, steady employment gains up through the third quarter of 1984. Virtually all of the mining division's increase came from oil and gas extraction, although the number of jobs remained short of the 1982 peak. Since 1982, the demand for oil has weakened, while lower oil prices have left less incentive for increasing exploration and employment.

Automobiles and steel. The automobile and steel industries are often mentioned together as the prototypes of industries bearing the costs of "restructuring" the U.S. economy. However, there are significant differences in the way the two have been affected by the business cycles of the early 1980's. The two sketches here highlight the similarities, the

differences, and their effect on industry employment.

For the past half century, the automobile industry has been a central element of the U.S. economy. Its impact on other industries is profound—for each job in the automobile industry there are about 2 associated jobs in the rest of the economy.<sup>5</sup> The three largest auto manufacturers rank 2, 9, and 38 on Fortune magazine's listings of the Nation's largest industrial corporations. Since the employment peak in the late 1970's, however, there have been a number of developments that have led to a deterioration in the relative position of the industry. Most obvious has been the effect of the back-to-back recessions of the early 1980's. Consumer durables manufacturing, such as for autos, has traditionally been sensitive to poor economic conditions, as consumers hedge against lower incomes by deferring "big ticket" purchases. This had tended to lengthen the average useful life of existing cars and lower demand for new autos. Postbaby-boom demographic patterns have slowed the long-term growth of the number of new motorists. In addition, as a private study of changes affecting the U.S. auto industry notes, a "shift in competition from styling to technology and quality has challenged the existing competitive strengths of domestic producers. . . . at the same time that foreign competitors have increased their presence markedly."6

The result of these changes has been a steep decline in the number of jobs in the automobile industry. After peaking at just over a million payroll jobs in the last quarter of 1978, auto employment plummeted to 660,000 at the fourth quarter 1982 trough. Despite the sharp recovery, in part due to strong consumer demand in 1984, payroll jobs in the industry-875,000 at the end of 1984-were still far below the level of 6 years before. Similarly, the unemployment rate for automobile manufacturing averaged slightly more than 4 percent in 1978, rose to more than 20 percent during the recession year of 1982, and in the final quarter of 1984 averaged about 6.5 percent. In should be noted that unemployment rates were lower in the first quarter—just under 6 percent—before starting to rise again. That the unemployment rate in the auto industry has roughly paralleled general labor force developments is in significant contrast to recent developments in the steel industry.

Throughout the late 1970's and into the 80's, the international steel industry has experienced severe change. World capacity has diversified geographically and now exceeds annual consumption needs by as much as 180 million tons. Technological change in production methods has radically altered the balance among the subsectors of the steel industry. Changes in demand for, and economies in the production of, final goods that are particularly steel intensive—for example, automobiles—have limited the demand for steel products.

Despite the vast size of its domestic market, the U.S. steel industry has not been isolated from these international trends. A combination of recession in the early 1980's, a change in the ratio of steel consumption to gross national

product (including the "downsizing" of autos), and intense international competition has contributed to a complex restructuring of the U.S. steel industry. Between 1977 and 1984, the overall capacity of the steel industry fell by 16 percent. By the first quarter of 1984, imports accounted for about one-fourth of raw steel consumption in the U.S. market, up from 18 percent in 1977. Within the industry, "minimill" production techniques have grown from a 3-percent share of output in 1960 to about one-fifth currently. Over roughly the same period, the market share of the major integrated steel firms shrank from about four-fifths in the 1950's and early 1960's to just over one-half in 1983.

The structural changes affecting the steel industry have had significant consequences for employment. While the increases in raw steel production rates between 1982 and 1984 would normally have suggested a general increase in payroll employment, such has not been the case. From the trough of the 1981-82 recession (November 1982) to December 1983, the steel industry had only recovered 5 percent of the jobs lost during the downturn, and 1984 saw job levels fall by about 30,000. While it is true that the unemployment rate, as measured by the Current Population Survey, has fallen in the "blast furnaces, steel-works, rolling and finishing mills" industrial category, this undoubtedly reflects a transfer of labor away from the steel industry, rather than increased employment; that is, unemployed steel workers may have taken jobs in other industries or withdrawn from the labor force entirely.

