

# EMPLOYMENT-UNEMPLOYMENT

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## HEARINGS

BEFORE THE

### JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

NINETY-EIGHTH CONGRESS

FIRST SESSION

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#### PART 24

JULY 8, AUGUST 5, OCTOBER 7, NOVEMBER 4,  
AND DECEMBER 2, 1983, AND JANUARY 6, 1984

[Hearing day of September 2, 1983, of this series, was not held due  
to Congress not being in session on that respective date]

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1984

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# CONTENTS

## WITNESSES AND STATEMENTS

FRIDAY, JULY 8, 1983

	Page
Hamilton, Hon. Lee H., vice chairman of the Joint Economic Committee: Opening statement.....	1
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, Department of Labor, accompanied by Thomas J. Plewes, Associate Commissioner, Office of Employment and Unemployment Statistics.....	2

FRIDAY, AUGUST 5, 1983

Jepsen, Hon. Roger W., chairman of the Joint Economic Committee: Opening statement.....	41
Proxmire, Hon. William, member of the Joint Economic Committee: Opening statement.....	42
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, Department of Labor, accompanied by Thomas J. Plewes, Associate Commissioner, Office of Employment and Unemployment Statistics; and Kenneth V. Dalton, Associate Commissioner, Office of Prices and Living Conditions.....	42

FRIDAY, OCTOBER 7, 1983

Lungren, Hon. Dan, member of the Joint Economic Committee, presiding: Opening statement.....	79
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, Department of Labor, accompanied by Thomas J. Plewes, Associate Commissioner, Office of Employment and Unemployment Statistics; and Kenneth V. Dalton, Associate Commissioner, Office of Prices and Living Conditions.....	80
Mitchell, Hon. Parren J., member of the Joint Economic Committee: Opening statement.....	104

FRIDAY, NOVEMBER 4, 1983

Wylie, Hon. Chalmers P., member of the Joint Economic Committee; presiding: Opening statement.....	115
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, Department of Labor, accompanied by Thomas J. Plewes, Associate Commissioner, Office of Employment and Unemployment Statistics; and Kenneth V. Dalton, Associate Commissioner, Office of Prices and Living Conditions.....	116

FRIDAY, DECEMBER 2, 1983

Lungren, Hon. Dan, member of the Joint Economic Committee, presiding: Opening statement.....	173
Proxmire, Hon. William, member of the Joint Economic Committee: Opening statement.....	175
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, Department of Labor, accompanied by Thomas J. Plewes, Associate Commissioner, Office of Employment and Unemployment Statistics; and Kenneth V. Dalton, Associate Commissioner, Office of Prices and Living Conditions.....	176

IV

FRIDAY, JANUARY 6, 1984

	Page
Lungren, Hon. Dan, member of the Joint Economic Committee, presiding: Opening statement.....	213
Norwood, Hon. Janet L., Commissioner, Bureau of Labor Statistics, Department of Labor, accompanied by Thomas J. Plewes, Associate Commissioner, Office of Employment and Unemployment Statistics; and Kenneth V. Dalton, Associate Commissioner, Office of Prices and Living Conditions.....	215

SUBMISSIONS FOR THE RECORD

FRIDAY, JULY 8, 1983

Norwood, Hon. Janet L., et al.:	
Table reflecting unemployment rates of all civilian workers by alternative seasonal adjustment methods .....	4
Press release No. 83-291 entitled "The Employment Situation: June 1983," Bureau of Labor Statistics, Department of Labor, July 8, 1983.....	6

FRIDAY, AUGUST 5, 1983

Norwood, Hon. Janet L., et al.:	
Table reflecting unemployment rates of all civilian workers by alternative seasonal adjustment methods .....	44
Press release No. 83-340 entitled "The Employment Situation: July 1983," Bureau of Labor Statistics, Department of Labor, August 5, 1983 .....	46
Response to Senator Proxmire's request to supply the number of persons unemployed 27 to 51 weeks and 52 weeks or more.....	74

FRIDAY, OCTOBER 7, 1983

Norwood, Hon. Janet L., et al.:	
Table reflecting unemployment rates of all civilian workers by alternative seasonal adjustment methods .....	82
Press release No. 83-431 entitled "The Employment Situation: September 1983," Bureau of Labor Statistics, Department of Labor, October 7, 1983 .....	84

FRIDAY, NOVEMBER 4, 1983

Norwood, Hon. Janet L., et al.:	
Table reflecting unemployment rates of all civilian workers by alternative seasonal adjustment methods .....	118
Press release No. 83-472 entitled "The Employment Situation: October 1983," Bureau of Labor Statistics, Department of Labor, November 4, 1983 .....	121
Response to Representative Wylie's request to supply a review of the different estimates of the full employment-unemployment rate or the non-inflationary-unemployment rate.....	152
Response to Representative Wylie's query regarding the last time the Nation had a significant reduction in unemployment in a single year.....	164

FRIDAY, DECEMBER 2, 1983

Norwood, Hon. Janet L., et al.:	
Table reflecting unemployment rates of all civilian workers by alternative seasonal adjustment methods .....	178
Press release No. 83-512 entitled "The Employment Situation: November 1983," Bureau of Labor Statistics, Department of Labor, December 2, 1983 .....	180
Tabular response to Senator Proxmire's request to supply for the record the number of discouraged workers currently outside the labor force who intend to seek work in the near future .....	202

FRIDAY, JANUARY 6, 1984

	Page
Norwood, Hon. Janet L., et al.:	
Table reflecting unemployment rates of all civilian workers by alternative seasonal adjustment methods .....	217
Press release No. 84-5 entitled "The Employment Situation: December 1983," Bureau of Labor Statistics, Department of Labor, January 6, 1984 .....	219

## EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JULY 8, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 9:30 a.m., in room 2322, Rayburn House Office Building, Hon. Lee H. Hamilton (vice chairman of the committee) presiding.

Present: Representative Hamilton and Senator Proxmire.

Also present: Mary E. Eccles and Mark R. Policinski, professional staff members.

### OPENING STATEMENT OF REPRESENTATIVE HAMILTON, VICE CHAIRMAN

Representative HAMILTON. The hearing will come to order.

Welcome, Commissioner Norwood. Let me begin by extending my congratulations to you on your reappointment as the Commissioner of the Bureau of Labor Statistics. We have benefited from your leadership in the past and I know we will continue to do so for the next several years. We look forward to working with you at the monthly hearings.

Your report for June shows the civilian unemployment rate at 10 percent and the overall rate, including the military, at 9.8 percent. Employment is growing steadily and the gains by industry are widespread. We welcome this evidence of labor market improvement.

It is also evident, however, that unemployment remains exceptionally high and is headed downward very slowly. Nearly 2 years ago, when the recession began, the jobless rate was 7.2 percent, which was high by historical standards. At the present pace, it could be another 2 years or longer before the unemployment rate approaches that level again. There are currently 11.1 million people out of work, nearly 3 million of them for longer than 6 months. Each month that unemployment stays this high, the country wastes hundreds of millions of man-hours of labor, and loses the value of the goods and services these workers would have produced.

Moreover, until the surge of summer jobseeking in June, recent improvement of the economy has not drawn more workers into the job market. A relevant measure is the number of so-called discouraged workers. During the second quarter, as you report this morning, 1.7 million people who wanted work believed that searching for jobs would be fruitless and, therefore, were not counted among the unemployed. If some of these people change their outlook in

the months ahead, and the economy is not able to provide jobs for them, the decline in unemployment could cease.

Commissioner, the other members of the committee and I are anxious to hear your report on the June employment figures and what they suggest about the course of the economy's recovery. The large seasonal influences in June complicate this picture and we welcome your interpretation of that.

Madam Commissioner, you may proceed.

**STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER,  
BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, AC-  
COMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSION-  
ER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATIS-  
TICS**

Ms. NORWOOD. Thank you very much, Congressman Hamilton. I would first like to introduce Thomas Plewes, who is our Associate Commissioner in charge of all the employment-unemployment data, who will assist me here. I also want to thank you for your kind comments.

I am, as always, very pleased to be here to provide a few interpretative comments to supplement our press release.

The labor market continued to show signs of strong recovery in June. The data release today show strong employment growth in both the goods-producing and the service-producing sectors. The size of the labor force has grown and the decline in the unemployment rate is continuing.

The unemployment rate for all civilian workers was 10 percent, down from December's rate of 10.8 percent. The rate which includes the resident Armed Forces among the employed was 9.8 percent in June, down from 10.7 in December: Thus, the two series have moved in a comparable fashion and both reflect the improved economic climate.

The drop in unemployment in June was particularly sharp among adult men. Their unemployment rate declined six-tenths of 1 percentage point over the month—and at 9 percent in June, is a full point below the December high. The unemployment rate for adult women, although little changed over the month, has dropped about half a point since December.

No improvement has occurred in the jobless situation of black workers during this period, however. Whereas the unemployment rate for white workers has dropped by a full percentage point since December, the rate for blacks at 20.6 percent has changed very little over the last 6 months.

Looking at the black situation in another way, the proportion of the population at work—that is, the employment population ratio—for black adult men was more than 11 percentage points lower than for white men and the ratio for black teenagers was 26½ points lower than for white teenagers.

As the economy continues to recover, the number of job losers, as distinct from those who voluntarily left a job or who were newly entering or reentering the labor force to search for a job, decreases. Since December, the number of persons unemployed who had lost their last job declined by nearly 800,000.

The mean duration of joblessness continued to rise in June. As we have discussed in many previous hearings, most measures of long duration joblessness continue to increase for some months after overall unemployment begins to improve. In June, nearly 3 million people were unemployed 27 weeks or longer. This group now accounts for a little more than a quarter of the unemployed.

The number of discouraged workers has declined by 140,000 since the fourth quarter of 1982. At 1.7 million in the second quarter, however, this group, which disproportionately represents blacks and women, remains quite large.

In June, the monthly household survey recorded a very large labor force increase and a comparable increase in employment. A substantial portion of this growth came from a more than usual increase in the number of young people entering the job market at the end of the school year. Undoubtedly, much of this increase was in response to improved economic conditions. But the fact that the survey week was later than usual this year may have made the seasonally adjusted changes for this group somewhat exaggerated.

However, even if we were to exclude these young people entirely, there was a marked improvement in the labor market. Roughly one-half of the 1.2 million May to June labor force increase, after seasonal adjustment, occurred among workers 25 years of age and over employment for this age group increasing by a comparable amount.

It should also be noted that the business survey had shown considerably more employment growth over the preceding period since December than the household survey did. The household survey is usually more erratic from month to month, and the very large increase in employment in this survey from May to June may be, in part, a catchup for the slow growth recorded in that survey over recent months.

The business survey continued to show a marked increase in employment in June. Following an increase of 315,000 from April to May, the number of payroll jobs rose by nearly 350,000 from May to June, with solid growth continuing in manufacturing and in construction. Services and retail trade also registered large gains.

Since December, the number of payroll jobs has increased by 1.1 million. The manufacturing industry accounted for 365,000 jobs over this 6-month span, while services and trade contributed 500,000 and 200,000, respectively. Two-thirds of the 186 industries in the BLS diffusion index showed increases in employment from May to June and three-quarters of the industries registered increases since December. And since December, the factory workweek has risen by 1 full hour.

In summary, the overall labor market improved significantly in June. Employment rose sharply in both surveys, the labor force increased, and the unemployment rate continued its steady decline from the December peak.

Mr. Plewes and I will be glad to try to answer any questions you may have.

[The table attached to Ms. Norwood's statement, together with the press release referred to, follows:]

UNEMPLOYMENT RATES OF ALL CIVILIAN WORKERS BY ALTERNATIVE SEASONAL ADJUSTMENT  
METHODS

Month and year	Unad-justed rate	X-11 ARIMA method					K-11 method (official method before 1980)	Range (cols. 2-7)
		Official procedure	Concur- rent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>1982:</b>								
June .....	9.8	9.5	9.5	9.5	9.4	9.5	9.5	0.1
July .....	9.8	9.8	9.8	9.8	9.7	9.7	9.7	.1
August .....	9.6	9.9	9.9	9.8	9.9	9.8	9.8	.1
September .....	9.7	10.2	10.2	10.1	10.2	10.0	10.2	.2
October .....	9.9	10.5	10.5	10.6	10.5	10.3	10.5	.3
November .....	10.4	10.7	10.7	10.9	10.7	10.6	10.8	.3
December .....	10.5	10.8	10.8	11.1	10.9	10.8	11.1	.3
<b>1983:</b>								
January .....	11.4	10.4	10.4	10.2	10.4	10.7	10.3	.5
February .....	11.3	10.4	10.4	10.1	10.4	10.8	10.3	.7
March .....	10.8	10.3	10.4	10.2	10.3	10.5	10.3	.3
April .....	10.0	10.2	10.3	10.3	10.4	10.1	10.2	.3
May .....	9.8	10.1	10.3	10.6	10.2	10.0	10.2	.6
June .....	10.2	10.0	10.1	9.9	9.8	10.0	9.9	.3

Source: U.S. Department of Labor Bureau of Labor Statistics, July 1983.

EXPLANATION OF COLUMN HEADS

(1) *Unadjusted rate.*—Unemployment rate for all civilian workers, not seasonally adjusted.

(2) *Official procedure (X-11 ARIMA method).*—The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1967 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. A prior adjustment for trend is applied to the extended series for adult male unemployment before seasonal adjustment. The unemployment rate is computed by summing the 4 seasonally adjusted unemployed components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of *Employment and Earnings*.

(3) *Concurrent (X-11 ARIMA method).*—The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data from the period January 1967 through January 1980.

(4) *Stable (X-11 ARIMA method).*—Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonally patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonally-irregular components for each month across the enter span of the period adjusted. As in the official proce-

dures, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(5) *Total (X-11 ARIMA method)*.—This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(6) *Residual (X-11 ARIMA method)*.—This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) *X-11 method (official method before 1980)*.—The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factor are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

*Methods of adjustment*.—The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum. Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in *X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

# News

United States  
Department  
of Labor



Bureau of Labor Statistics

Washington, D.C. 20212

Technical information:	(202) 523-1944	USDL 83-291
	523-1371	TRANSMISSION OF MATERIAL IN THIS RELEASE IS
	523-1959	EMBARGOED UNTIL 8:30 A.M. (EDT), FRIDAY,
Media contact:	523-1913	JULY 8, 1983

## THE EMPLOYMENT SITUATION: JUNE 1983

Employment rose sharply in June and the unemployment rate continued to edge down, the Bureau of Labor Statistics of the U. S. Department of Labor announced today. The overall unemployment rate, which includes the resident Armed Forces in the labor force base, was 9.8 percent, and the rate for civilian workers was 10.0 percent. Each of these measures has declined steadily from last December's recession highs of 10.7 and 10.8 percent, respectively.

Total employment--as measured by the monthly survey of households--rose markedly to 102.5 million in June after showing modest growth since the beginning of the year. The number of employees on nonagricultural payrolls--as measured by the monthly survey of establishments--also increased markedly over the month, by nearly 350,000. Job gains were widespread in both the goods- and service-producing industries.

### Unemployment

The number of unemployed persons, 11.1 million, was little changed in June after adjustment for the summer entrance of school-age youth into the labor market and other seasonal movements. A decline in the number of workers who had lost their job was partially countered by an increase in the number of new entrants to the labor force. Despite the lack of movement in total unemployment in June, the jobless level has declined by 890,000 since its December 1982 peak. The civilian unemployment rate continued to edge down and has declined 0.8 percentage point over the past half year. (See tables A-2 and A-8.)

Among the major labor force groups, there was a substantial over-the-month decline in the jobless rate for adult men; their rate dropped 0.6 percentage point to 9.0 percent, its lowest level since August 1982. Jobless rates for adult women (8.6 percent) and teenagers (23.6 percent) were little changed over the month. The unemployment rate for white workers continued to decline, while the rate for blacks was unchanged at 20.6 percent and has shown no improvement in the first half of the year. The rate for black teenagers remained at about 50 percent. (See tables A-2 and A-3.)

Jobless rates declined over the month for workers in mining, construction, and durable goods manufacturing, industries in which adult men comprise the bulk of the work force. Unemployment also declined among full-time workers but rose among part-time workers. There was little movement in most of the other major labor force categories. (See table A-6.)

The average (mean) duration of unemployment continued to rise in June, reaching 22.0 weeks. The number of persons jobless for 27 weeks or more increased by 165,000 to nearly 3 million and comprised 26 percent of the jobless total. (See table A-7.)

In addition to the downtrend in unemployment, there has also been a continued reduction in the number of persons working part time on nonfarm jobs because of reduced hours or the unavailability of full-time jobs. The number of these persons working "part time for economic reasons," at 5.7 million in June, was down 200,000 from May and 700,000 from last December. (See table A-4.)

### Civilian Labor Force and Employment

The civilian labor force typically swells in June, as large numbers of youth enter the labor force and either find jobs or continue to search for work. This June, the labor force increased by 3.1 million, substantially more than expected, based on patterns which have occurred in

recent years and larger than any previous May-June change. After adjustment for the expected seasonal movement, the labor force was up by 1.2 million. Some of the increase may well have resulted from an unusually late June survey week with a larger proportion of the summertime labor force expansion showing up in the June data. The labor force was up by 1.8 million from a year earlier. (See table A-2.)

Civilian employment also increased by 1.2 million in June, seasonally adjusted, to 100.8 million. Adult men accounted for half of this increase, and adult women and teenagers shared equally in the balance.

#### Discouraged Workers

At 1.7 million, the number of discouraged workers--persons who report that they want to work but are not looking for jobs because they believe they cannot find any--was about unchanged from the first to the second quarter of 1983 but down 140,000 from the fourth-quarter 1982 high. Nearly all of this decline occurred among blacks. About 3 out of 4 discouraged workers reported

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages		Monthly data			May - June change	
	1983		1983				
	II	I	Apr.	May	June		
<b>HOUSEHOLD DATA</b>							
	Thousands of persons						
Labor force 1/.....	111,754	112,193	112,825	112,457	112,418	113,600	1,182
Total employment 1/.....	101,386	100,755	101,603	101,129	101,226	102,454	1,228
Civilian labor force.....	110,088	110,528	111,156	110,786	110,749	111,932	1,183
Civilian employment.....	99,720	99,090	99,933	99,458	99,557	100,786	1,229
Unemployment.....	10,369	11,439	11,222	11,328	11,192	11,146	-46
Not in labor force.....	61,932	62,977	62,801	63,008	63,204	62,193	-1,011
Discouraged workers.....	1,487	1,764	1,709	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers 1/.....	9.3	10.2	9.9	10.1	10.0	9.8	-0.2
All civilian workers.....	9.4	10.3	10.1	10.2	10.1	10.0	-0.1
Adult men.....	8.4	9.7	9.4	9.8	9.6	9.0	-0.6
Adult women.....	8.2	8.9	8.5	8.4	8.5	8.6	0.1
Teenagers.....	22.7	22.8	23.3	23.4	23.0	23.6	0.6
White.....	8.3	9.1	8.8	8.9	8.9	8.6	-0.3
Black.....	18.6	20.1	20.7	20.8	20.6	20.6	0
Hispanic origin.....	13.3	15.9	14.1	14.5	13.8	14.0	0.2
	ESTABLISHMENT DATA						
	Thousands of jobs						
Nonfarm payroll employment.....	89,938	88,815	89,426p	89,101	89,416p	89,760p	344p
Goods-producing industries.....	24,178	23,088	23,340p	23,159	23,347p	23,514p	167p
Service-producing industries.....	65,760	65,727	66,086p	65,942	66,069p	66,246p	177p
	Hours of work						
Average weekly hours:							
Total private nonfarm.....	34.9	34.8	35.0p	34.9	35.1p	35.1p	0p
Manufacturing.....	39.1	39.5	40.0p	40.1	39.9p	40.1p	0.2p
Manufacturing overtime.....	2.3	2.5	2.8p	2.9	2.7p	2.9p	0.2p

1/ Includes the resident Armed Forces.

N.A.=not available.

p=preliminary.

job-market factors as their reasons for not looking for jobs in the second quarter. (See table A-13.)

#### Industry Payroll Employment

Nonagricultural payroll employment increased by 345,000 in June to 89.8 million, seasonally adjusted. This marked the third straight month of sharp employment gains, which together added nearly a million jobs to the Nation's payrolls. The goods-producing industries that had been hard hit by job losses last year accounted for nearly half of these job gains. (See table B-1.)

Construction employment rose by 85,000 in June, following an increase of similar magnitude in May and reflecting across-the-board advances in residential and commercial construction. Manufacturing job increases totaled 75,000, with the largest gains in those durables industries associated with construction, including lumber and wood products, furniture, and stone, clay, and glass products. Employment increases in nondurable goods were led by textile mill products.

Services industry employment continued its recent strong growth with an increase of 145,000 in June, and jobs in retail trade also rose sharply (95,000). Employment in State and local government declined by 95,000, entirely in education. These movements may have been affected by the later-than-usual reference week.

#### Hours of Work

The average workweek of production or nonsupervisory workers on private nonfarm payrolls was unchanged in June at 35.1 hours, seasonally adjusted. The manufacturing workweek and factory overtime both rose two-tenths of an hour, returning to the April levels of 40.1 and 2.9 hours, respectively. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls—a comprehensive measure which reflects changes in employment as well as the workweek—rose by 0.7 percent in June to 105.7 (1977=100). The manufacturing index was up 1.0 percent over the month and 6.7 percent from last December's low. (See table B-5.)

#### Hourly and Weekly Earnings

Average hourly earnings increased by 0.3 percent in June, seasonally adjusted, while weekly earnings rose by 0.2 percent. Before adjustment for seasonality, average hourly earnings, at \$7.97, were unchanged over the month but up 33 cents over the year. Average weekly earnings increased \$2.39 in June and \$13.94 from June 1982. (See table B-3.)

#### The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 154.8 (1977=100) in June, seasonally adjusted, 0.1 percent higher than in May. For the 12 months ended in June, the increase (before seasonal adjustment) was 4.6 percent. The HEI excludes the effect of two types of changes unrelated to underlying wage rate movements—fluctuations in overtime in manufacturing and interindustry employment shifts. In dollars of constant purchasing power, the HEI increased 1.4 percent during the 12-month period in May. (See table B-4.)

## Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on non-agricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 189,000 establishments employing about 36 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

### Coverage, definitions and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Also included among the unemployed are persons not looking for work because they were laid off and waiting to be recalled and those expecting to report to a job within 30 days.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special

grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

—The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

—The household survey includes people on unpaid leave among the employed; the establishment survey does not;

—The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

—The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

### Seasonal adjustment

Over a course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all

employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

#### Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 335,000; for total unemployment it is 240,000; and, for the overall unemployment rate, it is 0.21 percentage point. These figures do not mean that the sample results are off by these

magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .29 percentage point; for teenagers, it is 1.28 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

#### Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for \$6.00 per issue or \$39.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

*Employment and Earnings* also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

(Numbers in thousands)

Employment status and sex	Not seasonally adjusted			Seasonally adjusted <sup>a</sup>					
	June 1982	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>TOTAL</b>									
Noninstitutional population <sup>b</sup>	175,854	175,622	175,793	173,854	175,169	175,320	175,465	175,622	175,793
Labor force <sup>c</sup>	113,233	111,977	115,051	111,811	112,217	112,148	112,457	112,618	113,600
Participation rate <sup>d</sup>	65.1	63.8	65.4	64.3	64.1	64.0	64.1	64.0	64.6
Total employed <sup>e</sup>	102,347	101,212	103,481	101,345	100,727	100,767	101,125	101,226	102,354
Employment-population ratio <sup>f</sup>	58.2	57.6	58.9	58.3	57.5	57.5	57.6	57.6	58.3
Resident Armed Forces	1,664	1,669	1,668	1,664	1,664	1,664	1,671	1,669	1,668
Civilian employed	100,683	99,543	101,813	99,681	99,063	99,103	99,454	99,557	100,786
Agriculture	3,116	3,511	3,977	3,371	3,393	3,375	3,371	3,367	3,522
Nonagricultural industries	97,567	96,032	97,836	96,310	95,670	95,728	96,083	96,190	97,264
Unemployed	10,886	10,765	11,570	10,466	11,490	11,381	11,328	11,152	11,246
Unemployment rate <sup>g</sup>	9.6	9.6	10.1	9.4	10.2	10.1	10.1	10.0	9.8
Not in labor force	60,921	63,645	60,742	62,043	62,952	63,172	63,008	63,004	62,193
<b>Men, 18 years and over</b>									
Noninstitutional population <sup>b</sup>	82,006	81,931	84,014	83,006	83,720	83,789	83,856	83,931	84,014
Labor force <sup>c</sup>	65,059	64,055	66,078	63,851	63,996	63,957	64,207	64,276	64,616
Participation rate <sup>d</sup>	78.9	76.3	78.7	76.9	76.4	76.3	76.6	76.6	77.1
Total employed <sup>e</sup>	56,888	57,703	59,581	57,775	57,234	57,300	57,476	57,656	58,444
Employment-population ratio <sup>f</sup>	70.9	68.8	70.9	69.6	68.4	68.4	68.5	68.7	69.6
Resident Armed Forces	1,526	1,528	1,525	1,526	1,528	1,528	1,530	1,528	1,525
Civilian employed	57,362	56,175	58,056	56,249	55,706	55,772	55,946	56,128	56,919
Unemployed	8,211	6,342	6,498	6,076	6,762	6,657	6,731	6,620	6,351
Unemployment rate <sup>g</sup>	9.3	9.9	9.8	9.5	10.6	10.4	10.5	10.3	9.8
<b>Women, 18 years and over</b>									
Noninstitutional population <sup>b</sup>	50,888	91,651	91,779	90,848	91,449	91,532	91,609	91,691	91,779
Labor force <sup>c</sup>	48,133	47,912	48,973	47,960	48,220	48,191	48,251	48,182	48,784
Participation rate <sup>d</sup>	54.0	52.3	53.4	52.8	52.7	52.6	52.7	52.5	53.2
Total employed <sup>e</sup>	43,458	43,509	43,900	43,570	43,493	43,467	43,652	43,565	43,990
Employment-population ratio <sup>f</sup>	47.8	47.5	47.8	48.0	47.6	47.5	47.7	47.5	47.9
Resident Armed Forces	138	141	143	138	136	136	141	141	143
Civilian employed	43,320	43,368	43,757	43,432	43,357	43,331	43,512	43,420	43,847
Unemployed	4,675	4,404	5,072	4,398	4,727	4,728	4,597	4,522	4,795
Unemployment rate <sup>g</sup>	9.7	9.2	10.4	9.2	9.8	9.8	9.5	9.5	9.8

<sup>a</sup> The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>b</sup> Labor force as a percent of the noninstitutional population.

<sup>c</sup> Total employment as a percent of the noninstitutional population.

<sup>d</sup> Includes members of the Armed Forces stationed in the United States.

<sup>e</sup> Unemployment as a percent of the labor force (including the resident Armed Forces).

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>a</sup>					
	June 1962	May 1963	June 1963	June 1962	Feb. 1963	Mar. 1963	Apr. 1963	May 1963	June 1963
<b>TOTAL</b>									
Civilian noninstitutional population	172,190	173,953	174,125	172,190	173,505	173,656	173,794	173,953	174,125
Civilian labor force	111,569	110,308	113,383	110,147	110,553	110,484	110,766	110,749	111,932
Participation rate	64.8	63.4	65.1	64.0	63.7	63.6	63.7	63.7	64.3
Employed	100,683	99,503	101,813	99,681	99,063	99,103	99,458	99,557	100,786
Employment-population ratio <sup>b</sup>	58.5	57.2	58.5	57.5	57.1	57.1	57.2	57.2	57.9
Unemployed	10,886	10,765	11,570	10,466	11,400	11,381	11,326	11,152	11,146
Unemployment rate	5.8	9.6	10.2	9.5	10.4	11.3	10.2	10.1	10.0
<b>Men, 20 years and over</b>									
Civilian noninstitutional population	73,585	74,712	74,814	73,585	74,434	74,538	74,611	74,712	74,814
Civilian labor force	58,394	58,458	59,267	57,959	58,177	58,170	58,454	58,506	59,304
Participation rate	79.4	78.2	79.2	78.8	78.2	78.1	78.3	78.3	78.6
Employed	53,489	53,021	54,078	52,943	52,428	52,589	52,755	52,901	53,516
Employment-population ratio <sup>b</sup>	72.7	71.0	72.3	71.9	70.4	70.6	70.7	70.8	71.5
Agriculture	2,574	2,518	2,683	2,424	2,374	2,430	2,404	2,483	2,528
Nonagricultural industries	50,915	50,508	51,395	50,519	50,054	50,169	50,348	50,468	50,987
Unemployed	4,905	5,437	5,188	5,016	5,746	5,581	5,702	5,605	5,288
Unemployment rate	8.4	9.3	8.8	8.7	9.9	9.6	9.6	9.6	9.0
<b>Women, 20 years and over</b>									
Civilian noninstitutional population	62,811	63,899	64,008	62,811	63,593	63,699	63,794	63,899	64,008
Civilian labor force	43,404	44,161	44,249	43,819	44,216	44,166	44,238	44,228	44,608
Participation rate	52.4	52.6	52.7	52.9	52.8	52.8	52.6	52.7	53.1
Employed	39,839	40,574	40,394	40,254	40,291	40,277	40,500	40,484	40,789
Employment-population ratio <sup>b</sup>	48.1	48.4	48.1	48.6	48.2	48.1	48.3	48.3	48.3
Agriculture	706	647	763	586	657	647	622	657	636
Nonagricultural industries	35,133	39,927	39,631	39,668	39,634	39,630	39,876	39,827	40,153
Unemployed	3,565	3,587	3,855	3,565	3,925	3,889	3,729	3,744	3,859
Unemployment rate	8.2	8.1	8.7	8.1	8.9	8.8	8.4	8.4	8.6
<b>Both sexes, 18 to 19 years</b>									
Civilian noninstitutional population	15,794	15,382	15,303	15,794	15,478	15,429	15,389	15,382	15,383
Civilian labor force	9,770	7,690	9,867	8,365	8,100	8,148	8,084	8,015	8,480
Participation rate	61.9	50.1	64.5	53.0	52.7	52.8	52.6	52.2	55.4
Employed	7,355	5,948	7,341	6,484	6,345	6,237	6,197	6,172	6,481
Employment-population ratio <sup>b</sup>	46.6	38.8	48.0	41.1	41.0	40.4	40.3	40.2	42.4
Agriculture	536	351	530	361	362	308	344	327	357
Nonagricultural industries	6,818	5,557	6,811	6,123	5,983	5,929	5,853	5,845	6,124
Unemployed	2,415	1,742	2,527	1,885	1,815	1,911	1,897	1,843	1,999
Unemployment rate	24.7	22.7	25.6	22.2	22.2	23.5	23.4	23.0	23.6

<sup>a</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>b</sup> Civilian employment as a percent of the civilian noninstitutional population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	June 1982	Aug 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1982
<b>WHITE</b>									
Civilian noninstitutional population	145,425	150,671	150,810	149,429	150,187	150,382	150,518	150,671	150,810
Civilian labor force	97,367	96,010	98,488	96,165	95,987	95,996	96,287	96,362	97,250
Participation rate	65.2	63.7	65.3	64.8	63.9	63.9	64.0	64.0	64.5
Employed	89,068	87,813	89,890	88,089	87,194	87,324	87,709	87,777	88,880
Employment-population ratio <sup>2</sup>	59.6	58.3	59.6	59.0	58.1	58.1	58.3	58.3	58.9
Unemployed	8,299	8,195	8,598	8,076	8,793	8,672	8,577	8,585	8,370
Unemployment rate	8.5	8.5	8.7	8.4	9.2	9.0	8.5	8.9	8.6
<b>Men, 20 years and over</b>									
Civilian labor force	51,614	51,531	52,202	51,213	51,151	51,214	51,559	51,589	51,771
Participation rate	79.8	78.6	79.5	79.2	78.5	78.4	78.7	78.7	79.8
Employed	47,773	47,291	48,735	47,268	46,682	46,883	47,089	47,150	47,710
Employment-population ratio <sup>2</sup>	71.9	72.2	73.5	73.1	71.6	71.8	72.1	72.1	73.9
Unemployed	3,841	4,240	3,467	3,945	4,469	4,332	4,409	4,439	4,060
Unemployment rate	7.4	8.2	7.6	7.7	8.7	8.5	8.6	8.6	7.8
<b>Women, 20 years and over</b>									
Civilian labor force	37,133	37,671	37,741	37,529	37,588	37,509	37,685	37,703	38,124
Participation rate	51.8	52.0	52.0	52.8	52.1	51.9	52.1	52.0	52.6
Employed	34,490	35,066	34,634	34,857	34,695	34,723	34,872	34,961	35,287
Employment-population ratio <sup>2</sup>	48.1	48.4	48.2	48.6	48.1	48.0	48.3	48.3	48.6
Unemployed	2,643	2,605	2,806	2,672	2,893	2,787	2,711	2,742	2,837
Unemployment rate	7.1	6.9	7.4	7.1	7.7	7.4	7.2	7.3	7.4
<b>Both sexes, 16 to 18 years</b>									
Civilian labor force	8,420	6,808	8,585	7,423	7,248	7,273	7,145	7,069	7,355
Participation rate	65.8	53.6	67.6	56.6	56.5	56.9	56.0	55.7	58.2
Employed	6,805	5,457	6,720	5,964	5,817	5,719	5,688	5,666	5,883
Employment-population ratio <sup>2</sup>	80.5	79.0	78.2	80.5	80.4	80.4	80.6	80.6	82.5
Unemployed	1,615	1,350	1,825	1,459	1,431	1,554	1,457	1,403	1,472
Unemployment rate	21.1	19.8	21.4	19.7	19.7	21.4	20.4	19.8	20.0
Men	21.6	19.3	20.5	21.2	21.1	22.9	21.7	20.2	19.8
Women	20.5	20.5	22.4	18.0	18.2	19.7	19.0	19.4	20.2
<b>BLACK</b>									
Civilian noninstitutional population	18,570	18,880	18,911	18,570	18,796	18,823	18,651	18,880	18,911
Civilian labor force	11,471	11,526	11,988	11,267	11,586	11,556	11,631	11,672	11,783
Participation rate	61.8	61.2	63.4	60.7	61.8	61.4	62.4	62.4	62.3
Employed	9,211	9,234	9,389	9,171	9,276	9,253	9,209	9,270	9,352
Employment-population ratio <sup>2</sup>	49.6	48.5	49.6	49.4	49.4	49.2	48.8	49.1	49.5
Unemployed	2,260	2,292	2,599	2,096	2,271	2,302	2,423	2,402	2,432
Unemployment rate	19.7	19.9	21.7	18.6	19.7	19.9	20.8	20.6	20.6
<b>Men, 20 years and over</b>									
Civilian labor force	5,383	5,496	5,614	5,366	5,441	5,439	5,500	5,512	5,597
Participation rate	75.0	74.9	76.4	74.0	74.7	74.5	75.7	75.1	76.1
Employed	4,474	4,436	4,558	4,435	4,423	4,416	4,415	4,418	4,522
Employment-population ratio <sup>2</sup>	62.3	60.5	62.0	61.8	60.7	60.5	60.3	60.2	61.5
Unemployed	910	1,060	1,055	931	1,018	1,023	1,085	1,094	1,075
Unemployment rate	16.9	19.3	18.8	17.3	18.7	18.6	20.3	19.8	19.2
<b>Women, 20 years and over</b>									
Civilian labor force	5,142	5,281	5,284	5,145	5,353	5,350	5,265	5,348	5,283
Participation rate	56.3	56.7	56.6	56.3	57.8	57.7	56.6	57.4	56.6
Employed	4,354	4,400	4,353	4,267	4,441	4,404	4,372	4,431	4,384
Employment-population ratio <sup>2</sup>	47.4	47.3	46.7	47.8	48.0	47.5	47.0	47.6	47.4
Unemployed	807	881	931	778	912	946	893	917	900
Unemployment rate	15.7	16.7	17.6	15.1	17.0	17.7	17.0	17.1	17.0
<b>Both sexes, 16 to 18 years</b>									
Civilian labor force	946	749	1,050	756	754	765	827	812	903
Participation rate	42.0	33.5	48.9	33.5	33.5	34.1	37.0	36.4	40.5
Employed	403	398	478	369	412	432	422	421	446
Employment-population ratio <sup>2</sup>	17.9	17.8	21.4	16.4	16.3	19.3	18.9	18.9	20.0
Unemployed	543	351	612	387	342	333	405	391	457
Unemployment rate	57.4	44.9	56.2	51.2	45.4	43.5	49.0	48.2	50.6
Men	58.6	51.2	54.5	55.7	45.3	46.5	48.0	53.1	51.1
Women	56.1	41.7	58.2	46.0	45.4	42.3	50.0	42.3	50.0
<b>HISPANIC ORIGIN</b>									
Civilian noninstitutional population	9,428	9,747	9,738	9,428	9,368	9,551	9,665	9,747	9,738
Civilian labor force	6,034	6,155	6,318	5,965	5,922	6,074	6,206	6,167	6,253
Participation rate	64.0	63.2	64.9	63.3	64.0	63.6	64.2	63.3	64.2
Employed	5,303	5,329	5,422	5,155	5,042	5,088	5,304	5,318	5,379
Employment-population ratio <sup>2</sup>	55.2	54.7	55.7	54.7	53.8	53.3	54.9	54.6	55.2
Unemployed	832	830	896	810	950	986	902	849	874
Unemployment rate	13.8	13.5	14.2	13.6	15.2	16.2	14.5	13.8	14.0

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race 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.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Selected employment indicators

Category	Not seasonally adjusted			Seasonally adjusted					
	June 1982	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>CHARACTERISTIC</b>									
Chilren employed, 18 years and over .....	100,663	99,583	101,813	99,681	99,063	99,103	99,458	99,557	100,786
Married men, spouse present .....	38,421	37,635	38,115	38,258	37,828	37,852	37,523	37,560	37,925
Married women, spouse present .....	23,889	24,374	23,921	24,331	24,070	24,171	24,371	24,279	24,335
Women who maintain families .....	5,092	5,001	4,991	5,120	5,050	5,097	4,944	4,942	5,016
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>									
<b>Agriculture:</b>									
Wage and salary workers .....	1,710	1,665	1,911	1,457	1,624	1,515	1,560	1,595	1,636
Self-employed workers .....	1,768	1,605	1,716	1,661	1,541	1,585	1,607	1,558	1,608
Unpaid family workers .....	338	282	389	254	223	260	208	229	263
<b>Nonagricultural industries:</b>									
Wage and salary workers .....	89,108	88,104	89,938	88,568	87,794	87,912	88,16*	88,395	89,254
Government .....	15,260	15,756	15,182	15,614	15,501	15,452	15,518	15,223	15,498
Private industries .....	73,848	72,348	74,756	72,954	72,293	72,459	72,648	72,872	73,856
Private households .....	1,261	1,196	1,375	1,205	1,232	1,235	1,205	1,228	1,317
Other industries .....	72,587	71,152	73,421	71,729	71,061	71,225	71,463	71,644	72,538
Self-employed workers .....	7,338	7,556	7,530	7,301	7,385	7,453	7,528	7,406	7,493
Unpaid family workers .....	424	372	368	398	353	342	353	335	365
<b>PERSONS AT WORK<sup>1</sup></b>									
Nonagricultural industries .....	90,599	92,188	90,394	90,917	90,207	90,271	92,367	90,941	90,539
Full-time schedules .....	72,807	73,555	73,270	72,842	71,564	71,678	73,594	72,575	72,978
Part time for economic reasons .....	6,415	5,664	6,593	5,561	6,481	6,202	6,062	5,928	5,779
Usually work full time .....	2,376	1,705	1,886	2,126	2,097	1,927	1,871	1,685	1,702
Usually work part time .....	4,039	3,959	4,707	3,435	4,384	4,275	4,211	4,243	4,077
Part time for noneconomic reasons .....	11,377	12,965	10,511	12,811	12,162	12,191	12,552	12,036	11,633

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

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Measure	Quarterly averages					Monthly data		
	1982		1983			1983		
	II	III	IV	I	II	Apr.	May	June*
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force .....	3.0	3.3	4.0	4.2	4.0	3.9	4.1	4.1
U-2 Job losers as a percent of the civilian labor force .....	5.5	6.0	6.6	6.1	6.0	6.1	6.1	5.8
U-3 Unemployed-persons 25 years and over as a percent of the civilian labor force .....	7.1	7.6	8.3	8.1	7.9	8.0	7.9	7.9
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force .....	9.3	9.8	10.6	10.3	9.9	10.2	9.9	9.7
U-4a Total unemployed as a percent of the labor force, including the resident Armed Forces .....	9.3	9.8	10.5	10.2	9.9	10.1	10.0	9.8
U-4b Total unemployed as a percent of the civilian labor force .....	9.4	10.0	10.7	10.3	10.1	10.2	10.1	10.0
U-6 Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force .....	12.1	12.8	13.8	13.5	12.9	13.2	12.9	12.6
U-7 Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ½ of the part-time labor force .....	13.4	14.2	15.3	15.0	14.3	N.A.	N.A.	N.A.

N.A. = not available.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)				Unemployment rates <sup>a</sup>				
	June 1962	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>CHARACTERISTIC</b>									
Total, 16 years and over	10,466	11,192	11,186	9.5	10.4	10.3	10.2	10.1	10.0
Men, 16 years and over	6,676	6,620	6,351	9.7	10.8	10.7	10.7	10.6	10.0
Men, 20 years and over	5,076	5,605	5,288	8.7	9.5	9.6	9.8	9.6	9.0
Women, 16 years and over	4,390	4,572	4,795	9.2	9.8	9.8	9.6	9.5	9.9
Women, 20 years and over	3,545	3,784	3,859	8.1	8.9	8.8	8.4	8.2	8.6
Both sexes, 16 to 19 years	1,605	1,883	1,999	22.5	22.2	23.5	23.4	23.0	23.6
Married men, spouse present	2,632	2,810	2,671	6.4	7.2	7.1	7.1	7.0	6.6
Married women, spouse present	1,853	1,558	2,060	7.1	7.6	7.5	7.3	7.5	7.8
Women who maintain families	798	732	735	12.1	13.0	13.5	13.2	12.9	12.8
Full-time workers	6,677	9,438	9,294	9.4	10.4	10.3	10.2	9.9	9.7
Part-time workers	1,416	1,713	1,911	10.0	10.1	10.5	10.6	11.0	12.1
Labor force time lost <sup>b</sup>	--	--	--	10.4	12.0	11.8	11.4	11.5	10.8
<b>INDUSTRY</b>									
Nonagricultural private wage and salary workers	9,691	8,538	8,283	10.0	10.8	10.8	10.5	10.5	10.0
Mining	165	259	204	19.0	18.4	18.6	20.3	22.7	18.2
Construction	587	1,125	988	19.5	19.7	20.1	20.3	20.4	18.1
Manufacturing	2,752	2,656	2,519	12.2	13.3	12.8	12.4	12.2	11.5
Durable goods	1,730	1,741	1,593	13.1	14.7	14.1	13.5	13.5	12.2
Non-durable goods	1,022	925	921	11.1	11.4	11.1	10.8	10.5	10.4
Transportation and public utilities	392	355	485	6.0	8.0	7.8	7.7	7.0	7.9
Wholesale and retail trade	2,021	2,087	2,157	9.7	10.9	11.2	10.4	10.1	10.2
Finance and service industries	1,764	2,062	1,935	6.9	7.3	7.2	7.3	7.5	7.2
Government workers	774	553	835	4.7	6.0	5.9	6.1	5.8	5.1
Agricultural wage and salary workers	258	329	335	15.0	16.4	16.3	17.2	17.0	17.0

<sup>a</sup> Unemployment as a percent of the civilian labor force.<sup>b</sup> Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted				Seasonally adjusted				
	June 1962	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>DURATION</b>									
Less than 5 weeks	4,542	3,368	4,587	3,605	3,731	3,440	3,547	3,519	3,655
5 to 14 weeks	2,942	2,452	2,536	3,398	3,106	3,180	3,154	2,979	2,915
15 weeks and over	3,001	4,544	4,487	3,517	4,418	4,615	4,356	4,517	4,588
15 to 20 weeks	1,635	1,979	1,605	1,683	1,928	1,875	1,662	1,731	1,638
21 weeks and over	1,366	2,567	2,882	1,834	2,489	2,740	2,694	2,786	2,951
Average (mean) duration, in weeks	14.7	21.8	19.8	16.3	19.0	19.1	19.0	20.4	22.0
Median duration, in weeks	7.3	12.6	8.8	5.8	9.6	10.3	11.3	12.3	11.8
<b>PERCENT DISTRIBUTION</b>									
Total unemployed	10,916	10,765	11,570	10,466	11,450	11,381	11,328	11,192	11,186
Less than 5 weeks	+1.7	31.3	39.6	34.3	32.6	30.7	32.1	31.9	32.6
5 to 14 weeks	-7.0	22.8	21.9	32.3	27.1	28.1	28.5	27.0	26.1
15 weeks and over	-11.2	45.9	38.4	33.4	40.3	41.2	39.4	41.0	41.1
15 to 20 weeks	-15.0	18.4	13.9	16.0	16.8	16.7	15.0	15.7	14.7
21 weeks and over	-16.2	27.6	24.6	17.4	23.5	24.5	24.8	25.3	24.4

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-8. Reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	June 1982	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>NUMBER OF UNEMPLOYED</b>									
Job losers .....	5,604	6,481	6,135	6,181	6,809	6,823	6,750	6,766	6,513
On layoff .....	1,884	1,760	1,625	2,097	2,028	1,945	1,998	1,983	1,822
Other job losers .....	3,540	4,681	4,510	4,084	4,764	4,878	4,803	4,823	4,691
Job leavers .....	751	757	788	826	848	901	815	801	782
Reentrants .....	2,751	2,365	2,799	2,376	2,491	2,426	2,468	2,365	2,825
New entrants .....	1,538	1,203	1,687	1,091	1,161	1,155	1,285	1,251	1,440
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers .....	53.3	59.8	53.0	59.0	60.2	60.4	59.7	60.5	58.4
On layoff .....	17.1	16.3	16.0	20.0	17.9	17.2	17.2	17.4	16.3
Other job losers .....	36.2	43.5	39.0	39.0	42.3	43.1	42.5	43.1	42.0
Job leavers .....	7.3	7.0	6.5	7.9	7.5	8.0	7.2	7.2	7.0
Reentrants .....	25.3	22.0	24.2	22.7	22.0	21.5	22.0	21.1	21.7
New entrants .....	14.1	11.2	16.3	10.4	10.3	10.2	11.0	11.2	12.9
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers .....	5.2	5.8	5.4	5.6	6.2	6.2	6.1	6.1	5.8
On layoff .....	1.7	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.0
Reentrants .....	2.5	2.1	2.5	2.2	2.3	2.2	2.2	2.1	2.2
New entrants .....	1.4	1.1	1.7	1.0	1.1	1.0	1.1	1.1	1.3

Table A-9. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (In thousands)			Unemployment rates <sup>1</sup>					
	June 1982	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>Total, 16 years and over .....</b>	<b>10,466</b>	<b>11,192</b>	<b>11,146</b>	<b>9.5</b>	<b>10.4</b>	<b>10.3</b>	<b>10.2</b>	<b>10.1</b>	<b>10.0</b>
16 to 24 years .....	4,228	4,332	4,332	17.3	16.3	16.1	16.1	16.1	17.6
16 to 18 years .....	1,865	1,843	1,999	22.5	22.2	23.5	23.4	23.0	23.6
18 to 17 years .....	752	805	799	23.6	23.4	25.1	26.3	26.2	25.8
20 to 24 years .....	1,135	1,047	1,200	22.0	21.5	22.7	21.8	21.9	22.4
25 years and over .....	6,264	6,889	6,863	7.3	8.2	8.1	8.0	7.9	7.9
25 to 54 years .....	5,462	6,134	6,016	7.7	8.7	8.7	8.5	8.5	8.3
55 years and over .....	778	795	836	5.1	5.4	5.4	5.6	5.3	5.6
<b>Men, 16 years and over .....</b>	<b>6,076</b>	<b>6,620</b>	<b>6,351</b>	<b>9.7</b>	<b>10.8</b>	<b>10.7</b>	<b>10.7</b>	<b>10.6</b>	<b>10.0</b>
16 to 24 years .....	2,426	2,523	2,488	18.7	17.8	19.5	19.4	19.7	18.4
16 to 18 years .....	1,060	1,015	1,063	24.3	23.6	25.3	24.4	23.9	23.7
18 to 17 years .....	431	489	418	25.4	23.6	26.0	27.0	27.4	25.4
20 to 24 years .....	627	577	646	23.7	23.4	24.8	22.8	22.0	22.9
25 years and over .....	1,366	1,508	1,381	15.9	17.8	16.6	17.0	17.6	15.7
25 to 54 years .....	3,662	4,102	3,918	7.4	8.5	8.4	8.5	8.2	7.8
55 years and over .....	3,207	3,599	3,443	7.9	9.1	9.0	8.9	8.8	8.4
55 years and over .....	487	515	483	4.9	5.7	5.8	6.3	5.8	5.4
<b>Women, 16 years and over .....</b>	<b>4,390</b>	<b>4,572</b>	<b>4,795</b>	<b>9.2</b>	<b>9.8</b>	<b>9.8</b>	<b>9.6</b>	<b>9.5</b>	<b>9.9</b>
16 to 24 years .....	1,802	1,805	1,888	15.6	16.6	16.5	16.5	16.2	16.6
16 to 18 years .....	825	828	936	20.6	20.7	21.5	22.4	21.9	23.4
18 to 17 years .....	321	356	385	21.6	23.2	24.2	25.5	24.7	26.2
20 to 24 years .....	508	470	554	20.2	19.3	20.5	20.7	20.2	21.9
25 years and over .....	977	981	952	13.0	14.5	14.1	13.5	13.3	12.9
25 to 54 years .....	2,602	2,787	2,945	7.2	7.7	7.7	7.4	7.6	7.9
55 years and over .....	2,255	2,536	2,572	7.5	8.2	8.3	7.9	8.2	8.2
55 years and over .....	331	280	351	5.4	6.9	6.7	6.5	6.6	5.8

<sup>1</sup> Unemployment as a percent of the civilian labor force.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	June 1982	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
Civilian noninstitutional population	22,761	23,282	23,216	22,761	23,318	23,275	23,276	23,282	23,216
Civilian labor force	16,201	16,289	16,895	13,960	14,420	14,456	14,487	14,460	14,452
Participation rate	62.4	61.4	63.9	61.3	61.8	62.1	62.2	62.1	62.6
Employed	11,616	11,729	11,923	11,567	11,828	11,779	11,759	11,775	11,879
Unemployment rate	51.0	50.4	51.1	59.8	57.7	50.6	50.5	50.6	50.9
Unemployed	2,587	2,570	2,972	2,393	2,593	2,677	2,728	2,685	2,773
Not in labor force	8,560	8,993	8,420	8,801	8,898	8,819	8,789	8,822	8,668

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	June 1982	June 1983	June 1982	June 1983	June 1982	June 1983
Total, 16 years and over <sup>1</sup>	100,683	101,813	10,886	11,570	9.8	10.2
Managerial and professional specialty	22,801	23,201	831	851	3.5	3.5
Executive, administrative, and managerial	10,612	10,725	417	392	3.8	3.5
Professional specialty	12,189	12,475	415	460	3.3	3.6
Technical, sales, and administrative support	30,727	31,170	2,072	2,280	6.2	6.8
Technicians and related support	2,986	2,951	170	156	5.0	5.0
Sales occupations	11,222	11,887	718	537	6.5	7.3
Administrative support, including clerical	16,519	16,372	1,124	1,187	6.4	6.8
Service occupations	13,713	13,970	1,683	1,603	10.9	11.4
Private household	1,027	990	71	89	6.2	8.2
Protective services	1,639	1,757	93	127	5.4	6.7
Service, except private household and protective	11,047	11,223	1,519	1,587	12.1	12.4
Precision production, craft, and repair	11,988	12,420	1,285	1,493	9.7	10.7
Mechanics and repairers	3,919	4,118	291	372	6.9	8.3
Construction trades	4,111 <sup>2</sup>	4,461	609	669	12.9	13.0
Other precision production, craft, and repair	3,958	3,841	386	451	8.9	10.5
Operators, fabricators, and laborers	17,074	16,526	3,168	2,797	15.7	14.5
Machine operators, assemblers, and inspectors	8,109	7,776	1,555	1,371	16.1	15.0
Transportation and material moving occupations	4,312	4,255	620	520	12.6	10.9
Handlers, equipment cleaners, helpers, and laborers	4,653	4,495	1,013	906	17.5	16.8
Construction laborers	605	739	200	161	24.8	17.9
Other handlers, equipment cleaners, helpers, and laborers	4,048	3,756	813	745	16.7	16.6
Farming, forestry, and fishing	4,324	4,526	306	406	6.6	8.2

<sup>1</sup> Persons with no previous work experience are included in the unemployed total.

NOTE: Occupational detail may not add to totals because of changes in the estimation procedures.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
			June 1982	June 1983	June 1982	June 1983	June 1982	June 1983	June 1982	June 1983
<b>VETERANS</b>										
Total, 25 years and over .....	8,688	7,845	8,178	7,367	7,472	6,748	706	619	8.6	8.4
25 to 29 years .....	7,151	5,878	6,887	5,639	6,218	5,113	633	526	9.2	9.3
30 to 34 years .....	1,227	684	1,136	637	938	538	196	99	17.3	15.5
35 to 39 years .....	2,553	2,371	2,833	2,094	2,594	1,887	239	207	8.4	5.9
40 years and over .....	2,971	3,023	2,880	2,908	2,682	2,688	198	220	6.9	7.6
	1,537	1,965	1,331	1,728	1,258	1,635	73	93	5.5	5.4
<b>NONVETERANS</b>										
Total, 25 to 39 years .....	18,174	19,970	17,285	18,915	15,745	17,197	1,540	1,718	8.9	9.1
25 to 29 years .....	8,155	8,691	7,722	8,190	6,900	7,323	822	867	10.6	10.6
30 to 34 years .....	5,947	6,759	5,702	6,481	5,233	5,912	469	525	8.2	8.2
35 to 39 years .....	4,072	4,520	3,861	4,284	3,612	3,962	289	322	6.4	7.5

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Arm-

ed Forces; published data are limited to those 25 to 39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Persons not in labor force by reason, sex, and race, quarterly averages  
(In thousands)

Reason, sex, and race	Not seasonally adjusted		Seasonally adjusted					
	1982	1983	1982		1983			
	II	II	II	III	IV	I	II	
<b>TOTAL</b>								
Total not in labor force	61,921	62,768	61,932	61,693	62,077	62,977	62,801	
Do not want a job now	5,859	5,887	5,678	5,258	5,322	56,171	56,053	
Current activity:								
Going to school	4,091	5,982	6,766	6,309	6,400	6,675	6,402	
Ill, disabled	28,665	8,326	8,065	8,040	3,978	3,496	4,106	
Keeping house	12,211	28,609	28,325	28,212	28,127	28,832	28,281	
Retired	4,157	13,025	12,206	12,482	12,576	13,025	13,011	
Other	8,157	6,165	4,333	4,254	4,241	4,132	4,247	
Want a job now	6,097	6,082	6,589	6,686	6,995	6,406	6,540	
Reason not looking:								
School attendance	2,215	2,046	1,708	1,803	1,887	1,429	1,492	
Ill health, disability	768	680	779	778	758	649	655	
Home responsibilities	1,424	1,412	1,480	1,370	1,373	1,384	1,474	
Think cannot get a job	1,073	1,684	1,487	1,638	1,849	1,774	1,709	
Job-market factors <sup>1</sup>	368	1,290	1,082	1,222	1,351	1,442	1,306	
Personal factors <sup>2</sup>	1,049	356	405	416	458	522	403	
Other reasons <sup>3</sup>		1,098	1,135	1,078	1,128	980	1,171	
<b>Men</b>								
Total not in labor force	18,805	19,315	18,976	19,082	19,609	19,764	19,501	
Do not want a job now	16,403	16,860	16,972	16,939	16,893	17,250	17,154	
Want a job now	2,402	2,460	2,166	2,298	2,390	2,187	2,215	
Reason not looking:								
School attendance	1,178	1,073	859	944	1,022	868	763	
Ill health, disability	336	301	334	342	299	285	301	
Home responsibilities	562	671	577	595	660	707	693	
Think cannot get a job	326	414	256	397	380	327	454	
Other reasons <sup>3</sup>								
<b>Women</b>								
Total not in labor force	43,116	43,449	42,956	42,610	43,002	43,213	43,301	
Do not want a job now	38,620	39,027	38,706	38,315	38,429	38,921	38,859	
Want a job now	4,496	4,422	4,423	4,369	4,605	4,219	4,325	
Reason not looking:								
School attendance	1,037	972	808	839	866	741	729	
Ill health, disability	432	379	445	436	459	364	390	
Home responsibilities	1,424	1,412	1,480	1,370	1,373	1,384	1,474	
Think cannot get a job	578	975	911	1,043	1,159	1,057	1,016	
Other reasons <sup>3</sup>	724	684	778	681	748	653	716	
<b>White</b>								
Total not in labor force	53,098	53,957	53,139	53,119	53,248	54,180	54,033	
Do not want a job now	48,195	48,838	48,535	48,431	48,444	49,178	49,215	
Want a job now	4,902	5,120	4,707	4,772	4,572	4,675	4,833	
Reason not looking:								
School attendance	1,594	1,597	1,202	1,226	1,320	1,194	1,115	
Ill health, disability	537	505	556	549	505	471	527	
Home responsibilities	986	975	1,039	1,043	1,029	1,043	1,031	
Think cannot get a job	518	1,187	955	1,072	1,247	1,193	1,261	
Other reasons <sup>3</sup>	847	855	914	862	871	773	900	
<b>Black</b>								
Total not in labor force	7,330	7,238	7,279	7,233	7,254	7,246	7,165	
Do not want a job now	5,558	5,650	5,598	5,594	5,549	5,462	5,701	
Want a job now	1,774	1,588	1,478	1,631	1,763	1,595	1,525	
Reason not looking:								
School attendance	315	359	416	442	505	400	320	
Ill health, disability	220	169	222	215	221	168	170	
Home responsibilities	397	386	387	295	318	317	374	
Think cannot get a job	462	413	449	502	529	543	609	
Other reasons <sup>3</sup>	180	221	204	177	190	168	251	

<sup>1</sup> Job market factors include "could not find job" and "didn't see job available."<sup>2</sup> Personal factors include "unemployed think too young or old," "lack education or training," and<sup>3</sup> "other personal handling."<sup>4</sup> Includes small number of men not looking for work because of home responsibilities.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-14. Employment status of the civilian population for ten large States

State and employment status	Not seasonally adjusted <sup>a</sup>			Seasonally adjusted <sup>b</sup>					
	June 1982	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
<b>California</b>									
Civilian noninstitutional population	18,432	18,741	18,770	18,432	18,660	18,687	18,713	18,741	18,770
Civilian labor force	12,202	12,247	12,434	12,228	12,263	12,216	12,153	12,301	12,459
Employed	11,059	11,032	11,182	11,053	10,893	10,926	10,963	11,007	11,173
Unemployed	1,143	1,214	1,251	1,175	1,370	1,290	1,191	1,294	1,286
Unemployment rate	9.4	9.9	10.1	9.6	11.2	10.6	9.8	10.5	10.3
<b>Florida</b>									
Civilian noninstitutional population	8,106	8,322	8,343	8,106	8,264	8,284	8,302	8,322	8,343
Civilian labor force	4,721	4,748	4,957	4,675	4,727	4,638	4,748	4,742	4,915
Employed	4,359	4,335	4,522	4,315	4,268	4,228	4,338	4,311	4,481
Unemployed	362	412	434	360	459	411	410	431	434
Unemployment rate	7.7	8.7	8.8	7.7	9.7	8.9	8.6	9.1	8.8
<b>Illinois</b>									
Civilian noninstitutional population	8,529	8,545	8,547	8,529	8,542	8,543	8,544	8,545	8,547
Civilian labor force	5,691	5,591	5,640	5,616	5,639	5,692	5,580	5,646	5,567
Employed	5,023	4,933	4,921	4,979	4,880	5,000	4,898	4,966	4,876
Unemployed	668	658	719	637	759	692	682	680	691
Unemployment rate	11.7	11.8	12.7	11.3	13.5	12.2	12.2	12.0	12.4
<b>Massachusetts</b>									
Civilian noninstitutional population	4,474	4,506	4,510	4,474	4,498	4,501	4,503	4,506	4,510
Civilian labor force	3,039	2,951	3,025	3,017	2,921	2,981	3,009	2,986	3,005
Employed	2,765	2,759	2,799	2,761	2,698	2,744	2,797	2,794	2,798
Unemployed	274	193	226	256	223	237	212	192	207
Unemployment rate	9.0	6.5	7.5	8.5	7.6	8.0	7.0	6.4	6.9
<b>Michigan</b>									
Civilian noninstitutional population	6,751	6,727	6,725	6,751	6,733	6,731	6,728	6,727	6,725
Civilian labor force	4,317	4,377	4,420	4,255	4,273	4,297	4,344	4,370	4,357
Employed	3,700	3,736	3,773	3,627	3,638	3,622	3,695	3,717	3,696
Unemployed	617	641	648	628	634	675	649	653	661
Unemployment rate	14.3	14.7	14.6	14.8	14.8	15.7	14.9	14.9	15.2
<b>New Jersey</b>									
Civilian noninstitutional population	5,698	5,742	5,746	5,698	5,730	5,734	5,738	5,742	5,746
Civilian labor force	3,667	3,614	3,697	3,617	3,623	3,595	3,637	3,579	3,647
Employed	3,352	3,342	3,382	3,313	3,314	3,292	3,367	3,335	3,342
Unemployed	314	272	315	304	309	303	270	244	305
Unemployment rate	8.6	7.5	8.5	8.4	8.5	8.4	7.4	6.8	8.4
<b>New York</b>									
Civilian noninstitutional population	13,508	13,579	13,586	13,508	13,562	13,568	13,572	13,579	13,586
Civilian labor force	8,135	7,869	8,209	8,060	7,917	8,036	8,015	7,907	8,133
Employed	7,440	7,200	7,459	7,364	7,221	7,291	7,271	7,215	7,382
Unemployed	695	669	750	696	696	745	744	692	751
Unemployment rate	8.5	8.5	9.1	8.6	8.8	9.3	9.3	8.8	9.2
<b>Ohio</b>									
Civilian noninstitutional population	8,056	8,069	8,071	8,056	8,067	8,068	8,068	8,069	8,071
Civilian labor force	5,264	5,166	5,267	5,184	5,047	5,104	5,158	5,185	5,182
Employed	4,619	4,502	4,595	4,547	4,361	4,431	4,485	4,479	4,517
Unemployed	645	664	672	637	686	673	673	706	665
Unemployment rate	12.3	12.9	12.8	12.3	13.6	13.2	13.0	13.6	12.8
<b>Pennsylvania</b>									
Civilian noninstitutional population	9,133	9,154	9,157	9,133	9,149	9,151	9,152	9,154	9,157
Civilian labor force	5,451	5,428	5,407	5,420	5,416	5,357	5,377	5,489	5,578
Employed	4,888	4,769	4,886	4,875	4,700	4,638	4,669	4,796	4,874
Unemployed	563	659	721	545	716	719	708	693	704
Unemployment rate	10.3	12.1	12.9	10.1	13.2	13.4	13.2	12.6	12.6
<b>Texas</b>									
Civilian noninstitutional population	10,919	11,223	11,251	10,919	11,143	11,170	11,196	11,223	11,251
Civilian labor force	7,434	7,469	7,703	7,365	7,569	7,567	7,569	7,508	7,431
Employed	6,859	6,873	7,046	6,857	6,900	6,887	6,919	6,897	7,044
Unemployed	575	596	657	508	669	680	650	611	587
Unemployment rate	7.7	8.0	8.5	6.9	8.8	9.0	8.6	8.1	7.7

<sup>a</sup> These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

<sup>b</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted					Seasonally adjusted				
	June 1982	Apr. 1983	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
Total	50,585	89,016	89,827	90,574	89,775	88,746	88,814	89,101	89,416	89,760
Goods-producing	24,300	22,936	23,354	23,812	24,001	23,049	23,030	23,155	23,347	23,514
Mining	1,169	991	1,000	1,024	1,150	1,014	1,006	997	998	1,008
Construction	4,092	3,650	3,890	4,104	3,933	3,790	3,757	3,786	3,863	3,946
Manufacturing	19,039	18,295	18,464	18,681	18,918	18,245	18,267	18,376	18,486	18,560
Production workers	12,941	12,369	12,525	12,732	12,643	12,303	12,323	12,435	12,534	12,629
Durable goods	11,258	10,687	10,806	10,922	11,169	10,608	10,617	10,689	10,783	10,830
Production workers	7,485	7,038	7,148	7,255	7,408	6,949	6,961	7,035	7,117	7,177
Lumber and wood products	616.4	640.2	644.0	657.4	601	631	638	651	661	679
Furniture and fixtures	430.4	440.1	482.2	486.2	433	427	433	440	444	448
Stone, clay, and glass products	592.3	559.9	572.3	587.4	580	557	559	565	569	575
Primary metal products	839.0	828.5	832.2	841.0	929	810	816	820	827	832
Fabricated metal products	1,450.4	1,367.3	1,377.3	1,393.2	1,442	1,364	1,362	1,369	1,379	1,385
Machinery, except electrical	2,311.3	2,043.6	2,070.5	2,073.5	2,298	2,042	2,020	2,031	2,048	2,061
Electric and electronic equipment	2,035.9	1,994.4	2,007.8	2,027.4	2,025	1,981	1,988	1,999	2,010	2,017
Transportation equipment	1,767.8	1,746.3	1,770.3	1,774.4	1,756	1,729	1,723	1,743	1,758	1,761
Instruments and related products	725.5	688.8	688.5	694.5	720	693	691	690	689	689
Miscellaneous manufacturing	388.7	377.9	380.6	386.2	385	374	377	381	382	383
Non-durable goods	7,781	7,608	7,658	7,762	7,749	7,437	7,450	7,487	7,703	7,730
Production workers	5,456	5,331	5,377	5,473	5,435	5,354	5,362	5,400	5,417	5,452
Food and kindred products	1,619.7	1,565.6	1,582.7	1,620.6	1,635	1,620	1,619	1,633	1,630	1,637
Tobacco manufactures	64.0	61.4	60.8	61.1	68	67	67	66	66	65
Textile mill products	745.7	733.0	737.4	746.8	744	726	730	733	736	745
Apparel and other textile products	1,186.8	1,148.5	1,164.0	1,179.5	1,167	1,148	1,149	1,149	1,153	1,160
Paper and allied products	466.5	451.8	454.9	462.5	461	452	452	454	454	457
Printing and publishing	1,268.0	1,274.3	1,275.0	1,276.2	1,268	1,264	1,269	1,274	1,276	1,276
Chemicals and allied products	1,088.4	1,055.7	1,057.9	1,065.9	1,079	1,056	1,056	1,058	1,058	1,056
Petroleum and coal products	202.0	196.9	197.7	200.2	200	199	199	199	198	198
Rubber and misc. plastics products	711.1	707.4	716.0	728.5	705	691	699	707	716	721
Leather and leather products	226.6	213.6	215.8	220.9	222	214	214	214	214	215
Services-producing	66,285	66,080	66,473	66,759	65,774	65,697	65,784	65,942	66,065	66,246
Transportation and public utilities	5,140	4,953	4,991	5,037	5,099	4,966	4,963	4,988	4,991	4,997
Wholesale and retail trade	20,573	20,177	20,369	20,580	20,445	20,343	20,350	20,329	20,354	20,457
Wholesale trade	5,326	5,164	5,196	5,236	5,293	5,181	5,176	5,180	5,196	5,205
Retail trade	15,247	15,013	15,173	15,344	15,152	15,162	15,174	15,149	15,158	15,252
Finance, insurance, and real estate	5,395	5,401	5,431	5,506	5,339	5,384	5,391	5,423	5,431	5,451
Services	19,195	19,517	19,643	19,869	19,046	19,262	19,356	19,478	19,565	19,711
Government	15,982	16,032	16,039	15,767	15,836	15,742	15,724	15,724	15,728	15,630
Federal government	2,766	2,746	2,780	2,792	2,738	2,742	2,742	2,749	2,745	2,745
State and local government	13,196	13,286	13,290	12,975	13,098	13,000	12,982	12,975	12,979	12,885

p = preliminary.

c = corrected.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	June 1982	Apr. 1983	May 1983 P	June 1983 P	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983 P	June 1983 P
Total private .....	35.0	34.7	35.0	35.3	34.9	34.5	34.6	34.9	35.1	35.1
Mining .....	42.6	41.6	42.0	42.9	(2)	(2)	(2)	(2)	(2)	(2)
Construction .....	37.5	36.7	37.5	38.0	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing .....	39.3	38.6	39.9	40.3	39.1	39.2	39.5	40.1	39.9	40.1
Overtime hours .....	2.4	2.7	2.7	2.9	2.3	2.4	2.6	2.9	2.7	2.9
Durable goods .....	39.8	40.3	40.4	40.7	39.6	39.7	39.9	40.5	40.4	40.5
Overtime hours .....	2.3	2.6	2.6	2.9	2.2	2.3	2.5	2.8	2.6	2.8
Lumber and wood products .....	39.2	39.9	40.2	40.7	38.4	39.5	39.5	40.0	39.8	39.9
Furniture and fixtures .....	37.8	39.0	39.0	39.8	37.6	37.9	38.3	39.3	39.2	39.5
Stone, clay, and glass products .....	40.8	40.9	41.4	42.0	40.3	40.5	40.6	41.0	41.2	41.5
Primary metal products .....	38.9	40.1	40.0	40.4	38.8	39.1	39.4	39.9	40.2	40.2
Fabricated metal products .....	39.4	40.2	40.4	40.7	39.4	39.6	39.7	40.5	40.4	40.4
Machinery, except electrical .....	39.6	40.0	39.9	40.1	39.7	39.4	39.7	40.2	40.0	40.2
Electric and electronic equipment .....	39.5	40.1	40.2	40.6	39.4	39.5	39.8	40.4	40.3	40.5
Transportation equipment .....	41.6	42.0	41.9	42.4	41.3	41.2	41.7	42.3	41.6	42.0
Instruments and related products .....	40.2	40.1	40.2	40.2	40.1	39.7	40.0	40.5	40.3	40.1
Miscellaneous manufacturing .....	38.6	39.0	38.8	38.9	(2)	(2)	(2)	(2)	(2)	(2)
Nonurable goods .....	36.7	39.1	39.3	39.6	38.5	38.5	39.0	39.5	39.4	39.4
Overtime hours .....	2.5	2.7	2.8	2.9	2.5	2.6	2.7	3.0	2.9	2.9
Food and kindred products .....	39.4	38.9	39.3	39.5	39.4	39.0	39.2	39.6	39.4	39.5
Tobacco manufactures .....	38.4	37.3	37.4	37.3	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products .....	38.0	40.2	40.5	41.0	37.7	39.0	39.6	40.6	40.4	40.6
Apparel and other textile products .....	35.5	35.9	36.1	36.7	35.1	35.2	35.6	36.2	36.1	36.2
Paper and allied products .....	42.0	42.2	42.4	42.8	41.9	41.4	42.1	42.4	42.7	42.7
Printing and publishing .....	36.9	37.4	37.3	37.2	37.0	37.1	37.4	37.7	37.4	37.3
Chemicals and allied products .....	40.9	41.5	41.4	41.7	40.9	41.0	41.2	41.5	41.5	41.7
Petroleum and coal products .....	44.2	43.8	43.8	43.8	44.0	44.4	44.9	43.5	43.7	43.6
Rubber and misc. plastics products .....	40.1	41.1	41.2	41.2	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products .....	36.7	36.5	37.1	37.8	35.8	34.9	36.0	37.0	36.8	36.8
Transportation and public utilities .....	39.3	38.6	38.7	39.2	39.1	38.6	38.8	38.8	38.9	39.0
Wholesale and retail trade .....	32.1	31.5	31.6	32.1	31.9	31.4	31.7	31.7	31.9	32.0
Wholesale trade .....	38.5	38.3	38.5	38.7	38.4	38.2	38.4	38.5	38.6	38.7
Retail trade .....	30.4	29.4	29.7	30.1	29.9	29.3	29.7	29.4	29.9	29.9
Finance, insurance, and real estate .....	36.1	36.1	36.3	36.0	(2)	(2)	(2)	(2)	(2)	(2)
Services .....	32.8	32.6	32.7	33.0	32.6	32.5	32.7	32.7	32.9	32.8

<sup>1</sup> Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

<sup>2</sup> This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.  
p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers' on private nonagricultural payrolls by industry

Industry	Average hourly earnings					Average weekly earnings				
	June 1982	Apr. 1983	May 1983 <sup>1</sup>	June 1983 <sup>2</sup>	June 1982	Apr. 1983	May 1983 <sup>3</sup>	June 1983 <sup>3</sup>	June 1983 <sup>3</sup>	
Total private	47.64	47.94	47.57	47.57	\$267.40	\$275.52	\$278.95	\$281.34		
Seasonally adjusted	7.67	7.95	7.98	8.00	267.60	277.46	280.10	280.80		
Mining	10.78	11.28	11.21	11.33	461.38	469.25	470.82	486.06		
Construction	11.47	11.90	11.80	11.72	430.13	436.73	442.50	445.36		
Manufacturing	8.50	8.77	8.78	8.81	334.05	349.05	350.32	355.04		
Durable goods	9.07	9.31	9.33	9.37	360.99	375.19	376.93	381.36		
Lumber and wood products	7.54	7.74	7.75	7.83	295.57	308.05	311.55	318.68		
Furniture and fixtures	6.29	6.51	6.51	6.57	237.76	253.89	253.89	261.49		
Stone, clay, and glass products	8.85	9.16	9.21	9.29	361.08	374.64	381.28	390.18		
Primary metal products	11.30	11.25	11.28	11.29	439.57	451.13	451.20	456.12		
Fabricated metal products	8.82	9.07	9.09	9.11	349.27	364.61	367.24	370.78		
Machinery, except electrical	9.29	9.48	9.58	9.63	387.80	395.20	382.24	386.16		
Electric and electronic equipment	8.14	8.60	8.59	8.67	321.53	344.86	345.32	352.00		
Transportation equipment	11.21	11.53	11.51	11.58	466.36	484.26	482.27	490.99		
Instruments and related products	8.08	8.46	8.47	8.46	324.82	339.25	340.49	340.09		
Miscellaneous manufacturing	6.42	6.76	6.81	6.79	247.81	263.64	264.23	264.13		
Nondurable goods	7.70	8.03	8.03	8.04	297.99	313.97	315.56	318.38		
Food and kindred products	7.91	8.20	8.18	8.21	311.65	318.98	321.47	324.30		
Tobacco manufactures	10.36	10.61	10.74	10.67	392.82	399.75	401.68	397.99		
Textile mill products	5.80	6.18	6.14	6.16	220.40	246.83	248.67	252.56		
Apparel and other textile products	5.20	5.35	5.33	5.36	184.60	192.07	192.41	196.71		
Paper and allied products	8.27	8.72	8.70	8.71	389.34	410.18	415.52	424.15		
Printing and publishing	6.68	7.03	7.07	7.08	320.29	337.72	338.31	337.78		
Chemicals and allied products	9.94	10.43	10.50	10.53	406.55	432.85	434.70	439.10		
Petroleum and coal products	12.52	13.27	13.21	13.23	553.83	581.23	576.60	579.47		
Rubber and misc. plastics products	7.66	7.95	7.96	7.96	307.17	326.75	327.95	327.95		
Leather and leather products	5.35	5.52	5.51	5.50	196.35	201.48	204.42	207.90		
Transportation and public utilities	10.20	10.72	10.73	10.72	400.86	413.79	415.25	420.22		
Wholesale and retail trade	6.18	6.45	6.47	6.45	198.38	203.18	205.75	207.05		
Wholesale trade	7.96	8.34	8.36	8.35	306.46	319.42	321.86	323.15		
Retail trade	5.46	5.69	5.71	5.71	164.35	167.29	169.59	171.87		
Finance, insurance, and real estate	6.71	7.23	7.31	7.25	242.33	261.00	265.35	261.00		
Services	6.88	7.20	7.22	7.19	224.35	234.72	236.09	237.27		

<sup>1</sup> See footnote 1, table B-2.

p = preliminary.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers' on private nonagricultural payrolls by industry (1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted						
	June 1982	Apr. 1983	May 1983 <sup>1</sup>	June 1983 <sup>2</sup>	Percent change from: June 1982-June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983 <sup>3</sup>	Percent change from: June 1983
Total private nonfarm:	147.5	154.0	154.4	154.3	4.6	148.0	153.4	153.4	154.0	154.6	154.8	0.1
Current dollars	92.3	94.7	94.6	N.A.	(2)	92.8	93.3	95.0	94.8	94.7	N.A.	(3)
Constant (1977) dollars	159.2	165.7	169.1	167.0	4.8	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Mining	139.7	144.3	143.9	143.4	2.6	140.5	145.7	145.5	145.9	144.5	144.2	-2
Construction	152.4	157.1	157.4	157.7	3.5	152.5	157.3	157.1	157.0	157.7	157.8	-1
Manufacturing	147.0	155.5	155.6	155.2	5.6	148.5	155.2	155.9	155.9	156.4	156.6	-1
Transportation and public utilities	144.5	150.9	151.6	151.5	4.8	144.6	149.3	149.6	150.5	151.3	151.5	-2
Wholesale and retail trade	146.8	157.4	159.0	158.1	7.7	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Finance, insurance, and real estate	146.5	154.2	154.9	154.5	5.5	147.4	152.4	152.6	154.0	154.9	155.4	-3
Services												

<sup>1</sup> See footnote 1, table B-2.<sup>2</sup> Percent change was 1.4 percent from May 1982 to May 1983, the latest month available.<sup>3</sup> Percent change was -1.1 percent from April 1983 to May 1983, the latest month available.<sup>4</sup> These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

N.A. = not available.

p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers\* on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted				
	June 1982	Apr. 1983	May 1983	June 1983	June 1982	Feb. 1983	Mar. 1983	Apr. 1983	May 1983	June 1983
Total private .....	106.4	102.8	104.8	107.5	105.0	102.2	103.1	104.0	105.0	105.7
Goods-producing .....	93.9	87.9	90.7	94.0	92.1	87.2	87.8	89.6	90.5	91.8
Mining .....	135.9	107.7	110.0	115.7	132.8	111.6	110.7	109.5	110.2	113.9
Construction .....	102.7	91.5	101.4	109.8	101.1	94.7	94.3	96.3	99.9	102.7
Manufacturing .....	89.2	86.3	87.7	89.9	88.5	84.1	85.4	87.4	87.8	88.7
Durable goods .....	87.4	83.3	84.7	86.8	86.6	80.4	81.6	83.7	84.3	85.4
Food and kindred products .....	80.8	86.0	90.4	96.7	77.9	83.1	85.1	88.0	89.0	92.0
Lumber and wood products .....	86.4	91.1	91.7	98.5	86.8	84.7	87.9	92.0	92.8	94.1
Furniture and fixtures .....	81.4	78.9	82.0	85.8	80.6	76.6	78.1	80.0	81.3	82.6
Stone, clay, and glass products .....	71.3	64.8	65.1	66.6	70.5	61.0	62.2	63.7	65.0	65.4
Primary metal products .....	84.4	80.7	81.9	83.8	83.6	78.9	79.4	81.4	82.0	82.7
Fabricated metal products .....	94.2	89.3	81.6	82.3	94.0	78.4	78.7	80.0	81.4	82.0
Machinery, except electrical .....	97.9	96.7	98.0	100.4	97.4	93.2	95.2	97.6	98.1	99.5
Electric and electronic equipment .....	83.9	83.4	84.7	86.1	83.6	80.1	81.0	83.7	83.0	84.3
Transportation equipment .....	110.0	100.6	101.6	103.1	108.8	99.1	100.6	101.9	101.7	101.7
Instruments and related products .....	83.8	81.5	81.9	83.8	83.0	77.7	80.7	82.9	82.4	83.0
Miscellaneous manufacturing .....	91.9	90.9	92.0	94.4	91.2	89.5	91.0	92.8	92.9	93.6
Nondurable goods .....	94.9	89.3	91.3	94.7	95.0	93.8	94.1	96.0	95.4	96.2
Food and kindred products .....	87.3	80.4	79.7	79.9	95.1	82.4	89.6	89.1	88.6	85.5
Tobacco manufactures .....	75.8	79.2	80.3	82.5	74.7	75.4	77.6	80.1	80.1	81.6
Textile mill products .....	88.9	86.7	88.1	91.4	86.2	85.0	85.5	87.6	87.8	88.4
Apparel and other textile products .....	93.9	92.3	93.6	96.0	92.6	90.4	92.1	93.1	94.6	95.0
Paper and allied products .....	105.4	107.6	107.1	104.7	106.2	105.6	106.5	108.1	107.5	107.4
Printing and publishing .....	96.5	94.6	94.9	96.7	95.5	93.6	91.7	94.7	94.6	95.7
Chemicals and allied products .....	95.3	93.8	93.8	96.3	92.8	96.2	97.6	94.6	93.5	94.0
Petroleum and coal products .....	95.5	98.1	99.7	101.9	95.3	90.9	94.9	98.5	100.4	100.8
Rubber and misc. plastics products .....	87.0	80.3	82.8	87.0	82.8	76.4	79.9	81.7	81.2	82.2
Leather and leather products .....	113.3	111.1	112.6	114.9	112.1	110.5	111.6	111.9	113.0	113.4
Service-producing .....	104.3	98.5	99.4	101.8	103.0	98.6	99.1	99.6	99.8	100.3
Transportation and public utilities .....	106.3	102.1	104.1	106.3	105.2	102.1	103.9	103.6	104.6	105.1
Wholesale and retail trade .....	110.4	105.5	107.0	108.5	109.5	106.1	106.6	107.2	107.2	107.7
Wholesale trade .....	104.8	100.8	103.0	105.5	103.6	100.8	103.0	102.4	103.6	104.1
Retail trade .....	118.2	117.1	118.5	119.6	117.0	116.4	116.4	117.8	118.9	118.4
Finance, insurance, and real estate .....	123.6	124.7	126.0	126.6	122.3	122.5	123.9	124.7	126.2	126.7
Services .....										

\* See footnote 1, table B-2.  
p = preliminary.

c = corrected.

Table B-6. Indexes of diffusion: Percent of industries in which employment increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981 .....	57.8	52.4	52.2	65.6	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982 .....	28.5	45.4	36.0	39.0	47.6	32.8	38.4	37.1	34.1	19.3	32.0	42.2
	1983 .....	56.5	45.7	62.4	69.1	70.4p	66.9p						
Over 3-month span	1981 .....	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	33.3	30.1	24.5	23.4
	1982 .....	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983 .....	45.4	55.1	65.6	73.3p	77.2p							
Over 6-month span	1981 .....	68.5	65.3	63.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982 .....	20.2	23.7	25.3	29.8	28.1	26.1	23.4	19.1	21.2	26.1	26.6	35.8
	1983 .....	50.5	64.0p	74.7p									
Over 12-month span	1981 .....	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	25.3	23.1
	1982 .....	22.0	20.7	18.0	19.4	18.3	20.7	20.7	22.8	24.2	31.5	37.4p	42.7p
	1983 .....												

\* Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 100 private nonagricultural industries.  
p = preliminary.

NOTE: Figures are the percent of industries with employment rising. Half of the un-changed components are counted as rising. Data are centered within the spans.

Representative HAMILTON. Thank you very much, Ms. Norwood. Let me focus first on the behavior of the labor force during recovery periods and try to get some idea of just how strong this recovery has been that you mentioned in your statement.

How does the drop in unemployment of eight-tenths of 1 percent between December and June compare with previous postwar business cycles?

Ms. NORWOOD. If we look at employment and compare it to other postwar recessions, I think we find that the change is fairly strong. I can read you some numbers, if you'd like, but basically, it is stronger than in 1975. It is stronger than in 1980. Stronger than actually every postwar recession except for 1949, which was 2.3-percent change—I am sorry, I am looking at employment.

Representative HAMILTON. You are looking at—

Ms. NORWOOD. At the growth in employment. Now if we look at the decline in unemployment, in the level of unemployment, in percentage terms, it is still extraordinarily strong. There was in those 6 months a decline of almost 7½ percent in the number of people unemployed and that compares quite favorably all the way back to 1958; 1958 had 8.9 percent.

Representative HAMILTON. You are saying that there is an unusually sharp drop over this 6-month period in the unemployment rate?

Ms. NORWOOD. Yes; certainly more than in any postwar recession except 1949. And the decline in the number of unemployed exceeds that of 1961, 1970, 1975, or 1980. You have to go back to 1958 to have something that was stronger.

Representative HAMILTON. Have the other recoveries been characterized by greater increases in the size of the labor force than this one?

Ms. NORWOOD. Not necessarily. We did have a little larger increase in the labor force in 1975. That was about a 1.1-percent increase. In the last 6 months, we have had a seven-tenths of 1 point increase. That was about the same as in 1980 and in 1970 and somewhat more than in the other preceding recessions.

Representative HAMILTON. Now, ordinarily, you have a lot of new people come into the market in June, do you not?

Ms. NORWOOD. Yes.

Representative HAMILTON. And you would therefore expect unemployment to rise, or at least that factor would tend to push it up.

[Ms. Norwood nods in the affirmative.]

Representative HAMILTON. Has that happened this time?

Ms. NORWOOD. Before seasonal adjustment?

Representative HAMILTON. Yes.

Ms. NORWOOD. Yes; certainly, it did, because we did have a very large increase, larger than we have had for sometime, in the labor force. We also had a large increase in employment, but the increase in the labor force was larger. I did discuss, as you recall, the fact that the survey week, which contains the 12th of the month, was somewhat later this year. We may have picked up some people who would normally be picked up in the July survey.

But I think that that affects primarily, the young people—that is, young adults and teenagers who would have been in school. And

if we take them out of the data completely, we still have a very vigorous labor market.

Representative HAMILTON. Now the number of workers unemployed for an extended period, more than 26 weeks, was 3 million in June—that is a higher figure than May, even though overall unemployment declined.

Now is the number, 2.95 million, a record?

Ms. NORWOOD. Yes, it is.

Representative HAMILTON. Can you tell us a little bit about the characteristics of the long-term unemployed worker, sex, age, race, occupation? Are you able to give us any information on that?

Ms. NORWOOD. Yes, I can. Almost 7 out of 10 of them are men. The others, obviously, are women. A little more than half of them are in what we call the prime-age group. I am never quite sure what that means, by the way, but they are 25 to 44 years old. Three quarters of them are white and about a quarter, 23 percent, are black.

In terms of industry, a little more than a third are in manufacturing, with a pretty hefty group of them in durable manufacturing, as we would expect.

Representative HAMILTON. In what kind of manufacturing?

Ms. NORWOOD. Durable industries, particularly primary metals, steel, autos. About one in five of them are people who are entrants to the labor force; that is, who either had left the labor force or newly entered the labor force in search of their first job.

Representative HAMILTON. Has the number of long-term unemployed declined more slowly than the general, overall unemployment rate as a rule?

Ms. NORWOOD. Yes, it does. And, in particular, in a period of recovery, as there are very many fewer people who lost their job recently, those who are unemployed for longer periods of time—say 15 to 26 weeks—move, then, into the longer time group.

Employers tend to fire the most experienced people last and then they tend to rehire those people first in a period of recovery.

Representative HAMILTON. What is happening with these long-term unemployed people? Are they dropping out of the labor force? Are they retiring? Are they getting into job training?

Ms. NORWOOD. We have very little information that is specific to that. The long-term unemployed, of course, are in the labor force. These 3 million people are in the labor force. They are looking for jobs. But they have been out of work, the 3 million have been out of work for 6 months or more.

They are, somewhat disproportionately, of course, men. They are also disproportionately minorities.

Representative HAMILTON. How many of them are still eligible for unemployment insurance?

Mr. PLEWES. If we look at the latest figures we have for the extended benefits program—that is, those benefits exceeding 27 weeks—we see that the number in the Federal extended benefits programs is 1,062,000. And the number on the regular extended benefits programs is 347,000, for a total of about 1.4 million.

Representative HAMILTON. 1.4 million out of the 2.95 million who still qualify for unemployment benefits; is that your testimony?

Mr. PLEWES. Yes.

Representative HAMILTON. Senator Proxmire.

Senator PROXMIRE. Thank you, Congressman. Ms. Norwood, it is good to see you here.

Let me ask a question a little bit different from what Congressman Hamilton has been asking about, something that has puzzled me for sometime now. You've had a comprehensive employment and unemployment picture, including the resident Armed Forces. That hasn't been picked up very much by the press, which is a mystery to me.

You say all civilian workers, unemployment is down to 9.8 percent. It broke that magic double-digit figure. But for civilian workers, it's down to 10 percent; is that right?

Ms. NORWOOD. Yes.

Senator PROXMIRE. Now, of course, I am a Democrat and I am critical of President Reagan. I hope he is defeated in the next election and I can see why they would prefer to have the lower figure. But, at the same time, it seems to me, in all fairness, we ought to have a comprehensive figure.

I cannot understand why people in the Armed Forces are not considered to be employed.

Ms. NORWOOD. Well, they are——

Senator PROXMIRE. If a kid wants a job and he cannot get it anywhere else, he goes into the Armed Forces and he works hard. He gets paid for it and it seems to me that he is employed.

Ms. NORWOOD. That is right, and——

Senator PROXMIRE. What is your position on this? I would like to know, because I think that might have some effect. I think the press wants to be fair and they would like to know what the outstanding expert in this area feels is the fairest measure of unemployment.

Ms. NORWOOD. I think they are both important. Clearly, the overall figure, that includes the Armed Forces among the employed, was 9.8 percent this month, and I think that's a very important figure.

On the other hand, because we do not survey specifically the people in the Armed Forces—we just get an overall number from the Department of Defense—it is not possible for us to break that down into all of the various demographic characteristics.

Senator PROXMIRE. But when you look at the overall figure, you know that that figure is correct. You don't challenge, nobody challenges the fact that there are a certain number of people, whether it's 1.8 or 1.7 in the civilian Armed Forces, whatever that is. You have that figure to the man. It's not a matter of guessing there. We know what it is. Isn't that right?

Ms. NORWOOD. That's right.

Senator PROXMIRE. But you say that perhaps when you interpret it in terms of the effect on black unemployment, teenage unemployment, et cetera, there you can't break it down.

So it would seem to me that it might be more, perhaps more accurate as a comprehensive figure, but less when we're talking about ethnic groups or a particular breakdown measure.

Ms. NORWOOD. Yes; when we're discussing the economy and looking at the availability of labor, we want to take account, certainly,

of people who have chosen the military as a career. And that's why we've added that rate.

I think the two unemployment rates are very close together. A tenth or two-tenths is a very little difference, and I think they're both important.

Senator PROXMIRE. Now, the labor force figure that you have here for June 1983 is 113,600,000. Is that a seasonally adjusted figure?

Ms. NORWOOD. Yes.

Senator PROXMIRE. Is that the highest that it's ever been? Is that a record?

Ms. NORWOOD. I think so. Yes, it is.

Senator PROXMIRE. And as you pointed out, that's an enormously sharp increase in 1 month. It's 1,200,000 in 1 month, seasonally adjusted.

[Ms. Norwood nods in the affirmative.]

Senator PROXMIRE. It was 3 million if it wasn't seasonally adjusted.

Ms. NORWOOD. Yes; I think that it's perhaps somewhat exaggerated.

Senator PROXMIRE. Now why?

Ms. NORWOOD. Well, one reason, I think, is that the survey week was a little bit later and therefore, we probably picked up a large number of young people who typically leave school after the survey week. Let me say, I think the seasonal adjustment process has worked quite well, but we have not had a survey week as late as this since 1978. And you can't expect the seasonal adjustment process to take care of that.

But I think if we partition it and look at those portions of it that relate to young people, clearly, many of those young people really came into the labor force—even after seasonal adjustment—because there are more jobs available. The economy is recovering.

Senator PROXMIRE. At any rate, regardless of how you interpret this, it's your impression, I take it, that this is the largest labor force we've ever had and it must be one of the very largest increases we've ever had in 1 month.

Ms. NORWOOD. That's right.

Senator PROXMIRE. Seasonally adjusted or in any other cases, when was total employment last above 102,494,000? That's the highest figure since when; 2 or 3 years? I have the figure on this chart we have here through 1982, but—

Ms. NORWOOD. May 1981, just before the beginning of the recession.

Senator PROXMIRE. May 1981. So we are not far from the level of employment—

Ms. NORWOOD. That's right.

Senator PROXMIRE [continuing]. That we had at the beginning of the recession.

Ms. NORWOOD. Because we have a larger population.

Senator PROXMIRE. Is this the sharpest drop in 1 month in male adult unemployment that you can recall?

Ms. NORWOOD. It's a very sharp drop. I think so. The 0.6-point decline in the unemployment rate for adult men is the sharpest drop since December 1959.

Senator PROXMIRE. Now there's been a lot of concern expressed by people in the administration and outside the administration that the recovery may be going too fast. Is there any evidence as far as employment is concerned that that may be the case? Are we getting a situation where we may be working into shortages or other frictions that might be counterproductive? Any reason why you think it might be wise to slow it down or does it seem to be going at the kind of pace that we can welcome?

Ms. NORWOOD. I think the discussion of slowing down the economy relates to monetary and, to some extent, fiscal policy. We've got still more than 11 million people unemployed, and I don't see that the labor market is related to those discussions.

Senator PROXMIRE. Do you see any of the expected effect of the July 1 tax cut on employment and unemployment? On the basis of past experience—after all, this is the third tax cut we've had. We had a 5-percent cut in October 1981. We had a 10-percent cut 1 year ago. And now another 10-percent cut a few days ago.

Do you anticipate that that, by itself, might have an effect and, if so, how significant?

Ms. NORWOOD. I don't really know how significant, but clearly, consumers are spending more. We did have this month a significant increase in employment in retail trade and I would expect that if consumers continue and if they spend their tax increases, that employment in the retail trade industry, in particular, will show some direct relationship to that.

Senator PROXMIRE. So it could be an increase. Would you care to put a figure on it or not?

Ms. NORWOOD. No; I'll leave that to you, Senator.

Senator PROXMIRE. You don't want to say 50,000, 100,000 more in trade?

Ms. NORWOOD. You're much better at guessing that.

Senator PROXMIRE. And ultimately, that figure, of course, would be reflected in manufacturing and so forth, construction.

Ms. NORWOOD. Yes.

Senator PROXMIRE. Any evidence at all of labor shortages that could push up wages and prices in particular areas? I realize, as you say, with 11 million plus people out of work, that certainly there isn't any comprehensive—

Ms. NORWOOD. I'm not aware of specific instances. I'm sure that there are some skill mismatches. We have a program, you know, on occupational outlook and we have been attempting to examine some of those trends for the future. We are finding, however, that it is extremely complicated. Even when you talk about engineers, for example, we find that there are many different kinds of engineers. And some people say there's a shortage and other people say that there is no shortage. One needs to delve quite deeply into particular situations.