# Hours of work

After steady increases throughout 1983, the factory workweek peaked at 41 hours in the early months of 1984; this level represented the longest workweek in manufacturing since 1967. The pattern of increase was partly a result of increasing factory overtime hours, which rose to a 1984 peak of 3.7 hours early in the second quarter. Employers often change hours of work in the short run to reconcile production schedules with the current number of workers. Adding employees to the payroll is a costly process, more costly than overtime hours if the increase in product demand is to be only transitory. If the increased level of production is viewed as more permanent, the employer will add workers to reduce overtime hours. As a result, employment will continue to increase after hours have begun to decline. This pattern was evident in hours and employment for manufacturing in 1984, particularly within the durable goods sector. While hours retreated from the first quarter peak, they remained at historically high levels.

The aggregate hours index is a comprehensive measure of labor input, taking into account both the number of production or nonsupervisory employees on nonfarm payrolls and their weekly hours. The index for the total private sector rose by 3.3 percentage points in the first six months, reflecting the strength in employment and hours for goods-

producing industries and employment gains in the services sector. The index continued to edge up in the second half, buoyed by continued job growth in the services sector. The total private index ended the year at 114.5, a full 12 points above the previous recession trough.

Full- and part-time workers. Four of every 5 nonagricultural workers in the United States are employed full time—that is 35 hours or more a week. The remaining workers, those at work part time, totaled 18 million in the fourth quarter. Most of these (70 percent) worked part time voluntarily, or for noneconomic reasons. However, 5.5 million were at work on part-time schedules for economic reasons. These persons either wanted a full-time job but could not find one or usually worked full time but had had their hours cut back in response to unfavorable economic conditions.

The number of persons working part time for economic reasons had doubled from its late-1978 level to reach 6.4 million by the fourth quarter of 1982. Seventy percent of the 900,000-improvement since then took place during 1983.

While the number of persons involuntarily on short work-weeks moves in a cyclical fashion, changes in the number of voluntary part-timers are not particularly cyclical but rather follow a fairly narrow secular growth trend. Over the 4 quarters ending in late 1984, there was less than 1 percent growth in the number of voluntary part-time workers in nonagricultural industries, despite a 4-percent increase in persons on full-time schedules. Voluntary part-timers accounted for about 13 percent of nonagricultural workers in the fourth quarter, down slightly from their 14-percent employment share in 1977.

Although only about 20 percent of employed women were voluntary part-timers in late 1984, they accounted for close to 60 percent of persons in all industries on voluntary part-time schedules. Men and teenagers fairly evenly made up the remaining 40 percent. These proportions have changed over the last few years, as more women have joined both the part-time and full-time labor forces, while the number of teenagers in the labor force has declined. This decline is especially relevant to the part-time employment issue, because about half of all working teens were on voluntary part-time schedules in 1984. Teenagers who work part time average about 17 hours per week, compared with a 20-hour average for adults.

#### Labor force growth

The civilian labor force—the employed and the unemployed—grew in 1984, but by less than 2 percent. Both 1983 and 1984 have been years of slow labor force growth when compared to similar periods of recovery in the 1970's. For instance, the second year of recovery from the 1969—70 downturn saw a labor force increase approaching 3 percent. (The highest fourth-quarter-to-fourth-quarter labor force gains of the 1970's were recorded in 1972—73 and 1976—

77, at 3.3 percent.) Contributing to the slower growth of the labor force was a decline in the number of teenagers in the labor force. This was a reflection of the long-term decline in the teenage population as the baby boom generation passed into adulthood, to be followed by a generation characterized by very low birth rates—the so-called "baby-bust" generation.