Senator PROXMIRE. So you're looking at it from the standpoint of the effect on wages and prices?

Ms. NORWOOD. Well, to some extent. But we also expect, of course, that as some of the defense buildup continues, that there may be more demand for some occupations than for others. We have been looking at that. We have not yet come up with anything that's very definitive.

Senator PROXMIRE. How about the regional situation? In the Midwest, where the chairman and I come from, there has been exceptionally heavy unemployment. And I see that you have improvement in construction manufacturing, where we were hit especially hard.

How does that shape up? Has there been a special improvement in Michigan, Indiana, Wisconsin, et cetera—Illinois?

Ms. NORWOOD. There has been some improvement over a period of some months. I'm sure that you, in particular, Senator Proxmire, are aware of our problems in the statistical significance of the monthly changes in those numbers. This month, for example, there was a change from 13.6 to 12.8 percent in the unemployment rate for Ohio, which is barely significant in statistical terms. I think we need to look at that over a longer period of time.

There has been, certainly over a period of months since December, some significant improvement in some of those very hard-hit States. For example, an 18,000 increase in employment in lumber and wood manufacturing was concentrated in the Northwest.

So I think these things are all related and there are changes going on. It's just harder to measure.

Senator PROXMIRE. What constitutes, in your judgment, the greatest danger to further recovery?

Ms. NORWOOD. Well, I read in the newspapers about the problems of deficits, and fiscal policy, and monetary policy not being coordinated, and I guess that is a problem. There is also the problem, of course, of the international debt, which I think is quite a serious one.

Senator PROXMIRE. I'd like to ask you also, you highlighted briefly in your statement the fact that there has been little improvement for blacks. My staff people have told me that they notice that over the last 6 months there's been very, very little, a very discouraging situation for blacks.

In view of the fact that there has been a pickup in manufacturing and in some of the areas where blacks have been employed more perhaps than in others, and a big pickup for related service work and so forth, how do you explain this? Why is there this heartbreaking, unfortunate situation for blacks?

Ms. NORWOOD. I don't know, Senator Proxmire. I am concerned about it. You will note that I have been talking about it for some months now.

If we go back to the period of the 1970's and look at the experience of black adult men, in particular, you will see that their employment-population ratios tended to decline, even during a period when we were, in fact, as a country investing some considerable amounts of money in training programs.

So there has been a development generally downward in terms of the population, the proportion of the population employed.

The unemployment rates for the black population went up in the 1980 recession, in particular, and don't seem to have improved very much since then. Some of it, clearly, is due to skill training. It seems to me when we look at the pool of people who are unemployed, there are really two kinds of groups. There are people who are unemployed, who have lost their job, who have some training, and have some ability, either because of the places in which they

are located or the economic circumstances from which they come or the education that they have, to move into other jobs after some period of unemployment. And there's a lot of evidence that in this country, we have a considerable flow into unemployment and out of unemployment.

Senator PROXMIRE. Could this have been affected in any way by the fact that the Armed Forces have been an especially attractive employer in the last year or so, recent months, especially, because of the higher pay and also because of the lack of jobs elsewhere and that more whites are going into Armed Forces, less opportunity for blacks in the Armed Forces?

Ms. NORWOOD. There's some possibility of that. But as I pointed out, I think this is a longer term phenomenon than that. The other point I wanted to make is that there is, as well as that group, there is another group, many members of which are in the long-term unemployed, who have different kinds of problems in the labor force and which, in a sense, they cannot self-correct.

Senator PROXMIRE. Can you explain the lack of teenage opportunity and the fact that the teenage unemployment didn't increase and remained painfully high on the same basis, or are there other explanations for it?

Ms. NORWOOD. I think the teenage problem is, in fact, a much greater social problem. Teenagers tend to be concentrated, particularly minority teenagers, in central cities, and in families with very low economic circumstances. Many of them are living in what even the Government defines as poverty. They have a very difficult time and they are not in very encouraging circumstances.

I think there's a direct relationship between the kind of family economic situation that some of these youngsters come out of and their relationship to the labor force. I can't prove that, but it seems to me that there is a lot of correlation there.

Senator PROXMIRE. One final question before I yield to Congressman Hamilton again. I notice that, and you say in your overall analysis here, that there's quite a difference between the business survey and the household survey. The household survey this time seemed to catch up somewhat.

Why, was this lag and is there still a difference? The business survey seems to give us more encouraging figures, less unemployment, more employment. Is the business survey, in your judgment, any more accurate? Do they measure different things?

Ms. NORWOOD. They, of course, have somewhat different definitions. They are very different kinds of surveys. In a period of business cycle change, I think the business survey tells us more than the household survey does. The household survey is a sample survey, as you know, and tends to be somewhat more erratic from month to month.

We are in the process of working with the Census Bureau to begin the redesign of the household survey to take account of the 1980 population census. That's somewhat overdue and I will feel much happier when it is completed.

I do happen to think, however, that the United States is much better off for having two surveys measuring the same kind of phenomenon. I should say that it makes our lives much more difficult

because people like to have revealed truth from a statistical series and we have to tell them that that doesn't often happen.

Senator PROXMIRE. Would the business survey, in your judgment, give us a lower unemployment figure if we relied on that entirely?

Ms. NORWOOD. I'm not sure about what it would do with unemployment because that is involved, to a great extent, with people's search for jobs. I do think that since December, the business survey has been giving us better signals of what's going on in employment and I think in a period of economic recovery, it is the employment side that we ought to be looking at in terms of direction of the economy.

That does not mean, of course, that we should not be concerned about social problems that are related to unemployment. But I think that in a period of business cycle change, it's the business survey that seems to tell us more.

Senator PROXMIRE. Thank you, Congressman.

Representative HAMILTON. Stories are in the papers today about the Federal Reserve preparing to tighten money policy. If that happens, interest rates will go up. If that happens, what's the impact on employment?

Ms. NORWOOD. Well, the increase in interest rates in the past has clearly affected housing and, therefore, all of the housing-related industries—lumber and wood, glass, furniture, appliances and so on, and has affected large investment in infrastructure and in machinery for improving efficiency.

Representative HAMILTON. How quickly has that been reflected? If the interest rates jump up, how quickly is it reflected in the unemployment statistics?

Ms. NORWOOD. Well, I think it's very hard to tell. There is no absolutely direct relationship. And it's also a matter of degree. You can have increases in the interest rate without having it affect the economy very much. It depends in part on people's expectations. There has been a lot in the press about the expectations and whether, perhaps, they had not already been discounted. I don't know.

There's also a particularly worrisome international situation which makes the changes in interest rates more important and more difficult.

Representative HAMILTON. But, ordinarily, you would expect that if the interest rates jump up, it would have an impact on the employment level.

Ms. NORWOOD. If they jump up a great deal.

Representative HAMILTON. "A great deal" being what?

Ms. NORWOOD. I don't know. But what I seem to read in the press is not as large as we have had historically.

Representative HAMILTON. Now on the minority question that Senator Proxmire raised, the jobless rate for blacks is 20.6 percent. And 6 months ago, December, January, it was 20.8 percent. He asked you why that has occurred and I didn't get a very clear idea of your response.

Are you saying to us that we don't really know why that occurs?

Ms. NORWOOD. I'm saying that I cannot give you a full explanation. There are some very puzzling things there. We do know that some of the black population, in particular, the black teenagers,

tend to be concentrated in central cities where there are not very many jobs, since many jobs have moved into other areas. They also tend to be concentrated in families in fairly low economic circumstances, which clearly has an effect on their ability to find jobs, their interest and encouragement, as well as on their education and skill.

So I think that's a problem. We have a lot of high school dropouts among our minorities, a greater proportion of them among the minority population than among the white population.

In terms of the others, I am concerned about not just the high unemployment rate, but also about the fact that many of our black adult men are not in the labor force. They do represent a larger proportion of the discouraged workers than the white men do. It is true that this quarter there was a decline of 140,000 in the number of discouraged workers compared with fourth quarter 1982. That was primarily among blacks, which means that those people came into the labor force and they haven't yet found jobs. But at least they're in the labor force looking for jobs and not out of the labor force too discouraged to search.

So there is some movement there. But I think it is a problem that needs to be focused on.

Representative HAMILTON. Are the discouraged workers predominantly from certain demographic groups?

Ms. NORWOOD. They are predominantly blacks and females. They are people who have a harder time in the labor market than others.

Representative HAMILTON. Are there any States in the country in which unemployment is rising?

Ms. NORWOOD. There are always States which have different movements in unemployment. It's rather interesting to note that even in 1979, when we had rather a good labor market situation, we had some States with high unemployment rates, much higher than others, and we had some individual counties with extraordinarily high unemployment rates, even into double digits.

So there always is a disparity between the unemployment rates in one area of the country and another. It's generally related to the industrial structure.

Representative HAMILTON. In May, you projected that the youth labor force would expand by a smaller amount this summer than last, largely because the youth population is smaller. Has that been borne out in the statistics for June?

Ms. NORWOOD. Well, we had, as we said, a much larger influx of people into the labor market this June than we have had for many, many years.

Perhaps Mr. Plewes might want to add something to that.

Mr. PLEWES. We did have a smaller population group, that's true. But what happened this month is that we had a larger propensity of those people in the smaller population to be in the labor force. The labor force participation rate went from 52.2 percent for the 16- to 19-year olds, for example, in May, to 55.4 percent in June, seasonally adjusted, a very large increase.

Representative HAMILTON. Will that jump again in July?

Ms. NORWOOD. It may go down in July.

Representative HAMILTON. It will go down in July.

Mr. PLEWES. It will pick up somewhat in July, before seasonal adjustment.

Ms. NORWOOD. Part of it is, as I said, due to the survey week being somewhat later and so we may have picked up some of what would have been picked up in July and part of it is that this is a statistical survey and it tends to move in spurts. And sometimes it goes up a lot, particularly the labor force. That may be a correction for what hasn't happened before and we may find some up and down movement in the next few months.

Representative HAMILTON. The labor force participation rate for adult women is not changing very much now. Is the trend that we saw in the 1960's and 1970's of a large increase in the number of women coming into the work force now clearly reversed, plateaued, or changed?

Ms. NORWOOD. There's a lot of discussion about that, Congressman. I do not believe so. It has slowed down. That's quite clear. But women are continuing to come into the labor force. I would expect that in a period of recession, that women, as men, would tend to stay out of the labor force because there aren't very many jobs. As the economy picks up, I would expect that more women would come into the labor force. I am not sure that they will be coming in in as great a rate as they did in the 1960's and 1970's, but I think it will pick up.

Representative HAMILTON. Senator Proxmire.

Senator PROXMIRE. Ms. Norwood, are we facing a serious structural unemployment problem? I've heard a lot about that. Can you tell us on the basis of the latest statistics that there is more or less evidence that we face a situation where, in steel and in many other industries, because of the competition from abroad and because of the difference in wage scales and so forth, our employment is declining sharply and we have to recognize that some people are likely to be unemployed for considerable periods of time?

Is this increase that we have in the length of unemployment, the duration of unemployment, which is one of the spectacular parts of what you're telling us here, a reflection of that structural problem?

Ms. NORWOOD. There are structural changes going on. Many industries began declining in the 1970's, really. The recession exacerbated those changes. They didn't start with the recession. So conditions have gotten worse.

On the other hand, since December, an industry like automobiles has picked up a considerable amount of employment. But they're not back to where they were in 1979.

I think there will be change and many of the workers who previously had had jobs—that is, in the 1970's—in some of our major industries like steel manufacturing, auto manufacturing, machinery manufacturing, may not find jobs in those industries.

Senator PROXMIRE. There's likely to be less employment in those industries, automobiles, for instance; is that right, steel, perhaps?

Ms. NORWOOD. Yes.

Senator PROXMIRE. Because of automation and because of—the difference is we have smaller cars, for instance, that we're making now that I presume would not take as much steel.

Ms. NORWOOD. There are also demographic changes. We have had fewer children. We are going to have fewer youngsters. We are going to have fewer two- or three-car families.

And it's also much more expensive to operate an automobile with the price of gasoline, for example. So I think that the days of buying more and more cars are probably behind us. I think we will be buying cars. We will be rehiring many of the people who were in those industries. We will not be expanding those industries as much as they were expanding in the past.

But, you know, I think sometimes we focus a great deal of attention on the so-called displaced worker as though all of the people who have been displaced are in serious trouble. Some of them are, clearly. But one of the things that has always characterized the U.S. labor market and made it somewhat different from those in other countries is that we always have considerable change going on. The people who have lost their jobs who can find jobs in other industries are not going to be in serious trouble. It is the people who have lost their jobs who will not find jobs in other industries that are going to be the problem and that is not the total group. There also will be some dislocation in terms of geographic location.

We have a concentration of particular kinds of industries and feeder industries into autos, steel, machinery, and so on, in particular areas of the country, and unless new industry comes into those areas, workers who have been displaced can have some serious difficulty unless they move. And people don't like to move.

Senator PROXMIRE. Now you referred a couple of times and I haven't followed up on it, you referred to the international situation and the effect interest rates might have there. There has been, as I understand it, a dramatic change in our dependence, both in imports and exports, on the international situation. Obviously, if there's a recession abroad—we sell lots abroad—if there's a recession abroad, they tend to compete more effectively with us because their wages don't go up and their prices are lower.

So I understand that about a third, 35 percent, of our jobs relate one way or the other, either on the export side or the import side, due to the international situation.

As interest rates rise, if they do, that will have the tendency of slowing down recovery abroad, will it not? It absorbs some of their capital, for one thing. It raises their interest rates for another. And this will have an effect on our recovery that would be perverse, I would think, as far as the international situation is concerned.

Is that the situation, as you see it, or is there something else?

Ms. NORWOOD. Senator Proxmire, I'm not an expert on monetary policy and I wouldn't want to comment on that. I can tell you that we are more dependent on foreign trade now than we were years ago and that our export situation is not in very good shape. Recovery seems to be beginning in some of the western European countries and that is an essential element of the prosperity of the United States. We cannot have economic recovery and increasing employment in this country if the rest of the world who are our trading partners are continuing to go down. But there is some evidence that—

Senator PROXMIRE. Certainly, one policy we can follow to try to counteract that is to hold our interest rates down because that has

the most profound effect. The head of the International Monetary Fund has said that the most significant economic problem in the world today are American deficits, because we absorb so much capital from all over the world and because we keep interest rates high everywhere. And, of course, we're reminded of that by heads of state, whether they're conservative or liberal, when they come to this country and talk to our officials.

Ms. NORWOOD. Well, you know a great deal more about that than I do.

Senator PROXMIRE. Well, I don't think that's true by any means. Let me ask you, what proportion of our long-term unemployed are running out of unemployment compensation?

Mr. PLEWES. That's a difficult question to answer, Senator. Last month, in May, we had 519,000 persons on regular extended benefit programs. In June, that went down to 347,000, about 150,000 less.

On Federal extended benefits programs, we had 1.5 million persons in May, and 1,100,000, roughly, in June, about 400,000 less. So we've got about 500,000 or so fewer persons drawing extended benefits between May and June.

Senator PROXMIRE. Can you make a calculation on the basis of that how many of these people have found jobs and therefore, no longer need unemployment compensation and how many are still unemployed and are out of unemployment compensation?

Mr. PLEWES. Unfortunately, there's no data base that allows us to trace that.

Senator PROXMIRE. Why shouldn't we have that? It seems to me that that is critically important for policies we follow. We're always often being asked in the Congress to extend unemployment compensation benefits. We debate it. If we don't have these facts, we can't make a decision intelligently.

Ms. NORWOOD. Senator Proxmire, the unemployment insurance data are not a responsibility of the Bureau of Labor Statistics.

Senator PROXMIRE. I'm not saying they are. I'm just wondering if you'll give me some ammunition—

Ms. NORWOOD. I'd be glad to. [Laughter.]

Senator PROXMIRE [continuing]. So we can get some of this information that we need.

Ms. NORWOOD. The unemployment insurance data base is really an offshoot of the program to administer unemployment benefits. It is an administrative data base. It is not really a statistical data base.

Senator PROXMIRE. Would you be able to secure this data so that when you come before us next month you would have that information?

Ms. NORWOOD. No, sir.

Senator PROXMIRE. You couldn't do it?

Ms. NORWOOD. No, sir.

Senator PROXMIRE. Who would we have to call to get it?

Ms. NORWOOD. Well, we're giving you what is available from the system within the Department of Labor.

Senator PROXMIRE. Are you saying that it's not available, nobody can tell us in the Government what the number of people running out of unemployment compensation is who are still unemployed?

Ms. NORWOOD. No, no.

Senator PROXMIRE. What's that?

Ms. NORWOOD. What I'm saying is that there is some information first on the number of people who have exhausted their last benefits. It has a very large timelag. We have data, for example, for the month of April, rather than for the month of June.

Senator PROXMIRE. Why the timelag?

Ms. NORWOOD. Because it is data which is available in local offices in each of the States. It has to be gathered together and sent in to the Employment and Training Administration. It is not treated as a statistical series. The purpose of the UI program is to pay people checks. It is to see to it that people who qualify are processed in a way, in an orderly and efficient way, to get their checks. And all that we have out of the UI data system is basically an offshoot of that administrative data base.

To construct a really good statistical data base from that would take considerable effort, time and funds.

Senator PROXMIRE. How much in the way of funds?

Ms. NORWOOD. I can't tell you off the top of my head, but it's a lot.

Senator PROXMIRE. Give us as much of this as you can in subsequent meetings.

Ms. NORWOOD. We'd be glad to.

Senator PROXMIRE. I know I would like to have this. I think the committee would be well served if we had this kind of information.

Ms. NORWOOD. It could be a very rich body of data.

Senator PROXMIRE. Now, I want to ask a question that I find is of intense interest to television crews, not necessarily to people who watch television, but the people who operate the cameras and others.

What would be the effect, in your judgment, of having a 7-hour workday, double time instead of time and a half for overtime?

The reason I ask that is if we're going to continue to have high levels of unemployment, we have 11 million people still out of work, we're going to continue to have that and have a growing work force of the kind we have. I think we ought to at least consider the possibility of doing something that we haven't done for 50 years, but did without any feeling that it abridged our free enterprise system. And that is consider the possibility of reducing the workweek and providing for a more effective premium for those who work overtime.

Ms. NORWOOD. I haven't thought very much about that and I have no idea. I can tell you that I participated a few months ago in a conference at Ditchley Park in England. And that many of the discouraged Europeans were advocating a shorter workweek and having people leave the labor force, retire earlier. I was saying to them, in our country, things are somewhat different because the Congress has passed legislation permitting people to continue to work much longer and doing away with mandatory retirement and so on. We are much more optimistic about the possibilities of finding ways to have the economy recover to employ people.

But I don't know about any of the specific things.

Senator PROXMIRE. My calculations are that if we did this, we do have an average workweek, as you show, of about 35 hours, as a matter of fact. But in manufacturing, it's higher and in many

others. We still have to pay a lot of overtime and so forth. We would increase employment by between 6 and 7 million without any additional Federal spending. Now, of course, there would be a burden, a significant cost burden, on industry and you would have perhaps an inflationary effect.

But the statistics seem pretty clear that if you could reduce overtime by insisting on that premium and also increase the number of people that work because you reduce the day from 8 hours to 7 hours, that you would have automatically an increase in the number of people working.

Ms. NORWOOD. Many European countries have a process which provides for subsidization of shorter hours. And, as a result, they have fewer people who are classified as unemployed, because they work for some period of time.

In this country, in our data, if someone works for 1 hour or more during the survey work for pay, he or she is classified as "at work" or "being employed."

To receive any unemployment insurance, in most States of this country, though it varies from one to the other, people need to be unemployed; that is, they cannot be working 20 hours a week or something.

Senator PROXMIRE. Well, again, I'd appreciate it very much. I have such faith in your judgment. You are very competent in this area. It would be very helpful if you would think about this and give us any further reflections you may have on it. It would be very useful.

Ms. NORWOOD. Thank you.

Representative HAMILTON. Ms. Norwood, the thing that impresses me most, I guess, is the chart over there and the very, very rapid increase in the unemployment rate during 1982. And then your coming in this morning and telling us that we have a very strong recovery and that the decline in the unemployment rate is proceeding—giving us kind of an upbeat statement overall. But that unemployment rate is going down at a very, very slight rate.

I'll give you a little nonstatistical information. I just returned from the July Fourth recess. I appeared, as many politicians do, in a lot of parades and a lot of picnics and all the rest. One statement that was shot at me every parade, not once, but half a dozen times, every picnic was "get us some jobs, get us some jobs, get us some jobs."

The unemployment rate just inches down very, very slightly, one-tenth of 1 percent or so each month. So I find the situation still very discouraging and not at all optimistic, even though you talk in terms of strong recovery and sharp declines in the unemployment rate.

Ms. NORWOOD. I've talked in terms of strong employment growth, and I think that it's a requirement, really, of recovery. And I think we are seeing strong employment growth since December, but especially in the last several months.

The decline in unemployment tends to lag, partly because, you know, we've got to create an awful lot of jobs in order just to stand still because we do have—

Representative HAMILTON. Does that suggest that that line will drop more sharply, in your judgment, in the next few months?

Ms. NORWOOD. I don't know. I would hope so. I'm always optimistic.

Representative HAMILTON. Given the factors you know and the projections you know about the balance of the year, what is your reasonable expectation of that unemployment rate?

Ms. NORWOOD. I don't forecast the unemployment rate. I leave that to others. They do a much better job of it than I.

Representative HAMILTON. You are the ranking expert on the labor market in the country, according to Senator Proxmire.

Ms. NORWOOD. He's much too kind. [Laughter.]

Representative HAMILTON. Maybe the reason you are an expert is because you don't make predictions. [Laughter.]

Ms. NORWOOD. Well, I see my job, Congressman, as pointing out to people like you who have the responsibility in the country for making policy, the areas of difficulty and the areas of improvement. That's what I tried to do this morning.

Representative HAMILTON. Obviously, we appreciate that very much and it is very helpful to us. Those who deal with policy also have to think ahead.

I think Mr. Policinski had some questions for the Republican side. Mark.

Mr. POLICINSKI. Thank you much, Congressman. Commissioner, last month you told the committee that it was important for policy-makers to look at both seasonally and not seasonally adjusted data. I'd just like to look at that in regard to the employment level, not seasonally adjusted data.

If my figures are correct, if there haven't been any updates, I think what it shows is the not seasonally adjusted employment level in January was 97,262,000; is that right?

Ms. NORWOOD. Yes.

Mr. POLICINSKI. And this month?

Ms. NORWOOD. Yes?

Mr. POLICINSKI. What was it this month, 101.8?

Ms. NORWOOD. Yes.

Mr. POLICINSKI. So since January, we have created 4½ million new jobs.

Ms. NORWOOD. According to the household survey, yes.

Mr. POLICINSKI. The increases last month in employment, almost 1¼ million, have we ever had a month when the increase was that large?

Ms. NORWOOD. I doubt it.

Mr. PLEWES. Between March and April in 1960 when many people were hired to conduct the census, we had an increase of 1.8 million, I believe it was. But that was it. This is the highest since.

Mr. POLICINSKI. And one of the reasons—well, part of the reason for this very large increase—could be due to the fact that there was such a late survey week, you were saying?

Ms. NORWOOD. It's possible that there was some exaggeration. That's why I don't like to look at that particular number alone. I think the two surveys are telling us that there is employment growth. It may not be as large as the household survey has said it was in June, but it is large. It is there.

Mr. POLICINSKI. The only other question I have is: Initial claims for unemployment, what's the latest figure we have?

Ms. NORWOOD. We have a figure for the week of the 25th of June. Before seasonal adjustment, it's 384,000. After seasonal adjustment, 416,000. That's the regular State UI initial claims.

Mr. POLICINSKI. Is that basically in the range of where initial claims were before the recession started, roughly in that 400,000 area?

Ms. NORWOOD. I only have it back to 1982. We can provide that. In September 1981, the level was 413,000.

Mr. POLICINSKI. I sincerely thank the Chair.

Representative HAMILTON. Senator Proxmire.

Senator PROXMIRE. Ms. Norwood, yes, I just have one more question. I apologize to Congressman Hamilton for taking so much time. But you pointed out the large absolute decline in unemployment and increase in employment over the past several months compared to the recovery period after previous recessions. But what about the relative or percentage changes in these statistics? After all, you're starting from a base of over 11 million people out of work. So the percentage decline now, of course, would seem to be bigger.

Ms. NORWOOD. I was giving you percentage figures for that very reason. Since December, for example, the level of unemployment has declined by 7.4 percent. And that is a larger decline than we have had since—

Senator PROXMIRE. 1949 you said before, I think.

Ms. NORWOOD. 1958.

Senator PROXMIRE. 1958?

Ms. NORWOOD. 1958, in percentage terms.

Senator PROXMIRE. That isn't affected in any way—well, it is affected, to some extent, isn't it, by the fact that this is the worst recession we've had since the 1930's, worse than any of those previous.

Ms. NORWOOD. Yes. As you well know—

Senator PROXMIRE. So while this recovery looks pretty good, it's not a world beater. It doesn't beat what we did in the 1950's when we had a lesser recession to recover from.

Ms. NORWOOD. Sure. Frequently, the more serious the recession, the more vigorous the recovery. There's more to recover from.

Senator PROXMIRE. Right. Thank you.

Representative HAMILTON. Thank you very much, Ms. Norwood and Mr. Plewes.

Ms. NORWOOD. Thank you, sir.

Representative HAMILTON. The committee stands adjourned.

[Whereupon, at 10:40 a.m., the committee adjourned, subject to the call of the Chair.]

# EMPLOYMENT-UNEMPLOYMENT

FRIDAY, AUGUST 5, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 9:30 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Roger W. Jepsen (chairman of the committee) presiding.

Present: Senators Jepsen and Proxmire; and Representative Hawkins.

Also present: Bruce R. Bartlett, executive director, and Mary E. Eccles, Christopher J. Frenze, Paul B. Manchester, and Robert E. Weintraub, professional staff members.

## OPENING STATEMENT OF SENATOR JEPSEN, CHAIRMAN

Senator JEPSSEN. It gives me great pleasure to greet the distinguished witness before us today, Bureau of Labor Statistics Commissioner Janet Norwood. It's a very happy occasion with some very dramatic things to talk about.

Today, we will hear more good news on the strength of the economic recovery. For the first time in almost 1 year, the unemployment rate has fallen below the double-digit level. The 9.5-percent unemployment rate for July shows great improvement in the job markets. More jobs are being created and more Americans have returned to work. Although the level of unemployment is still too high, the downward trend is very encouraging.

The latest good economic news was not completely unexpected. Unemployment insurance initial claims have declined steadily in recent months and tend to parallel changes in the unemployment rate. The latest release for the week ending July 23 shows initial claims of around 390,000, down about 100,000 from the beginning of May. That means fewer workers are being laid off.

The increase in employment also shows that many workers are being called back and new jobs are being created at a very rapid rate. Civilian employment jumped 500,000 in July to a total of 101.3 million. Civilian employment has leapt 2.2 million since December, using seasonally adjusted figures. The raw data show that there are actually 6 million more Americans on the job now than in January. The 9.5-percent rate shows that the President's economic recovery program is working. They call it a sustainable recovery. It is broad. It is deep. The job of putting America back to work is not yet complete, but we are on the right track.

The 500,000 increase in nonagricultural employment is the biggest monthly gain so far in 1983. It's also the fourth substantial in-

crease in employment in a row. This total is now at its highest level since February 1982 and these numbers show that America is, indeed, going back to work.

We have licked the recession. We have licked the inflation. And now it's unemployment's turn. We have unemployment on the run.

I'm very pleased and delighted, Ms. Norwood, and looking forward to your remarks.

Senator Proxmire—good news.

#### OPENING STATEMENT OF SENATOR PROXMIRE

Senator PROXMIRE. Thank you, Mr. Chairman. Well, it's great news. It's marvelous news. It's the best news we've had in a long, long time. Look at that chart. There were periods when unemployment was stable and we all celebrated that. I can't remember a month in a long, long time when it's been this good, and it's across the board. Everybody's benefiting—women, men, blacks, Hispanics. There's no group that didn't benefit, except teenagers, perhaps. With that single exception, it's been superlative news and, of course, we're all very, very encouraged.

I think we have to be cautious about this. I notice, for instance, that one of the country's outstanding economists, Mr. Greenspan, pointed out just a couple of days ago that we're likely to have the recovery stall next year. His analysis has been based, to a very considerable extent, on inventories and that this has been to some extent—not entirely, of course, but to some extent—catching up on the inventory situation.

Of course, we can expect that we will have good months like this, but this is exceptional. There's no way that we can view this as anything but very, very good news. And it's extraordinary because other countries don't seem to be recovering as much as we have and our balance of trade has been deteriorating very seriously—probably the worst balance of trade we've had.

I do think that we have to be cautious, though. The 1-month figures are never as good as the quarterly figures or the annual figures and I think we're going to have to be careful in assessing this.

I'm looking forward to hearing Ms. Norwood and I'm delighted to see the numbers.

Senator JEPSEN. Ms. Norwood, welcome, and you may proceed.

#### STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS; AND KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS

Ms. NORWOOD. Thank you very much, Mr. Chairman, Senator Proxmire. Let me introduce Kenneth Dalton, our price expert, and Tom Plewes, our employment and unemployment expert.

Obviously, we're very pleased to be here this morning. The improvement in the labor market was especially strong in July. Employment growth continued to be substantial and the unemployment rate declined half a percentage point to the lowest level in more than a year.

The total number of unemployed persons declined by more than half a million in July to 10.6 million. The civilian unemployment rate was 9.5 percent, down from 10.0 percent in June and 10.8 percent in December. The rate which includes the resident Armed Forces was 9.3 percent, down from 9.8 in June and 10.7 in December.

The unemployment rate for black workers dropped 1.1 percentage points over the month to 19.5 percent, the first sign of a reduction in joblessness for this group in many months. In addition, the proportion of the black population with jobs reached 50 percent for the first time in nearly a year and a half. The unemployment rate also fell in July among whites to 8.2 percent. Thus, the gap in the employment situation between black and white workers remains large. The proportion of the adult black male population with jobs was 62 percent in July, compared with 73 percent for adult white men. In addition, the considerable divergence between the employment-population ratios for black and white teenagers—19 versus 46 percent—continued.

July data also provide evidence of economic improvement for other groups in the labor force. Married men, married women, women maintaining families, full- and part-time workers, and persons of Hispanic origin all shared in the general reduction in unemployment in July.

The number of persons unemployed for 6 months or longer fell by 365,000 in July, the first significant drop since the series began increasing 2 years ago. These workers accounted for 24 percent of the jobless in July, down from 26 percent in June. As shown by the median duration figure, half of the unemployed in July had been jobless for less than 10 weeks.

The civilian labor force was unchanged in July, seasonally adjusted, after registering an unusually large increase in June. Over the past 12 months, the labor force has grown by 1½ million. As has been the case for several years now, labor force growth was limited to adult workers. Increases for both adult men and women were just about in line with population growth, as their participation rates were virtually the same as a year earlier.

Both the survey of households and the survey of business establishments recorded an increase in employment of half a million in July. The household survey showed that the gains were shared by adult men and women. The business survey showed widespread job gains with particular strength in services, construction, and durable goods manufacturing. Accompanying substantial increases in the number of jobs in the manufacture of transportation equipment, machinery, and electrical equipment were unemployment declines for persons who last worked in these industries. For example, the jobless rate for autoworkers was 9.1 percent in July, down from 24.9 percent in November. Employment increases and unemployment declines were also evident in the nondurable apparel and rubber and plastics industries. A 140,000 gain in services jobs follows on the heels of several months of other large increases.

The manufacturing workweek continued to edge up, reaching 40.3 hours in July. Since its low last September, this leading indicator has risen an hour and a half. The comprehensive index of aggregate weekly hours, which reflects changes in both employment

and hours for all private production or nonsupervisory workers, rose 0.6 percent in July and was up 3.7 percent since November.

The current recovery has been very strong in comparison to previous ones. Overall employment growth 8 months after the trough has been sharper, both on a numerical and on a percentage basis, than in any of the prior six recoveries. The reduction in unemployment has been larger by a wide margin than in the same time period of the four most recent recoveries.

In summary, the statistics released today show that the labor market has improved substantially. In July, employment increased markedly, and unemployment registered its largest reduction since the recovery began.

Mr. Chairman, we would be glad to try to answer any questions you may have.

[The table attached to Ms. Norwood's statement, together with the Employment Situation press release referred to, follows:]

#### UNEMPLOYMENT RATES OF ALL CIVILIAN WORKERS BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method						X-11 method (official method before 1980)	Range (cols. 2-8)
		Official procedure	Concurrent	Stable	Total	Residual	12-month extrapolation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>1982:</b>									
July .....	9.8	9.8	9.8	9.8	9.7	9.7	9.8	9.7	0.1
August .....	9.6	9.9	9.9	9.8	9.9	9.8	9.9	9.8	.1
September .....	9.7	10.2	10.2	10.1	10.2	10.0	10.2	10.2	.2
October .....	9.9	10.5	10.5	10.6	10.5	10.3	10.5	10.5	.3
November .....	10.4	10.7	10.7	10.9	10.7	10.6	10.7	10.8	.3
December .....	10.5	10.8	10.8	11.1	10.9	10.8	10.8	11.1	.3
<b>1983:</b>									
January .....	11.4	10.4	10.4	10.2	10.4	10.7	10.4	10.3	.5
February .....	11.3	10.4	10.4	10.1	10.4	10.8	10.4	10.3	.7
March .....	10.8	10.3	10.4	10.2	10.3	10.5	10.3	10.3	.3
April .....	10.0	10.2	10.3	10.3	10.4	10.1	10.2	10.2	.3
May .....	9.8	10.1	10.3	10.6	10.2	10.0	10.1	10.2	.6
June .....	10.2	10.0	10.1	9.9	9.8	10.0	10.0	9.9	.3
July .....	9.4	9.5	9.5	9.4	9.3	9.3	9.4	9.3	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, August 1983.

#### EXPLANATION OF COLUMN HEADS

(1) *Unadjusted rate.*—Unemployment rate for all civilian workers, not seasonally adjusted.

(2) *Official procedure (X-11 ARIMA method).*—The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1967 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. A prior adjustment for trend is applied to the extended series for adult male unemployment before seasonal adjustment. The unemployment rate is computed sum-

ming the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of *Employment and Earnings*.

(3) *Concurrent (X-11 ARIMA method)*.—The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data from the period January 1967 through January 1980.

(4) *Stable (X-11 ARIMA method)*.—Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(5) *Total (X-11 ARIMA method)*.—This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(6) *Residual (X-11 ARIMA method)*.—This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) *12-month extrapolation (X-11 ARIMA method)*.—This approach is the same as the official procedure except that the factors are extrapolated in 12-month intervals. The factors for January-December of the current year are computed at the beginning of the year based on data through the preceding year. The values for January through June of the current year are the same as the official values since they reflect the same factors.

(8) *X-11 method (official method before 1980)*.—The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

*Methods of adjustment*.—The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in *X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

# News

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Department  
of Labor



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USDL 83-340  
TRANSMISSION OF MATERIAL IN THIS RELEASE IS  
EMBARGOED UNTIL 8:30 A.M. (EDT), FRIDAY,  
AUGUST 5, 1983

## THE EMPLOYMENT SITUATION: JULY 1983

Unemployment declined sharply in July and employment surged upward, the Bureau of Labor Statistics of the U.S. Department of Labor announced today. The overall unemployment rate, 9.3 percent, and the rate for civilian workers, 9.5 percent, each fell by half a percentage point over the month and were nearly one-and-a-half points below last December's highs.

Total employment—as measured by the monthly survey of households—rose by 500,000 in July, following an even larger increase in June. The number of employees on nonagricultural payrolls—as measured by the monthly survey of establishments—also rose by about half a million over the month. Increases in payroll employment have totaled 1.7 million since last December.

### Unemployment

Both the number of unemployed persons, 10.6 million, and the civilian worker unemployment rate, 9.5 percent, dropped substantially in July. Since last December's high, the jobless total has declined by 1.4 million, and the unemployment rate has dropped by 1.3 percentage points. The number of job losers (persons on layoff and those permanently separated from their jobs) fell by 320,000 in July and has declined by 1.1 million since December. (See tables A-2 and A-8.)

The July decrease in unemployment occurred largely among adult women, whose jobless rate declined 0.7 percentage point to 7.9 percent. The rate for adult men, which had decreased markedly in June, edged down further in July to 8.8 percent. There was little change, however, in the unemployment rate for teenagers, whose rate has hovered around 23 percent for more than a year. Whites, blacks, and Hispanics all shared in the overall decline in unemployment. The rate for black workers dropped from 20.6 to 19.5 percent. (See tables A-2 and A-3.)

At 10.5 percent, the jobless rate for workers in manufacturing fell by a full percentage point over the month and has declined by 4.3 points since last December. During the past 7 months, jobless rates have decreased for all major industry groups, though most of the improvement has occurred among workers in the goods-producing industries. (See table A-6.)

The number of persons unemployed for more than 6 months decreased by 365,000 in July; this was the first real decline in this very long-term jobless category in 2 years. The median duration of unemployment declined nearly 2 weeks to 9.9 weeks in July, while the mean duration was about unchanged at 21.7 weeks. (See table A-7.)

### Civilian Employment and the Labor Force

Civilian employment continued to increase substantially, rising by 500,000 in July to 101.3 million (seasonally adjusted). Adult women accounted for 375,000 of the over-the-month increase and adult men nearly 300,000, as teenage employment fell off somewhat following a very large gain in June. Total civilian employment has risen by 2.1 million since last December.

At 111.9 million, the civilian labor force was unchanged from June, seasonally adjusted, after a huge advance—1.2 million—in the prior month. Since last July, the labor force has grown by 1.5 million. (See table A-2.)

### Industry Payroll Employment

Nonagricultural payroll employment rose by nearly half a million in July, the largest monthly gain in 1983 and the fourth consecutive strong increase. At 90.3 million, the July job

total was the highest since February 1982. Since December, payroll jobs have increased by 1.7 million. (See table B-1.)

July employment gains were widespread, with increases occurring in 70 percent of the 186 industries which make up the BLS index of diffusion. (See table B-6.) Manufacturing posted sharp job growth for the fourth straight month, with durable goods industries accounting for the bulk of the over-the-month increase of 160,000. Transportation equipment, machinery, and electric and electronic equipment were the biggest gainers in durable goods, with lumber and wood products, furniture and fixtures, and primary and fabricated metals also showing strength. Among the nondurable goods industries, the most notable increases occurred in apparel and rubber and plastic products.

Elsewhere in the goods-producing sector, employment rose in mining for the second month in a row, primarily due to job gains in oil and gas extraction. Strong performance continued in construction, where the July increase was 40,000 and job growth since March has totaled 230,000.

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages			Monthly data			June - July change
	1982		1983	1983			
	II	I	II	May	June	July	
<b>HOUSEHOLD DATA</b>							
	Thousands of persons						
Labor force 1/.....	111,754	112,193	112,825	112,418	113,600	113,539	-61
Total employment 1/.....	101,386	100,755	101,603	101,226	102,454	102,949	495
Civilian labor force.....	110,088	110,528	111,156	110,749	111,932	111,875	-57
Civilian employment.....	99,720	99,090	99,933	99,557	100,786	101,285	499
Unemployment.....	10,369	11,439	11,222	11,192	11,146	10,590	-556
Not in labor force.....	61,932	62,977	62,801	63,204	62,193	62,431	238
Discouraged workers.....	1,487	1,764	1,709	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers 1/.....	9.3	10.2	9.9	10.0	9.8	9.3	-0.5
All civilian workers.....	9.4	10.3	10.1	10.1	10.0	9.5	-0.5
Adult men.....	8.4	9.7	9.4	9.6	9.0	8.8	-0.2
Adult women.....	8.2	8.9	8.5	8.5	8.6	7.9	-0.7
Teenagers.....	22.7	22.8	23.3	23.0	23.6	22.8	-0.8
White.....	8.3	9.1	8.8	8.9	8.6	8.2	-0.4
Black.....	18.6	20.1	20.7	20.6	20.6	19.5	-1.1
Hispanic origin.....	13.3	15.9	14.1	13.8	14.0	12.3	-1.7
	<b>ESTABLISHMENT DATA</b>						
	Thousands of jobs						
Nonfarm payroll employment.....	89,938	88,815	89,448p	89,421	89,832p	90,319p	487p
Goods-producing industries.....	24,178	23,088	23,347p	23,347	23,534p	23,749p	215p
Service-producing industries.....	65,760	65,727	66,101p	66,074	66,298p	66,570p	272p
	Hours of work						
Average weekly hours:							
Total private nonfarm.....	34.9	34.8	35.0p	35.1	35.1p	35.1p	0p
Manufacturing.....	39.1	39.5	40.1p	40.0	40.2p	40.3p	0.1p
Manufacturing overtime.....	2.3	2.2	2.8p	2.7	2.9p	3.1p	0.2p

1/ Includes the resident Armed Forces.  
p=preliminary.

N.A.=not available.

The service-producing sector registered an over-the-month increase of 270,000 jobs, with gains occurring almost entirely in services (140,000) and State and local government (120,000). Service industry employment has grown by more than 500,000 in the last 5 months.

#### Hours of Work

At 35.1 hours in July, the average workweek of production or nonsupervisory workers on private nonfarm payrolls was unchanged from May and June levels. Manufacturing hours edged up 0.1 hour to 40.3, an hour and a half above its September 1982 cyclical low. Factory overtime rose 0.2 hour and at 3.1 hours was at its highest level since December 1980. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls—a comprehensive measure which reflects changes in employment as well as hours—rose by 0.6 percent in July to 106.3 (1977=100). The manufacturing index was 90.4, up 1.7 percent in July and almost 9 percent since December's low. (See table B-5.)

#### Hourly and Weekly Earnings

Average hourly and weekly earnings both rose by one quarter of one percent in July, seasonally adjusted. Before adjustment for seasonality, average hourly earnings, at \$7.99, were up 2 cents over the month and 31 cents over the year. Weekly earnings, at \$282.85, increased \$1.51 from June and \$12.51 from July 1982. (See table B-3.)

#### The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 155.2 (1977=100) in July, seasonally adjusted, 0.2 percent higher than in June. For the 12 months ended in July, the increase (before seasonal adjustment) was 4.3 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements—fluctuations in overtime in manufacturing and interindustry employment shifts. In dollars of constant purchasing power, the HEI increased 2.1 percent during the 12-month period ended in June. (See table B-4.)

## Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 189,000 establishments employing about 36 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

### Coverage, definitions and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Also included among the unemployed are persons not looking for work because they were laid off and waiting to be recalled and those expecting to report to a job within 30 days.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special

grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

—The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

—The household survey includes people on unpaid leave among the employed; the establishment survey does not;

—The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

—The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

### Seasonal adjustment

Over a course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all

employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

#### Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 335,000; for total unemployment it is 240,000; and, for the overall unemployment rate, it is 0.21 percentage point. These figures do not mean that the sample results are off by these

magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are culminated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .29 percentage point; for teenagers, it is 1.28 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

#### Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for \$6.00 per issue or \$39.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

*Employment and Earnings* also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

(Numbers in thousands)

Employment status and sex	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	July 1962	June 1963	July 1962	July 1962	Mar. 1963	Apr. 1963	May 1963	June 1963	July 1963
<b>TOTAL</b>									
Noninstitutional population <sup>2</sup>	174,038	175,753	175,970	174,038	175,320	175,465	175,622	175,793	175,970
Labor force <sup>3</sup>	114,200	115,051	115,644	112,090	112,148	112,457	112,418	113,600	113,529
Participation rate <sup>4</sup>	65.6	65.4	65.7	64.4	64.0	64.1	64.0	64.6	64.5
Total employed <sup>5</sup>	103,138	103,481	104,937	101,262	100,767	101,129	101,226	102,854	102,949
Employment-population ratio <sup>6</sup>	59.3	58.9	59.6	58.2	57.5	57.6	57.6	58.3	58.5
Resident Armed Forces	1,674	1,668	1,664	1,674	1,664	1,671	1,669	1,668	1,664
Civilian employed	101,460	101,813	103,273	99,588	99,103	99,458	99,557	100,786	101,285
Agriculture	1,023	3,577	4,129	3,445	3,375	3,371	3,367	3,522	3,527
Nonagricultural industries	97,467	97,836	99,144	96,143	95,729	96,088	96,190	97,264	97,758
Unemployed	17,936	11,570	10,707	10,828	11,381	11,329	11,192	11,146	10,590
Unemployment rate <sup>7</sup>	9.7	10.1	9.3	9.7	10.1	10.1	10.0	9.8	9.3
Not in labor force	59,836	60,742	60,326	61,948	63,172	63,008	63,204	62,193	62,431
<b>Men, 16 years and over</b>									
Noninstitutional population <sup>2</sup>	83,097	84,016	84,099	83,097	83,789	83,856	83,231	84,014	84,099
Labor force <sup>3</sup>	65,633	66,078	66,568	63,898	63,957	64,207	64,276	64,816	64,864
Participation rate <sup>4</sup>	78.0	78.7	79.2	76.9	76.3	76.6	76.6	77.1	77.1
Total employed <sup>5</sup>	56,460	59,581	60,471	57,664	57,300	57,476	57,656	58,464	58,625
Employment-population ratio <sup>6</sup>	71.6	70.9	71.9	69.4	68.4	68.5	68.7	69.6	69.7
Resident Armed Forces	1,537	1,505	1,521	1,537	1,528	1,530	1,528	1,525	1,521
Civilian employed	57,923	58,056	58,950	56,127	55,772	55,946	56,128	56,939	57,104
Unemployed	6,172	6,498	6,097	6,234	6,487	6,731	6,620	6,351	6,238
Unemployment rate <sup>7</sup>	9.4	9.8	9.2	9.8	10.4	10.5	10.3	9.8	9.6
<b>Women, 16 years and over</b>									
Noninstitutional population <sup>2</sup>	93,941	91,779	91,871	90,941	91,532	91,609	91,691	91,779	91,871
Labor force <sup>3</sup>	48,567	48,973	49,076	48,192	48,191	48,251	48,142	48,784	48,675
Participation rate <sup>4</sup>	52.4	53.4	53.4	53.0	52.6	52.7	52.5	53.2	53.0
Total employed <sup>5</sup>	43,704	43,900	44,466	43,598	43,467	43,653	43,569	43,900	44,324
Employment-population ratio <sup>6</sup>	48.1	47.8	48.4	47.9	47.5	47.7	47.5	47.9	48.2
Resident Armed Forces	137	143	143	137	136	141	141	143	143
Civilian employed	43,567	43,757	44,323	43,461	43,331	43,512	43,428	43,757	44,181
Unemployed	4,863	5,072	4,610	4,594	4,724	4,597	4,572	4,795	4,351
Unemployment rate <sup>7</sup>	10.0	10.4	9.4	9.5	9.8	9.5	9.5	9.8	8.9

<sup>1</sup> The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Includes members of the Armed Forces stationed in the United States.

<sup>3</sup> Labor force as a percent of the noninstitutional population.

<sup>4</sup> Total employment as a percent of the noninstitutional population.

<sup>5</sup> Unemployment as a percent of the labor force (including the resident Armed Forces).

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
<b>TOTAL</b>									
Civilian noninstitutional population	172,364	174,125	174,306	172,364	173,656	173,794	173,953	174,125	174,306
Civilian labor force	112,526	113,383	113,980	110,416	110,408	110,786	110,749	111,932	111,875
Participation rate	65.3	65.1	65.4	64.1	63.6	63.7	63.7	64.3	64.2
Employed	101,450	101,813	103,273	99,588	99,103	99,458	99,557	100,786	101,285
Employment-population ratio <sup>2</sup>	58.9	58.5	59.2	57.8	57.1	57.2	57.2	57.9	58.1
Unemployed	11,036	11,570	10,707	10,828	11,381	11,328	11,192	11,146	10,590
Unemployment rate	9.8	10.2	9.4	9.8	10.3	10.2	10.1	10.0	9.5
<b>Men, 20 years and over</b>									
Civilian noninstitutional population	73,685	74,814	74,927	73,685	74,528	74,611	74,712	74,814	74,927
Civilian labor force	58,559	59,267	59,492	58,055	58,170	58,854	58,506	58,804	59,016
Participation rate	79.5	79.2	79.4	78.8	78.1	78.3	78.3	78.6	78.8
Employed	53,619	54,078	54,570	52,905	52,589	52,752	52,901	53,516	53,808
Employment-population ratio <sup>2</sup>	72.8	72.3	72.8	71.8	70.6	70.7	70.8	71.5	71.8
Agriculture	2,462	2,683	2,782	2,462	2,420	2,404	2,483	2,528	2,584
Nonagricultural industries	50,977	51,395	51,828	50,443	50,169	50,348	50,458	50,987	51,284
Unemployed	4,940	5,188	4,922	5,150	5,561	5,702	5,605	5,288	5,208
Unemployment rate	8.4	8.8	8.3	8.9	9.6	9.8	9.6	9.0	8.8
<b>Women, 20 years and over</b>									
Civilian noninstitutional population	82,926	84,008	84,122	82,926	83,699	83,794	83,999	84,008	84,122
Civilian labor force	43,434	44,249	44,150	43,983	44,166	44,238	44,228	44,648	44,665
Participation rate	52.4	52.7	52.5	53.0	52.8	52.8	52.7	53.1	53.1
Employed	39,465	40,394	40,544	40,311	40,277	40,509	40,484	42,789	41,164
Employment-population ratio <sup>2</sup>	47.8	48.1	48.2	48.6	48.1	48.3	48.3	48.6	48.9
Agriculture	749	763	750	598	647	622	597	636	607
Nonagricultural industries	38,916	39,631	39,786	39,713	39,630	39,886	39,887	40,153	40,557
Unemployed	3,765	3,855	3,606	3,672	3,869	3,729	3,744	3,859	3,521
Unemployment rate	6.7	8.7	8.2	8.3	8.8	8.4	8.5	8.6	7.9
<b>Both sexes, 16 to 19 years</b>									
Civilian noninstitutional population	15,753	15,303	15,257	15,753	15,429	15,389	15,342	15,303	15,257
Civilian labor force	12,533	9,867	10,338	8,378	8,148	8,094	8,015	8,480	8,173
Participation rate	66.9	64.5	67.8	53.2	52.8	52.6	52.2	55.4	53.6
Employed	8,206	7,381	8,159	6,372	6,237	6,197	6,172	6,481	6,313
Employment-population ratio <sup>2</sup>	52.1	48.0	53.5	40.4	40.4	40.3	40.2	42.4	41.4
Agriculture	632	530	629	385	308	344	327	357	376
Nonagricultural industries	7,574	6,811	7,530	5,987	5,929	5,853	5,845	6,124	5,937
Unemployed	4,326	2,527	2,179	2,006	1,911	1,897	1,843	1,999	1,860
Unemployment rate	22.1	25.6	21.1	23.9	23.5	23.4	23.0	23.6	22.8

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted				Seasonally adjusted <sup>1</sup>					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983	
<b>WHITE</b>										
Civilian noninstitutional population	143,569	150,810	150,559	149,569	150,382	150,518	150,671	150,810	150,959	
Civilian labor force	97,973	98,488	98,911	96,385	95,996	96,287	96,362	97,250	97,341	
Employed	65.3	65.3	65.5	64.4	63.8	64.0	64.0	64.5	64.5	
Unemployed	32.6	33.1	33.4	31.9	32.1	32.2	32.3	32.8	32.8	
Employment-population ratio <sup>2</sup>	59.9	59.6	59.3	56.8	56.2	56.3	56.3	56.8	56.8	
Unemployment rate	8.37%	8.59%	8.89%	8.36%	8.67%	8.57%	8.58%	8.37%	7.95%	
Unemployment rate	8.6	8.7	8.9	8.7	9.0	8.9	8.9	8.6	8.2	
<b>Men, 20 years and over</b>										
Civilian labor force	51,720	52,202	52,367	51,252	51,216	51,459	51,589	51,771	51,919	
Employed	47,870	48,235	48,654	47,194	46,883	47,049	47,150	47,700	47,825	
Unemployed	3,850	3,967	3,713	4,058	4,332	4,409	4,440	4,060	3,984	
Employment-population ratio <sup>2</sup>	72.9	73.5	74.1	72.9	71.9	72.0	72.0	72.7	73.0	
Unemployment rate	7.4	7.6	7.1	7.9	8.5	8.6	8.6	7.8	7.7	
<b>Women, 20 years and over</b>										
Civilian labor force	37,146	37,741	37,646	37,750	37,509	37,483	37,703	38,126	38,262	
Employed	51.8	52.0	51.8	52.6	51.9	52.1	52.0	52.6	52.6	
Unemployed	24.3	24.7	24.8	25.1	25.6	25.3	25.7	25.5	25.6	
Employment-population ratio <sup>2</sup>	38.531	38.934	38.926	38.986	38.723	38.972	38.961	39.287	39.661	
Unemployment rate	2.816	2.806	2.620	2.764	2.787	2.711	2.742	2.837	2.574	
Unemployment rate	7.6	7.4	7.0	7.3	7.4	7.2	7.3	7.4	6.7	
<b>Both sexes, 18 to 18 years</b>										
Civilian labor force	9,105	8,545	8,898	7,383	7,273	7,145	7,069	7,355	7,180	
Employed	69.7	67.4	70.7	56.5	56.9	56.0	55.7	58.2	57.3	
Unemployed	21.3	18.0	18.1	17.3	15.8	15.4	14.3	14.8	14.7	
Employment-population ratio <sup>2</sup>	7.934	6.720	7.232	5.881	5.719	5.488	5.466	5.883	5.779	
Unemployment rate	36.6	53.2	58.3	44.7	44.8	44.6	44.6	46.5	45.9	
Unemployment rate	1,713	1,713	1,566	1,542	1,554	1,457	1,403	1,472	1,401	
Men	19.3	20.5	17.5	22.5	22.9	21.7	20.2	19.8	19.5	
Women	16.3	22.4	17.7	19.1	19.7	19.0	19.4	20.2	18.5	
<b>BLACK</b>										
Civilian noninstitutional population	18,500	18,911	18,942	18,600	18,623	18,851	18,880	18,911	18,942	
Civilian labor force	11,762	11,968	12,186	11,341	11,554	11,521	11,783	11,783	11,784	
Employed	63.2	63.4	63.3	61.0	61.4	61.7	61.8	62.3	62.1	
Unemployed	5.0	5.6	5.9	5.9	6.1	6.1	6.1	6.5	6.4	
Employment-population ratio <sup>2</sup>	3,447	3,389	3,717	3,211	3,253	3,209	3,270	3,352	3,469	
Unemployment rate	2,315	2,599	2,469	2,130	2,322	2,423	2,402	2,432	2,295	
Unemployment rate	19.7	21.7	20.3	18.8	19.9	20.8	20.6	20.6	19.5	
<b>Men, 20 years and over</b>										
Civilian labor force	5,421	5,614	5,661	5,377	5,439	5,540	5,512	5,597	5,611	
Employed	75.4	76.4	76.8	74.8	74.5	75.7	75.1	76.1	76.1	
Unemployed	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	
Employment-population ratio <sup>2</sup>	4,481	4,558	4,484	4,444	4,416	4,415	4,418	4,522	4,564	
Unemployment rate	82.3	82.0	82.6	81.8	80.5	80.3	80.2	81.5	81.9	
Unemployment rate	539	1,055	1,046	933	1,023	1,125	1,098	1,075	1,047	
Unemployment rate	17.3	18.8	18.5	17.4	18.6	20.3	19.8	19.2	18.7	
<b>Women, 20 years and over</b>										
Civilian labor force	5,168	5,284	5,331	5,159	5,350	5,285	5,388	5,283	5,328	
Employed	54.4	56.6	57.0	56.3	57.7	56.6	57.4	56.6	57.0	
Unemployed	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	
Employment-population ratio <sup>2</sup>	4,332	4,353	4,450	4,359	4,408	4,372	4,431	4,384	4,477	
Unemployment rate	47.3	46.7	47.6	47.6	47.5	47.0	47.6	47.0	47.9	
Unemployment rate	836	931	881	809	946	893	917	900	851	
Unemployment rate	16.2	17.6	16.5	15.5	17.7	17.0	17.1	17.0	16.0	
<b>Both sexes, 18 to 18 years</b>										
Civilian labor force	1,173	1,090	1,194	805	765	827	812	903	825	
Employed	52.1	48.9	51.7	35.8	34.1	37.9	36.4	40.5	37.1	
Unemployed	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	
Employment-population ratio <sup>2</sup>	28.1	21.4	29.3	18.1	19.3	18.9	18.9	20.0	19.2	
Unemployment rate	540	612	582	397	333	405	391	457	397	
Men	46.0	56.2	45.3	45.3	42.5	49.0	48.2	50.6	48.1	
Women	45.1	54.5	44.6	48.9	44.5	48.0	53.1	51.1	47.6	
Unemployment rate	47.1	58.2	46.3	49.7	42.3	50.0	42.3	50.0	48.8	
<b>HISPANIC ORIGIN</b>										
Civilian noninstitutional population	3,521	9,738	9,640	9,521	9,551	9,665	9,747	9,738	9,640	
Civilian labor force	6,120	6,318	6,246	5,972	6,074	6,206	6,167	6,253	6,079	
Employed	64.3	64.9	64.8	62.7	63.6	64.2	64.3	64.2	63.1	
Unemployed	5,227	5,422	5,448	5,136	5,088	5,304	5,318	5,379	5,331	
Employment-population ratio <sup>2</sup>	34.9	55.7	56.5	53.9	53.3	54.9	54.6	55.2	55.3	
Unemployment rate	8.95	8.96	7.98	8.16	8.06	9.02	8.69	8.74	7.88	
Unemployment rate	14.7	14.2	12.8	14.0	14.2	14.5	13.8	14.0	12.3	

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

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

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Selected employment indicators

(Numbers in thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	July 1962	June 1983	July 1983	July 1982	Dec. 1983	Apr. 1983	May 1983	June 1983	July 1983
<b>CHARACTERISTIC</b>									
Civilian employed, 15 years and over .....	101,430	101,813	103,273	99,588	99,103	99,458	92,557	120,786	101,285
Married men, spouse present .....	38,328	38,115	38,488	38,177	37,452	37,523	37,560	37,925	38,293
Married women, spouse present .....	23,448	23,921	23,925	24,173	24,171	24,271	24,229	24,335	24,640
Women who maintain families .....	5,137	4,991	5,012	5,200	5,097	4,944	4,982	5,016	5,088
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>									
<b>Agriculture:</b>									
Wage and salary workers .....	4,887	1,911	2,062	1,523	1,515	1,560	1,595	1,636	1,663
Self-employed workers .....	1,795	1,716	1,749	1,655	1,585	1,607	1,558	1,608	1,583
Unpaid family workers .....	381	349	348	258	260	208	229	263	259
<b>Nonagricultural industries:</b>									
Wage and salary workers .....	89,655	89,938	91,100	88,491	87,912	88,187	88,395	89,354	89,765
Government .....	14,564	15,142	15,100	15,471	15,452	15,518	15,523	15,498	15,615
Private industries .....	74,691	74,796	76,000	73,020	72,459	72,668	72,872	73,856	74,150
Private households .....	1,307	1,375	1,404	1,200	1,235	1,205	1,228	1,317	1,286
Other industries .....	73,384	73,421	74,596	71,820	71,225	71,463	71,644	72,539	72,864
Self-employed workers .....	7,377	7,530	7,689	7,286	7,453	7,528	7,408	7,493	7,598
Unpaid family workers .....	436	368	355	393	342	353	335	345	320
<b>PERSONS AT WORK*</b>									
Nonagricultural industries .....	85,978	90,394	87,767	90,434	90,271	92,267	90,941	90,539	92,253
Full-time schedules .....	69,533	73,270	71,192	72,208	71,878	73,594	72,975	72,978	74,004
Part-time for economic reasons .....	6,596	4,593	4,686	5,577	6,202	6,082	5,928	5,729	5,636
Usually work full time .....	2,019	1,886	1,773	2,047	1,927	1,871	1,685	1,702	1,809
Usually work part time .....	4,577	4,707	4,913	3,530	4,275	4,211	4,243	4,027	3,826
Part-time for noneconomic reasons .....	4,849	10,531	9,889	12,549	12,191	12,592	12,038	11,833	12,614

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

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Measure	Quarterly averages				Monthly data			
	1982		1983		1983			
	II	III	IV	I	II	May	June	July
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force .....	3.0	3.3	4.0	4.2	4.0	4.1	4.1	3.9
U-2 Job losers as a percent of the civilian labor force .....	5.5	6.0	6.6	6.1	6.0	6.1	5.8	5.5
U-3 Unemployed persons 25 years and over as a percent of the civilian labor force .....	7.1	7.5	8.3	8.1	7.9	7.9	7.9	7.4
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force .....	9.3	9.8	10.6	10.3	9.9	9.9	9.7	9.4
U-4a Total unemployed as a percent of the labor force, including the resident Armed Forces .....	9.3	9.8	10.5	10.2	9.9	10.0	9.8	9.3
U-4b Total unemployed as a percent of the civilian labor force .....	9.4	10.0	10.7	10.3	10.1	10.1	10.0	9.5
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons as a percent of the civilian labor force less 1/2 of the part-time labor force .....	12.1	12.8	13.8	13.5	12.9	12.9	12.6	12.1
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force .....	13.4	14.2	15.3	15.0	14.3	N.A.	N.A.	N.A.

N.A. = not available.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates <sup>1</sup>					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
	<b>CHARACTERISTIC</b>								
Total, 18 years and over .....	10,428	11,186	10,590	9.8	10.3	10.2	10.1	10.0	9.5
Men, 20 years and over .....	6,234	6,351	6,238	10.0	10.7	10.7	10.6	10.0	9.8
Women, 18 years and over .....	4,599	4,795	4,351	9.6	9.6	9.6	9.5	9.0	8.8
Women, 20 years and over .....	3,672	3,859	3,521	8.3	8.8	8.4	8.5	8.6	7.9
Both sexes, 18 to 19 years .....	2,006	1,899	3,860	23.9	23.5	23.4	23.3	23.6	22.8
Married men, spouse present .....	2,713	2,671	2,504	6.6	7.1	7.1	7.0	6.6	6.1
Married women, spouse present .....	1,920	2,060	1,846	7.4	7.5	7.3	7.5	7.8	7.0
Women who maintain families .....	708	735	667	12.0	13.5	13.2	12.5	12.8	11.6
Full-time workers .....	9,038	9,294	8,949	9.6	10.3	10.2	9.9	9.7	9.4
Part-time workers .....	1,806	1,911	1,643	11.2	10.5	10.6	11.0	12.1	10.2
Labor force time lost <sup>2</sup> .....	--	--	--	10.7	11.8	11.4	11.5	10.8	10.4
<b>INDUSTRY</b>									
Nonagricultural private wage and salary workers ..	8,296	8,243	7,869	10.2	10.8	10.5	10.5	10.0	9.6
Mining .....	182	204	181	15.8	18.6	20.3	22.7	18.2	16.6
Construction .....	1,048	988	989	20.3	20.3	20.3	22.4	18.1	18.0
Manufacturing .....	2,737	2,514	2,276	12.1	12.8	12.4	12.3	11.5	10.5
Durable goods .....	1,720	1,593	1,414	12.8	14.1	13.5	13.5	12.2	11.2
Non-durable goods .....	1,017	921	862	11.0	11.1	10.8	10.5	10.4	9.6
Transportation and public utilities .....	368	445	395	6.6	7.8	7.7	7.0	7.8	7.0
Wholesale and retail trade .....	2,138	2,157	2,032	10.3	11.2	10.4	10.1	10.2	9.7
Finance and service industries .....	1,807	1,935	1,996	7.0	7.2	7.3	7.5	7.2	7.3
Government workers .....	764	835	903	4.7	5.9	6.1	5.8	5.1	5.5
Agricultural wage and salary workers .....	250	335	275	14.1	16.3	17.2	17.0	17.0	14.2

<sup>1</sup> Unemployment as a percent of the civilian labor force.<sup>2</sup> Aggregate hours lost by the unemployed and persons on part time for economic

reasons as a percent of potentially available labor force hours.

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
	<b>DURATION</b>								
Less than 5 weeks .....	4,197	4,587	3,708	3,359	3,440	3,547	3,519	3,655	3,498
5 to 14 weeks .....	3,613	2,536	3,046	3,249	3,180	3,154	2,979	2,915	2,794
15 to 26 weeks .....	3,226	4,447	3,953	3,569	4,615	4,356	4,517	4,589	4,417
27 weeks and over .....	1,377	1,605	1,318	1,780	1,875	1,662	1,731	1,438	1,830
Average (mean) duration, in weeks .....	14.4	19.8	20.0	15.6	19.1	19.0	20.4	22.0	21.7
Median duration, in weeks .....	7.4	8.8	8.9	6.3	10.3	11.3	12.3	11.8	9.9
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	11,036	11,570	10,707	10,828	11,381	11,328	11,192	11,186	10,590
Less than 5 weeks .....	38.0	39.6	34.6	36.7	30.7	32.1	31.9	32.8	32.7
5 to 14 weeks .....	32.7	21.9	28.4	30.1	28.1	28.5	27.0	26.1	26.1
15 to 26 weeks .....	29.2	38.4	36.9	33.1	41.2	39.4	41.0	41.1	41.2
27 weeks and over .....	12.5	13.9	12.3	16.5	16.7	15.0	15.7	14.7	17.1
	16.8	24.6	24.6	16.6	24.5	24.4	25.3	26.4	24.2

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-8. Reason for unemployment

Reason	Not seasonally adjusted			Seasonally adjusted					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
<b>NUMBER OF UNEMPLOYED</b>									
Job losers .....	6,076	6,135	5,899	6,323	6,023	6,750	6,766	6,513	6,193
On layoff .....	2,023	1,625	1,609	2,126	1,945	1,968	1,946	1,822	1,719
Other job losers .....	4,055	4,510	4,281	4,197	4,078	4,803	4,823	4,691	4,474
Job leavers .....	854	788	767	819	901	815	801	782	738
Reentrants .....	2,553	2,739	2,482	2,478	2,426	2,488	2,365	2,425	2,429
New entrants .....	1,551	1,887	1,559	1,230	1,155	1,245	1,251	1,440	1,225
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers .....	55.0	53.0	55.0	58.3	60.4	59.7	60.5	58.4	58.5
On layoff .....	18.3	14.0	15.0	19.6	17.2	17.2	17.4	16.3	16.2
Other job losers .....	36.7	39.0	40.0	36.7	43.1	42.5	43.1	42.0	42.3
Job leavers .....	7.7	6.5	7.2	7.5	8.0	7.2	7.2	7.0	7.0
Reentrants .....	23.1	28.2	23.3	22.8	21.5	22.0	21.1	21.7	22.9
New entrants .....	14.1	16.3	14.6	11.3	11.3	11.0	11.2	12.9	11.6
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers .....	5.4	5.4	5.2	5.7	6.2	6.1	6.1	5.8	5.5
Job leavers .....	1.6	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7
Reentrants .....	2.3	2.5	2.2	2.2	2.2	2.2	2.1	2.2	2.2
New entrants .....	1.4	1.7	1.4	1.1	1.0	1.1	1.1	1.3	1.1

Table A-9. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates <sup>1</sup>					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
<b>Total, 16 years and over .....</b>	<b>10,628</b>	<b>11,166</b>	<b>10,590</b>	<b>9.8</b>	<b>10.3</b>	<b>10.2</b>	<b>10.1</b>	<b>10.0</b>	<b>9.5</b>
16 to 24 years .....	4,370	4,332	4,087	17.9	18.1	18.1	18.1	17.6	16.8
16 to 19 years .....	2,006	1,939	1,860	23.9	23.5	23.4	23.0	23.6	22.8
16 to 17 years .....	824	799	768	25.8	25.1	26.3	26.2	25.8	25.3
18 to 19 years .....	1,175	1,200	1,088	22.6	22.7	21.8	21.1	22.4	21.1
20 to 24 years .....	2,364	2,333	2,227	14.7	15.4	15.4	15.6	14.4	13.8
25 years and over .....	6,436	6,863	6,479	7.5	8.1	8.0	7.9	7.9	7.4
25 to 54 years .....	5,648	6,016	5,608	8.0	8.7	8.5	8.5	8.3	7.8
55 years and over .....	799	834	803	5.3	5.4	5.6	5.3	5.6	5.3
<b>Men, 16 years and over .....</b>	<b>6,234</b>	<b>6,351</b>	<b>6,238</b>	<b>10.0</b>	<b>10.7</b>	<b>10.7</b>	<b>10.6</b>	<b>10.0</b>	<b>9.8</b>
16 to 24 years .....	2,474	2,444	2,398	19.2	19.5	19.4	19.7	18.4	18.4
16 to 19 years .....	1,084	1,063	1,030	25.2	25.3	24.4	23.9	23.7	23.0
16 to 17 years .....	457	414	460	27.7	26.0	27.0	27.4	25.4	27.9
18 to 19 years .....	622	645	568	23.4	24.8	23.0	22.0	22.9	21.2
20 to 24 years .....	1,390	1,381	1,368	16.2	16.6	17.0	17.6	15.7	15.7
25 years and over .....	3,731	3,918	3,808	7.5	8.4	8.5	8.2	7.8	7.4
25 to 54 years .....	3,293	3,443	3,325	8.1	9.0	8.9	8.8	8.4	8.1
55 years and over .....	442	483	481	4.9	5.8	6.3	5.8	5.4	5.4
<b>Women, 16 years and over .....</b>	<b>4,594</b>	<b>4,795</b>	<b>4,351</b>	<b>9.6</b>	<b>9.8</b>	<b>9.6</b>	<b>9.5</b>	<b>9.9</b>	<b>9.0</b>
16 to 24 years .....	1,896	1,888	1,689	16.4	16.6	16.5	16.2	16.6	14.9
16 to 19 years .....	922	936	830	22.6	21.5	22.4	21.9	23.4	21.6
16 to 17 years .....	367	385	308	23.8	24.2	25.5	24.7	26.2	22.3
18 to 19 years .....	553	584	520	21.9	20.5	20.7	20.2	21.9	21.0
20 to 24 years .....	974	952	859	13.1	14.1	13.5	13.3	12.9	11.5
25 years and over .....	2,705	2,945	2,671	7.4	7.7	7.4	7.6	7.9	7.2
25 to 54 years .....	2,355	2,572	2,363	7.7	8.3	7.9	8.2	8.2	7.6
55 years and over .....	357	351	322	5.8	4.7	4.5	4.6	5.8	5.3

<sup>1</sup> Unemployment as a percent of the civilian labor force.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
Civilian noninstitutional population	24,795	23,316	23,367	22,795	23,275	23,276	23,282	23,316	23,367
Civilian labor force	14,553	14,855	15,069	14,047	14,456	14,487	14,460	14,652	14,573
Participation rate	58.8	63.9	64.5	61.6	62.1	62.2	62.1	62.8	62.6
Employed	11,695	11,923	12,261	11,601	11,779	11,759	11,775	11,879	11,966
Employment-population ratio <sup>2</sup>	52.2	51.1	52.5	50.9	50.6	50.5	50.6	50.9	51.3
Unemployed	4,458	2,972	2,808	2,446	2,677	2,728	2,685	2,773	2,607
Unemployment rate	18.3	20.0	16.6	17.5	18.5	18.8	18.6	18.9	17.9
Not in labor force	8,242	8,420	8,277	8,748	8,819	8,789	8,822	8,664	8,774

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	July 1982	July 1983	July 1982	July 1983	July 1982	July 1983
Total, 16 years and over	101,490	103,273	11,036	10,707	9.8	9.4
Managerial and professional specialty	22,707	23,166	888	867	3.8	3.6
Executive, administrative, and managerial professional specialty	10,682	10,740	435	389	3.9	3.5
Technical, sales, and administrative support	12,024	12,425	453	478	3.6	3.7
Technicians and related support	31,082	31,787	2,028	2,138	6.1	6.3
Sales occupations	3,113	3,182	149	156	4.6	4.7
Service occupations	11,356	12,060	750	892	6.2	6.5
Administrative support, including clerical	16,613	16,586	1,130	1,140	6.4	6.4
Service occupations	13,739	14,155	1,729	1,657	11.2	10.5
Private household	1,044	1,006	50	85	7.9	7.8
Protective service	1,634	1,761	106	135	6.1	7.1
Service, except private household and protective	11,062	11,387	1,533	1,437	12.2	11.2
Precision production, craft, and repair	12,181	12,831	1,296	1,334	9.6	9.4
Mechanics and repairers	3,910	4,171	285	334	6.8	7.4
Construction trades	4,228	4,632	637	612	13.1	11.7
Other precision production, craft, and repair	4,043	4,028	374	388	8.5	8.8
Operators, fabricators, and laborers	17,017	16,591	3,254	2,718	16.1	14.1
Machine operators, assemblers, and inspectors	7,952	7,772	1,608	1,293	16.8	14.3
Transportation and material moving occupations	4,291	4,260	596	523	12.2	10.9
Handlers, equipment cleaners, helpers, and laborers	4,775	4,558	1,051	902	18.0	16.5
Construction laborers	636	707	215	165	25.3	18.9
Other handlers, equipment cleaners, helpers, and laborers	4,139	3,851	836	737	16.8	16.1
Farming, forestry, and fishing	4,705	4,743	298	376	6.0	7.4

<sup>1</sup> Persons with no previous work experience are included in the unemployed total.

NOTE: Occupational detail may not add to totals because of changes in the estimation procedures.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
	July 1982	July 1983	July 1982	July 1983	July 1982	July 1983	Number		Percent of labor force	
							July 1982	July 1983	July 1982	July 1983
<b>VETERANS</b>										
Total, 25 years and over .....	8,695	7,846	8,208	7,378	7,523	6,763	681	615	8.3	8.3
25 to 29 years .....	7,129	5,886	6,838	5,613	6,228	5,108	606	509	8.9	9.1
30 to 34 years .....	1,202	668	1,132	620	963	588	169	76	18.9	12.3
35 to 39 years .....	2,917	2,125	2,801	2,055	2,582	1,888	239	207	8.5	10.3
40 years and over .....	1,506	2,000	1,370	1,765	1,295	1,659	75	196	5.5	6.0
<b>NONVETERANS</b>										
Total, 25 to 39 years .....	10,268	20,053	17,385	18,983	15,781	17,350	1,608	1,593	9.2	8.8
25 to 29 years .....	8,188	8,713	7,748	8,176	6,895	7,408	863	768	11.1	9.8
30 to 34 years .....	5,587	6,808	5,715	6,469	5,239	5,967	476	502	8.3	7.8
35 to 39 years .....	6,053	6,532	3,882	4,298	3,617	3,975	265	323	6.8	7.5

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the

Armed Forces; published data are limited to those 25 to 39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Employment status of the civilian population for ten large States

(Numbers in thousands)

State and employment status	Not seasonally adjusted <sup>1</sup>			Seasonally adjusted <sup>2</sup>					
	July 1982	June 1983	July 1983	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983	July 1983
<b>California</b>									
Civilian noninstitutional population	18,465	18,770	18,401	18,465	18,687	18,713	18,741	18,770	18,801
Civilian labor force	12,397	12,434	12,438	12,266	12,216	12,153	12,301	12,459	12,294
Employed	11,075	11,182	11,256	10,977	10,926	10,962	11,007	11,173	11,147
Unemployed	1,323	1,251	1,182	1,289	1,290	1,191	1,294	1,286	1,147
Unemployment rate	10.7	10.1	9.5	10.5	10.6	9.8	10.5	10.3	9.3
<b>Florida</b>									
Civilian noninstitutional population	8,125	8,343	8,363	8,125	8,284	8,302	8,322	8,343	8,363
Civilian labor force	4,809	4,957	5,017	4,736	4,639	4,748	4,742	4,915	4,926
Employed	4,447	4,522	4,608	4,373	4,228	4,338	4,311	4,481	4,511
Unemployed	362	434	409	363	411	410	431	434	415
Unemployment rate	7.5	8.8	8.2	7.7	8.9	8.6	9.1	8.8	8.4
<b>Illinois</b>									
Civilian noninstitutional population	8,532	8,547	8,550	8,532	8,543	8,544	8,545	8,547	8,550
Civilian labor force	5,741	5,640	5,657	5,633	5,692	5,580	5,546	5,567	5,541
Employed	5,042	4,921	4,994	4,954	5,000	4,898	4,866	4,876	4,902
Unemployed	700	719	663	679	692	682	680	691	639
Unemployment rate	12.2	12.7	11.7	12.1	12.2	12.2	12.0	12.4	11.5
<b>Massachusetts</b>									
Civilian noninstitutional population	4,477	4,510	4,513	4,477	4,501	4,503	4,506	4,510	4,513
Civilian labor force	3,096	3,025	3,046	3,053	2,981	3,009	2,986	3,005	2,999
Employed	2,798	2,789	2,856	2,769	2,744	2,797	2,794	2,798	2,823
Unemployed	298	226	190	284	237	212	192	207	176
Unemployment rate	9.6	7.5	6.2	9.3	8.0	7.0	6.4	6.9	5.9
<b>Michigan</b>									
Civilian noninstitutional population	6,747	6,725	6,724	6,747	6,731	6,728	6,727	6,725	6,724
Civilian labor force	4,382	4,420	4,404	4,314	4,297	4,344	4,370	4,357	4,333
Employed	3,737	3,773	3,829	3,680	3,622	3,695	3,717	3,696	3,764
Unemployed	645	648	575	634	675	649	653	661	569
Unemployment rate	14.7	14.6	13.1	14.7	15.7	14.9	14.9	15.2	13.1
<b>New Jersey</b>									
Civilian noninstitutional population	5,702	5,746	5,751	5,702	5,734	5,738	5,742	5,746	5,751
Civilian labor force	3,711	3,697	3,737	3,630	3,595	3,637	3,579	3,647	3,652
Employed	3,399	3,382	3,428	3,324	3,292	3,367	3,335	3,342	3,345
Unemployed	312	315	309	306	303	270	244	305	307
Unemployment rate	8.4	8.5	8.3	8.4	8.4	7.4	6.8	8.4	8.4
<b>New York</b>									
Civilian noninstitutional population	13,517	13,586	13,594	13,517	13,568	13,572	13,579	13,586	13,594
Civilian labor force	8,252	8,209	8,408	8,028	8,036	8,015	7,907	8,133	8,183
Employed	7,551	7,459	7,676	7,368	7,291	7,271	7,215	7,382	7,485
Unemployed	700	750	732	660	745	744	692	751	698
Unemployment rate	8.5	9.1	8.7	8.2	9.3	9.3	8.8	9.2	8.5
<b>Ohio</b>									
Civilian noninstitutional population	8,058	8,071	8,073	8,058	8,068	8,068	8,069	8,071	8,073
Civilian labor force	5,274	5,267	5,302	5,138	5,104	5,158	5,185	5,182	5,152
Employed	4,628	4,595	4,723	4,514	4,431	4,485	4,479	4,517	4,588
Unemployed	646	672	579	624	673	673	706	665	564
Unemployment rate	12.2	12.8	10.9	12.1	13.2	13.0	13.6	12.8	10.9
<b>Pennsylvania</b>									
Civilian noninstitutional population	9,135	9,157	9,160	9,135	9,151	9,152	9,154	9,157	9,160
Civilian labor force	5,578	5,607	5,670	5,479	5,357	5,377	5,489	5,578	5,555
Employed	4,982	4,886	5,054	4,885	4,638	4,669	4,796	4,874	4,938
Unemployed	595	721	617	594	719	708	693	704	617
Unemployment rate	10.7	12.9	10.9	10.8	13.4	13.2	12.6	12.6	11.1
<b>Texas</b>									
Civilian noninstitutional population	10,953	11,251	11,280	10,953	11,170	11,196	11,223	11,251	11,280
Civilian labor force	7,433	7,703	7,721	7,264	7,567	7,569	7,508	7,631	7,655
Employed	6,888	7,046	7,084	6,647	6,887	6,919	6,897	7,044	7,039
Unemployed	545	657	637	617	680	650	611	587	616
Unemployment rate	7.3	8.5	8.3	7.0	9.0	8.6	8.1	7.7	8.0

<sup>1</sup> These are the official Bureau of Labor Statistics estimates used in the administration of Federal fund allocation programs.<sup>2</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table 8-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	July 1982	May 1983	June 1983 P	July 1983 P	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983 P	July 1983 P
<b>Total</b> .....	89,221	89,830	90,641	90,107	89,430	88,814	89,090 <sup>c</sup>	89,421	89,832	90,319
<b>Goods-producing</b> .....	23,991	23,351	23,830	23,912	23,843	23,030	23,159	23,347	23,534	23,749
Mining .....	1,140	996	1,022	1,029	1,123	1,006	997	994	1,006	1,016
Construction .....	4,147	3,687	4,099	4,219	3,916	3,757	3,786	3,860	3,941	3,984
Manufacturing .....	18,704	18,468	18,709	18,664	18,802	18,267	18,376	18,493	18,587	18,749
Production workers .....	12,630	12,523	12,723	12,681	12,751	12,323	12,435	12,531	12,623	12,793
Durable goods .....	11,043	10,800	10,934	10,931	11,095	10,617	10,689	10,788	10,843	10,971
Production workers .....	7,285	7,148	7,249	7,242	7,350	6,961	7,035	7,115	7,168	7,297
Lumber and wood products .....	614.7	665.1	696.4	706.7	600	638	631	662	678	689
Furniture and fixtures .....	418.3	443.3	448.2	445.3	430	433	440	446	450	457
Stone, clay, and glass products .....	389.1	373.1	385.7	386.7	378	359	365	370	373	375
Primary metal products .....	905.4	832.7	839.1	838.1	909	816	820	828	830	841
Fabricated metal products .....	1,417.3	1,377.3	1,393.2	1,383.3	1,432	1,362	1,369	1,379	1,385	1,396
Machinery, except electrical .....	2,240.4	2,069.8	2,079.5	2,081.3	2,256	2,030	2,031	2,064	2,067	2,096
Electric and electronic equipment .....	2,007.3	2,007.7	2,040.3	2,043.8	2,016	1,988	1,999	2,010	2,030	2,052
Transportation equipment .....	1,753.7	1,769.2	1,773.9	1,779.0	1,770	1,723	1,743	1,757	1,760	1,793
Instruments and related products .....	718.7	688.3	691.1	685.3	717	691	690	689	686	683
Miscellaneous manufacturing .....	378.5	381.3	386.8	381.1	387	377	381	383	384	389
Non-durable goods .....	7,661	7,660	7,775	7,733	7,707	7,650	7,687	7,705	7,744	7,778
Production workers .....	5,345	5,373	5,474	5,439	5,401	5,362	5,400	5,416	5,455	5,496
Food and kindred products .....	1,666.1	1,584.4	1,630.2	1,664.3	1,639	1,619	1,633	1,632	1,647	1,636
Tobacco manufactures .....	62.7	60.8	61.1	60.6	67	67	66	66	65	65
Textile mill products .....	727.6	737.6	746.8	737.4	741	730	733	736	745	750
Apparel and other textile products .....	1,096.9	1,159.7	1,179.8	1,139.4	1,141	1,143	1,149	1,153	1,160	1,183
Paper and allied products .....	860.6	854.9	862.4	861.8	860	852	854	856	857	861
Printing and publishing .....	1,841.0	1,274.8	1,280.0	1,281.2	1,266	1,269	1,274	1,276	1,280	1,286
Chemicals and allied products .....	1,079.2	1,057.5	1,066.2	1,064.0	1,073	1,056	1,058	1,058	1,057	1,059
Petroleum and coal products .....	203.4	198.2	200.1	200.8	200	199	199	198	198	197
Rubber and misc. plastics products .....	692.2	715.9	728.7	727.6	700	699	707	716	721	735
Leather and leather products .....	209.6	215.8	219.9	196.1	220	216	214	214	214	206
<b>Service-producing</b> .....	65,230	66,479	66,811	66,195	65,607	65,784	65,931 <sup>c</sup>	66,074	66,298	66,570
Transportation and public utilities .....	5,089	4,993	5,031	4,992	5,075	4,963	4,988	4,993	4,991	4,977
Wholesale and retail trade .....	20,482	20,377	20,608	20,355	20,438	20,350	20,329	20,356	20,485	20,498
Wholesale trade .....	5,303	5,197	5,250	5,233	5,279	5,176	5,180	5,197	5,219	5,227
Retail trade .....	15,179	15,174	15,358	15,122	15,159	15,174	15,149	15,159	15,266	15,271
Finance, insurance, and real estate .....	5,411	5,435	5,506	5,342	5,342	5,391	5,423	5,435	5,451	5,471
Services .....	19,238	19,624	19,817	19,960	19,083	19,356	19,478	19,546	19,660	19,802
Government .....	15,009	16,056	15,849	15,146	15,669	15,724	15,719 <sup>c</sup>	15,744	15,711	15,822
Federal government .....	7,794	7,756	7,792	7,794	7,737	7,742	7,739 <sup>c</sup>	7,756	7,745	7,737
State and local government .....	12,215	13,300	13,057	12,352	12,932	12,982	12,975	12,988	12,966	13,085

p = preliminary.

c = corrected.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	July 1982	May 1983	June 1983 <sup>p</sup>	July 1983 <sup>p</sup>	July 1982	Mar. 1983	Apr. 1983	May 1983	June 1983 <sup>p</sup>	July 1983 <sup>p</sup>
Total private .....	35.2	34.9	35.3	35.4	34.9	34.8	34.9	35.1	35.1	35.1
Mining .....	42.5	42.2	42.5	41.7	(2)	(2)	(2)	(2)	(2)	(2)
Construction .....	38.0	37.4	37.9	38.2	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing .....	38.9	39.9	40.4	40.1	39.1	39.5	40.1	40.0	40.2	40.3
Overtime hours .....	2.3	2.7	3.0	3.0	2.3	2.6	2.9	2.7	2.9	3.1
Durable goods .....	39.2	40.4	40.8	40.4	39.6	39.9	40.5	40.4	40.6	40.8
Overtime hours .....	2.1	2.6	3.0	2.9	2.2	2.5	2.8	2.6	2.9	3.0
Lumber and wood products .....	38.6	40.2	40.8	40.1	38.5	39.5	40.0	39.8	40.0	39.9
Furniture and fixtures .....	36.7	39.0	39.9	39.1	37.4	38.3	39.3	39.2	39.6	39.9
Stone, clay, and glass products .....	40.6	41.4	42.1	42.0	40.5	40.6	41.0	41.2	41.6	41.8
Primary metal products .....	38.3	40.1	40.5	40.5	38.8	39.4	39.9	40.3	40.3	40.8
Fabricated metal products .....	38.9	40.4	40.7	40.5	39.4	39.7	40.5	40.4	40.4	40.8
Machinery, except electrical .....	39.2	39.9	40.3	40.1	39.8	39.7	40.2	40.0	40.4	40.7
Electric and electronic equipment .....	39.1	40.2	40.6	40.2	39.6	39.8	40.4	40.3	40.5	40.7
Transportation equipment .....	40.6	41.9	42.4	41.9	40.9	41.7	42.3	41.8	42.0	42.2
Instruments and related products .....	39.6	40.3	40.1	39.6	40.1	40.0	40.5	40.4	40.0	40.1
Miscellaneous manufacturing .....	38.2	38.8	38.9	38.5	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods .....	38.5	39.3	39.7	39.6	38.5	39.0	39.5	39.4	39.6	39.6
Overtime hours .....	2.5	2.8	3.0	3.1	2.5	2.7	3.0	2.9	3.0	3.2
Food and kindred products .....	39.5	39.3	39.8	39.7	39.4	39.2	39.6	39.4	39.8	39.6
Tobacco manufactures .....	36.8	37.4	38.5	38.4	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products .....	37.2	40.5	41.1	40.5	37.7	39.6	40.6	40.4	40.7	41.0
Apparel and other textile products .....	39.4	36.1	36.7	36.2	35.1	35.4	36.2	36.1	36.2	35.9
Paper and allied products .....	41.7	42.4	42.9	42.8	41.9	42.1	42.4	42.7	42.8	43.0
Printing and publishing .....	36.9	37.3	37.4	37.5	37.0	37.4	37.7	37.4	37.6	37.7
Chemicals and allied products .....	40.6	41.5	41.9	41.7	40.8	41.2	41.5	41.6	41.9	41.9
Petroleum and coal products .....	44.0	43.7	43.9	43.4	43.4	44.9	43.5	43.6	43.7	42.8
Rubber and misc. plastics products .....	39.6	41.1	41.3	41.1	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products .....	36.1	37.1	37.8	37.4	36.0	36.0	37.0	36.8	36.8	37.3
Transportation and public utilities .....	39.2	38.7	39.1	39.2	38.9	38.8	38.8	38.9	38.9	38.9
Wholesale and retail trade .....	32.6	31.8	32.1	32.5	32.0	31.7	31.7	31.9	32.0	31.9
Wholesale trade .....	38.7	38.5	38.7	38.8	38.5	39.4	38.5	38.6	38.7	38.6
Retail trade .....	30.7	29.7	30.1	30.6	29.9	29.7	29.6	29.9	29.9	29.8
Finance, insurance, and real estate .....	36.2	36.3	36.1	36.2	(2)	(2)	(2)	(2)	(2)	(2)
Services .....	33.1	32.7	32.9	33.2	32.6	32.7	32.7	32.9	32.7	32.7

<sup>1</sup> Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

<sup>2</sup> This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.  
p = preliminary.



## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers' on private nonagricultural payrolls by industry  
(1977=100)

Industry	Not seasonally adjusted				Seasonally adjusted					
	July 1982	Mar 1983	June 1983 P	July 1983 P	July 1982	Mar 1983	Apr. 1983	May 1983	June 1983 P	July 1983 P
Total private .....	106.1	104.8	107.3	108.0	104.8	103.1	104.0	105.0	105.7	106.3
Goods-producing .....	91.8	90.6	94.0	93.9	91.7	87.8	89.6	90.5	91.9	93.3
Mining .....	130.9	110.2	114.5	113.1	129.6	110.7	109.5	110.3	112.8	112.6
Construction .....	111.1	101.1	109.2	113.7	101.9	94.3	96.3	99.6	102.3	103.8
Manufacturing .....	86.2	87.7	90.0	89.1	87.9	85.4	87.4	87.8	88.9	90.4
Durable goods .....	83.9	84.7	85.9	86.0	86.0	81.6	83.7	84.3	85.4	87.5
Lumber and wood products .....	79.4	90.6	96.8	96.6	77.7	85.1	88.0	89.2	92.1	93.3
Furniture and fixtures .....	81.1	92.0	95.2	92.7	85.3	87.9	92.0	93.1	94.8	97.4
Stone, clay, and glass products .....	82.5	82.1	85.8	85.7	81.2	78.1	80.0	81.3	82.5	83.4
Primary metal products .....	67.6	65.2	66.5	66.6	68.7	62.2	63.7	65.1	65.3	67.4
Fabricated metal products .....	80.5	81.9	83.9	82.3	83.4	79.4	81.4	82.0	82.6	84.4
Machinery, except electrical .....	89.0	85.7	82.9	82.7	91.7	78.7	80.0	81.4	82.5	84.9
Electric and electronic equipment .....	94.3	97.9	100.5	99.4	97.3	95.2	97.6	98.0	99.6	101.7
Transportation equipment .....	81.0	84.8	85.9	85.1	84.2	81.0	83.7	82.9	84.1	87.3
Instruments and related products .....	106.5	101.4	101.6	98.6	108.5	100.6	101.9	101.7	100.4	99.8
Miscellaneous manufacturing .....	80.1	82.0	85.7	81.8	83.8	80.7	82.9	82.4	83.0	85.0
Nondurable goods .....	89.6	92.1	94.7	93.7	90.7	91.0	92.8	92.9	94.1	94.8
Food and kindred products .....	97.9	91.5	95.8	98.5	96.0	94.1	96.0	95.6	97.6	96.3
Tobacco manufactures .....	81.8	78.7	81.9	81.4	91.6	89.6	89.1	88.6	88.3	91.1
Textile mill products .....	72.2	80.5	82.8	80.5	74.8	77.6	80.1	80.1	81.8	83.1
Apparel and other textile products .....	81.3	88.2	91.4	86.7	83.6	85.5	87.6	87.7	88.4	89.6
Paper and allied products .....	92.0	93.4	95.9	95.8	92.4	92.1	93.1	94.4	94.8	96.2
Printing and publishing .....	104.5	107.1	107.6	108.0	105.6	106.5	108.1	107.5	108.6	109.6
Chemicals and allied products .....	94.4	94.9	96.8	96.0	94.4	93.7	94.7	94.7	95.7	96.3
Petroleum and coal products .....	95.7	93.6	95.5	96.6	91.9	92.6	94.6	93.3	93.5	93.1
Rubber and misc. plastics products .....	91.3	99.5	101.9	101.7	95.2	94.9	98.5	100.2	101.0	104.3
Leather and leather products .....	77.9	82.9	86.2	75.5	81.5	79.9	81.7	81.2	81.7	79.6
Services-producing .....	114.2	112.6	114.7	115.9	112.1	111.6	111.9	113.0	113.3	113.4
Transportation and public utilities .....	103.0	99.5	101.3	100.6	102.2	99.1	99.6	99.9	99.9	99.7
Wholesale and retail trade .....	107.4	104.0	106.4	107.5	105.5	103.9	103.6	104.7	105.3	105.1
Wholesale trade .....	110.3	106.9	108.8	109.1	109.4	106.1	106.6	107.3	108.0	107.8
Retail trade .....	106.2	102.9	105.5	106.9	104.0	103.0	102.4	103.7	104.3	104.1
Finance, insurance, and real estate .....	118.8	118.7	120.0	121.1	117.0	116.4	117.8	119.1	118.9	118.8
Services .....	125.1	125.8	128.0	129.9	122.1	123.9	124.7	126.1	126.1	126.8

\* See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment<sup>1</sup> increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981 .....	57.8	52.4	52.2	65.6	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982 .....	28.5	45.4	36.0	38.0	47.6	32.8	38.4	37.1	34.1	29.3	32.0	42.2
	1983 .....	56.5	45.7	62.4	69.1	71.0	64.5p	69.6p					
Over 3-month span	1981 .....	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	33.3	30.1	24.5	23.4
	1982 .....	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983 .....	45.4	55.1	65.6	75.8	75.8p	76.1p						
Over 6-month span	1981 .....	68.5	65.3	63.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982 .....	20.2	23.7	25.3	29.8	26.1	26.1	23.4	19.1	21.2	26.1	26.6	35.8
	1983 .....	50.5	63.2	73.4p	76.3p								
Over 12-month span	1981 .....	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	25.3	23.1
	1982 .....	22.0	20.7	18.0	19.4	18.3	20.7	20.7	22.8	24.2	31.5	37.6	45.8p
	1983 .....	50.8p											

<sup>1</sup> Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 100 private nonagricultural industries.  
p = preliminary.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

Senator JEPSEN. Thank you, Ms. Norwood. In your statement, you note that the jobless rate for autoworkers has declined from 24.9 percent last November to 9.1 percent in July. Is this the most improved segment of the labor market, the autoworkers? As a segment of the labor market, is that the most improved?