After a year and a half of rather sluggish increases in labor force participation, women registered a 0.6-percentage-point increase in their labor force participation rate, ending 1984 with 53.9 percent of their population working or looking for work. Men had virtually no change in labor force participation in 1984, nor did teenagers.

# **Discouraged workers**

Persons who are neither working nor looking for work are considered to be not in the labor force. Of the 63 million nonparticipants in the final quarter of 1984, about 1.3 million were "discouraged workers." These persons reported that they wanted a job but were not looking for work because they believed they could not find it. While the number of discouraged workers follows the cyclical movements in unemployment, the discouraged are not included in the count of the unemployed, because, unlike the unemployed, they have not looked for work during the 4-week period preceding the survey week. Indeed, they need not ever have actually tested the job market to be included in the category.

The total of discouraged workers peaked in the final quarter of 1982 at 1.8 million. The following shows the number of discouraged, seasonally adjusted in thousands, at the two most recent business cycle peaks (P) and troughs (T) and for the past 5 quarters.

		Total	Job market	Personal
		discouraged	factors	factors
1980:	I (P)	954	592	362
	Ш (т)	1,008	697	311
1981:	III (P)	1,106	820	286
1982:	IV (T)	1,813	1,390	423
1983:	IV	1,447	1,044	404
1984:	I	1,350	939	411
	II	1,275	928	348
	III	1,211	885	326
	IV	1,303	935	368

The majority of discouraged workers cite job market factors, rather than personal factors—such as age or lack of education or skills—as their reason for not looking for work. The proportion citing job market factors has been in the 70-to-80 percent range over the past 3 years, with the 80-percent figure being registered in the first quarter of 1983, just after the recessionary trough. Over the most recent 4 quarters, the number of discouraged declined by about 130,000, with decreases occurring among the job-market discouraged and those discouraged by personal factors.

About 3 of every 5 discouraged workers are women.

Interestingly, this proportion changed little over the course of the most recent recession, even though cyclical unemployment changes tend to be more pronounced among men than women. Blacks also make up a disproportionately large share of the discouraged and in the fourth quarter accounted for more than 35 percent of the total. There was no decline in the number of black discouraged workers over the year.

# Workers in families

Most labor force participants live in family units. About 65 percent of the labor force in 1984 consisted of persons responsible for their family units, including those with no spouse present (mainly women). An additional 20 percent consisted of relatives, generally teenagers and young adults living with their parents. Thus, only about 15 percent of the labor force were not in family units—fewer than 10 percent who lived alone and 6 percent who lived with others, such as housemates.

With the overwhelming proportion of the population living in family units and the growing number of women in the labor force has come an increase in the number of multiworker families. In 1984, 44 percent of all married-couple families had both a husband and wife employed. This was up from 39 percent just 7 years earlier. A large number of the remaining married-couple families had two or more workers other than a husband/wife combination, while others were of retirement age and had no workers at all.

As employment grew in 1984, so did the proportion of multi-worker families. In the fourth quarter, the proportion of employed persons who were the sole support of their families was 24 percent, down about a percentage point from 1983. This proportion has been edging downward over time—despite some increases during recessionary periods. Over the last 7 years, the decline has totaled 4 percentage points.<sup>9</sup>

The decline in joblessness over the year reduced the proportion of families that had an unemployed member. In the fourth quarter, just under 10 percent of all families had someone unemployed, down from 11 percent the year earlier and 14 percent at the end of 1982. Moreover, the rising incidence of multi-worker families means that many of these families also had an employed family member. The effect of unemployment within a family is often mitigated by the presence of other workers and may also be minimized by the receipt of unemployment compensation, which about one-third of the jobless in 1984 claimed.

These cushioning effects were not available to all the unemployed, however. In the fourth quarter, about 33 percent of the unemployed living in families had no employed person in the family. (Data on the proportion with *neither* another family member employed nor receiving unemployment compensation are not available.) While less than 20 percent of the unemployed wives in late 1984 had no workers in their family, such was the case for almost 45 percent

of the unemployed husbands. Men and women who maintain families alone were much more likely to be their family's sole support. About 70 percent of the unemployed men who maintain families and 80 percent of the women had no employed person in their family.