Ms. NORWOOD. In terms of industries, I believe that is the case. There was a very sharp decline in the auto industry, in fact, during the recession. The auto industry in terms of employment, is almost back to the July 1981 level. It is, of course, still below its peak employment level in 1979.

Senator JEPSEN. Madam Commissioner, some commentators say that the current recession is weak by historical standards. From your statement, I take it you believe the current recovery is, if anything, stronger than most in terms of employment. Would you please expand on your comparison?

Ms. NORWOOD. In terms of employment and the labor market in general, it is a strong recovery. If we look at employment from the household survey, which, as you know, does have considerable variability from 1 month to the next, it is considerably higher in percentage terms. This the way we need to look at it. Unemployment has declined by 11 percent in the 8 months since the trough of the recession, and one would have to go back to 1958 to have a percentage decline in unemployment that was larger.

The employment-population ratios, which is another way of looking at it, the percentage of the population that is employed is up in the 8 months since November 0.8 of a percentage point and that is larger than any recovery since 1950.

Senator JEPSEN. 1950.

Ms. NORWOOD. Yes.

Senator JEPSEN. We have a number of 101.3 million employed; is that correct, as of this report?

Ms. NORWOOD. Total employment in the household survey is 101.3 million, seasonally adjusted.

Senator JEPSEN. And what has been the maximum number of people on any reportable basis that have been employed in this country at any one time?

Ms. NORWOOD. This is larger than in any previous period.

Senator JEPSEN. Is this the largest total number of people employed in the United States of America in its history?

Ms. NORWOOD. I think that is so. Mr. Plewes is checking that, but I believe that is so. Of course, the population keeps increasing.

Your statement is correct.

Senator JEPSEN. My statement is correct?

Ms. NORWOOD. Yes, your statement is correct; 101.3 million.

Senator JEPSEN. Is the largest number of civilian employment in the history of the United States at any one time—that is a correct statement?

Ms. NORWOOD. For civilian workers, yes.

Senator JEPSEN. OK. It's becoming obvious, I think, to all who look at the figures that this recovery is much stronger than anticipated. We recently had a report in a hearing that I chaired that in the second quarter we had an 8.7 percent gross national product growth. The growth rate for the economy for the year as it's moving along now I think would be conservatively projected to be over 5

percent. And I notice that in response to this, many forecasters have significantly lowered their unemployment estimates for the year.

What is the relationship again between gross national product and employment, and what would be the effect on employment if real gross national product grew 1 percent faster as many are now suggesting it will.

Ms. NORWOOD. Mr. Chairman, as you well know, the exact relationships between GNP growth and employment are rather difficult to quantify. Clearly, the latest GNP figures show very rapid growth. And when production increases, we would expect employment to continue upward, which would mean a decline in unemployment, assuming that labor force participation remains as it is.

Senator JEPSEN. I thank you and I am pleased to yield to my distinguished colleague from Wisconsin, Senator Proxmire.

Senator PROXMIRE. Thank you, Mr. Chairman. About 1 week or so ago, Chairman Paul Volcker of the Federal Reserve Board said that the staff of the Federal Reserve said that this recovery—I'm not talking about employment—but this recovery in general had been about average of the recoveries that we'd had over the past 20 years or so, according to their statistics. Now that was before, of course, we had the figures we have this morning, which are most encouraging and might conceivably change that.

Nevertheless, this is good news. Madam Commissioner, a Harvard professor told me last week that, frankly, he couldn't understand why we hadn't had an explosive recovery already, in view of the colossal deficit. Here we're running deficits at an annual rate of \$200 billion—never anything like this, three times as big as any deficit we've ever had in the history of the country prior to last year, prior to 1982—and it seems a kind of a very simple economic principle that if the Federal Government is going to run a deficit, that tends to be expansionary and when it runs a huge deficit, a massive deficit of this kind, that we really ought to have a tremendous amount of increased economic activity.

Could you, as an economist, attribute much of this recovery to the fact that we're running deficits at this huge annual rate? Wouldn't that have an effect on increasing employment?

Ms. NORWOOD. Well, I think that all that I can say is that, clearly, we have an expansion. Now what is causing the expansion, there are a lot of elements to it. There has been, in terms of employment, some effect from some of the actions of the Congress, I'm sure, in passing summer youth employment programs, in some of the State and local government initiatives, perhaps in some of the infrastructure of the tax change. Some of that is beginning to show up here, I think.

The exact effect of deficits, I think, is always very difficult to predict.

Senator PROXMIRE. The exact effect of deficits is what?

Ms. NORWOOD. Is very difficult to ascertain.

Senator PROXMIRE. Except that, isn't it clear that a deficit does tend to have an expansionary effect on the economy?

Ms. NORWOOD. Yes.

Senator PROXMIRE. And a surplus tends to have a somewhat contractual effect. And when it's a very big deficit, and this is an enormously big deficit, it would tend to have a much more expansion-

ary effect than we've had before from Federal policy, combined with the fact that we have had a conspicuous easing in monetary policy by the Federal Reserve. It hasn't been, certainly, contradicting in the last few months, at least, since August or so of last year; it hasn't been contradicting the fiscal expansionary effects. We've had both fiscal and monetary policy pushing in this direction and now we've got about what you would expect, not in 1 month, but about what you'd expect over the period; is that right?

Ms. NORWOOD. We have a vigorous recovery, I think.

Senator PROXMIRE. What's that?

Ms. NORWOOD. I said, I think you have a very vigorous recovery, quite clearly.

Senator PROXMIRE. Well, a good recovery, in a sense. But then, aren't we haunted by what this deficit can do to us in the future? We're warned constantly about the fact that when we run a deficit this big, we have to borrow the money. We're borrowing three-quarters of the savings in the economy—the Federal Government is—not leaving very much for the other interest-sensitive sectors of the economy to recovery.

That seems to me that it would suggest oncoming higher interest rates. We're already moving in that direction. Right?

Also, just today or yesterday, we have the strongest dollar in our history, meaning that our exports are seriously handicapped, which will tend to cut down as time goes on, on jobs here. Imports will come in which will also inhibit the growth of jobs here. And it would seem to me that this combination would also tend to push in the direction as long as we have an expanding economy, in the direction of higher prices.

Ms. NORWOOD. Well, all of that, of course, is dependent in part on congressional action on the budget.

Senator PROXMIRE. Exactly. Exactly. I would agree with that. In other words, if we were able to cut spending or increase revenues, or do both, get a combination, reduce the deficit, we've have a sounder recovery, at least one that would make this Senator feel more comfortable. Wouldn't you feel more comfortable if we were doing this with a deficit of about a quarter of what it is?

Ms. NORWOOD. Well, if I may be rather parochial, Senator Proxmire, I'd feel much more comfortable if I had a budget for my agency. [Laughter.]

Senator PROXMIRE. Well, I'd feel better, too. I think you're one of the few that deserves a budget so we know what we're talking about, so we have the statistics that we need, because you're the fount of that.

I'm puzzled by one figure here. Usually, when we have a big increase in employment, we have some increase in the work force. But this month we had a very sharp increase in employment and a reduction in the work force. And that was one of the reasons why unemployment dropped so strikingly and dramatically. If you didn't have people coming out of retirement or out of discouragement about working into the work force to join the work force, the result was that you had a sharper drop in unemployment than you otherwise would have.

Can you explain why we didn't have the usual increase in the work force at a time of this remarkable recovery?

Ms. NORWOOD. I think that it was because in the month of June, we had a 1.2 million increase in the work force, which is an enormous increase. The fact that July showed a relatively stable work force—except for teenagers, which was counteracted by the change for adult men—I think, shows that over the period since November or December, and clearly over the past year, we've had quite a bit of labor force growth.

Senator PROXMIRE. Is it possible also that it was a matter of second earners in the household giving up their jobs that didn't pay very much as the prime earner went back to work and earned more? Do you think there's some of that?

Ms. NORWOOD. I don't see any of that, Senator Proxmire. There has been no decline in the labor force participation of adult women, who are usually classified as secondary earners. In the household survey, which measures the labor force, there is considerable variability from month to month. We had a rather slow growth in the labor force in the early months. We had a massive increase in the month of June. And I would have been very surprised, really, if after a 1.2 million increase in the labor force the very next month we had an increase.

The data do show that there has been an increase of 200,000 in adult men coming into the labor force in the month of July.

Senator PROXMIRE. Can you tell us how much, if any, of this recovery may be explained by the timing of the gathering of the information and the frictions that went on?

What I'm talking about is that normally in July, employment-unemployment are expected to increase as additional summer entrants look for work. At the last hearing you told us that because of a late survey week in June, some of the activity may have been picked up a month ago. Consequently, when the actual changes do not match, it was anticipated that the seasonally adjusted figures can show large fluctuations.

How much of the drop in unemployment between June and July is explained by that factor?

Ms. NORWOOD. What it is, I believe, would be very small. In general, we believe that the lateness of the survey week in the month of June affected primarily younger workers. There has been a correction, in a sense, of the labor force growth for teenagers this month. There was an extraordinary increase, almost 500,000, in the labor force of teenagers in June. In July, there was a decline of 300,000 in that labor force.

In general, we see that the older workers, 25 and over, seem to have improved their employment situation in July and, in any case, between May and July, the data are clearly reliable.

Senator PROXMIRE. So you feel that we might have a more—"reliable" may not be the right word—but a better figure if you took the 2-month change between May and July, which is also encouraging, but wouldn't be quite as sharp a difference.

Ms. NORWOOD. Well, I think particularly for teenagers.

Senator PROXMIRE. Now in July, the jobless rate for blacks was 19.5 percent, which is a terribly heartbreaking, shockingly high level. But it is down and down sharply from 20.6 a month ago. Among black teenagers, it dropped from 50.6 percent to 48.1 percent.

Now as you tell us, the jobless rate for black adults and youth are still more than twice as high as the corresponding rate for whites. And only 50 percent of blacks have jobs. What proportion of blacks who are working hold jobs in the public sector and how many minority youth are employment by publicly funded summer jobs programs?

Ms. NORWOOD. We have figures only on the younger workers, 16- to 24- or the 16- to 19-year-olds, in terms of summer employment. They show that this July, there are more people employed in Government than last July. And they also show—

Senator PROXMIRE. Substantially more? Is it a big difference, big enough to account for some of this?

Ms. NORWOOD. No. In July 1982, there were 2,064,000 16- to 24-year-olds in Government. And in July 1983, there were 2,125,000. So it's about 50,000 more.

Of teenagers, one of the interesting things—

Senator PROXMIRE. Black teenagers?

Ms. NORWOOD. If you look at the teenagers, 25 percent of the black and other minorities who are employed in July 1983 were on Government-supported employment programs. One in four.

Senator PROXMIRE. Now in previous periods of recovery, have the gaps between black and white jobless rates tended to decline more than in this one?

You pointed out earlier that there have been very little improvement—there had been an improvement for the overall work force, a drop in unemployment, but not for blacks until this last month. I'm wondering if, overall, with the corrections that we get this month, if the gap between black and white unemployment has improved compared to previously?

Ms. NORWOOD. No. The answer to that, I think, is no. As I pointed out before, since 1980, the employment situation for our black population has been very difficult. The unemployment rates went up and tended not to go down as recovery set in.

At least for this month, we have had the first significant decline in the black unemployment rate. But we've had a large decline in the unemployment rate for the white population. So the gap is still quite large. And if we also take into account the fact that the birth rate for the black population declined less than for the white population in the last couple of decades, the new entrants to the labor force for the minority population will grow faster than for whites, so that a larger proportion of our labor force in the future will probably be made up of minorities.

I think it still is a serious problem.

Senator PROXMIRE. The chairman has been very tolerant. I have gone over my time. I hadn't realized I had. But I want to thank the chairman.

Senator JEPSEN. Thank you. Congressman Hawkins.

Representative HAWKINS. Ms. Norwood, along with the chairman I think we can note with a great deal of satisfaction the progress that has been made in the last month and I wish to note that, so that it would not be said that any questions that I may ask are pessimistic in nature.

With respect to the number of individuals who are discouraged and who work only part time, although they desire to work full

time, would you give us those figures and what changes were made?

Ms. NORWOOD. In the second quarter—I'm sure you remember, Congressman Hawkins, that we report discouraged workers only on a quarterly basis—in the second quarter of 1983, there were still 1.7 million people who were classified as discouraged workers.

Representative HAWKINS. Does that indicate a change or is that basically the same?

Ms. NORWOOD. There was some decline between the first and second quarters.

Representative HAWKINS. Do you know how much decline?

Ms. NORWOOD. Yes, it was small, about 50,000, 60,000.

Representative HAWKINS. And in the number of part time, what was the amount in that category?

Ms. NORWOOD. In July, there were, seasonally adjusted, 5,636,000 people who were employed part time on nonfarm jobs for economic reasons, and that was roughly 90,000 less than the month before. And about 300,000 less than in May.

Representative HAWKINS. And do you have the figure for the long-term unemployed, those who have been unemployed 15 weeks or longer?

Ms. NORWOOD. Yes; 15 weeks? Fifteen weeks and longer, there are 4,417,000. That's about 170,000 less than in June.

Representative HAWKINS. So in terms of the discouraged, the part time and the long term, there have been statistically very minor changes, would you say?

Ms. NORWOOD. Well, they are small changes, yes, but they are beginning to come down as these groups, particularly the long-term unemployed, tend to decline only after the recovery really gets underway. There is some lag because employers tend to hire back the people who were last fired first.

Representative HAWKINS. Well, in speaking of recovery, I don't know what definition you're using. We sometimes relate that to the growth rate. Certainly, a recession is directly related to the growth rate, a negative growth rate.

Now in terms of recovery, what do we mean by recovery?

Ms. NORWOOD. Well, what I have been using as a definition of recovery is the National Bureau of Economic Research definitions, which basically involve a whole series of data. I agree with you that one cannot look just at a few unemployment or employment statistics. In fact, one needs to look more at production and GNP.

Obviously, since I'm discussing with you labor statistics, I focused more on the effect here.

Representative HAWKINS. You're relating recovery completely in this instance to the one variable of unemployment, as indicated by the survey which was taken last month?

Ms. NORWOOD. No; I have been looking at this. The National Bureau of Economic Research identified November of last year as the turning point. And I have been looking at a whole set of economic data, November, December. Actually, the trough for our employment series was December. And I think that one needs to look at a longer period of time than a single month. That is, from December, for example, which was the trough of our series, until July. And there, we do find some considerable improvement.

In the payroll series, for example, there was a 1.7 million increase in payroll employment since December.

Representative HAWKINS. No doubt. No doubt we certainly should look at those factors. But you seem to be a little revolving around the definition of recovery. Recovery from what, when 2 years ago we had 7.2 unemployment; today, we are at 9.5.

So from the viewpoint of recovering the lost ground since January 1981, can we really say that we have recovery?

Ms. NORWOOD. Well, I think, obviously—

Representative HAWKINS. We have improvement. I agree with your terminology with respect to improvement. But with respect to recovery, are we using this loosely or are we using it in a technical sense?

Ms. NORWOOD. Well, I have been using, as I indicated, the economic definitions, which are generally accepted. Obviously, Congressman Hawkins, anyone who is unemployed still and wants a job has some problems. And I would not want to suggest that unemployment is no longer a problem. All that I can do is to look at the trends, and there has been a very substantial change since December.

Now you're quite right that since July 1981, there has been a substantial recession. But we are beginning certainly to show some considerable recovery from the declines that occurred during that recession.

Representative HAWKINS. The last recovery, which I assume that we would refer to as the Carter recovery, the unemployment rate stood at what figure? Do you recall?

Ms. NORWOOD. 7.2 percent in July 1981. That was the lowest rate following the 1980 recession.

Representative HAWKINS. In that recovery, unemployment stood at 7.2. Now do you have the recovery prior to that one?

Ms. NORWOOD. Prior to 1980, that would be the recovery from the 1974-75 recession, when the rate improved from a high of 9 percent to 5.6 percent.

Representative HAWKINS. Those are recoveries now we're speaking of. So that the amount of unemployment in each of the last three recoveries, prior to this time, the unemployment rate tended to be higher than the previous one?

Ms. NORWOOD. Yes. That has been a trend that has been going for some time.

Representative HAWKINS. So now we're talking about recovery at 9.5, substantially higher. Now if this trend continues, I hate to think—I'll draw my own conclusion because I don't want to put you on the spot—I hate to think what the ninth recession will bring, which may be just around the corner, according to historical patterns. Since 1945 we've had eight recessions. We've had eight recoveries. Now we have the so-called ninth recovery and obviously, we can anticipate rather pessimistically that we'll have a ninth recession, if we go by historical trends which we've been discussing this morning. And if this trend continues, then we would have an unemployment rate which is excessively, almost unbearably, high. This is rather an ominous warning, it seems to me, what I read in these statistics, despite the optimism and the cheering about 9.5 percent unemployment.

Would you care to comment on it or do you think that's—

Ms. NORWOOD. Well, you're quite right that 9.5 percent is a high rate of unemployment. You are also quite right that essentially in the post-World War II period there has been a general trend upward in the unemployment rate. We start each recession at a much higher unemployment rate than the recession before it. That has been a historical pattern.

You're quite right about that.

Representative HAWKINS. Now, also in answer to the chairman's question about the number of the employed individuals, you indicated, and I assume correctly—I've never known you to be incorrect—

Ms. NORWOOD. I try not to be.

Representative HAWKINS [continuing]. That 101.3 million persons employed, that this is the largest in the history. Isn't it also true that this is the largest population we've ever had, and that the trend in employment tends to be a straight line upward over a long period of time with only minor declines?

Ms. NORWOOD. Well, you will recall that I did make the point with Chairman Jepsen that the population has, of course, increased.

Representative HAWKINS. I had an idea that he escaped that particular reference, however.

Ms. NORWOOD. But those are really two different phenomena. I think what it says, in a sense, is that as the population increases, we have to keep running to stand still.

Representative HAWKINS. We have more houses, more schools, more battleships, an so forth, don't we? So that's a normal trend. And if at any one time you make the statement—not you— but if one makes the statement that the largest employment in history, isn't it natural with an increasing population and with ½ or 2 million people entering the labor market as a result of the population increase, that normally, we would have many more people employed. We could also have many more people unemployed. Wouldn't it be true?

Ms. NORWOOD. Well, as the population increases, that is correct. Of course, in some other countries, that is not happening. There have been actual declines as population has increased.

Representative HAWKINS. Well, this instance that we're talking about here, of course, in some other countries, 9.5 percent unemployment would cause a revolution. And I can think of at least half a dozen in which that would be true. We seem to weather the storm and to bear with it, fortunately, and to improve.

Thanks a lot, Ms. Norwood.

Senator JEPSEN. Ms. Norwood, the recovery isn't over yet, would you say?

Ms. NORWOOD. Well, I would hope not.

Senator JEPSEN. No one knows what the employment and unemployment will be in the next several months, except that we are moving in the right direction. The trend is strongly positive. Are those accurate statements?

Ms. NORWOOD. Yes.

Senator JEPSEN. Many people who are unemployed because they do not have the skills required in the job market are called struc-

turally unemployed. There have been estimates that only about 3 percent of the present unemployment rate is due to the recession, and that 4 or 5 percent is due to structural shifts in the economy.

Do you believe that these estimates are generally correct and would you comment on them, please?

Ms. NORWOOD. I don't know what the various elements causing all of the unemployment are. I think that's a very difficult issue to quantify. I think that what we can say very clearly is that of the 10.6 million people who were unemployed, not all of those have been unemployed because of any single factor. What we have is a group of people who have various reasons for unemployment. We have had a decline, particularly since the 1970's, in some of our so-called smokestack industries and there are some people who have lost their jobs, the so-called dislocated workers. Some of them have found new jobs in other industries. Some of them have been rehired, as in the auto industry, for example. And some of them are remaining unemployed and have greater difficulties.

We also have the long-term unemployed, which is still a sizable group of several million people who have a more difficult time. So there are a lot of reasons, I think, for the unemployment that we have and it is extraordinarily difficult to quantify the particular parts that are caused by one phenomenon or another.

Senator JEPSEN. I thank you, Ms. Norwood. I appreciate the close attention and the evaluation that my Democratic colleagues make of my perception of what's presented to me in this committee. So in the interest of accuracy, I would suggest that the record show that we have fewer battleships today than we have ever had before. [Laughter.]

Senator PROXMIRE.

Senator PROXMIRE. Ms. Norwood, on unemployment insurance coverage, what proportion of jobless workers are covered by unemployment insurance? In recent months has the proportion been falling?

Ms. NORWOOD. Yes.

Senator PROXMIRE. Why?

Ms. NORWOOD. I don't know. We do know that there are about 4.1 million who are collecting unemployment insurance, both extended benefits and other programs. And, as you know, we have about 10.6 million unemployed. If we look at the UI as a percentage of our total employment figure in the current population survey, it's about 38 percent. That is a relatively low figure. It's a very low figure.

If we take the total unemployment insurance beneficiaries as a percentage of the job losers—that is, the people who have actually lost their job, rather than the entrants, reentrants, or those who have left their last job, who would tend not to be covered by UI benefits—that figure is 69.4 percent, which is also a very low figure. It is usually up in the seventies.

Senator PROXMIRE. How many States are eligible to pay extended benefits?

Ms. NORWOOD. The number of States on extended benefit triggers is seven. That's one less than a month ago.

Senator PROXMIRE. You say seven are eligible?

Ms. NORWOOD. They're on. They're actually on. There may be some others who are eligible, but not on.

Senator PROXMIRE. And how many States with double-digit unemployment rates are not eligible?

Ms. NORWOOD. Sixteen.

Senator PROXMIRE. Fifteen?

Ms. NORWOOD. Sixteen.

Senator PROXMIRE. Sixteen. Why have so many States triggered off the program?

Ms. NORWOOD. I don't know.

Senator PROXMIRE. Is there any justification that you can think of for our not providing extended unemployment benefits to people who are—it's kind of a philosophical question, a policy judgment question, perhaps—but I'd like to know if you can tell us what are the arguments for a situation in which people who are unemployed for a long time lose their unemployment benefits and lose them by the hundreds of thousands or by the millions in this country?

What's the justification for that?

Ms. NORWOOD. There are really several technical issues here. One is that the law provides for calculation of an insured unemployment rate in a particular way. And that sometimes results in a figure which triggers off. The other, of course, is that States do have the option to pay extended benefits under certain conditions.

Senator PROXMIRE. Provided they pay them with Federal money?

Ms. NORWOOD. I believe so.

Mr. PLEWES. There are two conditions for a State to trigger on, neither of which is related to the fact that they are in double-digit unemployment as we measure them. A State triggers on for extended benefits when a State insured unemployment rate is at least 5 percent and the insured unemployment rate is 20 percent higher than the average of the same 13-week period in the 2 previous years.

That's the technical threshold.

Senator PROXMIRE. Can you tell us how many Americans are out of work and have run out of their extended unemployment benefits and are getting no unemployment benefits now? Why can't we get that information? It seems to me that that is very important factual data to have on which we could formulate thoughtful and compassionate and reasonable economic policy.

Maybe we shouldn't do it, but at least we ought to know what we're doing. We ought to know if there are 2 or 3 million people who have been out of work and don't get unemployment benefits. Those figures ought to be available to us.

Ms. NORWOOD. It would be very useful to have data of those kinds.

Senator PROXMIRE. How costly would it be to amass that data?

Ms. NORWOOD. I don't know. The Bureau of Labor Statistics does not have responsibility for the unemployment insurance data.

Senator PROXMIRE. Who has the responsibility?

Ms. NORWOOD. The individual States and the Employment and Training Administration within the Department of Labor.

Senator PROXMIRE. Have we ever been able to put together this kind of information in past deep recessions? Wasn't there a call for it?

Ms. NORWOOD. It's very difficult because the data are really part of an administrative data base. Each State has a number of local offices and those local offices, quite correctly, are very busy trying to process the UI claims and to be certain that those who qualify receive the benefits that they are entitled to.

It is not handled as a statistical program. It's an administrative data base. And there are statistical problems with it.

Senator PROXMIRE. You report that about 2.6 million people, or about 24 percent of the unemployed, have been jobless for more than 6 months, more than 26 weeks. Can you tell us how many have been unemployed for more than a year?

Ms. NORWOOD. We could provide that for the record, I believe. We don't have it here.

Senator PROXMIRE. You can provide it for the record?

Ms. NORWOOD. Yes.

Senator PROXMIRE. Well, then, also, could you provide for the record or would it be possible to get monthly estimates on a seasonally adjusted basis the number of people unemployed for 52 weeks or more and the number unemployed for 27 to 51 weeks?

Ms. NORWOOD. We can try to do that, yes.

[The information referred to follows:]

In July, there were 1,139,000 persons unemployed 27 to 51 weeks and 1,496,000 unemployed 52 weeks or more, not seasonally adjusted. Based on recent testing, these series do not meet BLS criteria for seasonal adjustment, and thus seasonally adjusted data cannot be provided.

Senator PROXMIRE. Let me ask you, the drop, you say, in black unemployment seemed to be sharp. But my staff tells me that they question whether that, particularly black unemployment relating to teenagers, even though it's sharp, is statistically significant because they say that your sample is so small, that you can't really tell us whether it means it's true or not true.

Ms. NORWOOD. I said it was substantial, not sharp. It is statistically significant. The overall black—

Senator PROXMIRE. Black unemployment decline.

Ms. NORWOOD. The decline of 1.1 percent in overall black unemployment, the overall black unemployment rate decline is statistically significant.

Senator PROXMIRE. How about the 2.6-percent decline or something like that in the teenage black unemployment?

Ms. NORWOOD. That is not significant, statistically, and that's why I didn't discuss it.

Senator PROXMIRE. Now, when you say it's not statistically significant, does that mean that we can't tell whether there actually was a decline or not?

Ms. NORWOOD. That's right, for the teenagers.

Senator PROXMIRE. How much of a decline would you have to have before you could be sure?

Ms. NORWOOD. About five points.

Senator PROXMIRE. Five points?

Ms. NORWOOD. For the teenagers, the 16- to 19-year old black youth, yes.

Senator PROXMIRE. How many would be involved in your sample of black teenagers?

Ms. NORWOOD. Well, the total population that is affected, the labor force, for example, for black teenagers is only about 800,000. And that, of course, is a very small part of the labor force and that's why one needs to look at it over a much longer period of time than a single month.

However, the 1.1-percent drop is a statistically significant decline in the overall black unemployment rate.

Senator PROXMIRE. In the future, could you tell us which of your statistics are significant statistically and which are not? You do that occasionally, but you don't do that as a matter of—in each case. If you did, I think that that would be helpful to us.

Do you understand what I'm asking?

Ms. NORWOOD. Yes. Let me just say that when we analyze the data, we take into account the statistical significance. And we would not be telling you that something had happened if it was not a statistically significant figure.

We produce a very large and very comprehensive body of data—

Senator PROXMIRE. I'm sorry. I wanted to interrupt to say that you did tell us that black teenager unemployment declined, did you not?

Ms. NORWOOD. No, I did not.

Senator PROXMIRE. Well, maybe not in your statement, but it's in here [indicating.]

Ms. NORWOOD. It's in the release because those are data that are published.

Senator PROXMIRE. In your release, they don't say that it's not significant statistically.

Ms. NORWOOD. That's right. It does not say so. But I did not use that figure in discussing it here.

Senator PROXMIRE. All right.

Ms. NORWOOD. One of the points that I think one needs to understand, Senator Proxmire, that you certainly would understand is that it's very difficult always when one is doing time series analyses to look at statistical variance for a single month. If you have, for example, a decline of one-tenth a month in the unemployment rate each month, it will not be statistically significant in a particular month. But over a period of several months, you have a statistically significant decline.

So it is a very difficult thing to just set out on a particular line. But I can assure you that all of the Bureau of Labor Statistics staff takes into account very carefully the significance or lack thereof of the figures when we interpret them.

Senator PROXMIRE. I have one other question. Earlier, I pointed out that the U.S. dollar has reached a new high in its strength compared to other currencies. What impact can we expect that to have on employment in this country or unemployment in this country in the future? I realize that the stronger the dollar, the weaker our exports and the stronger our imports. But I'm asking whether this is a lagging—will have an effect in the future? Is the effect being felt at the present time? Can we expect on the basis of this adverse situation to have this as a dampening element in future improvements in unemployment?

Ms. NORWOOD. Clearly, the value of the dollar is an important competitive factor. It cannot be looked at alone, as you well know. One needs to look at the competitive price, and there are other factors that go into the price besides the value of the dollar.

The important thing, I think, is the need for a vigorous recovery abroad and increased purchasing power in foreign countries to begin to buy more of our goods.

But you're quite right that this can be a very serious problem. The drop in our exports is a very serious one.

Senator PROXMIRE. And you would expect that that would have an effect, could have an effect in the future? It would be likely to have an effect over the next 6 or 8 months?

Ms. NORWOOD. It could.

Senator PROXMIRE. Thank you. Thank you, Mr. Chairman.

Senator JEPSSEN. Congressman Hawkins.

Representative HAWKINS. Mr. Chairman, may I ask Ms. Norwood about the information that she promised to furnish to the committee presenting the long-term unemployed, whether or not she could include the characteristics of the long-term unemployed, who they are, and any characteristics that she may be able to ascertain?

Ms. NORWOOD. I can do better than that. I can give it to you right now.

Representative HAWKINS. Well, better still, then.

Ms. NORWOOD. As you know, those unemployed 27 weeks or more, 6 months or more, there were 2.6 million. That's not seasonally adjusted. Of those, 68 percent were men. A small proportion were teenagers. A little over half—54 percent—were 25 to 44 years old.

Representative HAWKINS. Fifty-four percent were what age?

Ms. NORWOOD. Were age 25 to 44. And 23.8 percent were 45 and over; 1 in 4 of them were black and 1 in 4 of them were last employed in durable goods manufacturing.

Representative HAWKINS. Do they tend to be the same individuals or is there movement in and out of the classification? There couldn't be much movement if they're unemployed this long. But are we essentially talking about the same?

Ms. NORWOOD. There is some movement, but if someone is unemployed for 6 months or more, they tend to remain there.

Representative HAWKINS. Thank you. Mr. Chairman, for fear that I might have caused you some discomfort on my reference to battleships, may I ask permission to just simply substitute missiles for battleships? [Laughter.]

Senator JEPSSEN. Ms. Norwood, I thank you. Do you have any closing remarks or anything that you want to say for the record before we adjourn this meeting?

Ms. NORWOOD. No, sir. I'd just like to say what a pleasure it is always to come to appear before this committee.

Senator JEPSSEN. Well, I thank you. Again, as I indicated in my opening statement, we have licked the recession. We have licked

inflation. Now it's unemployment's turn. We have unemployment on the run, and we look forward to next month's report.

Ms. NORWOOD. Thank you.

Senator JEPSEN. This meeting is adjourned.

[Whereupon, at 10:35 a.m., the committee adjourned, subject to the call of the Chair.]

# EMPLOYMENT-UNEMPLOYMENT

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FRIDAY, OCTOBER 7, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 9:30 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Dan Lungren (member of the committee) presiding.

Present: Representatives Lungren and Mitchell.

Also present: Charles H. Bradford, assistant director; and Mary E. Eccles and Christopher J. Frenze, professional staff members.

## OPENING STATEMENT OF REPRESENTATIVE LUNGREN, PRESIDING

Representative LUNGREN. Good morning.

Madam Commissioner, it is a pleasure to welcome you once again to the Joint Economic Committee's monthly employment hearing. We always look forward to your insightful testimony and analysis and that of your colleagues.

Today we receive more good news concerning labor market conditions. The civilian unemployment rate fell from 9.5 percent in August to 9.3 percent in September. The number of unemployed fell by over a quarter of a million in September. The overall black unemployment rate fell a full percentage point in September and the unemployment rate for adult black males fell from 18.4 percent to 16.9 percent. Overall, employment increased 400,000 in September, as measured by the household survey. In addition, over 100,000 new jobs were filled by black workers.

According to the raw data—that is, nonseasonally adjusted—since January of this year, approximately 5.1 million new jobs were created. This shows great improvement in labor market conditions this year.

The Bureau of Labor Statistics' diffusion index for 3 months increased last month to the level reached back in June. The level of this index, which measures the percent of industries in which employment increased, is a good signal for current and future employment gains. Last month saw employment gains in electrical equipment and machinery and primary metals industries which hadn't improved that much in the early phase of the economy. In addition, construction employment held up surprisingly well.

Another positive sign was the jump in factory hours. Total factory hours in September increased 0.4 hour to 40.7 hours, its highest level in over 5 years.

Futhermore, manufacturing overtime increased once again. These data presage further improvements in labor market conditions.

Commissioner Norwood, we thank you for appearing before us today and await your testimony.

**STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS; AND KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS**

Ms. NORWOOD. Thank you very much, Congressman.

I'd like first to introduce Mr. Plewes on my left who is in charge of our labor force statistics program, and Mr. Dalton on my right who is in charge of our price programs.

I am always pleased to appear before this committee to offer a few comments to supplement our press release issued this morning.

The employment situation continued to improve in September. Employment rose, factory hours increased, and unemployment declined. The overall unemployment rate, which includes the resident Armed Forces in the labor force base, was 9.1 percent, down from 9.4 percent in August. The civilian worker rate was 9.3 percent in September, down from 9.5 percent in the prior month. Both rates have declined by about 1½ percentage points since their December 1982 recession highs.

The two employment series we report each month show somewhat different rates of growth in September. Employment rose by nearly 400,000 in the household series, continuing the strong gains which have been evident in this survey over the past four months. The business survey showed a 735,000 increase in payroll employment in September, but this includes the return to work of some 675,000 telephone communications and other workers who were on strike in August and thus, by definition, were excluded from that month's business survey job count. Despite the limited change, once adjustment for the strikers is made, the business survey showed that job gains continued in the construction, manufacturing, and services industries.

As I have reported to this committee in the past, the household and the business surveys frequently show somewhat different monthly changes, but they do tend to track reasonably well over the longer term. Both surveys have shown strong job pickups since their recession lows at the end of 1982.

In September, the business survey showed that employment in electrical and electronic equipment rose by 35,000, including some 20,000 strikers returning to work, and that job gains also took place in the machinery and primary metals industries, which experienced very little job growth in the early months of the recovery. Continued strength was also evident in the construction industry—about a 30,000 increase in September—and in services—60,000 over the month. In contrast, employment in retail trade, which usually goes up in September, declined over the month. After seasonal adjustment, employment in retail trade was down about 100,000. This

unusually large decline, which limited the overall growth in the business survey, may be exaggerated because the seasonal adjustment process has not yet accounted for the changing seasonal patterns in this industry.

Further evidence of improvement in the September employment situation is the sharp increase in the factory hours of work. Total factory hours rose by 0.4 hour in September to 40.7 hours. This key indicator of business conditions was nearly 2 hours above its recession low in September 1982 and at its highest level in over 5 years. At 3.3 hours, factory overtime was up 0.2 hour over the month and a full hour over the year. It may be that employers are approaching the recovery cautiously by expanding the working hours of those already on their payrolls before hiring additional workers.

Unemployment declined by almost 300,000 to 10.4 million in September after seasonal adjustment. There has been substantial improvement for most groups since the 1982 recession highs. The jobless rate for adult men declined from 10.1 percent in December 1982 to 8.7 percent in September, and the rate for adult women dropped from 9.2 to 7.8 percent over the same period. The unemployment rate for teenagers declined 2.7 percentage points to 21.8 percent.

The jobless rate for whites—8.1 percent—was little changed from August to September. The rate for black workers fell one percentage point to 19 percent. Since December of last year, employment of black workers has risen by nearly 400,000. Although the proportion of black workers with jobs has risen over the same period, their employment-population ratio—at 50 percent—remains nearly 10 percentage points below that for white workers—59.4 percent.

Each quarter, the Bureau reports on the number of discouraged workers—persons who report that they would like to work but are not seeking a job because they believe they cannot find one. There were 1.6 million discouraged workers in the third quarter, 100,000 below the level of the second quarter and a quarter of a million below the recession high in the fourth quarter of 1982. The over-the-quarter decline occurred entirely among whites, even though blacks are disproportionately represented among the discouraged. Indeed, blacks, who make up 10 percent of the labor force, account for nearly one-third of the discouraged worker totals.

In a longer term perspective, the improvements in the labor market that have occurred during the current recovery compare reasonably well with prior recoveries. Since the end of last year, total civilian employment has grown sharply, especially so in recent months. Payroll job gains during the recovery have reached 60 percent of the employment reduction during the recession. And the unemployment rate has declined substantially since the end of last year. Unemployment is still very high, however, and a number of key industries are well short of their prerecession employment levels.

Nevertheless, the September statistics released today show that the labor market continues to improve. Civilian employment rose, factory hours increased, and the number of unemployed workers declined.

My colleagues and I will be glad to try to answer any questions you may have.

[The table attached to Ms. Norwood's statement, together with the press release referred to, follows:]

### UNEMPLOYMENT RATES OF ALL CIVILIAN WORKERS BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method						X-11 method (official method before 1980)	Range (cols. 2-8)
		Official procedure	Concurrent	Stable	Total	Residual	12-month extrapolation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1982:									
September.....	9.7	10.2	10.2	10.1	10.2	10.0	10.2	10.2	0.2
October.....	9.9	10.5	10.5	10.6	10.5	10.3	10.5	10.5	.3
November.....	10.4	10.7	10.7	10.9	10.7	10.6	10.7	10.8	.3
December.....	10.5	10.8	10.8	11.1	10.9	10.8	10.8	11.1	.3
1983:									
January.....	11.4	10.4	10.4	10.2	10.4	10.7	10.4	10.3	.5
February.....	11.3	10.4	10.4	10.1	10.4	10.8	10.4	10.3	.7
March.....	10.8	10.3	10.4	10.2	10.3	10.5	10.3	10.3	.3
April.....	10.0	10.2	10.3	10.3	10.4	10.1	10.2	10.2	.3
May.....	9.8	10.1	10.3	10.6	10.2	10.0	10.1	10.2	.6
June.....	10.2	10.0	10.1	9.9	9.8	10.0	10.0	9.9	.3
July.....	9.4	9.5	9.5	9.4	9.3	9.3	9.4	9.3	.2
August.....	9.2	9.5	9.6	9.4	9.5	9.5	9.5	9.4	.2
September.....	8.8	9.3	9.4	9.2	9.3	9.1	9.3	9.2	.3

Source: U.S. Department of Labor, Bureau of Labor Statistics, October 1983.

#### EXPLANATION OF COLUMN HEADS

(1) *Unadjusted rate.*—Unemployment rate for all civilian workers, not seasonally adjusted.

(2) *Official procedure (X-11 ARIMA method).*—The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1967 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. A prior adjustment for trend is applied to the extended series for adult male unemployment before seasonal adjustment. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of *Employment and Earnings*.

(3) *Concurrent (X-11 ARIMA method).*—The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data from the period January 1967 through January 1980.

(4) *Stable (X-11 ARIMA method).*—Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through

the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(5) *Total (X-11 ARIMA method)*.—This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(6) *Residual (X-11 ARIMA method)*.—This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) *12-month extrapolation (X-11 ARIMA method)*.—This approach is the same as the official procedure except that the factors are extrapolated in 12-month intervals. The factors for January–December of the current year are computed at the beginning of the year based on data through the preceding year. The values for January through June of the current year are the same as the official values since they reflect the same factors.

(8) *X-11 method (official method before 1980)*.—The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

*Methods of adjustment*.—The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in *X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

# News

United States  
Department  
of Labor



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USDL 83-431  
TRANSMISSION OF MATERIAL IN THIS RELEASE IS  
EMBARGOED UNTIL 8:30 A.M. (EDT), FRIDAY,  
OCTOBER 7, 1983

## THE EMPLOYMENT SITUATION: SEPTEMBER 1983

Unemployment declined in September and total employment continued to increase, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate which includes the resident Armed Forces in the labor force base was 9.1 percent, down from 9.4 percent in August, while the unemployment rate for civilian workers fell from 9.5 to 9.3 percent. Both measures have declined by about 1-1/2 percentage points from last December's highs.

Total employment—as measured by the monthly survey of households—rose by nearly 400,000 to 103.6 million in September, continuing a strong upward trend. Nonfarm payroll employment—as measured by the monthly survey of establishments—increased by 735,000, largely reflecting the return to work of persons on strike in August. The factory workweek, a leading indicator of business activity, rose 0.4 hour in September to 40.7 hours.

### Unemployment

Unemployment fell by 275,000 in September, after adjustment for seasonality, to 10.4 million, and the civilian worker unemployment rate dropped from 9.5 to 9.3 percent. Unemployment has declined by 1.6 million since last December, when 10.8 percent of the labor force was jobless.

Among the major demographic groups, the unemployment rate declined for teenagers (21.8 percent) and blacks (19.0 percent) but remained essentially unchanged for whites (8.1 percent), adult men (8.7 percent), adult women (7.8 percent), and Hispanics (13.1 percent). The improvement for black workers occurred primarily among adult men, whose rate was reduced from 18.4 to 16.9 percent. Jobless rates for blacks continued to be more than twice those of whites; the differential is greatest for teenagers, where the unemployment rate of 52.0 percent among blacks was nearly three times that for whites. (See tables A-2 and A-3.)

The median duration of unemployment was about unchanged in September, with half of the unemployed jobless for less than 9 weeks. The number of workers experiencing long-term unemployment (15 weeks and over) edged downward over the month to 3.9 million, well below the high of 4.7 million reached last December. Very long-term unemployment (27 weeks and over) held about steady, following declines in the previous 2 months. (See table A-7.)

The number of persons who lost their last job fell 200,000 to 6.0 million in September, the lowest level since May 1982. Job losers accounted for 57 percent of the unemployed; this proportion had been as high as 62 percent last fall. Unemployment among full-time workers also continued to decline, falling from 9.4 percent in August to 9.2 percent in September, considerably below last December's recessionary high of 10.8 percent. (See tables A-8 and A-6.)

### Civilian Employment and the Labor Force

Total civilian employment (as measured through the household survey) continued to increase, rising by nearly 400,000 in September to 101.9 million (seasonally adjusted). Agricultural employment fell by 200,000, in part a reflection of the impact of drought conditions that affected many areas of the country. (See table A-2.)

Since December 1982's recession low, employment has grown by 2.9 million. This gain was about evenly divided between adult men and women, with no appreciable rise for teenagers. Over

the same time period, the proportion of the population with jobs (the civilian employment-population ratio) has increased by more than a percentage point to 58.4 percent.

The civilian labor force, at 112.4 million, was about unchanged in September. Over the past year, the labor force has grown by 1.7 million—about 800,000 adult men and 1.2 million adult women. The number of teenagers working or looking for work declined by about 300,000, primarily the result of a reduction in their population.

#### Discouraged Workers

The number of discouraged workers—persons who report that they want to work but are not looking for jobs because they believe that they cannot find any—edged downward in the third quarter of 1983 to 1.6 million; this was 240,000 below the recessionary high of 1.8 million in the fourth quarter of 1982. Whites accounted for most of this improvement, as blacks continued to account for a disproportionate share of the discouraged total (31 percent). (See table A-13.)

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages			Monthly data			Aug. - Sept. change
	1982	1983		1983			
	III	II	III	July	Aug.	Sept.	
<b>HOUSEHOLD DATA</b>							
Thousands of persons							
Labor force 1/.....	112,307	112,825	113,849	113,539	113,943	114,063	120
Total employment 1/.....	101,283	101,603	103,278	102,949	103,245	103,640	395
Civilian labor force.....	110,629	111,156	112,168	111,875	112,261	112,368	107
Civilian employment.....	99,605	99,933	101,598	101,285	101,563	101,945	382
Unemployment.....	11,025	11,222	10,571	10,590	10,699	10,423	-276
Not in labor force.....	61,893	62,801	62,281	62,431	62,179	62,234	55
Discouraged workers.....	1,638	1,709	1,605	N.A.	N.A.	N.A.	N.A.
Percent of labor force							
Unemployment rates:							
All workers 1/.....	9.8	9.9	9.3	9.3	9.4	9.1	-0.3
All civilian workers.....	10.0	10.1	9.4	9.5	9.5	9.3	-0.2
Adult men.....	9.1	9.4	8.8	8.8	8.8	8.7	-0.1
Adult women.....	8.4	8.5	7.9	7.9	8.0	7.8	-0.2
Teenagers.....	23.9	23.3	22.5	22.8	23.0	21.8	-1.2
White.....	8.8	8.8	8.2	8.2	8.2	8.1	-0.1
Black.....	19.3	20.7	19.5	19.5	20.0	19.0	-1.0
Hispanic origin.....	14.4	14.1	12.8	12.3	12.9	13.1	-0.2
<b>ESTABLISHMENT DATA</b>							
Thousands of jobs							
Nonfarm payroll employment.....	89,316	89,452	90,118p	90,152	89,735p	90,468p	733p
Goods-producing industries.....	23,682	23,341	23,828p	23,724	23,832p	23,927p	95p
Service-producing industries.....	65,635	66,110	66,291p	66,428	65,903p	66,541p	638p
Hours of work							
Average weekly hours:							
Total private nonfarm.....	34.8	35.0	35.1p	35.0	35.0p	35.2p	0.2p
Manufacturing.....	39.0	40.1	40.4p	40.2	40.3p	40.7p	0.4p
Manufacturing overtime.....	2.3	2.8	3.1p	3.0	3.1p	3.3p	0.2p

1/ Includes the resident Armed Forces.

N.A.—not available.

p—preliminary.

Industry Payroll Employment

Nonagricultural payroll employment rose by 735,000 in September to 90.5 million, seasonally adjusted. About 675,000 of this increase, however, represented the return of employees to payrolls following settlement of strikes, chiefly that of communications workers. About 60 percent of the 186 industries in the BLS index of diffusion showed job growth in September, somewhat below the proportions of the previous 2 months. (See tables B-1 and B-6.)

Employment continued to increase in construction (30,000) and in manufacturing (70,000). Factory job pickups were essentially limited to three durable goods industries--electrical and electronic equipment (35,000, including a return to work of 20,000 strikers) and machinery and primary metals (10,000 each). Service industry employment sustained its strong growth with an increase of 60,000, the same amount as in August. Employment declined by 105,000 in retail trade, as seasonal job gains did not materialize.

Weekly Hours

The average workweek of production or nonsupervisory workers on private nonfarm payrolls rose 0.2 hour in September to 35.2 hours, seasonally adjusted. Led by a large increase in transportation equipment, the manufacturing workweek rose 0.4 hour to 40.7 hours, its highest level since April 1978. Overtime hours, up 0.2 hour to 3.3 hours, were at their highest point since July 1979. (See table B-2.)

The index of aggregate weekly hours increased by 1.9 percent to 107.2 (1977=100), reflecting both the lengthening of the average workweek and the return of striking workers. The manufacturing index advanced 1.7 percent to 91.8, due largely to the increase in the workweek. The factory index was 10.5 percent above last December's low point but still 7.9 percent below July 1981, the pre-recession peak month. (See table B-5.)