It should also be noted that unemployment may be dual in families. For instance, while husbands overall had a jobless rate of 4.1 percent in the fourth quarter, those with an unemployed wife had a jobless rate of more than 13 percent. Similarly, wives as a whole had an unemployment rate of 5.2 percent, but it was about 17 percent for those whose husbands also were looking for work. There were about 175,000 couples with dual unemployment, considerably less than in the recession years.

The likelihood of a woman participating in the labor force is greatly influenced by her age and marital status, and by whether she has children. For instance, more than 80 percent of never-married women ages 25 to 34 were in the labor force in the final quarter of 1984. The proportion drops to about 65 percent for married women in the same age group. The presence of young children, not surprisingly, tends to lower participation still further. Among married women of all ages, those with preschoolers had a participation rate of about 55 percent, compared with 67 percent for those with children in school. The effect of young children in the family was even larger among women who maintain families, where there is a 20-point participation rate difference between those with preschoolers and those with school-age children. In general, divorced women are the most likely to participate in the labor force and widows the least likely; no doubt the average age of 59 years for the latter group is an important factor.

Perhaps what is of most importance is not that labor force participation rates of mothers with young children are lower than those of women with older children, but rather that participation rates of mothers are so high. What is more, the largest increases in labor force participation have been among mothers with young children. In fact, the participation rate for married women with children under 6 grew by nearly 10 points in just 5 years and in 1984 far exceeded the rate for wives with no children present. (It should be noted that the wives without children tend to be older than the mothers, although certainly most were pre-retirement age and a number were young newlyweds.) Only the participation rates of widowed and divorced women have shown little growth.

## **Black workers**

The labor market situation for black workers has improved notably over the past 2 years. The unemployment rate for blacks, at 15.1 percent in the fourth quarter of 1984, declined by more than 2.5 points over the year and by more than 5 points from its all-time high, set in late 1982. The ratio of black-to-white unemployment, at 2.4 to 1, remained historically high, however.

Another way to view the differences in the unemployment rates for blacks and whites is by comparing their late-1984 levels to those registered in the first quarter of 1977; both of these periods came 8 quarters into recoveries from long and deep recessions. While the rate for white workers was, in fact, lower than it had been at the same point in the post-1974-75 recession recovery, the jobless rate for blacks at the end of 1984 remained above their 1977 level. One reason that unemployment among blacks is still higher than during the earlier recovery period is that blacks experienced essentially one long, hard recession, lasting from early 1980 through late 1982, while white workers experienced a 1year period of partial recovery (from the third quarter of 1980 to the third quarter of 1981). Hence, the unemployment rate for blacks at the "official" business cycle peak in the third quarter of 1981 was even higher than that registered during the "official" recessionary trough a year earlier. (See