Hourly and Weekly Earnings

Average hourly and weekly earnings both increased substantially in September, 1.3 and 1.8 percent, respectively, seasonally adjusted. These movements are somewhat exaggerated by the return to payrolls of striking workers in high-wage industries. Prior to seasonal adjustment, average hourly earnings, which had declined 6 cents in August, rose 17 cents in September to \$8.11, up 35 cents over the year. Average weekly earnings were up \$5.20 over the month and \$16.23 since September 1982. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index (HEI) was 155.9 (1977=100) in September, seasonally adjusted, 0.6 percent higher than in August. For the 12 months ended in September, the increase (before seasonal adjustment) was 3.9 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements--fluctuations in overtime in manufacturing and interindustry employment shifts. In dollars of constant purchasing power, the HEI increased 1.2 percent during the 12-month period ended in August. (See table B-4.)

## Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 189,000 establishments employing about 36 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

### Coverage, definitions and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Also included among the unemployed are persons not looking for work because they were laid off and waiting to be recalled and those expecting to report to a job within 30 days.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special

grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

----The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

----The household survey includes people on unpaid leave among the employed; the establishment survey does not;

----The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

----The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

### Seasonal adjustment

Over a course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all

employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

#### Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 335,000; for total unemployment it is 240,000; and, for the overall unemployment rate, it is 0.21 percentage point. These figures do not mean that the sample results are off by these

magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .29 percentage point; for teenagers, it is 1.28 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

#### Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for \$6.00 per issue or \$39.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

*Employment and Earnings* also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

Employment status and sex	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
	(Numbers in thousands)								
<b>TOTAL</b>									
Noninstitutional population <sup>2</sup>	174,360	176,122	176,297	174,360	175,422	175,793	175,970	176,122	176,297
Labor force <sup>3</sup>	112,216	115,260	113,892	112,528	112,418	113,600	113,539	113,943	114,063
Participation rate <sup>4</sup>	64.4	65.4	64.6	64.5	64.0	64.6	64.5	64.7	64.7
Total employment <sup>5</sup>	101,521	104,889	104,061	101,213	101,226	102,854	102,949	103,245	103,660
Employment-population ratio <sup>6</sup>	58.2	59.5	59.0	58.0	57.6	58.3	58.5	58.6	58.8
Resident Armed Forces	1,670	1,682	1,695	1,670	1,669	1,668	1,664	1,662	1,695
Civilian employed	99,851	103,167	102,366	99,543	99,557	100,786	101,285	101,563	101,965
Agriculture	3,412	3,988	3,582	3,363	3,367	3,522	3,527	3,409	3,290
Homage/natural industries	56,239	59,179	58,825	56,180	56,190	57,264	57,758	58,074	58,655
Unemployed	10,695	10,411	9,830	11,315	11,192	11,146	10,590	10,699	10,421
Unemployment rate <sup>7</sup>	9.5	9.0	8.6	10.1	10.0	9.8	9.3	9.4	9.1
Not in labor force	62,144	60,862	62,405	61,832	63,204	62,193	62,431	62,179	62,234
Men, 16 years and over									
Noninstitutional population <sup>2</sup>	83,231	84,173	84,261	83,231	83,931	84,018	84,099	84,173	84,261
Labor force <sup>3</sup>	63,822	65,973	64,566	64,301	64,276	64,816	64,844	64,818	64,944
Participation rate <sup>4</sup>	76.7	78.4	76.6	77.3	76.6	77.1	77.1	77.0	77.1
Total employment <sup>5</sup>	57,461	60,163	59,158	57,598	57,656	58,469	58,625	58,570	58,626
Employment-population ratio <sup>6</sup>	69.5	71.5	70.2	69.2	68.7	69.4	69.7	69.6	69.8
Resident Armed Forces	1,526	1,538	1,549	1,526	1,528	1,525	1,521	1,538	1,549
Civilian employed	56,335	58,645	57,609	56,072	56,128	56,939	57,104	57,032	57,277
Unemployed	5,961	5,790	5,408	6,703	6,428	6,351	6,238	6,244	6,118
Unemployment rate <sup>7</sup>	9.3	8.8	8.4	10.4	10.3	9.8	9.6	9.6	9.3
Women, 16 years and over									
Noninstitutional population <sup>2</sup>	91,129	91,949	92,036	91,129	91,691	91,779	91,871	91,949	92,036
Labor force <sup>3</sup>	48,394	49,287	49,325	48,227	48,142	48,784	48,675	49,130	49,119
Participation rate <sup>4</sup>	53.1	53.6	53.6	52.9	52.5	53.2	53.0	53.4	53.4
Total employment <sup>5</sup>	43,660	44,666	44,904	43,615	43,569	43,990	44,324	44,675	44,814
Employment-population ratio <sup>6</sup>	47.9	48.6	48.8	47.9	47.5	47.9	48.2	48.6	48.7
Resident Armed Forces	144	144	145	144	141	143	143	144	146
Civilian employed	43,516	44,522	44,759	43,471	43,428	43,847	44,181	44,531	44,668
Unemployed	4,130	4,144	4,125	4,144	4,141	4,151	4,151	4,144	4,146
Unemployment rate <sup>7</sup>	9.8	9.4	9.0	9.6	9.5	9.8	8.9	9.1	9.0

<sup>1</sup> The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Includes members of the Armed Forces stationed in the United States.

<sup>3</sup> Labor force as a percent of the noninstitutional population.

<sup>4</sup> Total employment as a percent of the noninstitutional population.

<sup>5</sup> Unemployment as a percent of the labor force (including the resident Armed Forces).

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>2</sup>					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>TOTAL</b>									
Civilian noninstitutional population	172,690	174,440	174,602	172,690	173,953	174,125	174,306	174,440	174,602
Civilian labor force	110,546	113,578	112,197	110,858	110,749	111,932	111,875	112,261	112,368
Participation rate	64.0	65.1	64.3	64.2	63.7	64.3	64.2	64.4	64.4
Employed	99,851	103,167	102,366	99,543	99,557	100,786	101,285	101,563	101,945
Employment-population ratio <sup>1</sup>	57.8	59.1	58.6	57.6	57.2	57.9	58.1	58.2	58.4
Unemployed	10,695	10,411	9,830	11,315	11,192	11,146	10,590	10,699	10,423
Unemployment rate	9.7	9.2	8.8	10.2	10.1	10.0	9.5	9.5	9.3
<b>Men, 20 years and over</b>									
Civilian noninstitutional population	73,867	75,012	75,115	73,867	74,712	74,814	74,927	75,012	75,115
Civilian labor force	58,149	59,351	58,954	58,354	58,506	58,804	59,016	58,945	59,053
Participation rate	78.7	79.1	78.5	79.0	78.3	78.6	78.8	78.6	78.6
Employed	53,212	54,586	54,444	52,776	52,901	53,516	53,806	53,771	53,928
Employment-population ratio <sup>1</sup>	72.0	72.8	72.5	71.4	70.8	71.5	71.8	71.7	71.8
Unemployed	2,579	2,694	2,587	2,436	2,443	2,529	2,544	2,496	2,431
Agriculture	50,633	51,890	51,857	50,340	50,458	50,987	51,264	51,275	51,497
Nonagricultural industries	4,937	4,765	4,510	5,570	5,465	5,288	5,202	5,174	5,125
Unemployment rate	8.5	8.0	7.6	9.6	9.6	9.0	8.8	8.8	8.7
<b>Women, 20 years and over</b>									
Civilian noninstitutional population	83,152	84,224	84,333	83,152	83,899	84,008	84,122	84,224	84,333
Civilian labor force	44,308	44,582	45,467	45,996	44,228	44,648	44,685	45,003	45,132
Participation rate	53.3	52.9	53.9	52.5	52.7	53.1	53.1	53.4	53.5
Employed	40,487	40,883	41,887	40,286	40,484	40,789	41,164	41,394	41,614
Employment-population ratio <sup>1</sup>	48.7	48.5	49.6	48.4	48.3	48.6	48.9	49.1	49.3
Agriculture	663	731	643	588	597	636	607	630	574
Nonagricultural industries	39,824	40,112	41,204	39,698	39,887	40,153	40,557	40,768	41,040
Unemployed	3,821	3,739	3,620	3,710	3,744	3,859	3,521	3,609	3,518
Unemployment rate	8.6	8.4	8.0	8.4	8.5	8.6	7.9	8.0	7.8
<b>Both sexes, 16 to 18 years</b>									
Civilian noninstitutional population	15,671	15,204	15,154	15,671	15,342	15,303	15,257	15,204	15,154
Civilian labor force	8,089	9,644	7,776	8,508	8,015	8,480	8,173	8,313	8,184
Participation rate	51.6	63.4	51.3	54.3	52.2	55.4	53.6	54.7	54.0
Employed	6,152	7,737	6,075	6,481	6,172	6,481	6,313	6,397	6,404
Employment-population ratio <sup>1</sup>	39.3	50.9	40.1	41.4	40.2	42.4	41.4	42.1	42.3
Agriculture	370	561	312	339	327	357	376	362	285
Nonagricultural industries	5,782	7,177	5,764	6,142	5,845	6,124	5,937	6,035	6,119
Unemployed	1,937	1,907	1,700	2,027	1,843	1,999	1,860	1,916	1,780
Unemployment rate	23.5	19.8	21.9	23.8	23.0	23.6	22.8	23.0	21.8

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted					Seasonally adjusted <sup>1</sup>				
	Sept. 1962	Aug. 1963	Sept. 1963	Sept. 1962	May 1963	June 1963	July 1963	Aug. 1963	Sept. 1963	
	<b>WHITE</b>									
Civilian noninstitutional population	149,652	151,003	151,021	149,652	150,671	150,810	150,959	151,003	151,021	
Civilian labor force	96,346	98,649	97,485	96,640	96,262	97,250	97,381	97,602	97,605	
Participation rate	64.4	65.3	64.8	64.6	64.0	64.5	64.5	64.6	64.6	
Employed	86,175	90,908	90,158	87,872	87,777	88,880	89,382	89,573	89,719	
Employment-population ratio <sup>2</sup>	58.3	60.2	59.7	58.7	58.3	58.9	59.2	59.3	59.4	
Unemployed	8,171	7,742	7,327	8,768	8,585	8,370	7,959	8,029	7,885	
Unemployment rate	8.5	7.8	7.5	9.1	8.9	8.6	8.2	8.2	8.1	
<b>Men, 20 years and over</b>										
Civilian labor force	51,315	52,248	51,829	51,517	51,589	51,771	51,919	51,888	51,913	
Participation rate	79.2	79.5	78.9	78.9	78.7	79.0	79.0	79.0	79.0	
Employed	47,493	49,610	48,383	47,100	47,150	47,935	47,935	47,852	47,864	
Employment-population ratio <sup>2</sup>	73.3	74.0	73.6	72.7	72.0	72.7	72.7	72.6	72.6	
Unemployed	3,822	3,637	3,486	4,417	4,440	4,060	3,984	3,957	4,049	
Unemployment rate	7.4	7.0	6.7	8.6	8.6	7.8	7.7	7.7	7.8	
<b>Women, 20 years and over</b>										
Civilian labor force	37,904	38,022	38,616	37,766	37,703	38,242	38,242	38,333	38,580	
Participation rate	52.7	52.3	52.3	52.4	52.4	52.6	52.6	52.8	52.9	
Employed	35,035	35,305	36,203	34,865	34,961	35,287	35,668	35,843	35,987	
Employment-population ratio <sup>2</sup>	46.7	48.5	49.7	48.5	48.3	48.6	48.9	49.3	49.4	
Unemployed	2,869	2,717	2,412	2,811	2,742	2,957	2,574	2,550	2,593	
Unemployment rate	7.6	7.1	6.7	7.5	7.3	7.2	6.7	6.7	6.6	
<b>Both sexes, 16 to 19 years</b>										
Civilian labor force	7,127	8,379	6,840	7,447	7,069	7,355	7,180	7,281	7,151	
Participation rate	54.9	66.8	54.7	57.4	55.7	58.2	57.1	58.0	57.2	
Employed	4,847	6,192	5,611	5,997	5,666	5,803	5,779	5,829	5,868	
Employment-population ratio <sup>2</sup>	43.5	55.7	44.9	45.5	44.6	46.5	45.9	46.5	47.0	
Unemployed	1,480	1,387	1,229	1,540	1,403	1,472	1,401	1,442	1,283	
Unemployment rate	20.8	16.6	18.0	20.7	19.8	20.0	19.5	19.8	17.9	
Men	21.0	16.7	17.9	22.2	20.2	19.8	20.4	21.1	18.7	
Women	19.9	16.4	18.0	19.1	19.4	20.2	18.5	18.4	17.1	
<b>BLACK</b>										
Civilian noninstitutional population	18,659	18,966	18,994	18,659	18,660	18,911	18,942	18,966	18,994	
Civilian labor force	11,433	11,997	11,754	11,443	11,672	11,783	11,764	11,778	11,778	
Participation rate	61.3	63.3	61.9	61.3	61.8	62.3	62.1	61.5	61.5	
Employed	9,159	9,633	9,553	9,172	9,270	9,352	9,469	9,398	9,505	
Employment-population ratio <sup>2</sup>	49.3	50.8	50.3	49.2	49.1	49.5	50.0	49.6	50.0	
Unemployed	2,235	2,368	2,201	2,271	2,402	2,432	2,295	2,347	2,224	
Unemployment rate	19.5	19.7	18.7	19.8	20.6	20.6	19.5	20.0	19.0	
<b>Men, 20 years and over</b>										
Civilian labor force	5,388	5,609	5,565	5,398	5,512	5,597	5,611	5,584	5,581	
Participation rate	74.6	76.0	75.2	74.7	75.1	76.1	76.1	75.6	74.9	
Employed	4,416	4,620	4,677	4,360	4,418	4,522	4,564	4,556	4,603	
Employment-population ratio <sup>2</sup>	61.1	62.6	63.2	60.4	60.2	61.5	61.9	61.7	62.2	
Unemployed	972	989	888	1,038	1,094	1,075	1,047	1,028	938	
Unemployment rate	18.0	17.6	16.0	19.2	19.8	19.2	18.7	18.4	16.9	
<b>Women, 20 years and over</b>										
Civilian labor force	5,255	5,347	5,436	5,187	5,348	5,283	5,328	5,322	5,372	
Participation rate	57.2	57.1	57.9	56.4	57.4	56.6	57.0	56.8	57.2	
Employed	4,400	4,483	4,541	4,371	4,431	4,384	4,477	4,447	4,509	
Employment-population ratio <sup>2</sup>	47.9	47.8	48.4	47.5	47.6	47.0	47.9	47.5	48.0	
Unemployed	855	905	895	816	917	900	851	874	862	
Unemployment rate	16.3	16.9	16.5	15.7	17.1	17.0	16.0	16.4	16.1	
<b>Both sexes, 16 to 19 years</b>										
Civilian labor force	790	1,081	753	858	812	803	825	839	816	
Participation rate	35.2	46.5	34.1	38.3	36.4	40.5	37.1	37.8	36.9	
Employed	382	570	335	441	421	446	428	394	392	
Employment-population ratio <sup>2</sup>	17.0	25.7	15.2	19.7	18.9	20.0	19.2	17.8	17.7	
Unemployed	408	471	419	417	391	457	397	445	424	
Unemployment rate	51.6	45.2	55.6	48.6	48.2	50.6	48.1	53.0	52.0	
Men	52.6	46.6	57.1	51.0	53.1	51.1	47.6	56.8	54.8	
Women	50.6	43.7	53.9	45.9	42.3	50.0	48.8	48.9	48.7	
<b>HISPANIC ORIGIN</b>										
Civilian noninstitutional population	9,464	9,690	9,700	9,464	9,747	9,738	9,640	9,690	9,700	
Civilian labor force	5,954	6,316	6,207	5,961	6,167	6,253	6,079	6,128	6,200	
Participation rate	62.9	65.2	64.0	63.0	63.3	64.2	63.1	63.2	63.9	
Employed	5,143	5,520	5,449	5,097	5,318	5,378	5,333	5,333	5,390	
Employment-population ratio <sup>2</sup>	54.3	57.0	56.2	53.9	54.6	55.2	55.3	55.0	55.6	
Unemployed	812	755	758	864	849	876	748	790	811	
Unemployment rate	13.6	12.6	12.2	14.5	13.8	14.0	12.3	12.9	13.1	

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

NOTE: Detail for the above race 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.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Selected employment indicators

(Numbers in thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>CHARACTERISTIC</b>									
Civilian employed, 18 years and over .....	99,851	103,167	102,366	99,583	99,557	100,786	101,285	101,563	101,995
Married men, spouse present .....	38,459	38,653	38,789	37,998	37,560	37,925	38,293	38,308	38,253
Married women, spouse present .....	28,853	28,323	28,296	28,159	28,229	28,335	28,600	28,972	28,996
Women who maintain families .....	5,130	5,053	5,139	5,118	4,982	5,016	5,088	5,104	5,124
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>									
<b>Agriculture:</b>									
Wage and salary workers .....	1,661	1,998	1,710	1,537	1,595	1,636	1,663	1,664	1,585
Self-employed workers .....	1,681	1,691	1,580	1,569	1,558	1,608	1,583	1,566	1,473
Unpaid family workers .....	270	299	252	254	229	263	259	285	237
<b>Nonagricultural industries:</b>									
Wage and salary workers .....	88,399	91,102	90,728	88,562	88,395	89,354	89,765	89,995	90,813
Government .....	15,524	15,006	15,409	15,681	15,523	15,498	15,615	15,697	15,549
Private industries .....	72,865	76,101	75,319	72,881	72,872	73,856	74,150	74,299	75,265
Private households .....	1,212	1,365	1,285	1,220	1,228	1,317	1,286	1,290	1,255
Other industries .....	71,653	74,736	74,034	71,661	71,644	72,539	72,864	73,009	73,969
Self-employed workers .....	7,456	7,704	7,714	7,422	7,408	7,493	7,598	7,658	7,660
Unpaid family workers .....	384	367	382	378	335	345	320	376	376
<b>PERSONS AT WORK*</b>									
<b>Nonagricultural industries</b>									
Full-time schedules .....	91,415	87,513	94,262	90,884	90,941	90,539	92,253	91,586	93,737
Part time for economic reasons .....	72,775	71,437	75,856	71,723	72,975	72,978	74,008	73,495	74,883
Part time for noneconomic reasons .....	5,924	6,423	5,594	6,495	5,928	5,729	5,636	5,789	6,106
Usually work full time .....	2,286	1,782	1,683	2,519	1,685	1,702	1,809	1,718	1,798
Usually work part time .....	3,638	4,641	3,951	3,976	4,243	4,027	3,876	4,071	4,309
Part time for noneconomic reasons .....	12,716	5,653	12,812	12,666	12,038	11,833	12,614	12,701	12,748

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

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Measure	Quarterly averages					Monthly data		
	1982		1983			1983		
	III	IV	I	II	III	July	Aug.	Sept.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force .....	3.3	4.0	4.2	4.0	3.7	3.9	3.6	3.4
U-2 Job losers as a percent of the civilian labor force .....	6.0	6.6	6.1	6.0	5.5	5.5	5.5	5.3
U-3 Unemployed-persons 25 years and over as a percent of the civilian labor force .....	7.6	8.3	8.1	7.9	7.3	7.4	7.3	7.3
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force .....	9.8	10.6	10.3	9.9	9.3	9.4	9.4	9.2
U-4a Total unemployed as a percent of the labor force, including the resident Armed Forces .....	9.8	10.5	10.2	9.9	9.3	9.3	9.4	9.1
U-4b Total unemployed as a percent of the civilian labor force .....	10.0	10.7	10.3	10.1	9.4	9.5	9.5	9.3
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/4 total on part time for economic reasons as a percent of the civilian labor force less 1/4 of the part-time labor force .....	12.8	13.8	13.5	12.9	12.2	12.1	12.2	12.2
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/4 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/4 of the part-time labor force .....	14.2	15.3	15.0	14.3	13.5	N.A.	N.A.	N.A.

N.A. - not available.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates <sup>a</sup>					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	Aug. 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>CHARACTERISTIC</b>									
Total, 16 years and over .....	11,315	10,499	10,423	10.2	10.1	10.0	9.5	9.5	9.3
Men, 16 years and over .....	6,703	6,288	6,118	10.7	10.6	10.0	9.8	9.9	9.7
Men, 20 years and over .....	5,578	5,174	5,125	9.6	9.6	9.0	8.8	8.8	8.7
Women, 16 years and over .....	4,612	4,255	4,305	9.6	9.5	9.9	9.0	9.1	8.8
Women, 20 years and over .....	3,710	3,609	3,518	8.8	8.5	8.6	7.9	8.0	7.8
Both sexes, 16 to 18 years .....	2,027	1,916	1,780	23.8	23.0	23.6	22.8	23.0	21.6
Married men, spouse present .....	2,970	2,575	2,488	7.2	7.0	6.6	6.1	6.3	6.1
Married women, spouse present .....	1,583	1,851	1,813	7.6	7.5	7.8	7.0	6.9	6.8
Women who maintain families .....	724	670	713	12.4	12.9	12.8	11.6	11.6	12.2
Full-time workers .....	9,622	9,022	8,832	10.2	9.9	9.7	9.4	9.4	9.2
Part-time workers .....	1,713	1,633	1,611	10.6	11.0	12.1	10.2	10.1	10.0
Labor force time lost <sup>b</sup> .....	--	--	--	11.7	11.5	10.8	10.4	10.6	10.6
<b>INDUSTRY</b>									
Nonagricultural private wage and salary workers .....	8,748	8,070	7,823	10.7	10.5	10.0	9.6	9.8	9.4
Mining .....	207	162	179	18.5	22.7	18.2	16.6	18.8	17.2
Construction .....	1,142	990	1,009	22.0	20.4	18.1	18.0	18.1	18.2
Manufacturing .....	3,057	2,812	2,202	13.6	12.3	11.5	10.5	11.2	10.2
Durable goods .....	1,987	1,871	1,378	18.9	13.5	12.2	11.2	11.6	10.9
Non-durable goods .....	1,070	941	824	11.8	10.5	10.4	9.6	10.6	9.2
Transportation and public utilities .....	821	888	823	7.3	7.0	7.8	7.0	8.0	7.4
Wholesale and retail trade .....	2,059	2,098	2,062	10.0	10.1	10.2	9.7	9.8	9.6
Finance and service industries .....	1,822	1,961	1,948	7.0	7.5	7.2	7.3	7.2	7.1
Government workers .....	801	830	807	4.9	5.8	5.1	5.5	5.0	4.9
Agricultural wage and salary workers .....	239	284	305	13.5	17.0	17.0	14.2	14.6	16.1

<sup>a</sup> Unemployment as a percent of the civilian labor force.

reasons as a percent of potentially available labor force hours.

<sup>b</sup> Aggregate hours lost by the unemployed and persons on part time for economic

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment <sup>a</sup>	Not seasonally adjusted			Seasonally adjusted					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	Aug. 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>DURATION</b>									
Less than 5 weeks .....	4,135	3,521	3,936	4,004	3,519	3,655	3,498	3,660	3,774
5 to 14 weeks .....	3,185	3,265	2,537	3,589	2,939	2,915	2,794	3,026	2,810
15 weeks and over .....	3,373	3,626	3,357	3,856	4,517	4,589	4,617	4,020	3,850
15 to 26 weeks .....	1,545	1,133	1,118	1,830	1,731	1,638	1,830	1,573	1,384
27 weeks and over .....	1,829	2,493	2,240	2,026	2,786	2,951	2,587	2,447	2,506
Average (mean) duration, in weeks .....	15.9	19.5	19.4	16.6	20.4	22.0	21.7	19.9	20.2
Median duration, in weeks .....	8.4	9.2	8.2	9.4	12.3	11.8	9.9	8.9	9.1
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	10,495	10,411	9,830	11,315	11,192	11,146	10,590	10,499	10,423
Less than 5 weeks .....	38.7	33.8	40.0	35.1	31.9	32.8	32.7	34.2	36.2
5 to 14 weeks .....	29.0	31.4	25.8	31.1	27.0	26.1	26.1	28.3	26.9
15 weeks and over .....	31.6	34.8	34.2	33.8	41.0	41.1	41.2	37.5	36.9
15 to 26 weeks .....	14.5	10.9	11.8	16.0	15.7	14.7	17.1	14.7	12.9
27 weeks and over .....	17.1	23.9	22.8	17.8	25.3	26.4	24.2	22.9	24.0

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-8. Reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>NUMBER OF UNEMPLOYED</b>									
Job losers	6,083	5,793	5,270	6,979	6,766	6,513	6,193	6,202	6,002
On layoff	2,016	1,492	1,265	2,625	1,943	1,822	1,719	1,658	1,591
Other job losers	4,067	4,301	4,005	4,354	4,823	4,691	4,474	4,545	4,411
Job leavers	861	863	941	786	801	681	738	767	866
Reentrants	2,467	2,431	2,393	2,837	2,365	2,425	2,429	2,524	2,351
New entrants	1,264	1,323	1,226	1,303	1,251	1,480	1,225	1,214	1,287
<b>PERCENT DISTRIBUTION</b>									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	56.9	55.6	53.6	60.7	60.5	58.4	58.5	57.5	57.3
On layoff	18.9	14.3	12.9	22.8	17.4	16.3	16.2	15.5	15.2
Other job losers	38.9	41.3	40.7	37.8	43.1	42.0	42.3	42.4	42.1
Job leavers	8.0	8.3	9.6	6.8	7.2	7.0	7.0	7.2	8.3
Reentrants	23.3	23.4	24.3	21.2	21.1	21.7	22.9	23.6	22.5
New entrants	11.8	12.7	12.5	11.3	11.2	12.9	11.6	11.3	11.9
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers	5.5	5.1	4.7	6.3	6.1	5.8	5.5	5.5	5.3
On layoff	1.8	1.4	1.2	2.7	2.0	1.9	1.8	1.7	1.6
Other job losers	2.2	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.1
Job leavers	0.8	0.8	0.9	0.7	0.7	0.6	0.7	0.7	0.8
Reentrants	2.2	2.1	2.1	1.9	1.8	1.9	2.0	2.0	1.9
New entrants	1.1	1.2	1.1	1.2	1.1	1.3	1.1	1.1	1.1

Table A-9. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates <sup>a</sup>					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
Total, 16 years and over	11,315	10,699	10,423	10.2	10.1	10.0	9.5	9.5	9.1
16 to 24 years	4,490	4,260	3,999	16.3	16.1	17.6	16.8	17.4	16.5
16 to 19 years	2,027	1,916	1,780	23.8	23.0	23.6	22.8	23.0	21.8
18 to 17 years	876	770	730	26.5	26.2	25.8	25.3	24.7	23.9
18 to 19 years	1,145	1,136	1,043	22.0	21.1	22.8	21.7	22.0	20.4
20 to 24 years	2,463	2,348	2,219	15.3	15.6	14.4	13.8	15.5	13.8
25 years and over	6,824	6,413	6,402	7.9	7.9	7.9	7.4	7.3	7.3
25 to 34 years	6,090	5,680	5,651	8.6	8.5	8.3	7.8	7.8	7.7
35 years and over	800	757	780	5.2	5.3	5.6	5.3	5.1	5.1
Men, 16 years and over	6,703	6,284	6,118	10.7	10.6	10.0	9.8	9.9	9.7
16 to 24 years	2,608	2,447	2,276	20.0	19.7	18.4	18.8	18.8	17.6
16 to 19 years	1,123	1,070	993	25.4	23.9	23.7	23.8	24.7	22.9
18 to 17 years	502	427	376	29.0	27.4	25.4	27.9	26.2	23.5
18 to 19 years	622	634	617	23.0	22.0	22.9	21.2	23.7	22.5
20 to 24 years	1,483	1,377	1,283	17.3	17.6	15.7	15.7	15.9	15.0
25 years and over	4,098	3,790	3,830	8.2	8.2	7.8	7.6	7.5	7.6
25 to 34 years	3,657	3,328	3,351	9.0	8.8	8.4	8.1	8.0	8.1
35 years and over	500	475	507	6.5	6.5	6.4	6.4	6.3	6.3
Women, 16 years and over	4,612	4,415	4,305	9.6	9.5	9.9	9.0	9.1	8.8
16 to 24 years	1,882	1,813	1,723	16.3	16.2	16.6	14.9	15.9	15.2
16 to 19 years	902	845	787	22.1	21.5	23.4	21.6	21.2	20.5
18 to 17 years	376	383	354	23.8	24.7	26.2	22.3	23.1	24.3
18 to 19 years	523	502	426	20.9	20.2	21.9	21.0	20.3	17.9
20 to 24 years	980	967	936	13.1	13.3	12.9	11.5	13.0	12.5
25 years and over	2,726	2,623	2,573	7.5	7.6	7.9	7.2	7.0	6.8
25 to 34 years	2,433	2,352	2,300	8.0	8.2	8.2	7.6	7.5	7.3
35 years and over	300	282	273	4.8	4.8	5.8	5.3	4.7	4.4

<sup>a</sup> Unemployment as a percent of the civilian labor force.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	Aug. 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
Civilian noninstitutional population	23,038	23,437	23,581	23,038	23,282	23,316	23,347	23,437	23,581
Civilian labor force	14,200	14,929	14,712	14,259	14,460	14,652	14,573	14,608	14,754
Participation rate	61.6	63.7	62.4	61.9	62.1	62.8	62.4	62.3	62.6
Employed	11,676	12,259	12,209	11,685	11,775	11,879	11,966	11,988	12,217
Employment-population ratio <sup>2</sup>	50.7	52.3	51.8	50.7	50.6	50.9	51.3	51.0	51.8
Unemployed	2,523	2,669	2,503	2,574	2,685	2,773	2,607	2,644	2,537
Unemployment rate	17.8	17.9	17.0	18.1	18.6	18.9	17.9	18.1	17.2
Not in labor force	8,638	8,509	8,869	8,779	8,822	8,664	8,774	8,829	8,827

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Sept. 1982	Sept. 1983	Sept. 1982	Sept. 1983	Sept. 1982	Sept. 1983
Total, 16 years and over	99,451	102,366	10,695	9,830	9.7	8.8
Managerial and professional specialty	23,281	23,865	868	782	3.6	3.2
Executive, administrative, and managerial	10,737	10,548	408	382	3.7	3.6
Professional specialty	12,508	12,918	460	399	3.5	3.0
Technical, sales, and administrative support	30,871	31,610	2,097	1,986	6.8	5.9
Technicians and related support	2,928	3,031	149	154	4.2	4.8
Sales occupations	11,358	12,038	733	762	6.1	6.0
Administrative support, including clerical	16,586	16,541	1,215	1,070	6.8	6.1
Service occupations	13,516	14,084	1,668	1,712	11.0	10.8
Private household	1,034	995	72	77	6.2	7.2
Protective service	1,659	1,653	117	118	6.2	6.7
Service, except private household and protective	10,823	11,436	1,480	1,517	12.0	11.7
Precision production, craft, and repair	11,780	12,711	1,328	1,236	10.1	8.9
Mechanics and repairers	3,844	4,296	297	296	7.2	6.4
Construction trades	4,008	4,444	669	563	16.3	11.2
Other precision production, craft, and repair	3,927	3,970	361	378	8.4	8.7
Operators, fabricators, and laborers	16,394	16,236	3,210	2,472	16.4	13.2
Machine operators, assemblers, and inspectors	7,573	7,879	1,696	1,168	18.3	12.9
Transportation and material moving occupations	4,348	4,313	531	877	10.9	10.0
Handlers, equipment cleaners, helpers, and laborers	4,473	4,063	983	828	18.0	17.0
Construction laborers	559	595	194	161	25.7	21.4
Other handlers, equipment cleaners, helpers, and laborers	3,914	3,469	789	666	16.0	16.2
Farming, forestry, and fishing	4,005	3,860	271	344	6.3	8.2

<sup>1</sup> Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Sept. 1964	Sept. 1963	Sept. 1982	Sept. 1983	Sept. 1982	Sept. 1983	Sept. 1982	Sept. 1983	Sept. 1982	Sept. 1983
<b>VETERANS</b>										
Total, 25 years and over .....	8,711	7,853	8,210	7,350	7,589	6,867	621	883	7.6	6.6
25 to 34 years .....	7,088	5,761	6,790	5,536	6,285	5,137	585	399	8.0	7.2
35 to 44 years .....	1,152	635	1,090	576	965	527	125	68	11.5	11.6
45 to 54 years .....	3,089	3,083	2,981	2,981	2,790	2,800	191	181	6.4	6.1
55 years and over .....	1,623	2,072	1,420	1,814	1,348	1,730	76	88	5.4	4.6
<b>NONVETERANS</b>										
Total, 25 to 54 years .....	18,415	20,223	17,480	19,070	15,843	17,522	1,597	1,548	9.2	8.1
25 to 34 years .....	8,225	8,751	7,788	8,211	6,926	7,471	822	740	10.6	9.0
35 to 44 years .....	6,079	6,902	5,782	6,532	5,298	6,071	484	461	8.4	7.1
45 to 54 years .....	4,111	4,570	3,910	4,327	3,619	3,580	291	347	7.4	8.0

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Arm-

ed Forces; published data are limited to those 25 to 54 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Persons not in labor force by reason, sex, and race, quarterly averages  
(In thousands)

Reason, sex, and race	Not seasonally adjusted		Seasonally adjusted				
	1982	1983	1982		1983		
	III	III	III	IV	I	II	III
<b>TOTAL</b>							
Total not in labor force	60,869	61,198	61,893	62,072	62,977	62,801	62,281
Do not want a job now	54,555	54,869	55,258	55,322	56,171	56,053	55,564
Current activity:							
Going to school	3,603	3,729	6,309	6,400	6,635	6,402	6,119
Ill, disabled	4,076	3,643	4,040	3,978	3,946	4,106	3,792
Keeping house	28,319	28,305	28,212	28,127	28,432	28,283	28,238
Retired	12,481	13,093	12,442	12,576	13,025	13,015	12,852
Other	5,916	5,904	6,254	4,241	4,132	4,287	4,263
Want a job now	6,375	6,328	6,556	6,995	6,806	6,590	6,881
Reason not looking:							
School attendance	1,001	973	1,803	1,887	1,629	1,492	1,902
Ill health, disability	729	810	778	758	649	695	861
Home responsibilities	1,545	1,620	1,370	1,373	1,384	1,474	1,486
Think cannot get a job	1,687	1,661	1,636	1,849	1,764	1,709	1,605
Job-market factors <sup>1</sup>	1,277	1,233	1,222	1,391	1,442	1,306	1,187
Personal factors <sup>2</sup>	409	429	416	458	322	403	418
Other reasons <sup>3</sup>	1,313	1,263	1,078	1,128	980	1,171	1,027
<b>Men</b>							
Total not in labor force	18,304	18,475	19,022	19,069	19,764	19,501	19,304
Do not want a job now	16,351	16,537	16,939	16,893	17,250	17,194	16,910
Want a job now	1,953	1,937	2,298	2,390	2,187	2,215	2,447
Reason not looking:							
School attendance	493	515	944	1,022	868	763	1,127
Ill health, disability	315	358	342	299	205	305	389
Think cannot get a job	652	640	595	690	707	643	591
Other reasons <sup>3</sup>	494	424	397	380	327	454	340
<b>Women</b>							
Total not in labor force	42,565	42,723	42,810	43,002	43,213	43,301	42,978
Do not want a job now	38,244	38,332	38,319	38,429	38,921	38,859	38,654
Want a job now	4,321	4,390	4,369	4,605	4,219	4,325	4,394
Reason not looking:							
School attendance	509	458	839	866	761	729	775
Ill health, disability	414	452	436	459	364	390	472
Home responsibilities	1,585	1,620	1,370	1,373	1,384	1,474	1,446
Think cannot get a job	1,035	1,021	1,043	1,159	1,057	1,016	1,014
Other reasons <sup>3</sup>	819	639	681	748	653	716	687
<b>White</b>							
Total not in labor force	52,359	52,646	53,119	53,248	54,180	54,033	53,478
Do not want a job now	47,809	48,117	48,431	48,444	49,178	49,215	48,787
Want a job now	4,551	4,529	4,772	4,972	4,675	4,833	4,721
Reason not looking:							
School attendance	684	623	1,226	1,320	1,194	1,119	1,122
Ill health, disability	515	599	549	505	471	522	637
Home responsibilities	1,192	1,216	1,043	1,029	1,043	1,031	1,075
Think cannot get a job	1,094	1,090	1,072	1,247	1,192	1,261	1,063
Other reasons <sup>3</sup>	1,066	1,001	882	871	773	900	824
<b>Black</b>							
Total not in labor force	7,017	6,949	7,233	7,254	7,248	7,185	7,222
Do not want a job now	5,468	5,395	5,594	5,549	5,662	5,701	5,505
Want a job now	1,549	1,595	1,631	1,763	1,595	1,525	1,728
Reason not looking:							
School attendance	270	289	442	505	400	320	508
Ill health, disability	202	194	215	221	168	170	209
Home responsibilities	316	303	295	318	317	376	384
Think cannot get a job	552	533	502	529	543	409	452
Other reasons <sup>3</sup>	209	215	177	190	168	251	175

<sup>1</sup> Job market factors include "would not find job" and "thinks no job available."<sup>2</sup> Personal factors include "unemployed think too young or old," "lack education or training," and<sup>3</sup> "other personal limitations."

Includes small number of men not looking for work because of home responsibilities.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-14. Employment status of the civilian population for ten large States

State and employment status	Not seasonally adjusted <sup>1</sup>			Seasonally adjusted <sup>2</sup>					
	Sept. 1982	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>California</b>									
Civilian noninstitutional population	18,522	18,826	18,854	18,522	18,741	18,770	18,801	18,826	18,854
Civilian labor force	12,269	12,493	12,358	12,329	12,301	12,459	12,294	12,331	12,408
Employed	11,084	11,306	11,332	11,073	11,007	11,173	11,147	11,128	11,312
Unemployed	1,185	1,188	1,026	1,256	1,294	1,286	1,147	1,203	1,096
Unemployment rate	9.7	9.5	8.3	10.2	10.5	10.3	9.3	9.6	8.8
<b>Florida</b>									
Civilian noninstitutional population	8,166	8,382	8,402	8,166	8,322	8,343	8,363	8,382	8,402
Civilian labor force	4,888	5,087	5,113	4,892	4,742	4,915	4,926	5,034	5,093
Employed	4,486	4,677	4,697	4,508	4,311	4,481	4,511	4,612	4,696
Unemployed	402	419	416	384	431	434	415	422	397
Unemployment rate	8.2	8.2	8.1	7.8	9.1	8.8	8.4	8.4	7.8
<b>Illinois</b>									
Civilian noninstitutional population	8,535	8,550	8,552	8,535	8,545	8,547	8,550	8,550	8,552
Civilian labor force	5,622	5,606	5,539	5,626	5,444	5,567	5,541	5,542	5,549
Employed	4,941	4,973	4,995	4,928	4,946	4,876	4,902	4,895	4,988
Unemployed	681	633	544	697	680	691	639	647	561
Unemployment rate	12.1	11.3	9.8	12.4	12.0	12.4	11.5	11.7	10.1
<b>Massachusetts</b>									
Civilian noninstitutional population	4,483	4,515	4,519	4,483	4,506	4,510	4,513	4,515	4,519
Civilian labor force	3,052	3,064	3,023	3,068	2,986	3,005	2,999	3,006	3,037
Employed	2,827	2,881	2,810	2,839	2,794	2,798	2,823	2,832	2,818
Unemployed	225	183	213	229	192	207	176	174	219
Unemployment rate	7.4	6.0	7.0	7.5	6.4	6.9	5.9	5.8	7.2
<b>Michigan</b>									
Civilian noninstitutional population	6,744	6,721	6,719	6,744	6,727	6,725	6,724	6,721	6,719
Civilian labor force	4,281	4,370	4,294	4,286	4,370	4,357	4,333	4,300	4,293
Employed	3,651	3,784	3,768	3,601	3,717	3,696	3,764	3,684	3,709
Unemployed	621	586	527	685	653	661	569	616	584
Unemployment rate	14.5	13.4	12.3	16.0	14.9	15.2	13.1	14.3	13.6
<b>New Jersey</b>									
Civilian noninstitutional population	5,711	5,754	5,758	5,711	5,742	5,746	5,751	5,754	5,758
Civilian labor force	3,595	3,726	3,650	3,644	3,579	3,647	3,652	3,700	3,699
Employed	3,287	3,407	3,370	3,308	3,335	3,342	3,345	3,369	3,384
Unemployed	308	319	280	336	244	305	307	331	305
Unemployment rate	8.6	8.6	7.7	9.2	6.8	8.4	8.4	8.9	8.2
<b>New York</b>									
Civilian noninstitutional population	13,531	13,598	13,605	13,531	13,578	13,586	13,594	13,598	13,605
Civilian labor force	7,910	8,023	8,146	8,018	7,907	8,133	8,183	8,280	8,248
Employed	7,242	7,728	7,873	7,324	7,215	7,382	7,485	7,580	7,538
Unemployed	667	695	673	704	692	751	698	700	710
Unemployment rate	8.4	8.2	8.3	8.8	8.8	9.2	8.5	8.5	8.6
<b>Ohio</b>									
Civilian noninstitutional population	8,061	8,074	8,075	8,061	8,069	8,071	8,073	8,074	8,075
Civilian labor force	5,136	5,244	5,123	5,105	5,185	5,182	5,152	5,126	5,088
Employed	4,505	4,679	4,555	4,457	4,474	4,517	4,508	4,559	4,504
Unemployed	631	565	568	648	706	665	644	567	584
Unemployment rate	12.3	10.8	11.1	12.7	13.4	12.8	10.9	11.1	11.5
<b>Pennsylvania</b>									
Civilian noninstitutional population	9,140	9,161	9,163	9,140	9,154	9,157	9,160	9,161	9,163
Civilian labor force	5,486	5,645	5,512	5,503	5,489	5,578	5,555	5,544	5,513
Employed	4,886	5,035	4,944	4,878	4,796	4,874	4,938	4,907	4,937
Unemployed	601	610	549	625	693	704	617	637	576
Unemployment rate	10.9	10.8	10.0	11.4	12.4	12.6	11.1	11.5	10.4
<b>Texas</b>									
Civilian noninstitutional population	11,008	11,305	11,333	11,008	11,223	11,251	11,280	11,305	11,333
Civilian labor force	7,353	7,659	7,724	7,346	7,508	7,631	7,655	7,636	7,726
Employed	6,762	7,079	7,062	6,761	6,887	7,044	7,039	7,081	7,047
Unemployed	591	581	663	585	621	587	616	555	679
Unemployment rate	8.0	7.6	8.6	8.0	8.1	7.7	8.0	7.3	8.5

<sup>1</sup> These are the official Bureau of Labor Statistics estimates used in the administration of Federal food assistance programs.