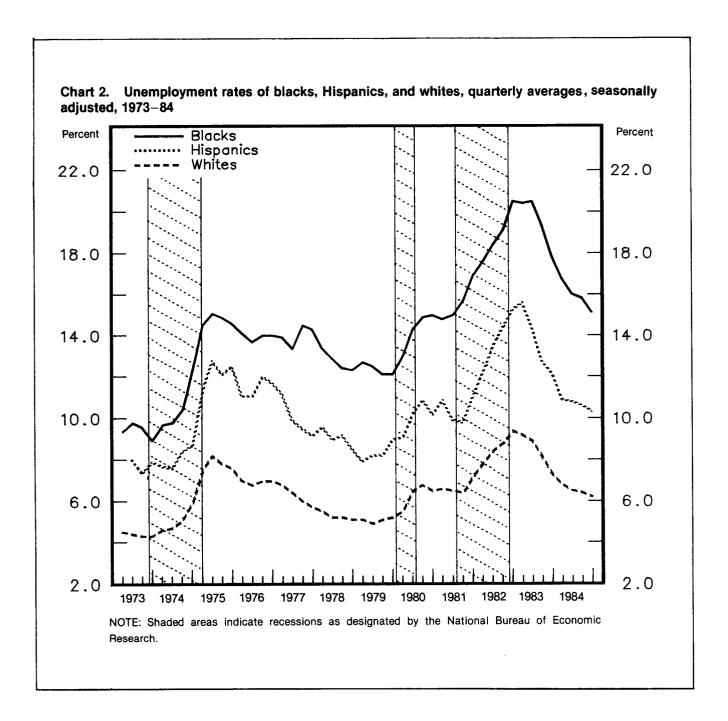
The jobless rate for black men, at 13.1 percent in late 1984, had fallen by about 7 points from its recession peak. Joblessness among white men only dropped about 3.5 percentage points but, at 5.4 percent, was substantially below the national average. Unemployment among black women, like that of white women, is less cyclical, meaning less prone to the ups and downs of the business cycle, than that of their male counterparts. The late-1984 rate for black women of 13.2 percent was about 4 points below the recession high but was substantially higher than the 5.6 percent registered for white women.

Nearly half of all black teenagers in the labor force in late 1982 were unemployed, and no improvement occurred during the next year. By late 1984, their unemployment rate dropped to 41 percent, about matching the level in 1977. Interestingly, white teenagers, like black teens and adults, showed no improvement in joblessness during the 1980–81 recovery. But the unemployment rate for white teens declined in both 1983 and 1984. By late 1984, their rate was down to 15.6 percent; hence, black teens were 2.6 times as likely as white teens to be unemployed.

The actual number of unemployed blacks rose from about 1.3 million before the 1980 recession to 2.4 million in the second quarter of 1983 and receded to 1.9 million by late 1984. About 200,000 of that decline took place in 1984.

On the employment side, the count dropped from 9.5 million before the 1980 recession to 9.2 million by late 1982 and then grew to 10.4 million by late 1984. Most of the improvement—about 850,000—took place over the last 4 quarters.

The ratio of employment-to-population, by telling us what proportion of the population is employed, helps put employment changes into perspective in a setting of a continually growing population. About 53 percent of all workingage blacks in the civilian population were employed in late 1984; among whites, the proportion was 61 percent. Much of the difference can be attributed to a 10-point gap in the



ratios for black and white men—65 versus 75 percent. The ratios for men decline due both to economic downturns and earlier retirements.

Unlike their male counterparts, black women historically have had higher employment ratios than white women. But faster labor force growth among white women has brought their ratios to about the same level—50 percent. That high mark, representing a record for both groups of women, resulted from steady labor force participation during the recessionary period and a resumption of growth during the recovery.

As indicated earlier, the population of teenagers has been shrinking. For black teens, the decline began in 1981 and for white teens, in 1978. Both 16-to-19-year-old groups contracted by about 3 percent during 1984. But the number of employed black teens actually grew by almost 100,000 during 1984, raising their employment-population ratio nearly 5 points, to 23 percent. The employment of white teens was about unchanged, and when combined with the decrease in their population, their employment ratio rose, albeit by only 1 percentage point. Perhaps of more significance, however, is the fact that the employment ratio for black teens remains

less than half that of white teens, whose ratio was 48 percent in late 1984.

The kinds of jobs held by black workers are quite different from those of whites. One-third of black men worked as machine operators, fabricators, and laborers in 1984, compared to one-fifth of white men. (See table 3.) Close to 20 percent of black men were in service occupations, twice the proportion of whites. Black men were underrepresented in all other fields, with about 15 percent in precision production, craft, and repair—compared to more than 20 percent of white males—and 12 percent in managerial and professional specialty jobs—compared to about 25 percent among whites.