<sup>2</sup> The population figures are not adjusted for seasonal variation. However, identical ratios appear in the unadjusted and the seasonally adjusted columns.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

Industry	Not seasonally adjusted					Seasonally adjusted				
	Sept. 1982	July 1983	Aug. 1983	Sept. 1983	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983	Sept. 1983
<b>Total</b> .....	89,562	89,944	89,599	90,833	89,235	89,421	89,844	90,132	89,735	90,448
<b>Goods-producing</b> .....	24,024	23,884	24,218	24,444	23,530	23,347	23,518	23,724	23,832	23,827
Mining.....	1,104	1,030	1,034	1,027	1,100	994	1,003	1,017	1,025	1,023
Construction.....	4,109	4,208	4,304	4,293	3,875	3,860	3,933	3,974	4,022	4,050
Manufacturing.....	18,811	18,646	18,880	19,124	18,555	18,493	18,582	18,733	18,785	18,854
Production workers.....	12,790	12,648	12,867	13,131	12,542	12,531	12,415	12,756	12,797	12,844
Durable goods.....	10,971	10,910	10,990	11,193	10,862	10,788	10,644	10,961	11,018	11,073
Production workers.....	7,231	7,233	7,285	7,494	7,150	7,115	7,149	7,278	7,325	7,380
Lumber and wood products.....	623.0	706.4	724.0	727.2	603	642	679	688	700	704
Furniture and fixtures.....	433.1	446.8	456.0	462.3	428	446	450	459	468	475
Stone, clay, and glass products.....	585.5	588.5	596.7	601.0	570	570	573	577	582	585
Primary metal industries.....	875.9	835.3	840.4	855.0	849	828	830	839	839	849
Fabricated metal products.....	1,416.6	1,378.2	1,408.3	1,431.2	1,401	1,378	1,384	1,391	1,413	1,414
Machinery, except electrical.....	2,183.8	2,079.3	2,078.5	2,114.1	2,184	2,064	2,066	2,094	2,104	2,114
Electric and electronic equipment.....	2,005.1	2,038.4	2,039.7	2,090.4	1,993	2,010	2,030	2,047	2,042	2,078
Transportation equipment.....	4,748.2	4,779.9	4,742.1	4,825.9	4,724	4,737	4,782	4,794	4,804	4,797
Instruments and related products.....	710.8	689.1	694.8	695.1	710	689	687	687	693	694
Miscellaneous manufacturing.....	591.1	577.4	588.4	594.5	580	583	583	585	583	583
Non-durable goods.....	7,840	7,726	7,890	7,931	7,693	7,705	7,738	7,772	7,767	7,781
Production workers.....	5,359	5,423	5,582	5,637	5,592	5,416	5,444	5,478	5,472	5,484
Food and kindred products.....	1,735.1	1,866.2	1,718.1	1,730.8	1,633	1,632	1,645	1,638	1,624	1,630
Tobacco manufactures.....	70.7	60.4	55.4	68.2	66	66	65	65	62	64
Textile mill products.....	746.4	733.1	755.5	780.7	734	736	745	746	753	753
Apparel and other textile products.....	1,167.5	1,136.3	1,182.5	1,194.1	1,149	1,153	1,159	1,180	1,179	1,175
Paper and allied products.....	661.8	658.8	665.7	664.3	659	656	657	658	660	660
Printing and publishing.....	1,695.1	1,279.0	1,281.4	1,286.1	1,246	1,276	1,281	1,284	1,287	1,289
Chemicals and allied products.....	1,071.1	1,064.0	1,063.3	1,061.7	1,070	1,058	1,056	1,059	1,057	1,061
Petroleum and coal products.....	205.0	200.1	199.0	198.9	202	198	198	197	195	194
Rubber and misc. plastics products.....	705.8	724.6	740.5	748.8	696	716	721	732	736	739
Leather and leather products.....	231.3	203.0	220.0	219.4	218	214	213	213	216	216
<b>Service-producing</b> .....	65,538	66,062	65,381	66,387	65,705	66,074	66,326	66,428	65,903	66,541
Transportation and public utilities.....	5,102	4,999	4,354	5,065	5,054	4,993	4,992	4,984	4,343	5,015
Wholesale and retail trade.....	20,501	20,584	20,684	20,627	20,360	20,356	20,494	20,528	20,591	20,494
Wholesale trade.....	5,242	5,255	5,242	5,245	5,252	5,197	5,222	5,228	5,244	5,234
Retail trade.....	15,259	15,331	15,422	15,382	15,108	15,159	15,272	15,300	15,345	15,240
Finance, insurance, and real estate.....	5,355	5,536	5,548	5,490	5,351	5,435	5,451	5,465	5,488	5,485
<b>Services</b> .....	19,179	19,928	19,948	19,919	19,156	19,546	19,668	19,770	19,829	19,889
<b>Government</b> .....	15,401	15,013	14,845	15,274	15,784	15,744	15,721	15,680	15,652	15,659
Federal government.....	2,701	2,794	2,744	2,708	2,735	2,756	2,742	2,738	2,733	2,741
State and local government.....	12,700	12,219	12,071	12,566	13,049	12,988	12,979	12,942	12,919	12,917

D = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Sept. 1982	July 1983	Aug. 1983 P	Sept. 1983 P	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983 P	Sept. 1983 P
Total private .....	34.8	35.4	35.4	35.3	34.8	35.1	35.1	35.0	35.0	35.2
Mining .....	42.0	42.1	42.7	42.9	(2)	(2)	(2)	(2)	(2)	(2)
Construction .....	36.9	38.2	38.0	38.1	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing .....	38.9	40.0	40.2	40.7	38.8	40.0	40.1	40.2	40.3	40.7
Overtime hours .....	2.5	3.0	3.2	3.5	2.3	2.7	2.9	3.0	3.1	3.3
Durable goods .....	39.0	40.4	40.6	41.2	39.1	40.4	40.6	40.8	40.8	41.3
Overtime hours .....	2.2	2.9	3.1	3.5	2.1	2.6	2.8	3.0	3.1	3.4
Lumber and wood products .....	38.7	40.1	40.7	40.5	38.4	39.8	40.0	39.9	40.1	40.3
Furniture and fixtures .....	37.7	38.9	39.9	40.0	37.5	39.2	39.6	39.7	39.5	39.8
Stone, clay, and glass products .....	40.5	41.9	42.1	42.3	40.2	41.2	41.6	41.7	41.7	42.0
Primary metal industries .....	18.0	40.5	40.7	41.3	17.8	40.3	40.3	40.8	41.0	41.1
Fabricated metal products .....	38.8	40.2	40.7	41.3	38.9	40.4	40.5	40.7	40.8	41.5
Machinery, except electrical .....	39.1	40.1	40.3	40.8	39.2	40.0	40.4	40.7	40.9	40.9
Electric and electronic equipment .....	38.9	40.3	40.5	40.9	39.0	40.3	40.5	40.8	40.7	41.0
Transportation equipment .....	39.5	41.7	41.3	42.7	40.1	41.6	41.9	42.0	41.9	43.4
Instruments and related products .....	39.9	40.2	40.1	40.4	39.9	40.4	40.1	40.7	40.2	40.4
Miscellaneous manufacturing .....	38.6	38.8	39.1	39.4	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods .....	38.8	39.4	39.7	40.0	38.6	39.4	39.6	39.5	39.5	39.9
Overtime hours .....	2.9	3.0	3.3	3.6	2.8	2.9	3.0	3.0	3.1	3.2
Food and kindred products .....	39.9	39.5	40.0	40.3	39.4	39.4	39.8	39.4	39.6	39.8
Tobacco manufactures .....	19.7	36.8	37.6	37.6	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products .....	38.2	40.2	41.2	41.5	38.1	40.4	40.7	40.7	41.0	41.4
Apparel and other textile products .....	35.1	36.1	36.6	36.7	35.1	36.1	36.1	35.8	36.2	36.7
Paper and allied products .....	41.8	42.7	42.7	43.3	41.6	42.7	42.8	42.9	42.8	43.1
Printing and publishing .....	37.2	37.5	37.6	37.8	37.0	37.4	37.6	37.7	37.5	37.7
Chemicals and allied products .....	41.2	41.6	41.4	41.8	41.0	41.6	41.9	41.8	41.6	41.6
Petroleum and coal products .....	45.4	44.3	43.4	44.1	44.2	43.6	43.8	43.7	43.4	43.0
Rubber and misc. plastics products .....	39.6	40.9	41.2	41.8	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products .....	35.3	37.5	37.7	37.9	35.7	36.8	36.8	37.4	37.4	38.1
Transportation and public utilities .....	38.8	39.2	39.2	39.2	38.8	38.9	38.9	38.9	39.0	39.2
Wholesale and retail trade .....	32.1	32.5	32.4	31.9	31.9	31.9	32.0	31.9	31.8	31.8
Wholesale trade .....	38.4	38.8	38.7	38.7	38.4	38.6	38.7	38.6	38.5	38.7
Retail trade .....	30.1	30.6	30.5	29.8	29.9	29.9	29.9	29.8	29.7	29.6
Finance, insurance, and real estate .....	36.1	36.3	36.1	36.0	(2)	(2)	(2)	(2)	(2)	(2)
Services .....	32.7	33.1	33.1	32.8	32.8	32.9	32.7	32.6	32.7	32.9

<sup>1</sup> Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

<sup>2</sup> This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.  
p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Sept. 1982	July 1983	Aug. 1983 <sup>p</sup>	Sept. 1983 <sup>p</sup>	Sept. 1982	July 1983	Aug. 1983 <sup>p</sup>	Sept. 1983 <sup>p</sup>
Total private	\$7.76	\$8.00	\$7.94	\$8.11	\$270.05	\$283.20	\$281.08	\$286.28
Seasonally adjusted	7.73	8.03	7.98	8.08	249.00	281.05	279.30	284.47
Mining	10.99	11.29	11.25	11.34	461.38	475.31	480.38	486.49
Construction	11.74	11.78	11.84	11.90	433.21	450.00	449.92	456.44
Manufacturing	8.59	8.86	8.79	8.91	334.15	354.40	353.36	362.64
Durable goods	9.17	9.40	9.34	9.49	337.63	379.74	379.20	390.99
Lumber and wood products	7.65	7.82	7.83	7.85	296.06	313.58	316.68	317.93
Furniture and fixtures	4.40	4.65	4.67	4.72	241.28	258.69	266.13	268.80
Stone, clay, and glass products	9.03	9.34	9.30	9.39	365.72	391.35	391.53	397.20
Primary metal industries	11.34	11.37	11.28	11.39	438.52	460.49	459.10	470.41
Fabricated metal products	8.90	9.10	9.10	9.22	345.32	365.82	370.37	380.78
Machinery, except electrical	9.41	9.65	9.61	9.73	367.93	386.97	387.28	394.98
Electric and electronic equipment	8.37	8.69	8.64	8.77	325.59	350.21	349.92	358.69
Transportation equipment	11.24	11.62	11.53	11.81	463.98	484.55	476.19	504.29
Instruments and related products	8.24	8.37	8.50	8.61	328.78	344.51	340.65	347.84
Miscellaneous manufacturing	6.50	6.82	6.80	6.83	250.90	264.62	263.88	269.10
Nondurable goods	7.84	8.11	8.05	8.11	304.19	319.53	319.59	324.40
Food and kindred products	7.91	8.17	8.13	8.13	315.61	322.78	325.20	327.64
Tobacco manufactures	9.53	10.84	10.23	9.92	379.14	398.81	384.65	372.99
Textile mill products	5.86	6.17	6.19	6.23	223.85	248.03	255.03	258.55
Apparel and other textile products	5.23	5.35	5.36	5.42	183.57	193.14	196.18	198.91
Paper and allied products	9.63	10.08	10.01	10.09	402.53	429.56	427.43	436.90
Printing and publishing	9.91	9.10	9.16	9.25	331.45	341.25	344.42	350.58
Chemicals and allied products	10.19	10.58	10.60	10.73	419.83	440.13	438.84	448.31
Petroleum and coal products	12.81	13.20	13.19	13.30	532.49	584.74	570.71	586.53
Rubber and misc. plastics products	7.78	8.04	8.03	8.08	308.09	329.65	330.84	337.74
Leather and leather products	5.41	5.52	5.50	5.57	192.06	207.00	207.35	211.10
Transportation and public utilities	10.46	10.86	10.70	10.99	405.85	425.71	419.44	430.81
Wholesale and retail trade	6.24	6.48	6.46	6.54	200.30	210.60	209.30	208.63
Wholesale trade	8.10	8.42	8.40	8.47	311.04	326.70	325.08	327.79
Retail trade	5.50	5.72	5.70	5.77	165.55	175.03	173.85	171.95
Finance, insurance, and real estate	6.90	7.30	7.23	7.32	249.59	264.99	261.00	263.52
Services	6.89	7.18	7.18	7.29	228.57	237.68	237.64	239.11

<sup>1</sup> See footnote 1, table B-2.

p = preliminary.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry (1977=100)

Industry	Not seasonally adjusted				Seasonally adjusted					Percent change from: Sept. 1983		
	Sept. 1982	July 1983	Aug. 1983 <sup>p</sup>	Sept. 1983 <sup>p</sup>	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983 <sup>p</sup>			
Total private nonfarm:	150.3	153.0	154.6	156.2	3.9	150.0	154.6	154.8	155.2	155.0	155.9	0.6
Constant (1977) dollars	93.2	94.3	93.7	94.4	(2)	93.1	94.7	94.8	94.7	94.0	94.0	(3)
Mining	162.0	167.6	167.1	168.3	3.4	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	143.1	144.2	144.9	146.4	2.3	141.6	144.5	144.6	144.0	144.2	144.8	-4
Manufacturing	154.8	158.2	157.5	158.7	2.6	154.6	157.7	157.8	158.2	158.0	158.6	-3
Transportation and public utilities	151.0	157.2	156.2	159.4	5.5	150.1	156.6	156.8	157.9	156.1	158.5	1.5
Wholesale and retail trade	146.3	152.1	151.8	153.0	4.5	146.2	151.2	151.6	152.2	152.0	152.9	-5
Finance, insurance, and real estate	150.6	159.1	157.9	159.7	6.1	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	149.6	154.6	154.6	156.5	4.6	149.8	154.9	155.5	155.6	155.9	156.6	-3

<sup>1</sup> See footnotes 1, table B-2.<sup>2</sup> Percent change was 1.2 percent from August 1982 to August 1983, the latest month available.<sup>3</sup> Percent change was -0.7 percent from July 1983 to August 1983, the latest month available.<sup>4</sup> These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

N.A. = not available.

p = preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers' on private nonagricultural payrolls by industry (1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted				
	Sept. 1982	July 1983	Aug. 1983	Sept. 1983 <sup>p</sup>	Sept. 1982	May 1983	June 1983	July 1983	Aug. 1983 <sup>p</sup>	Sept. 1983 <sup>p</sup>
Total private	105.1	107.9	107.4	108.6	103.9	105.0	105.7	106.1	105.2	107.2
Goods-producing	91.7	93.5	95.7	98.0	88.9	90.5	91.8	93.0	93.5	95.0
Mining	124.8	114.7	116.8	116.5	122.8	110.3	112.5	114.0	115.5	116.0
Construction	106.9	113.4	116.2	115.9	98.2	99.6	102.0	103.5	104.7	106.8
Manufacturing	87.2	88.7	90.8	93.7	85.6	87.8	88.8	90.0	90.3	91.8
Durable goods	83.0	85.7	86.9	90.6	82.0	84.3	85.4	87.2	87.7	89.4
Lumber and wood products	80.8	96.7	100.8	100.9	77.4	89.2	92.2	93.5	95.6	97.2
Furniture and fixtures	86.7	92.4	97.3	99.0	85.3	93.1	94.8	97.2	96.7	97.2
Stone, clay, and glass products	82.1	85.9	87.9	89.3	79.3	81.3	82.5	83.4	84.5	85.7
Primary metal industries	64.4	66.2	67.0	69.6	63.6	65.1	65.2	67.0	67.6	68.6
Fabricated metal products	80.9	81.6	84.8	87.9	79.7	82.0	82.8	83.7	85.4	87.0
Machinery, except electrical	85.9	82.4	82.7	86.4	85.8	81.4	82.4	84.6	85.2	86.5
Electric and electronic equipment	93.8	99.3	100.0	104.9	93.5	98.0	99.6	101.6	101.0	104.2
Transportation equipment	78.6	84.5	82.3	89.7	78.3	82.9	84.2	86.8	86.9	89.3
Machinery and related products	105.9	100.5	101.8	104.1	105.8	101.7	100.4	101.9	101.9	103.8
Instruments and related products	84.4	81.2	85.0	87.7	80.8	82.4	82.7	84.5	83.4	83.9
Miscellaneous manufacturing										
Nondurable goods	93.5	93.1	96.5	98.3	90.8	92.9	93.9	94.2	94.2	95.2
Food and kindred products	105.1	98.2	103.9	106.1	95.2	95.6	97.4	96.2	95.4	96.2
Tobacco manufactures	102.8	77.6	87.5	91.8	89.9	88.6	89.3	87.3	81.9	82.1
Textile mill products	75.9	79.3	84.0	85.5	75.3	80.1	81.8	81.8	83.5	84.3
Apparel and other textile products	86.2	86.1	91.2	92.6	85.2	87.7	88.1	89.0	89.8	90.9
Paper and allied products	93.2	94.8	95.5	97.6	92.3	94.4	94.6	95.4	95.0	96.4
Printing and publishing	108.1	107.5	108.1	109.7	105.6	107.5	108.7	109.0	108.5	109.3
Chemicals and allied products	85.5	92.6	94.9	96.4	95.5	94.7	95.5	95.8	95.1	95.8
Petroleum and coal products	100.6	96.1	93.7	95.4	95.7	93.3	92.9	92.7	91.3	91.2
Rubber and misc. plastics products	93.6	100.2	103.6	106.4	92.9	100.2	100.6	102.7	103.5	105.0
Leather and leather products	81.5	78.6	86.8	86.7	81.0	81.2	81.2	82.6	84.0	85.5
Service-producing	112.5	115.8	113.9	114.4	112.2	113.0	113.3	113.4	111.7	113.9
Transportation and public utilities	102.3	100.8	85.1	102.2	101.2	99.9	99.9	99.7	84.4	101.1
Wholesale and retail trade	105.8	107.7	107.9	105.7	105.1	104.7	105.4	105.3	105.3	104.6
Wholesale trade	108.4	109.1	109.1	109.2	108.4	107.3	108.1	107.8	108.0	108.8
Retail trade	104.7	107.2	107.4	104.4	103.8	103.7	104.4	104.3	104.3	103.0
Finance, insurance, and real estate	116.7	121.3	121.0	118.9	117.0	119.1	118.9	119.1	118.9	118.9
Services	123.0	129.5	129.4	128.0	123.3	126.1	126.1	126.3	127.1	128.2

<sup>1</sup> See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment<sup>1</sup> increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981	57.8	52.4	52.2	65.6	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982	28.5	45.4	36.0	39.0	47.6	32.8	38.4	37.1	34.1	29.3	32.0	42.2
	1983	56.5	45.7	62.4	69.1	71.0	64.5	68.5	67.7p	58.9p			
Over 3-month span	1981	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	39.3	30.1	24.5	23.4
	1982	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983	45.4	55.1	65.6	75.8	76.1	77.2	74.7p	76.9p				
Over 6-month span	1981	66.5	65.3	63.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982	20.2	23.7	25.3	29.8	26.1	26.1	23.4	19.1	21.2	26.1	26.6	35.8
	1983	50.5	63.2	73.4	76.3	79.3p	80.9p						
Over 12-month span	1981	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	25.3	23.1
	1982	22.0	20.7	18.0	19.4	18.3	20.7	20.7	22.8	24.2	31.5	37.6	44.1
	1983	48.9	57.3p	61.8p									

<sup>1</sup> Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 100 private nonagricultural industries. p = preliminary.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

Representative LUNGREN. Thank you, Madam Commissioner. One of the figures that comes out of all this is, I believe, the total civilian employment at 101.9 million in September. How does this compare with previous years?

Ms. NORWOOD. That is the highest number employed that we have had.

Representative LUNGREN. And as I understand it, the employment-population ratio is still edging upward with these statistics; is that correct?

Ms. NORWOOD. It has been. The employment-population ratios have been edging upward every month, though they are still somewhat below prerecession levels.

Representative LUNGREN. You mentioned that the average work-week of production workers increased again. How does this measure relate to future labor market conditions? What correlation can we draw from that?

Ms. NORWOOD. Clearly, employers who increase hours are doing so because more production is needed. We know that there has been a considerable effort to build up inventories and that factory orders have been on an upward trend.

It may be that, rather than expand the work force as much as has been needed, employers are being more cautious, but it is hard to tell. If the need for increased hours continues, it is clearly good news for the work force.

Representative LUNGREN. You've mentioned to us that we have two basic surveys on employment and unemployment.

Can we focus on the household survey for a moment? How would you describe employment growth this year as measured by the household survey, in a comparison with the other postwar recoveries that we've had?

Ms. NORWOOD. Employment growth has been strong in the household survey and has roughly equaled the growth rate experienced during the first 10 months of the recovery period in 1975-76.

It is a vigorous growth that the household survey is now showing.

Representative LUNGREN. When we had the hearings of this committee in August, and went over the July statistics, in your prepared statement you mentioned that the overall employment growth 8 months after the trough of the recession has been sharper both on a numerical and a percentage basis than in any of the prior six recoveries.

You went on to say that the reduction in unemployment had been larger by a wide margin than in the same time period of the four most recent recoveries.

If you extend that time period to include the statistics that you are giving us today, would that change your remarks? Are we still seeing that type of significant drop in unemployment over that period of time compared to our prior recoveries?

Ms. NORWOOD. Yes. The drop in unemployment has been very large. Of course, we have to remember that we started from a very high level. Each recession, in fact, has started at a higher level of unemployment than the one before, so that in each successive recovery period, we have further to go to recover. But it is certainly

true that, when compared to the recovery periods since 1970, the drop in unemployment has been sharper.

There were sharper declines in unemployment during economic recovery periods in the 1950's and 1960's.

Representative LUNGREN. I also note that in the 1960's the employment-population ratio was generally less than what we have today. This could lead us into a whole discussion on the different labor market that we have and the problems that are different today than in the 1960's, but I don't think we have time to go into that right now.

Congressman Mitchell.

Representative MITCHELL. Thank you. It's good to see you again, Commissioner. I missed a few of these.

Ms. NORWOOD. We missed you, too, sir.

Representative MITCHELL. Did you really?

Ms. NORWOOD. Yes, sir.

#### OPENING STATEMENT OF REPRESENTATIVE MITCHELL

Representative MITCHELL. I have some questions but I want to make a statement first, a statement that I hope conveys my perplexity.

Of course, anyone would not decry with disdain even a miniscule drop in the rate of unemployment. Everybody would be pleased by any drop, whether it's pitifully small or not. But I just find it incredible that we make these euphoric statements about a miniscule drop in unemployment. And I'm serious. I don't know what's happening in my country. A few years ago, if we had almost 11 million people out of work in this Nation, America would be up in arms. But now we say, "It's down and it's only 11 million out of work and that's good."

If we had an unemployment crisis, such as we face now, had we had one like this in the past, there would have been a great deal of motion to try to deal with this problem. But very little is happening.

I guess I'm saying that I am concerned about the fiber of an America that seems to be kind of resigned to accepting high unemployment rates and then practices a pattern of saying: "Yes, we're resigned, but it's looking so much better." There's still 11 million people out of work, and I can't be euphoric about that nor can I be euphoric about the magnificent drop in the rate of black unemployment—down from 20 percent to 19 percent. That means you still have one out of every five blacks in this country unemployed.

Now you look at the discouraged worker figure where blacks make up one-third of the discouraged workers, and people are sending forth these pollyanna vibrations this morning saying: "Isn't it wonderful what's happening?" No, it isn't. It's a national disgrace, really.

It causes me to question—not you, not your statistics—but it causes me to question those who get so ecstatic about these rather miserable unemployment figures—as to whether or not they aren't trying to create a kind of rationale—which would cause the Senate not to act on a real jobs bill that it has, which would cause us to

say: "Well, let's stay the course, because only 11 million people are miserable in this country."

I wish I could share the optimism of some of my colleagues, but I can't. And I repeat, I reiterate, I am deeply disturbed over what appears to be a change in the character of America that says: "Okay, it's all right now to have 11 million people unemployed."

You mentioned the recovery several times in your statement and you said in connection with that recovery that the number of discouraged workers fell from 1.7 million down to 1.6 million.

Generally, isn't it true when employment conditions appear to be improving, aren't generally discouraged workers drawn into the labor force? And the answer is yes; I'm sure. But why hasn't this happened in greater numbers in this recovery? Why are so few of the discouraged workers not being drawn into the labor force?

Ms. NORWOOD. We have had a drop of 240,000 since the fourth quarter of 1982, but it is true that the growth in the labor force has been somewhat slower than it has been in past recessions, particularly since 1970. It is less, for example, than the growth in the labor force which occurred after the 1975-76 recession. But it is also true that we are not expecting gains in the labor force that we had in the 1970's because we now have fewer youth in the population.

Representative MITCHELL. While you were talking about the recovery, you mentioned that the number of part-time schedules did not go down; it went up. It increased by 300,000 in September.

Is that usual for a recovery?

Ms. NORWOOD. No; it isn't, and those figures are difficult to understand. Most of the change in the part-time-for-economic-reasons category seems to be among the people who usually work part time, not the people who usually work full time. And I think that we will find, over the next month or two that those figures will change and stabilize.

I'm not suggesting that they necessarily went down, but I am suggesting that perhaps the changes there may smooth out over the next month or two.

Representative MITCHELL. I missed one part of that. Why do you think that will happen?

Ms. NORWOOD. I don't think these numbers are consistent with some of the other data in the survey, and sometimes you need another month or two of observations in order to determine the trend. The number of people who are employed part time for economic reasons, however, is high by historic standards.

Representative MITCHELL. Do I have time for a couple more questions?

Representative LUNGREN. Sure.

Representative MITCHELL. Thank you.

Let me get back to the vastly improved area that you spoke to in your presentation that my colleague waxed so eloquently about, and that's the reduction in the rate of black unemployment. I sort of looked over the data for the last couple of months and to my amazement I discovered that twice since last December a drop in the black unemployment rate was immediately reversed the following month.

Are there any indications at all of a lasting improvement in the employment situation for minorities?

Ms. NORWOOD. Congressman Mitchell, as you and I have discussed many times, the labor market position of the black population of this country is a serious one; they are having a great deal of trouble in the labor market. Their unemployment rates are high and perhaps even more importantly, their employment-population ratios—the proportion of their population that is employed—are considerably lower than for the white population.

There is some improvement, however. Since December, black employment has risen by about 400,000, and the unemployment rate for black men has dropped proportionately more than the overall rate. I think these are important points to look at, but they do not obscure the fact that there are problems—especially for particular groups of the population. Teenagers for example, have a distressingly low employment-population ratio.

Representative MITCHELL. Yes. I think we've agreed on those facts in the past, but my question is, is there any indication based on your data that this minuscule drop portends a lasting improvement in the employment situation for minorities?

Ms. NORWOOD. I would hope so, but I don't think there's anything in the data that predicts the future.

Representative MITCHELL. You know, that's generally your answer to me and it's always said with such a pleasant smile that I have to smile, too.

Let me redirect. No, it doesn't portend any lasting improvement in the employment situation for minorities, not at all. I say that because the unemployment rate for minority groups is declining more slowly than they are for whites, and I suppose it still represents the vestiges of racism in this Nation where blacks in an improving economic recovery situation are still the last to be hired or rehired.

So I frankly am not going to be very optimistic about this tiny, little percentage drop reflecting any long-term, lasting improvement in the employment situation for minorities.

I had one last question and then I'll stop. Of the overall black unemployment rate, what percentage of that is black youth unemployment, which we haven't even touched? We just let that sort of sit there and cluck and moan.

Ms. NORWOOD. Well, it's roughly 400,000 of 2.2 million—a little less than 20 percent.

Representative MITCHELL. I particularly wanted to raise that issue because every time we talk about black youth unemployment, that is not the sole, exclusive problem in my community. The problem is with the breadwinner, the adult who's out of work.

Well, what can I say except thank you for giving me what I consider not at all news of sufficient magnitude to promote smiles and conviviality and euphoria. I guess we'll just hang in there and pray and hope that something will happen. Let's hope that the Senate, for example, would act on the jobs bill which now languishes before it. That would help a half-million people immediately.

Thank you very much, Commissioner.

Representative LUNGREN. Thank you, Congressman Mitchell. I thought we had somewhat of an agreement before we started that I wouldn't be too optimistic if you wouldn't be too pessimistic.

Representative MITCHELL. But you broke the agreement.

Representative LUNGREN. I tried to contain my optimism. When all is said and done, it seems to me going from 10.8 percent unemployment to 9.3 unemployment in less than a year is one of the fastest drops in unemployment we've had.

Since you were constrained to comment on the jobs bill, I would just mention that—well, let me just ask this question to Ms. Norwood.

Illegal aliens or undocumented workers are viewed by some as somewhat of a problem with respect to taking low-skilled jobs away from American workers.

Do we have any data on that? Is there any way that your Bureau has attempted to quantify that to this point?

Ms. NORWOOD. We've thought about those problems a great deal and, in fact, we have discussed some of them with statisticians in other countries who have many of the same kinds of problems. We do not, however, and I think quite rightly, ask people in the household survey whether they are here illegally or not. We think we would not get very good data if we did.

Representative LUNGREN. You probably don't have the legal right to do so.

Ms. NORWOOD. We leave the task of determining the numbers of illegal aliens to the Immigration and Naturalization Service.

Representative LUNGREN. Based on your experience in this field, do you have any opinion as to whether there is some impact on unemployment in this country by virtue of the fact that we have a not insignificant number of undocumented workers here?

Ms. NORWOOD. Certainly. The more illegals we have who are looking for work is bound to have an impact on unemployment. That's about all I would be prepared to say; the rest would be pure speculation.

Representative LUNGREN. My other hat that I wear on the House side, I'm the ranking Republican on the Immigration Subcommittee of the House Judiciary Committee, and I'm not one of those who believes there's a one-for-one loss of jobs for every person who's here working on an undocumented basis, but I have no doubt that it is not an insignificant problem, and, with that, it just causes me to reflect on the decisions of the Speaker of the House this last week to unilaterally not allow us to deal with the immigration issue at all for expressed political purposes.

If we're serious about this—and I know the gentleman from Maryland is as serious about this as I am—it seems to me Congress has to get to the place where we're going to deal with that issue for any number of reasons, including the unemployment problem.

I would be happy to yield to the gentleman.

Representative MITCHELL. Yes; it is a problem that I'm concerned with, and I'm delighted to hear you say there's not necessarily a one-to-one displacement rate for immigration.

When you brought up that issue, it triggered my thinking of what is taking place in terms of the character of America? We're now trying to figure out how we can prevent people from coming

into this country to get jobs. We have a capacity, if we would but use it, to hire almost as many people as we can if we would but use it.

When we take this kind of posture, it seems to me, once again, to be reflecting on a very subtle change in the American character, a change from "Give me your tired and your poor," to "Close the door." And I am not aiming specifically at you on this; it's just that I am concerned about these subtle changes that are taking place in our thinking and in our practices.

Representative LUNGREN. I appreciate the gentleman's remarks. I would just suggest that we have had a 26 percent increase in employment in this country from 1970 to 1982. Japan has been almost 11 percent. West Germany has had a decrease in employment. We have taken in more refugees than any country on the face of the earth. We continue to do that. We take a lead in internationalizing the refugee effort, and no country has done a better job on that.

I don't think we've changed in character. I think we've just realized that a sovereign nation has to control its borders.

Madam Commissioner, we talked a bit about the discouraged workers and you had cautioned us at the beginning of this year, as we started to see the first signs of decline in the unemployment figures, that as a recovery is coming on, we see the phenomena of the encouraged worker. So we have to realize that oftentimes as the recovery does occur we should not be surprised to see an upturn in the unemployment rate on a month-to-month basis because of the number of workers going into the job market.

Since, as I understand from the figures we received from the Bureau of Labor Statistics, we have had an increase of 5.1 million jobs unadjusted since January, and the adjusted figure is about 3 million—

Ms. NORWOOD. Employment—seasonally adjusted—has increased 2.8 million since January.

Representative LUNGREN. 2.8 million. Is some of that difference made up in the encouraged workers, those that have begun looking for jobs who were not looking for jobs at the time when the unemployment figures were the highest?

Ms. NORWOOD. Well, as I indicated earlier in the discussion, there has been a reduction of about 240,000 in the number of discouraged workers since the fourth quarter of 1982.

Clearly, the job growth that we have had has been large enough to take care of the discouraged and other persons who have come into the labor force. The labor force has been growing, but it does not grow evenly each month, at least as measured in the survey, so one needs to look at labor force expansion over some longer period of time. We have had considerable labor force growth in recent months.

The recovery has been certainly more vigorous than most of the economic forecasters had anticipated and there has been a larger number of people finding jobs than we have had at comparable points in prior recovery periods.

Representative LUNGREN. When you indicated that the labor force growth has not been as large as in some previous recoveries, is any of that explained in part by some observations you had made at previous appearances before the committee about this

country having passed the crest of the baby boom entrants into the job market and the significant acceleration of women's entry into the job market, over the last decade or decade and a half?

In other words, if I understood those comments correctly, we would see not quite the same increase in overall labor force growth in the near future as we have in the recent past because we have passed the zenith of those two phenomena.

Ms. NORWOOD. We certainly have passed the zenith of one of them, and that is the growth of teenagers in the labor force. Past birth rates have now resulted in fewer teenagers in the population, and, correspondingly, we have had a decline over the year in the teenage labor force of roughly 300,000.

We are still seeing women entering the labor force in large numbers. Perhaps a somewhat smaller rate of increase may occur than had occurred during the 1960's and 1970's, but very clearly those who enter are there to stay, with many more expected to be coming in.

Over the last year, we had an increase of close to 1.2 million adult women entering the labor force and about 800,000 adult men.

Representative LUNGREN. Well, I understand those observations. I'm just trying to find out whether that has any impact whatsoever on our expectations for the labor force growth in this recovery period or beyond. In other words, when we say this labor force growth is not as good as it has been in some recoveries, ought we to take into consideration at least the war baby boom entrants, and not that women are going to enter the job market at lesser rates, but the rate of growth may not be accelerating?

Ms. NORWOOD. Yes, certainly. We also have to take into account the possibility that people may work longer. Their working lives may be longer in part because of some of the legislation that's been passed, although it has not yet had an effect on these data. But you're quite right in assuming that the strong demographic pressures of the past on the labor force will be less in the future.

Representative LUNGREN. On a quarterly basis, what trends exist in the number of workers laid off since the third quarter of 1982?

Ms. NORWOOD. The number of workers laid off dropped considerably over the year, and in fact, again this month. The number of job losers is also down considerably, as one would expect, since the recovery is well underway.

I don't have the figures on a quarterly basis, but I do have them here on a monthly basis. The number of job losers this month, for example, dropped 200,000, while the number of people who have been laid off temporarily waiting to be recalled fell by about 70,000. In fact, there are now about 1.6 million people on layoff as distinct from people who have been terminated completely; this compares with about 2.6 million a year ago.

Representative LUNGREN. I recall, I believe, at one of your previous appearances before this committee that you mentioned the automobile industry and the changes that are taking place there.

Do you have the most recent figures of what the unemployment rate is in this industry, and the numbers working?

Mr. PLEWES. In the automobile industry, the employment level for September was 789,000, well above the recession low. The un-

employment rate in autos was 11.9 percent last month. It had been as high as 24.9 percent in November 1982.

Representative LUNGREN. So the trend of the job recovery in the auto industry that you articulated in an appearance 2 months ago has continued. While it may not be as significant an increase over that period of time, it has continued somewhat to bring the unemployment rate down?

Ms. NORWOOD. Yes, that's true. We have recovered somewhere nearly 90 percent of the 1981-82 recession loss in the auto industry.

I think people get a bit confused about this because we must recognize that the level that we're talking about at the beginning of the recession was considerably below the level of employment in the automobile industry in 1979. Even though we are closer to the level of employment of July 1981, when this last recession began, we are considerably below the employment levels that were in place in 1979. So there has been a general long-term trend downward.

Representative LUNGREN. That's absolutely consistent with the figures that have come out for production. Even though automobile manufacturers in the United States are coming back up and will continue to come back up versus where they were before the recession, they are not coming back to the levels we had, I guess, in 1979.

Ms. NORWOOD. Yes.

Representative LUNGREN. Congressman Mitchell.

Representative MITCHELL. I just have one last question.

In another one of those "Perils of Pauline" scenarios that occur far too frequently in government, last night we acted belatedly to protect jobless workers in terms of unemployment compensation benefits.

What proportion of the jobless workers are covered by unemployment insurance?

Ms. NORWOOD. About 33 percent.

Representative MITCHELL. 33 percent. And you're telling me—

Ms. NORWOOD. That's the total receiving unemployment insurance benefits.

Representative MITCHELL. That's the total. Then, the other 66 percent are making it somehow or other in terms of charities. There are no benefits really coming to that other 66 percent, is that correct?

Ms. NORWOOD. No unemployment insurance benefits. There may be other benefits from other programs.

Representative MITCHELL. Food stamps.

Ms. NORWOOD. In general, the definition of unemployment includes not only those who are entitled to unemployment insurance benefits—that is, those that have worked before—but also reentrants to the labor force and new entrants to the labor force who may not have any qualifications for UI benefits.

Representative MITCHELL. That was my last question. I will think about the 66 percent.

Representative LUNGREN. Madam Commissioner, it's kind of difficult at times to deal with this whole issue because, on the one hand, we are here very seriously concerned about the problem of

unemployment, and no one wants to suggest that it's not a continuing problem and that we do want to make the right decisions to try and solve the problems we see before us.

At the same time, in other hearings we have under the auspices of this committee, we have some labor market analysts foreseeing labor shortages in the near future because of the dropoffs of entrants into the job market.

In your opinion, is there any validity to that view and, if there is, how do we stack that view up against the continuing problems that we have with unemployment in this country?

Ms. NORWOOD. Most of the discussions that I've seen, Congressman, refer to shortages for particular occupations rather than for the labor force as a whole. It is really very difficult to determine with accuracy many years ahead exactly how many engineers or welders may be needed by the country, since, as I'm sure you are more aware than I, policy decisions affect these needs. An example would be the extent of defense buildup and things of that sort, which can change over time. So I think it is really very difficult to predict. I do think that there has been a great deal of emphasis lately on some of the new technologies and there has been some concern expressed by many that there may be shortages in one of several occupations related to some of those new technologies.

Our work—and we do have a program in the Bureau of Labor Statistics which monitors future occupational requirements—is carefully stated and we do see some occupational deficiencies. However, we have not identified large groups for which there will be shortages. I think the supply and the demand are very difficult to combine.

Representative LUNGREN. Well, Madam Commissioner, if I were to suggest to you that there are 1.5 to 6 million people in the labor force that were not being counted for one reason or another, would that cause you concern about the statistics we have on employment and unemployment and the credibility with which we could make decisions based on those figures?

Ms. NORWOOD. It certainly would. But I think that you are referring to something a little bit different, and that is what we often call an off-book economy or the underground economy where the people who perhaps tell us they are not employed really are working but are not classified as such for tax purposes or for some other reason.

We have done a very careful review of the techniques that we use for data collection in each of our programs in the Bureau. And Mr. Plewes and I are going to an OECD meeting for a working party that I chair on employment and unemployment measurement issues on which all countries of the OECD are concerned with this kind of issue.

Our work suggests that in terms of the employment, unemployment, productivity, price, and other measures that we are responsible for, that the estimates that have been made are not based upon very reliable data. So I don't think there's any proof one way or another.

Now I am not speaking to the subject of the shortfall in tax revenue and I am not speaking to the gross national product, but rather to the kinds of surveys that we conduct.

There may be some workers who are offbook, but we don't have any way of getting at that and I don't see any evidence that it is indeed a very large problem.

In the household survey, we believe that we are picking up most of the people who are in the labor force. We are very careful about the confidentiality of the data. The Census Bureau, who works with the Bureau of Labor Statistics on the survey, has a very good reputation with people. We find that people are responsive in the household survey, and we think we are getting at least most of the people who are indeed out there looking for work.

In the establishment survey, we are getting people who are on the payroll; people who are not on the payroll are not being counted.

Representative LUNGREN. On an acknowledged payroll?

Ms. NORWOOD. Yes.

Representative LUNGREN. That's a very interesting comment that you had on that. That was one area I had been thinking about, but I was thinking more specifically—returning to the subject we mentioned before—of the question of undocumented workers in this country. The best estimates run from 3 to 12 million that I've been able to find. That shows you how uncertain we are as to those numbers.

If you were only to assume that 50 percent of those who are working, because some are under age and going to school and so forth, you're talking about 1.5 to 6 million.

Now if they are counted in your survey through the household surveys, that would give us some data as to who are working and who are not. But in terms of Members of Congress making intelligent decisions as to how we deal with the unemployment problem—how we reach the question of the unskilled, how we train those who are in transition—it's like a whole universe out there that we don't know about.

When you talk about discouraged workers, I'm a discouraged worker, having worked for 5 years in the vineyard of immigration, and now being told by the Speaker of the House that it's not a national problem and there's no national constituency and we ought not to worry about it.

So even though you didn't direct your comments to that, there still is the suggestion that we have 1.5 to 6 million undocumented workers in this country—and believe me, I think most of them who are working are good, hardworking people. My question is how do we solve the unemployment problem in this country for the people who are here? It discourages me as a policymaker to know that we don't have a handle on that problem.

I'm not criticizing you because I know you can't ask that question. We couldn't ask that question under the census. Under the Carter administration we funded a survey of the situation of the people who were here legally working and illegally working, and then got into a big hassle with the people contracted to do it and ended up paying \$1 million and never got any figures back.

Ms. NORWOOD. That never happens with the Bureau of Labor Statistics Congressman Lungren.

Representative LUNGREN. It had nothing to do with the Bureau of Labor Statistics.

Ms. NORWOOD. We have never been appropriated funding for \$1 million for such a survey.

Representative LUNGREN. I may have overextended what the exact amount was. All I know is that whatever was paid, we got zapped for it, and we had some attorneys in the executive branch who thought it was better to sue for what we were trying to get and they got it tied up in court. So now by the time we get the statistics they will be invalid, which doesn't seem to me to make a whole lot of sense. It may employ some people to go out and take invalid statistics, but I'm not sure it really helped us in the long run.

Ms. NORWOOD. Let me just say, Congressman, that I think we should be careful to understand that the statistical agencies within the U.S. Government, for the most part, really do a very good job.

Representative LUNGREN. I have no doubt about that.

Ms. NORWOOD. I think they collect valid data.

Representative LUNGREN. I have no doubt about that. I'm just suggesting that the manner in which we make decisions may be affected by virtue of the fact that we do not allow you to ask some of the questions that ought to be asked so we could have the data upon which to make rational decisions. We are dealing with a serious problem of unemployed people in this country and we are trying to make some rational decisions as decisionmakers elected by the people, but when we have closed our eyes to a whole element of it that may have some keys to some questions that would help us and help all those people who are here without benefit of papers as well as those who are here with benefit of papers and those who are born here—we may be fooling ourselves as to answering some of those tough questions.

I'm not criticizing your Bureau at all. I hope you understand that. I'm criticizing the institution of which I am a Member, the House of Representatives.

I want to thank you again for your testimony. We appreciate you coming up here on a monthly basis to give us the news, on the national employment situation. With all due respect to my friend from Maryland, I'd like to view this as slightly optimistic and I'll try and contain my optimism. Thank you very much. The committee stands adjourned.

[Whereupon, at 10:25 a.m., the committee adjourned, subject to the call of the Chair.]

## EMPLOYMENT-UNEMPLOYMENT

FRIDAY, NOVEMBER 4, 1983

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 9:40 a.m., in room SD-628, Dirksen Senate Office Building, Hon. Chalmers P. Wylie (member of the committee) presiding.

Present: Representatives Wylie, Lungren, Snowe, and Mitchell; and Senator Proxmire.

Also present: James K. Galbraith, deputy director; Charles H. Bradford, assistant director; and Mary E. Eccles and Christopher J. Frenze, professional staff members.

### OPENING STATEMENT OF REPRESENTATIVE WYLIE, PRESIDING

Representative WYLIE. I want to welcome you back to the Joint Economic Committee, Ms. Norwood, and this is the 11th month in a row that you've brought us good news. This month the news is particularly good. The unemployment rate has dropped by one-half point I understand. Month after month, the number of Americans with jobs has increased. Month after month, the number of Americans without jobs has decreased. And during this 11-month period, the unemployment rate has fallen 1.9 percentage points.

The simple fact is this: for the American worker, this is the best economic recovery we've had in 30 years. More Americans have found jobs in the last 11 months than at the same stage in any economic recovery since 1950.

The number of Americans without jobs has declined faster in the last 11 months than in any of the six previous economic recoveries.

The unemployment rate has fallen farther in the last 11 months than in any recovery over the past 30 years. The unemployment rate declined again in October and now stands at just 8.8 percent.

This is a remarkable record of accomplishment. Still, every month for the past 11 months, we've heard voices of doom complaining that this economic recovery has helped Wall Street but not Main Street. Some pessimists seem to feel it's their duty to minimize the accomplishments we've made. They just keep glooming and dooming, while the economy keeps on booming.

Well, we all know that too many Americans who want jobs still can't find them. That's what we all want to correct. But let's not allow that fact to make us forget the progress we've already made.

Ms. NORWOOD, we look forward to your analysis of what contin-

ues to be very strong improvement in the employment picture. And if you have any modification or anything to say about my statement that you don't think is accurate, I'd be glad to hear that, too. Thank you very much and welcome to the committee this morning, and we will now hear your testimony.

**STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS; AND KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS**

Ms. NORWOOD. Thank you very much, Congressman Wylie. I'd first like to introduce Mr. Dalton, who is our price expert, on my right; and Mr. Plewes, on my left, who is our employment-unemployment expert. I am very pleased, as always, to have an opportunity to offer the Joint Economic Committee a few comments on the data we released this morning.

The labor market continued to improve in October. Unemployment was down sharply—to 9.9 million, seasonally adjusted—and the number of payroll jobs increased substantially. The overall unemployment rate, which includes the resident Armed Forces in the labor force base, was 8.7 percent, down from 9.1 percent in September. The civilian worker rate was 8.8 percent, down from 9.3 percent in the prior month. Both measures were 2 full percentage points below their December 1982 recession highs.

The large decline in unemployment was shared by most worker groups, especially those over 25 years of age who work full time and persons who had lost their last job. Jobless rates declined for both adult men and women and for both whites and blacks.

As the recovery continues, long-term unemployment declines. The number of persons unemployed for 6 months or longer fell sharply in October, reducing to 2.3 million the number experiencing very long-term unemployment. In addition, there was a reduction in the number of persons who entered the unemployment stream in October—those in the less than 5 weeks duration category. The number of persons working part time for economic reasons also declined. Since December, the number in this group has declined by three-quarters of 1 million.

The number of payroll jobs increased by 320,000 in October, with particular strength in durable goods manufacturing, services, and construction. Every durable goods industry registered an increase, with particularly large ones occurring in transportation equipment, electrical equipment, machinery, and fabricated metals.

The widespread nature of this over-the-month increase, on top of a fairly large upward revision in our preliminary estimates for September, show an underlying strength in the employment recovery. Since December, the manufacturing and the services industries have each posted employment increases of more than 800,000; together they account for about 70 percent of total job growth over the period. In the case of manufacturing where the recessionary job loss was especially steep, however, the increase since December represents only about 40 percent of the employment decline during the recession.

The factory workweek fell two-tenths of an hour in October following a fairly sustained period of increase. The strong increase in manufacturing employment for the month suggests that some employers may have added workers instead of extending working hours.

While total employment, as measured by the household survey, showed no change in October, both surveys have registered strong employment growth over the recovery period. Since December 1982, payroll jobs have grown by 2.4 million, while total civilian employment has grown by 2.8 million. As we have discussed before, the two surveys do not have identical coverage. After accounting for conceptual differences, the two surveys track pretty closely over the recovery period as a whole. For example, included in the household survey but not in the business survey are agricultural workers, the self-employed and private household workers, as well as persons on unpaid absences from their jobs. The December 1982-October 1983 changes in these groups account for virtually the entire difference between the two surveys. Self-employment has been particularly strong, rising by 370,000 over the period.

In October, the labor force declined by about half a million. Why? In the past, I have discussed with this committee the volatility of the monthly change in the household survey and our view that its employment count may have been somewhat overstated during the recovery. Our experience suggested that a reduction in this employment count could be anticipated, and the data for October suggest that such a reduction has taken place. Employment and unemployment are estimated separately in the household survey. We get the labor force by adding together the separate employment and unemployment counts; so, if employment were somewhat overstated and later reduced, the result would change the employment totals and the labor force count, but not the number of unemployed.

My interpretation of the data released this morning is that the drop in unemployment in October was accompanied by a real increase in employment. This is supported by a real increase in employment. This is supported by the sharp rise in jobs in the payroll survey as well as by the employment increase for workers 25 years of age and over in the household survey.

The improvements in the labor market that have occurred during the current recovery compare quite well with prior business cycles. In particular, unemployment rates have declined more sharply and employment-population ratios have risen more substantially than have generally occurred in the past. Nevertheless, the labor force has grown more slowly, the number of payroll jobs is still below prerecession levels and the unemployment rate remains quite high.

In summary, the October statistics released today indicate that the labor market remains on a strong upward course. While total employment was unchanged in the household survey, several other

important employment measures improved. In particular, the data show that sharp declines in unemployment were accompanied by strong gains in payroll jobs.

#### OCCUPATIONAL SAFETY AND HEALTH SURVEY RESULTS

In addition to the employment situation, I would like to comment briefly on the results of the Bureau of Labor Statistics' annual survey of occupational safety and health, the data for which were also released this morning. The news is good. This survey, which provides data for the full calendar year, shows the rate of job-related injuries and illnesses in 1982 to be 7.7 per 100 full-time workers, down from 8.3 in the previous year. Hours worked in the 1982 recession year were, of course, considerably lower than in 1981, especially in such high risk industries as mining, construction, and manufacturing. However, if we were to assume for 1981 the same hours of exposure as for 1982—for each industry division—the decline in the overall incidence rate from 1981 to 1982 would have been only 0.1 lower—0.5 rather than 0.6.

From 1981 to 1982, the number of job-related injuries dropped by nearly 530,000 cases with declines occurring both in injuries involving lost worktime as well as those with no time loss. The lost worktime rate dropped from 3.7 per 100 full-time workers to 3.4. The average number of workdays lost per injury, however, was up one day from 1981 to 1982. The overall job-related injury and illness incidence rate has declined steadily since 1979 and is now at its lowest level since the series began in 1972.

Congressman Wylie, my colleagues and I will be glad to try to answer any questions you may have.

[The table attached to Ms. Norwood's statement, together with the press release referred to, follows:]

#### UNEMPLOYMENT RATES OF ALL CIVILIAN WORKERS BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method						X-11 method (official method before 1980)	Range (cols. 2-8)
		Official procedure	Concurrent	Stable	Total	Residual	12-month extrapolation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1982:									
October .....	9.9	10.5	10.5	10.6	10.5	10.3	10.5	10.5	0.3
November .....	10.4	10.7	10.7	10.9	10.7	10.6	10.7	10.8	.3
December .....	10.5	10.8	10.8	11.1	10.9	10.8	10.8	11.1	.3
1983:									
January .....	11.4	10.4	10.4	10.2	10.4	10.7	10.4	10.3	.5
February .....	11.3	10.4	10.4	10.1	10.4	10.8	10.4	10.3	.7
March .....	10.8	10.3	10.4	10.2	10.3	10.5	10.3	10.3	.3
April .....	10.0	10.2	10.3	10.3	10.4	10.1	10.2	10.2	.3
May .....	9.8	10.1	10.3	10.6	10.2	10.0	10.1	10.2	.6
June .....	10.2	10.0	10.1	9.9	9.8	10.0	10.0	9.9	.3
July .....	9.4	9.5	9.5	9.4	9.3	9.3	9.4	9.3	.2
August .....	9.2	9.5	9.6	9.4	9.5	9.5	9.5	9.4	.2
September .....	8.8	9.3	9.4	9.2	9.3	9.1	9.3	9.2	.3
October .....	8.4	8.8	8.9	9.0	8.9	8.9	8.9	8.9	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, November 1983.

## EXPLANATION OF COLUMN HEADS

(1) *Unadjusted rate*.—Unemployment rate for all civilian workers, not seasonally adjusted.

(2) *Official procedure (X-11 ARIMA method)*.—The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1967 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. A prior adjustment for trend is applied to the extended series for adult male unemployment before seasonal adjustment. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of *Employment and Earnings*.