The occupational distribution of black women also was notably different from that of their white counterparts. About 30 percent of the black women were in service occupations, in which fewer than one-fifth of white women worked. Like black men, black women were overrepresented as operators, fabricators, and laborers. While more than a third of the black female workers held jobs in the technical, sales, and administrative support category, nearly half of all white women were so employed. For both black and white women, administrative support including clerical jobs accounted for the majority of these positions. Black women were underrepresented in both managerial and professional specialty occupations. Only 2.5 percent of working black women or white women held precision production, craft, and repair jobs.

## Hispanic workers

Like other worker groups, persons of Hispanic origin shared in the economic recovery of the last 2 years, as their jobless rate dropped from 15.3 to 10.3 percent. In fact, the fourth-quarter 1984 figure compares favorably with the rate posted 2 years into the recovery from the 1973–75 recession. The labor market situation for Hispanic workers more or less paralleled the course of the business cycle, with two separate recessionary periods during the 1980's. The ratio of Hispanic-to-white unemployment rates was 1.7 to 1 in late 1984; that relationship has not altered appreciably since the inception of the Hispanic unemployment data series more than 10 years ago.

Hispanic men, women, and teenagers all exhibited substantial unemployment rate declines during the recovery from the latest recession. Between the fourth quarters of 1982 and 1984, the jobless rate for Hispanic men fell from 12.9 to 8.6 percent. For women, the rate dropped from 13.7 to 9.5 percent, and for teens, unemployment fell from 31.6 percent to 21.9 percent. (These data are not available on a seasonally adjusted basis and hence are not fully comparable with those shown for whites and blacks in table 1.)

The nearly 10 million working-age persons of Hispanic origin residing in the United States (excluding Puerto Rico) accounted for 5.6 percent of the overall population. The largest of the Hispanic ethnic groups was persons of Mexican origin, with 60 percent of the Hispanic total. The job-

Table 3. Employed civilians by occupation, sex, race, and Hispanic origin, 1984 annual averages [Percent distribution]

		Me	n			Won	ien	
Occupation		White	Black	Hispanic origin	Total	White	Black	Hispanic origin
Total, 16 years and over (thousands)	59,091 100.0	52,462 100.0	5,123 100.0	3,359 100.0	45,915 100.0	39,659 100.0	4,995 100.0	2,320 100.0
Managerial and professional speciality. Executive, administrative, and managerial. Professional speciality	24.6 13.0 11.6	25.7 13.7 12.0	12.3 6.3 6.1	12.0 7.1 4.9	22.5 8.5 14.0	23.3 8.9 14.4	15.8 5.2 10.6	12.1 5.1 7.0
Technical, sales, and administrative support. Technicians and related support. Sales occupations	19.6 2.8 11.1 5.7	20.0 2.8 11.8 5.4	15.0 1.9 4.6 8.5	15.2 2.0 7.1 6.1	45.6 3.3 13.1 29.1	46.9 3.3 13.9 29.8	36.5 3.3 7.8 25.3	41.3 2.3 11.4 27.6
Service occupations Private household Protective service Service, except private household and protective	9.4 .1 2.5 6.8	8.4 .1 2.3 6.0	18.4 .1 4.1 14.2	13.8 .1 1.8 11.9	18.7 2.1 .5 16.2	17.2 1.6 .4 15.2	30.8 5.9 .8 24.0	23.0 3.9 .5 18.6
Precision production, craft, and repair	20.2	20.8	15.8	21.1	2.4	2.4	2.6	4.4
Operators, fabricators, and laborers  Machine operators, assemblers, and inspectors.  Transportation and material moving occupations  Handlers, equipment cleaners, helpers, and laborers	8.0	20.0 7.6 6.6 5.8	33.6 11.4 11.2 11.0	29.4 12.7 7.1 9.7	9.6 7.1 .8 1.6	8.9 6.5 .8 1.6	13.9 11.0 1.0 1.8	17.5 14.3 .6 2.6
Farming, forestry, and fishing	5.1	5.2	4.9	8.5	1.2	1.3	.5	1.8

<sup>1</sup>Less than 0.05 percent.

Note: Detail for the above racial and Hispanic-origin groups will not sum to totals because data for the "other races" groups are not presented, and Hispanics are included in both the white and black population groups.

less rate for persons of Mexican origin (at 9.9 percent) was between that of workers of Puerto Rican origin (13.8 percent) and those of Cuban origin (7.3 percent). Cuban workers tend to be older and better educated than other Hispanics.

Employment among Hispanics, which had fallen by about 400,000 during the latest recession, has since grown by 700,000. Their employment-population ratio reached 58 percent—still shy of the 60-percent high posted in early 1979—but nonetheless substantially above the recessionary level of 54 percent.

The jobs Hispanic men hold are, with only a few exceptions, quite similar to those of black men. (See table 3.) Like blacks, Hispanic men in 1984 were overrepresented as machine operators, fabricators, and laborers, and in service occupations, while their numbers in managerial and professional specialty positions and sales occupations were relatively small. However, like white men, one-fifth of Hispanic males held precision production, craft, and repair jobs. About 9 percent of Hispanic men worked in farming, forestry, and fishing, a category which accounts for only about 5 percent of white men and black men.

The occupational distribution of Hispanic women is not especially like that of either white women or black women. Slightly more than one-fourth provided clerical and administrative support and just under one-fourth worked in service occupations. The next largest group of Hispanic female workers was machine operators, fabricators, and laborers—particularly textile, apparel, and furnishings machine operators, among whom Hispanics hold a disproportionately large share of the jobs. Hispanic women were especially poorly represented in the professional specialty category, as well as in executive, administrative, and managerial jobs.

IN SUMMARY, it would be accurate to call 1984 a year of strong employment gains—about 3 million more people had jobs by the end of the year than were employed a year earlier. However, employment growth did pause in the summer months before advancing again in the last quarter. Whether this moderate growth will continue will be the employment story for 1985.

----FOOTNOTES-----

<sup>1</sup>The Current Population Survey is conducted monthly by the Census Bureau on behalf of the Bureau of Labor Statistics. The survey is conducted among a scientifically selected sample of about 60,000 households and provides information on labor force, employment, and unemployment by a variety of demographic and economic characteristics.

Data from the Current Employment Statistics program are collected from the payroll records of nearly 200,000 nonagricultural establishments by the Bureau of Labor Statistics in cooperation with State agencies. This survey provides estimates of the number of persons on business payrolls, their average hours of work, and their average hourly and weekly earnings.

<sup>2</sup>The business cycle as identified by the National Bureau of Economic Research.

<sup>3</sup> See Business Week, July 9, 1984, p. 83, for a summary of contrasting opinions on this issue. See Barry Bluestone, and Bennett Harrison. The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry (New York, Basic Books, 1982); and Robert Z. Lawrence, Can America Compete? (Washington, The Brookings Institution, 1984) for elaboration of the arguments.

<sup>4</sup>See "Housing Heads for a Soft Landing," *Business Week*, Sept. 17, 1984, pp. 38–39. Additional information on housing starts and construction expenditures is available from the U.S. Department of Commerce, Bureau of the Census.

<sup>5</sup>Based on unpublished Employment Requirements Tables developed by the Office of Economic Growth and Employment Projections, Bureau of Labor Statistics.

<sup>6</sup> Jeffrey Allen Hunker, Structural Change in the U.S. Automobile Industry (Lexington, MA and Toronto: Lexington Books, 1984), p. 2.

<sup>7</sup>Congressional Budget Office, The Effects of Import Quotas on the Steel Industry (Washington, Congressional Budget Office, 1984), pp. 16, 6, and 4. See also Patricia A. Daly, formerly a BLS economist, "The Steel Industry," 1983 (unpublished).

<sup>8</sup>For more information about discouraged workers, see Paul O. Flaim, "Discouraged workers: how strong are their links to the job market?" *Monthly Labor Review*, August 1984, pp. 8-11.

<sup>9</sup>These family data are available on a quarterly basis beginning with the second quarter of 1976. They are not available seasonally adjusted.