(3) *Concurrent (X-11 ARIMA method)*.—The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data from the period January 1967 through January 1980.

(4) *Stable (X-11 ARIMA method)*.—Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(5) *Total (X-11 ARIMA method)*.—This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(6) *Residual (X-11 ARIMA method)*.—This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) *12-month extrapolation (X-11 ARIMA method)*.—This approach is the same as the official procedure except that the factors are extrapolated in 12-month intervals. The factors for January-December of the current year are computed at the beginning of the year based on data through the preceding year. The values for January through June of the current year are the same as the official values since they reflect the same factors.

(8) *X-11 method (official method before 1980)*.—The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

*Methods of Adjustment.*—The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in *X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

# News

United States  
Department  
of Labor



Bureau of Labor Statistics

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USDL 83-472  
TRANSMISSION OF MATERIAL IN THIS RELEASE IS  
EMBARGOED UNTIL 8:30 A.M. (EST), FRIDAY,  
NOVEMBER 4, 1983

THE EMPLOYMENT SITUATION: OCTOBER 1983

Unemployment declined markedly in October and the number of nonfarm jobs increased, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate, 8.7 percent, and the rate for civilian workers, 8.8 percent, each fell by about half a percentage point over the month and were 2 points below last December's recessionary highs.

The number of persons on nonagricultural payrolls--as measured by the monthly survey of establishments--rose by 320,000 in October from the revised September level to 91.1 million. Over-the-month advances were particularly strong in construction, durable goods manufacturing, and services. Total civilian employment--as measured by the monthly survey of households--was unchanged in October at 101.9 million. Since last December, both the number of payroll jobs and total civilian employment have risen sharply--by 2.4 and 2.8 million, respectively.

Unemployment (Household Survey Data)

Both the number of unemployed persons and the unemployment rate fell substantially in October. After seasonal adjustment, there were 9.9 million unemployed workers, and the civilian worker unemployment rate was 8.8 percent. Last December, the jobless total was 12.0 million and the civilian worker rate was 10.8 percent.

The October improvement occurred primarily among men and women in the prime working ages--25 to 54 years old--as rates for both teenagers and young adults were about unchanged. Adult women continued to have a much lower jobless rate than adult men. Black and white workers both shared in the overall October decline. The rate for blacks fell to 18.1 percent, while that for whites dropped to 7.7 percent. (See tables A-2, A-3, and A-9.)

Joblessness in those industries which had been hardest hit by the recession--mining, construction, and manufacturing--was substantially reduced in October. The unemployment rate for workers in mining, which had continued to rise in the early stages of the 1983 recovery, fell to 11.3 percent, while joblessness among workers in construction and in manufacturing fell to 15.2 and 9.5 percent, respectively. The latter two rates were at their lowest levels since the early part of the 1981-82 recession. Unemployment among full-time workers also continued to decline. (See table A-6.)

Both the number of short-term unemployed (less than 5 weeks) and very long-term unemployed (6 months and over) fell substantially over the month. As a result, both measures of average duration of unemployment--the mean and the median--were about unchanged at 20.1 and 9.3 weeks, respectively. (See table A-7.) Most of the over-the-month decline occurred among job losers--persons on layoff as well as those who had permanently lost their jobs. There was also a drop in unemployment among persons seeking their first job. (See table A-8.)

After increasing in September, the number of persons working part time for economic reasons fell in October by 440,000 to 5.7 million. The reduction occurred about equally among those who could not find full-time work and those whose hours had been cut back. (See table A-4.)

Civilian Employment and the Labor Force (Household Survey Data)

Following particularly strong advances during the previous 4 months, total civilian employment was about unchanged in October, at 101.9 million, seasonally adjusted. An over-the-month employment gain among persons 25 years and over was offset by a decline among

youth under 25 years of age. Youth employment had risen markedly over the summer on a seasonally adjusted basis.

The civilian labor force, at 111.8 million, was down by 550,000 over the month. Nearly two-thirds of the decline occurred among 16 to 24 year olds. The October level was 1.3 million higher than a year earlier. (See table A-2.)

#### Industry Payroll Employment (Establishment Survey Data)

Total nonagricultural payroll employment rose by 320,000 in October, with two-thirds of the industries in the BLS index of diffusion registering over-the-month increases. At 91.1 million, seasonally adjusted, the number of payroll jobs was 2.4 million higher than last December's recessionary low. In addition to the October increase, there was an unusually large upward revision in the September estimate (285,000); this occurred largely in retail trade and State and local government. (See tables B-1 and B-6.)

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages			Monthly data			Sept.- Oct. change
	1982		1983	1983			
	III	II	III	Aug.	Sept.	Oct.	
<b>HOUSEHOLD DATA</b>							
Thousands of persons							
Labor force 1/.....	112,307	112,825	113,849	113,943	114,063	113,510	-553
Total employment 1/.....	101,283	101,603	103,278	103,245	103,640	103,623	-17
Civilian labor force.....	110,629	111,156	112,168	112,261	112,368	111,815	-553
Civilian employment.....	99,605	99,933	101,598	101,563	101,945	101,928	-17
Unemployment.....	11,025	11,222	10,571	10,699	10,423	9,886	-537
Not in labor force.....	61,893	62,801	62,281	62,179	62,234	62,965	731
Discouraged workers.....	1,638	1,709	1,605	N.A.	N.A.	N.A.	N.A.
Percent of labor force							
Unemployment rates:							
All workers 1/.....	9.8	9.9	9.3	9.4	9.1	8.7	-0.4
All civilian workers.....	10.0	10.1	9.4	9.5	9.3	8.8	-0.5
Adult men.....	9.1	9.4	8.8	8.8	8.7	8.2	-0.5
Adult women.....	8.4	8.5	7.9	8.0	7.8	7.4	-0.4
Teenagers.....	23.9	23.3	22.5	23.0	21.8	21.6	-0.2
White.....	8.8	8.8	8.2	8.2	8.1	7.7	-0.4
Black.....	19.3	20.7	19.5	20.0	19.0	18.1	-0.9
Hispanic origin.....	14.4	14.1	12.8	12.9	13.1	12.3	-0.8
<b>ESTABLISHMENT DATA</b>							
Thousands of jobs							
Nonfarm payroll employment.....	89,316	89,452	90,213p	89,735	90,753p	91,073p	320p
Goods-producing industries.....	23,682	23,341	23,832p	23,830	23,943p	24,167p	224p
Service-producing industries.....	65,635	66,110	66,381p	65,905	66,810p	66,906p	96p
Hours of work							
Average weekly hours:							
Total private nonfarm.....	34.8	35.0	35.1p	35.0	35.2p	35.2p	0p
Manufacturing.....	39.0	40.1	40.4p	40.3	40.8p	40.6p	-0.2p
Manufacturing overtime.....	2.3	2.8	3.1p	3.1	3.3p	3.3p	0p

1/ Includes the resident Armed Forces.  
p-preliminary.

N.A.=not available.

Nearly half of the October increase was in durable goods manufacturing, with employment in every industry rising. The largest job gains took place in the major metals and metal-using industries. Employment also rose in several of the nondurable goods industries, particularly in apparel and rubber and plastics. However, jobs declined in food processing, related to the drought conditions experienced throughout much of the country. Since December, manufacturing employment has increased by nearly 850,000, or about 35 percent of the overall payroll job gain.

Construction employment, at 4.1 million in October, continued the strong growth that has been evident since spring. The over-the-month increase was 50,000, and job gains have totaled 330,000 since March. Growth also continued in mining with an October pickup of 10,000.

In the service-producing sector, there were employment gains in trade (up 55,000) and in services (up 100,000). Since December, the increase in the number of jobs in services has totaled 810,000, while trade has risen by 415,000. There was a comparatively small decline in State and local government, most of which resulted from a teacher's strike.

#### Weekly Hours (Establishment Survey Data)

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls was 35.2 hours, seasonally adjusted, unchanged from September. In manufacturing industries, weekly hours declined 0.2 hour, following a half-hour rise in September. Factory overtime hours, however, held steady at 3.3 hours. The workweek fell 1.0 hour in transportation equipment (following a gain of 1.7 hours in September) and 0.6 hour in textile mill products. Industries with large increases were petroleum and coal products (0.6 hour) and primary metals (0.5 hour). (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers rose 0.6 percent to 108.1 (1977=100), reflecting the increase in employment. The manufacturing index advanced 0.8 percent to 92.8, despite some shortening of the workweek; it was 11.7 percent above last December's low and at its highest point since November 1981. (See table B-5.)

#### Hourly and Weekly Earnings (Establishment Survey Data)

Average hourly and weekly earnings of production or nonsupervisory workers both increased in October by 0.6 percent, seasonally adjusted. Prior to seasonal adjustment, average hourly earnings were up 4 cents to \$8.15, and average weekly earnings rose \$1.42 to \$287.70. Since last October, average hourly earnings have risen by 36 cents and average weekly earnings by \$17.39. (See table B-3.)

#### The Hourly Earnings Index (Establishment Survey Data)

The Hourly Earnings Index (HEI) was 156.8 (1977=100) in October, seasonally adjusted, 0.5 percent higher than in September. For the 12 months ended in October, the increase (before seasonal adjustment) was 4.1 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements--fluctuations in overtime in manufacturing and interindustry employment shifts. In dollars of constant purchasing power, the HEI increased 1.2 percent during the 12-month period ended in September. (See table B-4.)

## Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 189,000 establishments employing about 36 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

### Coverage, definitions and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Also included among the unemployed are persons not looking for work because they were laid off and waiting to be recalled and those expecting to report to a job within 30 days.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special

grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

----The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

----The household survey includes people on unpaid leave among the employed; the establishment survey does not;

----The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

----The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

### Seasonal adjustment

Over a course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all

employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

#### Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 335,000; for total unemployment it is 240,000; and, for the overall unemployment rate, it is 0.21 percentage point. These figures do not mean that the sample results are off by these

magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .29 percentage point; for teenagers, it is 1.28 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

#### Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for \$6.00 per issue or \$39.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

*Employment and Earnings* also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

Employment status and sex	Not seasonally adjusted			Seasonally adjusted <sup>a</sup>					
	Oct. 1962	Sept. 1963	Oct. 1963	Oct. 1962	June 1963	July 1963	Aug. 1963	Sept. 1963	Oct. 1963
<b>TOTAL</b>									
Noninstitutional population <sup>b</sup> .....	174,549	176,297	176,474	174,549	175,793	175,970	176,122	176,297	176,474
Labor force <sup>c</sup> .....	112,435	115,892	113,737	112,420	113,600	113,539	113,943	114,063	113,510
Participation rate <sup>d</sup> .....	64.4	64.6	64.4	64.4	64.6	64.5	64.7	64.7	64.3
Total employed <sup>e</sup> .....	101,493	104,061	104,354	100,884	102,454	102,969	103,245	103,640	103,423
Employment-population ratio <sup>f</sup> .....	58.1	59.0	59.1	57.8	58.3	58.5	58.6	58.8	58.6
Resident Armed Forces.....	1,400	1,495	1,695	1,668	1,668	1,464	1,682	1,655	1,695
Civilian employed.....	99,825	102,366	102,659	99,176	100,786	101,285	101,563	101,985	101,728
Agriculture.....	3,018	3,542	3,407	3,413	3,522	3,527	3,469	3,290	3,202
Nonagricultural Industries.....	96,207	98,825	99,252	95,763	97,264	97,758	98,074	98,655	98,726
Unemployed.....	10,942	9,830	9,383	11,576	11,146	10,590	10,659	10,423	9,886
Unemployment rate <sup>g</sup> .....	7.7	8.6	8.2	10.3	9.8	9.3	9.4	9.1	8.7
Not in labor force.....	62,114	62,405	62,737	62,129	62,193	62,431	62,179	62,234	62,965
<b>Men, 18 years and over</b>									
Noninstitutional population <sup>b</sup> .....	83,343	84,261	84,344	83,323	84,014	84,099	84,173	84,261	84,344
Labor force <sup>c</sup> .....	63,893	64,566	64,444	64,300	64,816	64,864	64,816	64,944	64,690
Participation rate <sup>d</sup> .....	76.7	76.6	76.4	77.2	77.1	77.1	77.0	77.1	76.7
Total employed <sup>e</sup> .....	57,727	59,158	59,236	57,856	58,464	58,625	58,570	58,826	58,912
Employment-population ratio <sup>f</sup> .....	69.3	70.2	70.2	69.0	69.6	69.7	69.6	69.0	69.8
Resident Armed Forces.....	1,524	1,549	1,543	1,524	1,525	1,521	1,538	1,549	1,543
Civilian employed.....	56,403	57,609	57,693	56,332	56,939	57,104	57,032	57,277	57,369
Unemployed.....	6,172	5,408	5,208	6,844	6,351	6,238	6,244	6,118	5,778
Unemployment rate <sup>g</sup> .....	9.7	8.4	8.1	10.6	9.4	9.6	9.6	9.4	8.9
<b>Women, 18 years and over</b>									
Noninstitutional population <sup>b</sup> .....	91,226	92,036	92,129	91,226	91,779	91,871	91,949	92,036	92,129
Labor force <sup>c</sup> .....	48,536	49,325	49,292	48,120	48,784	48,675	49,130	49,119	48,819
Participation rate <sup>d</sup> .....	53.2	53.4	53.5	52.7	53.2	53.0	53.4	53.4	53.0
Total employed <sup>e</sup> .....	41,766	44,904	45,118	43,368	43,990	44,324	44,675	44,814	44,712
Employment-population ratio <sup>f</sup> .....	45.8	48.8	49.0	47.6	47.5	48.2	48.6	48.7	48.5
Resident Armed Forces.....	144	146	152	143	143	144	144	146	152
Civilian employed.....	41,622	44,758	44,966	43,224	43,847	44,181	44,531	44,668	44,560
Unemployed.....	4,771	4,422	4,174	4,732	4,795	4,551	4,455	4,305	4,108
Unemployment rate <sup>g</sup> .....	9.8	9.0	8.5	9.8	9.8	8.9	9.1	8.8	8.4

<sup>a</sup> The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>b</sup> Includes members of the Armed Forces stationed in the United States.

<sup>c</sup> Labor force as a percent of the noninstitutional population.

<sup>d</sup> Total employment as a percent of the noninstitutional population.

<sup>e</sup> Unemployment as a percent of the labor force (including the resident Armed Forces).

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
<b>TOTAL</b>									
Civilian noninstitutional population	172,681	174,602	178,779	172,681	174,125	174,306	174,460	174,602	174,779
Civilian labor force	110,767	112,197	112,042	110,752	111,932	111,875	112,261	112,368	111,815
Participation rate	64.1	64.3	62.8	64.1	64.3	64.2	64.4	64.4	64.0
Employed	93,825	102,346	102,659	99,176	100,786	101,285	101,563	101,945	101,928
Employment-population ratio <sup>2</sup>	57.7	58.6	57.4	57.4	57.9	58.1	58.2	58.4	58.3
Unemployed	16,942	9,830	5,383	11,576	11,146	10,590	10,699	10,423	9,886
Unemployment rate	15.3	8.6	4.7	10.5	10.0	9.5	9.5	9.3	8.8
<b>Men, 20 years and over</b>									
Civilian noninstitutional population	73,984	75,115	75,216	73,984	74,814	74,927	75,014	75,115	75,216
Civilian labor force	50,193	58,954	58,919	58,363	58,804	59,016	58,945	59,053	58,947
Participation rate	76.7	78.5	78.3	78.5	78.4	78.6	78.6	78.6	78.4
Employed	51,056	54,444	54,580	52,449	53,516	53,808	53,771	53,928	54,121
Employment-population ratio <sup>2</sup>	71.7	72.5	72.6	71.2	71.5	71.8	71.7	71.8	72.0
Agriculture	2,054	2,587	2,511	2,444	2,529	2,548	2,496	2,431	2,362
Nonagricultural industries	50,445	51,857	52,069	50,205	50,987	51,264	51,275	51,497	51,758
Unemployed	5,137	4,510	4,335	5,714	5,288	5,208	5,174	5,125	4,826
Unemployment rate	6.5	7.6	7.4	9.6	9.0	8.8	8.8	8.7	8.2
<b>Women, 20 years and over</b>									
Civilian noninstitutional population	83,271	84,333	84,443	83,271	84,008	84,122	84,224	84,333	84,443
Civilian labor force	49,448	45,467	45,505	43,936	44,448	44,685	45,003	45,132	44,930
Participation rate	59.4	53.9	53.9	52.8	53.1	53.1	53.4	53.5	53.2
Employed	49,086	41,887	42,088	40,112	40,789	41,164	41,394	41,614	41,583
Employment-population ratio <sup>2</sup>	49.7	48.6	48.6	48.2	48.6	48.5	48.1	48.3	48.2
Agriculture	848	643	635	578	636	607	630	574	581
Nonagricultural industries	39,946	41,204	41,453	39,538	40,153	40,557	40,764	41,040	41,002
Unemployed	3,882	3,620	3,417	3,824	3,659	3,521	3,609	3,518	3,347
Unemployment rate	8.7	8.0	7.5	8.7	8.6	7.9	8.0	7.8	7.4
<b>Both sexes, 16 to 19 years</b>									
Civilian noninstitutional population	15,425	15,154	15,120	15,625	15,303	15,257	15,204	15,154	15,120
Civilian labor force	4,106	7,776	7,618	8,453	8,480	8,173	8,313	8,184	7,938
Participation rate	51.9	51.3	50.4	54.1	55.4	53.6	54.7	54.0	52.5
Employed	4,182	6,075	5,991	6,415	6,481	6,313	6,397	6,404	6,225
Employment-population ratio <sup>2</sup>	39.0	40.1	39.6	41.1	42.4	41.8	42.1	42.3	41.2
Agriculture	389	312	281	391	357	376	362	285	259
Nonagricultural industries	5,794	5,764	5,710	6,024	6,128	5,937	6,035	6,119	5,966
Unemployed	1,924	1,700	1,627	2,038	1,999	1,860	1,916	1,780	1,713
Unemployment rate	45.7	21.9	21.4	24.1	23.6	22.8	23.0	21.8	21.6

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted				Seasonally adjusted <sup>1</sup>					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	
<b>WHITE</b>										
Civilian noninstitutional population	149,636	151,021	151,175	149,836	150,810	150,559	151,003	151,021	151,175	
Civilian labor force	98,479	97,405	97,526	96,452	97,250	97,341	97,602	97,605	97,300	
Participation rate	66.2	64.5	64.5	64.4	64.5	64.6	64.8	64.6	64.4	
Employed	86,185	90,158	90,532	87,477	88,880	89,382	89,573	89,719	89,798	
Employment-population ratio <sup>2</sup>	58.6	59.7	59.9	58.4	58.9	59.2	59.3	59.4	59.4	
Unemployed	8,334	7,327	6,994	8,976	8,370	7,959	8,029	7,885	7,502	
Unemployment rate	6.6	7.5	7.2	9.3	8.6	8.2	8.2	8.1	7.7	
<b>Men, 20 years and over</b>										
Civilian labor force	51,302	51,829	51,867	51,499	51,771	51,919	51,888	51,913	51,902	
Participation rate	79.1	78.9	78.8	79.4	79.4	79.0	79.0	79.0	78.9	
Employed	47,259	48,343	48,538	46,987	47,710	47,935	47,892	47,866	46,301	
Employment-population ratio <sup>2</sup>	73.0	73.6	73.8	72.4	72.7	73.0	72.8	72.9	73.1	
Unemployed	3,943	3,486	3,333	4,512	4,060	3,984	3,997	4,049	3,800	
Unemployment rate	7.7	6.7	6.4	8.8	7.8	7.7	7.7	7.8	7.3	
<b>Women, 20 years and over</b>										
Civilian labor force	46,613	38,816	38,933	37,532	38,124	38,242	38,433	38,540	38,427	
Participation rate	32.6	32.3	32.4	32.1	32.6	32.6	32.8	32.9	32.9	
Employed	35,722	36,203	36,488	34,463	35,287	35,790	35,883	35,987	35,016	
Employment-population ratio <sup>2</sup>	48.6	49.7	50.0	48.1	48.6	49.1	49.3	49.4	49.4	
Unemployed	2,649	2,612	2,450	2,869	2,837	2,574	2,550	2,553	2,411	
Unemployment rate	7.9	6.7	6.3	7.8	7.4	6.7	6.7	6.6	6.3	
<b>Both sexes, 16 to 18 years</b>										
Civilian labor force	7,164	6,840	6,726	7,422	7,355	7,180	7,281	7,151	6,971	
Participation rate	52.3	54.7	54.0	57.3	58.2	57.1	58.0	57.2	56.0	
Employed	5,065	5,611	5,515	5,827	5,883	5,779	5,839	5,868	5,681	
Employment-population ratio <sup>2</sup>	43.7	44.9	44.3	45.0	46.5	45.9	46.5	47.0	45.6	
Unemployed	1,501	1,229	1,211	1,595	1,472	1,401	1,442	1,283	1,290	
Unemployment rate	20.5	18.0	18.0	21.5	20.0	19.5	19.8	17.9	18.5	
Men	22.0	17.9	19.2	23.0	19.8	20.4	21.1	18.7	20.1	
Women	19.6	18.0	16.7	19.9	20.2	18.5	18.4	17.1	16.7	
<b>BLACK</b>										
Civilian noninstitutional population	18,692	18,594	19,026	18,692	18,911	18,942	18,966	18,994	19,026	
Civilian labor force	11,462	11,758	11,582	11,398	11,783	11,764	11,745	11,729	11,502	
Participation rate	61.3	61.9	60.9	61.0	62.3	62.1	61.9	61.7	60.5	
Employed	7,162	9,553	9,502	9,102	9,352	9,469	9,358	9,500	9,420	
Employment-population ratio <sup>2</sup>	49.1	50.3	49.9	48.7	49.5	50.0	49.0	50.0	49.5	
Unemployed	4,280	2,201	2,080	2,296	2,432	2,295	2,347	2,224	2,082	
Unemployment rate	19.5	18.7	18.0	20.1	20.6	19.5	20.0	19.0	18.1	
<b>Men, 20 years and over</b>										
Civilian labor force	5,428	5,565	5,515	5,390	5,597	5,611	5,584	5,581	5,461	
Participation rate	75.0	75.2	74.4	74.4	76.1	76.1	75.6	74.9	73.6	
Employed	4,414	4,677	4,668	4,331	4,522	4,564	4,556	4,603	4,585	
Employment-population ratio <sup>2</sup>	61.0	63.2	62.9	59.8	61.5	61.9	61.7	62.2	61.8	
Unemployed	1,014	888	847	1,059	1,075	1,047	1,028	976	876	
Unemployment rate	18.7	16.0	15.4	19.6	19.2	18.7	18.4	16.9	16.0	
<b>Women, 20 years and over</b>										
Civilian labor force	3,274	5,436	5,256	5,169	5,283	5,328	5,322	5,372	5,258	
Participation rate	57.2	57.9	57.0	56.1	56.6	57.0	56.8	57.2	55.9	
Employed	4,305	4,581	4,487	4,332	4,388	4,477	4,447	4,509	4,429	
Employment-population ratio <sup>2</sup>	47.6	48.4	47.7	47.0	47.0	47.9	47.5	48.0	47.1	
Unemployed	885	895	868	837	900	851	874	862	828	
Unemployment rate	16.8	16.5	16.2	16.2	17.0	16.0	16.4	16.1	15.8	
<b>Both sexes, 16 to 18 years</b>										
Civilian labor force	760	753	742	839	903	825	839	816	783	
Participation rate	38.0	38.1	37.2	37.5	40.5	37.1	37.8	38.9	35.5	
Employed	380	335	387	439	446	428	394	392	405	
Employment-population ratio <sup>2</sup>	17.0	15.2	15.7	19.6	20.0	19.2	17.8	17.7	18.3	
Unemployed	381	419	365	400	457	397	445	424	378	
Unemployment rate	30.1	55.6	51.3	47.7	50.6	48.1	53.0	52.0	48.3	
Men	50.8	57.1	45.6	49.2	51.1	47.6	56.8	54.8	43.9	
Women	49.5	53.9	57.6	45.9	50.0	48.8	49.9	48.7	53.3	
<b>HISPANIC ORIGIN</b>										
Civilian noninstitutional population	9,474	9,700	9,745	9,474	9,738	9,640	9,690	9,700	9,745	
Civilian labor force	6,008	6,207	6,187	5,973	6,253	6,079	6,124	6,200	6,142	
Participation rate	63.4	64.0	63.5	63.0	64.2	63.1	63.2	63.9	63.0	
Employed	5,167	5,449	5,477	5,075	5,379	5,331	5,333	5,390	5,385	
Employment-population ratio <sup>2</sup>	54.5	56.2	56.2	53.6	55.2	55.3	55.0	55.6	55.3	
Unemployed	841	758	710	898	874	748	790	811	756	
Unemployment rate	14.0	12.2	11.5	15.0	14.0	12.3	12.9	13.1	12.3	

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

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

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Selected employment indicators

(Numbers in thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
<b>CHARACTERISTIC</b>									
Civilian employed, 16 years and over .....	55,825	102,366	102,659	99,176	100,786	101,285	101,563	101,985	101,928
Married men, spouse present .....	38,269	38,789	38,700	37,852	37,925	38,293	38,308	38,253	38,281
Married women, spouse present .....	24,552	25,296	25,445	24,081	24,335	24,640	24,572	24,996	24,971
Women who maintain families .....	5,128	5,139	5,208	5,107	5,016	5,088	5,104	5,124	5,187
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>									
<b>Agriculture:</b>									
Wage and salary workers .....	1,667	1,710	1,571	1,576	1,636	1,663	1,664	1,585	1,481
Self-employed workers .....	1,492	1,580	1,584	1,621	1,608	1,583	1,566	1,473	1,514
Unpaid family workers .....	259	252	252	229	263	259	245	237	224
<b>Nonagricultural industries:</b>									
Wage and salary workers .....	88,484	90,728	91,073	88,064	89,354	89,765	89,995	90,813	90,663
Government .....	15,259	15,409	15,703	15,436	15,498	15,615	15,697	15,589	15,598
Private industries .....	72,854	75,219	75,370	72,628	73,856	74,150	74,298	75,265	75,069
Private households .....	1,226	1,285	1,295	1,216	1,317	1,286	1,280	1,295	1,291
Other industries .....	71,628	74,034	74,075	71,412	72,539	72,864	73,009	73,969	73,778
Self-employed workers .....	7,359	7,714	7,772	7,332	7,493	7,598	7,658	7,460	7,703
Unpaid family workers .....	394	382	404	403	385	320	376	376	415
<b>PERSONS AT WORK*</b>									
Nonagricultural industries .....	91,834	94,262	95,011	90,232	90,539	92,253	91,986	93,737	93,326
Full-time schedules .....	72,497	75,856	76,219	71,398	72,978	74,004	73,495	74,883	75,167
Part time for economic reasons .....	6,073	5,594	5,430	6,403	5,729	5,636	5,789	6,106	5,670
Usually work full time .....	2,232	1,643	1,507	2,381	1,702	1,809	1,718	1,798	1,575
Usually work part time .....	3,841	3,951	3,923	4,022	4,027	3,826	4,071	4,309	4,095
Part time for noneconomic reasons .....	13,244	12,812	13,362	12,435	11,833	12,614	12,701	12,748	12,488

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

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

(Percent)

Measure	Quarterly averages				Monthly data			
	1982		1983		1983			
	III	IV	I	II	III	Aug.	Sept.	Oct.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force .....	3.3	4.0	4.2	4.0	3.7	3.6	3.4	3.2
U-2 Job losers as a percent of the civilian labor force .....	6.0	6.6	6.1	6.0	5.5	5.5	5.3	5.0
U-3 Unemployed-persons 25 years and over as a percent of the civilian labor force .....	7.6	8.3	8.1	7.9	7.3	7.3	7.3	6.8
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force .....	9.8	10.6	10.3	9.9	9.3	9.4	9.2	8.7
U-5a Total unemployed as a percent of the labor force, including the resident Armed Forces .....	9.8	10.5	10.2	9.9	9.3	9.4	9.1	8.7
U-5b Total unemployed as a percent of the civilian labor force .....	10.0	10.7	10.3	10.1	9.4	9.5	9.3	8.8
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons as a percent of the civilian labor force less 1/2 of the part-time labor force .....	12.8	13.8	13.5	12.9	12.2	12.2	12.2	11.5
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force .....	14.2	15.3	15.0	14.3	13.5	N.A.	N.A.	N.A.

N.A. = not available.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates <sup>a</sup>					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
<b>CHARACTERISTIC</b>									
Total, 16 years and over .....	11,570	10,423	9,886	10.5	10.0	9.5	9.5	9.3	8.8
Men, 16 years and over .....	6,884	6,118	5,778	10.9	10.0	9.8	9.9	9.7	9.2
Men, 20 years and over .....	5,714	5,125	4,826	9.8	9.0	8.8	8.8	8.7	8.2
Women, 16 years and over .....	4,752	4,305	4,108	9.9	9.9	9.0	9.1	8.8	8.4
Women, 20 years and over .....	3,624	3,518	3,347	8.7	8.6	7.9	8.0	7.8	7.4
Both sexes, 16 to 19 years .....	2,038	1,780	1,713	24.1	23.6	22.8	23.0	21.8	21.6
Married men, spouse present .....	3,084	2,488	2,358	7.5	6.6	6.1	6.3	6.1	5.8
Married women, spouse present .....	2,059	1,813	1,665	7.9	7.8	7.0	6.9	6.8	6.3
Women who maintain families .....	651	713	650	11.3	12.8	11.6	11.6	12.2	11.1
Full-time workers .....	5,942	8,832	8,355	10.5	9.7	9.4	9.4	9.2	8.7
Part-time workers .....	1,639	1,611	1,550	10.3	12.1	10.2	10.1	10.0	9.8
Labor force time lost <sup>b</sup> .....	--	--	--	12.0	10.8	10.4	10.6	10.6	10.0
<b>INDUSTRY</b>									
Nonagricultural private wage and salary workers .....	9,019	7,823	7,419	11.0	10.0	9.6	9.8	9.4	9.0
Mining .....	197	179	112	17.9	18.2	16.6	14.8	17.2	11.3
Construction .....	1,176	1,009	832	22.3	18.1	18.0	18.1	18.2	15.2
Manufacturing .....	3,184	2,702	2,361	14.1	11.5	10.5	11.2	10.2	9.5
Durable goods .....	1,226	1,378	1,316	16.0	12.2	11.2	11.6	10.9	10.2
Nondurable goods .....	1,010	824	745	11.2	10.4	9.6	10.6	9.2	8.5
Transportation and public utilities .....	462	423	420	7.9	7.8	7.0	8.0	7.4	7.4
Wholesale and retail trade .....	2,166	2,062	2,106	10.4	10.2	9.7	9.8	9.6	9.9
Finance and service industries .....	1,874	1,948	1,888	7.1	7.2	7.3	7.2	7.1	6.9
Government workers .....	800	807	821	4.9	5.1	5.5	5.0	4.9	5.0
Agricultural wage and salary workers .....	241	305	305	13.1	17.0	14.2	14.4	16.1	17.1

<sup>a</sup> Unemployment as a percent of the civilian labor force.

reasons as a percent of potentially available labor force hours.

<sup>b</sup> Aggregate hours lost by the unemployed and persons on part time for economic

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
<b>DURATION</b>									
Less than 5 weeks .....	3,844	3,936	3,477	3,930	3,655	3,498	3,660	3,774	3,512
5 to 14 weeks .....	3,292	2,537	2,600	3,511	2,915	2,794	3,026	2,810	2,746
15 weeks and over .....	3,804	3,357	3,304	4,167	4,589	4,417	4,020	3,850	3,613
15 to 26 weeks .....	1,727	1,118	1,200	1,951	1,638	1,830	1,573	1,344	1,363
27 weeks and over .....	2,077	2,240	2,104	2,216	2,951	2,587	2,447	2,506	2,250
Average (mean) duration, in weeks .....	14.9	19.4	19.8	17.1	22.0	21.7	19.9	20.2	20.1
Median duration, in weeks .....	8.8	8.2	8.5	9.4	11.8	9.9	8.9	9.1	9.3
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	10,942	9,830	9,383	11,576	11,146	10,590	10,699	10,423	9,886
Less than 5 weeks .....	35.1	40.0	37.1	33.9	32.8	32.7	34.2	36.2	35.6
5 to 14 weeks .....	30.1	25.9	27.7	30.2	26.1	26.1	28.2	26.9	27.8
15 weeks and over .....	34.8	34.2	35.2	35.9	41.1	41.2	37.5	36.9	36.6
15 to 26 weeks .....	15.8	11.4	12.8	16.8	14.7	17.1	14.7	12.9	13.8
27 weeks and over .....	19.0	22.8	22.4	19.1	26.4	24.2	22.9	24.0	22.8

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-8. Reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
<b>NUMBER OF UNEMPLOYED</b>									
Job losers	6,340	5,270	4,971	7,325	6,513	6,193	6,202	5,002	5,592
On layoff	1,942	1,265	1,058	2,519	1,822	1,719	1,656	1,551	1,373
Other job losers	4,576	4,005	3,873	4,806	4,691	4,474	4,546	4,411	4,169
Job leavers	647	941	935	803	782	738	767	866	889
Reentrants	2,357	2,393	2,432	2,322	2,425	2,429	2,524	2,351	2,375
New entrants	1,418	1,226	1,045	1,250	1,040	1,225	1,214	1,247	1,102
<b>PERCENT DISTRIBUTION</b>									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	39.5	53.6	53.0	62.4	58.4	58.5	57.3	57.3	55.9
On layoff	17.7	12.8	11.7	21.4	16.3	16.2	15.5	15.2	13.9
Other job losers	41.8	40.7	41.3	40.9	42.0	42.3	42.4	42.1	42.1
Job leavers	7.7	9.6	10.0	6.8	7.0	7.0	7.2	8.3	9.0
Reentrants	21.5	24.3	25.9	19.8	21.7	22.9	23.6	22.5	24.0
New entrants	11.1	12.5	11.1	11.0	12.9	11.6	11.3	11.9	11.1
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers	5.9	4.7	4.5	6.6	5.8	5.5	5.5	5.3	5.0
Job leavers	0.2	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8
Reentrants	2.1	2.1	2.2	2.1	2.2	2.2	2.2	2.1	2.1
New entrants	1.1	1.1	.9	1.2	1.3	1.1	1.1	1.1	1.0

Table A-9. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates <sup>a</sup>					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
<b>Total, 16 years and over</b>	11,276	10,423	9,886	10.5	10.0	9.5	9.5	9.3	8.8
16 to 24 years	4,577	3,999	3,902	18.7	17.6	16.8	17.4	16.5	16.3
16 to 18 years	4,036	1,780	1,713	24.1	23.6	22.6	23.0	21.8	21.6
18 to 17 years	851	730	700	26.1	25.8	25.3	24.7	23.9	23.9
18 to 19 years	1,184	1,043	1,015	22.9	22.4	21.1	22.0	20.4	20.3
20 to 24 years	2,339	2,219	2,189	15.8	16.4	13.8	14.5	13.8	13.7
25 years and over	6,597	6,402	5,968	8.1	7.9	7.4	7.3	7.3	6.8
25 to 54 years	6,176	5,651	5,217	8.7	8.3	7.8	7.8	7.7	7.2
55 years and over	637	780	755	5.5	5.6	5.3	5.1	5.1	5.0
<b>Men, 16 years and over</b>	6,844	6,118	5,778	10.9	10.0	9.8	9.9	9.7	9.2
16 to 24 years	2,622	2,276	2,214	20.2	18.4	18.4	18.8	17.6	17.4
16 to 18 years	1,130	993	952	25.6	23.7	23.8	24.7	22.9	22.7
18 to 17 years	498	376	364	26.8	25.4	27.9	26.2	23.5	24.0
18 to 19 years	628	617	586	23.4	22.9	21.2	23.7	22.5	21.9
20 to 24 years	1,503	1,283	1,252	17.4	15.7	15.7	15.9	15.0	14.8
25 years and over	4,213	3,830	3,551	8.5	7.8	7.6	7.5	7.6	7.0
25 to 54 years	3,699	3,351	3,073	9.1	8.4	8.1	8.0	8.1	7.4
55 years and over	545	507	484	6.0	5.4	5.4	5.3	5.6	5.4
<b>Women, 16 years and over</b>	4,734	4,305	4,108	9.9	9.9	9.0	9.1	8.8	8.9
16 to 24 years	1,944	1,723	1,688	17.0	16.6	14.9	15.9	15.2	15.1
16 to 18 years	908	787	761	22.5	23.4	21.6	21.2	20.5	20.4
18 to 17 years	353	354	336	22.9	24.0	22.3	23.1	24.3	23.8
18 to 19 years	356	426	429	22.3	21.9	21.0	20.3	17.9	18.5
20 to 24 years	1,036	936	927	14.0	12.9	11.5	13.0	12.5	12.5
25 years and over	2,788	2,573	2,417	7.6	7.9	7.2	7.0	6.8	6.4
25 to 54 years	2,480	2,300	2,144	8.2	8.2	7.6	7.5	7.3	6.8
55 years and over	292	273	271	4.8	5.8	5.3	4.7	4.4	4.4

<sup>a</sup> Unemployment as a percent of the civilian labor force.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted <sup>a</sup>					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
Civilian noninstitutional population	21,083	23,581	23,604	23,043	23,316	23,347	23,437	23,581	23,604
Civilian labor force	14,268	14,712	14,516	14,289	14,652	14,573	14,608	14,754	14,993
Participation rate	62.0	62.4	61.5	62.0	62.8	62.4	62.3	62.6	61.4
Employed	11,040	12,209	12,127	11,457	11,479	11,566	11,848	12,217	12,094
Employment-population ratio <sup>b</sup>	54.7	51.8	51.4	50.6	50.9	51.3	51.0	51.8	51.2
Unemployed	2,400	2,503	2,389	2,632	2,773	2,607	2,644	2,537	2,399
Unemployment rate	10.3	17.0	16.5	18.4	18.9	17.9	18.1	17.2	16.6
Not in labor force	6,734	8,869	9,088	8,754	8,664	8,774	8,823	8,827	9,111

<sup>a</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>b</sup> Civilian employment as a percent of the civilian noninstitutional population.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Oct. 1982	Oct. 1983	Oct. 1982	Oct. 1983	Oct. 1982	Oct. 1983
Total, 16 years and over	99,825	102,659	10,542	9,383	9.9	8.4
Managerial and professional specialty	23,510	23,863	851	855	3.5	2.7
Executive, administrative, and managerial	10,594	10,841	433	328	3.9	2.9
Professional specialty	12,916	13,022	418	327	3.1	2.4
Technical, sales, and administrative support	30,824	31,800	2,190	1,980	6.6	5.9
Technicians and related support	2,997	3,114	171	159	5.4	4.8
Sales occupations	11,408	12,084	783	794	6.4	6.2
Administrative support, including clerical	16,420	16,602	1,236	1,034	7.0	5.9
Service occupations	13,467	14,034	1,638	1,748	10.8	11.1
Private household	1,090	1,031	55	84	4.8	7.8
Protective service	1,577	1,624	126	123	7.9	7.0
Service, except private household and protective	10,800	11,378	1,447	1,534	11.8	11.9
Precision production, craft, and repair	11,677	12,745	1,334	1,133	10.3	8.2
Mechanics and repairers	3,862	4,196	272	301	6.6	6.7
Construction trades	3,399	4,554	655	512	14.1	10.1
Other precision production, craft, and repair	3,816	3,994	407	321	9.6	7.4
Operators, fabricators, and laborers	16,359	16,556	3,381	2,350	17.1	12.6
Machine operators, assemblers, and inspectors	7,582	8,072	1,758	1,122	18.8	12.2
Transportation and material moving occupations	4,232	4,368	565	456	11.8	9.5
Handlers, equipment cleaners, helpers, and laborers	4,545	4,115	1,058	812	18.9	16.5
Construction laborers	603	634	208	158	25.6	17.9
Other handlers, equipment cleaners, helpers, and laborers	3,942	3,481	850	673	17.7	16.2
Farming, forestry, and fishing	3,970	3,661	332	370	7.7	9.2

<sup>a</sup> Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
			Oct. 1982	Oct. 1983	Oct. 1982	Oct. 1983	Oct. 1982	Oct. 1983	Oct. 1982	Oct. 1983
<b>VETERANS</b>										
Total, 25 years and over .....	8,718	7,852	8,217	7,396	7,511	6,892	706	50%	8.6	6.8
25 to 29 years .....	7,066	5,775	6,787	5,526	6,172	5,128	615	812	9.1	7.4
30 to 34 years .....	1,127	863	1,055	581	699	514	156	67	16.8	11.5
35 to 39 years .....	2,812	4,036	2,696	1,980	2,454	1,778	242	184	9.0	8.6
40 years and over .....	3,427	3,116	3,036	3,015	2,819	2,836	217	179	7.1	5.9
	1,652	2,117	1,430	1,860	1,339	1,768	91	92	6.4	4.9
<b>NONVETERANS</b>										
Total, 25 to 39 years .....	18,504	20,277	17,529	19,092	15,913	17,690	1,616	1,402	9.2	7.3
25 to 29 years .....	8,253	6,760	7,767	8,191	6,905	7,503	862	688	11.1	8.4
30 to 34 years .....	6,127	6,943	5,828	6,567	5,362	6,133	862	834	7.9	6.6
35 to 39 years .....	4,124	6,574	3,938	4,334	3,646	4,058	292	280	7.4	6.5

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Ar-

med Forces; published data are limited to those 25 to 39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Employment status of the civilian population for ten large States

State and employment status	Not seasonally adjusted <sup>1</sup>				Seasonally adjusted <sup>2</sup>					
	Oct. 1982	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	
<b>California</b>										
Civilian noninstitutional population .....	18,550	18,854	18,884	18,550	18,770	18,801	18,826	18,854	18,884	
Civilian labor force .....	12,339	12,358	12,338	12,316	12,459	12,294	12,331	12,408	12,298	
Employed .....	11,065	11,332	11,143	10,998	11,173	11,147	11,128	11,312	11,265	
Unemployed .....	1,274	1,026	995	1,318	1,286	1,147	1,203	1,096	1,033	
Unemployment rate .....	10.3	8.3	8.1	10.7	10.3	9.3	9.8	8.8	8.4	
<b>Florida</b>										
Civilian noninstitutional population .....	8,186	8,402	8,422	8,186	8,343	8,363	8,382	8,402	8,422	
Civilian labor force .....	4,937	5,113	5,003	4,887	4,815	4,926	5,034	5,093	4,927	
Employed .....	4,483	4,647	4,571	4,493	4,481	4,511	4,612	4,696	4,525	
Unemployed .....	454	416	432	424	434	415	422	397	402	
Unemployment rate .....	9.2	8.1	8.6	8.7	8.9	8.4	8.4	7.8	8.2	
<b>Illinois</b>										
Civilian noninstitutional population .....	8,537	8,552	8,554	8,537	8,547	8,550	8,550	8,552	8,554	
Civilian labor force .....	5,546	5,539	5,501	5,527	5,567	5,541	5,542	5,549	5,493	
Employed .....	4,982	4,995	4,997	4,946	4,976	4,902	4,995	4,988	4,959	
Unemployed .....	664	544	515	681	591	639	547	561	534	
Unemployment rate .....	12.0	9.4	9.4	12.3	12.4	11.5	11.7	10.1	9.7	
<b>Massachusetts</b>										
Civilian noninstitutional population .....	4,486	4,519	4,522	4,486	4,510	4,513	4,515	4,519	4,522	
Civilian labor force .....	3,029	3,023	3,033	3,007	3,005	2,999	3,006	3,037	3,005	
Employed .....	2,810	2,810	2,830	2,775	2,798	2,823	2,832	2,818	2,797	
Unemployed .....	219	213	193	232	207	176	174	219	208	
Unemployment rate .....	7.2	7.0	6.4	7.7	6.9	5.9	5.8	7.2	6.9	
<b>Michigan</b>										
Civilian noninstitutional population .....	6,742	6,719	6,718	6,742	6,725	6,724	6,721	6,719	6,718	
Civilian labor force .....	4,292	4,294	4,229	4,246	4,257	4,233	4,200	4,293	4,224	
Employed .....	3,610	3,768	3,702	3,540	3,696	3,764	3,584	3,709	3,651	
Unemployed .....	633	527	528	686	661	569	616	584	573	
Unemployment rate .....	14.9	12.3	12.5	16.2	15.2	13.1	14.3	13.5	13.6	
<b>New Jersey</b>										
Civilian noninstitutional population .....	5,715	5,798	5,763	5,715	5,746	5,751	5,754	5,758	5,763	
Civilian labor force .....	3,635	3,650	3,651	3,630	3,647	3,652	3,700	3,699	3,643	
Employed .....	3,335	3,370	3,433	3,299	3,162	3,345	3,369	3,394	3,396	
Unemployed .....	300	280	218	332	305	307	331	305	247	
Unemployment rate .....	8.3	7.7	6.0	9.1	8.4	8.4	8.9	8.2	6.8	
<b>New York</b>										
Civilian noninstitutional population .....	13,538	13,605	13,613	13,538	13,586	13,594	13,598	13,605	13,613	
Civilian labor force .....	7,955	8,146	8,048	8,026	8,133	8,183	8,280	8,248	8,105	
Employed .....	7,239	7,473	7,433	7,270	7,382	7,485	7,580	7,538	7,457	
Unemployed .....	717	673	615	756	751	698	700	710	648	
Unemployment rate .....	9.0	8.3	7.6	9.4	9.2	8.5	8.5	8.6	8.0	
<b>Ohio</b>										
Civilian noninstitutional population .....	8,062	8,075	8,077	8,062	8,071	8,073	8,074	8,075	8,077	
Civilian labor force .....	5,177	5,123	5,174	5,137	5,182	5,152	5,126	5,088	5,132	
Employed .....	4,494	4,555	4,626	4,435	4,517	4,588	4,559	4,504	4,565	
Unemployed .....	683	568	550	702	665	564	567	584	567	
Unemployment rate .....	13.2	11.1	10.6	13.7	12.9	10.9	11.1	11.5	11.0	
<b>Pennsylvania</b>										
Civilian noninstitutional population .....	9,142	9,143	9,166	9,142	9,157	9,160	9,161	9,163	9,166	
Civilian labor force .....	5,531	5,512	5,568	5,490	5,578	5,555	5,544	5,513	5,508	
Employed .....	4,911	4,964	5,038	4,853	4,874	4,938	4,907	4,937	4,981	
Unemployed .....	620	549	530	635	704	617	637	576	527	
Unemployment rate .....	11.2	10.0	9.5	11.6	12.6	11.1	11.5	10.4	9.9	
<b>Texas</b>										
Civilian noninstitutional population .....	11,036	11,333	11,361	11,036	11,251	11,280	11,305	11,333	11,361	
Civilian labor force .....	7,363	7,724	7,666	7,361	7,631	7,655	7,636	7,726	7,669	
Employed .....	6,805	7,062	7,134	6,769	7,044	7,059	7,081	7,067	7,098	
Unemployed .....	558	663	532	592	587	616	555	659	571	
Unemployment rate .....	7.6	8.6	6.9	8.0	7.7	8.0	7.3	8.5	7.4	

<sup>1</sup> These are the official (Bureau of Labor Statistics) estimates used in the administration of Federal fund allocation programs.

<sup>2</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983
Total	89,541	89,599	91,116	91,716	88,938	89,844	90,152	89,735	90,753	91,073
Goods-producing	23,651	24,216	24,461	24,554	23,287	23,518	23,724	23,830	23,943	24,167
Mining	1,077	1,032	1,031	1,033	1,082	1,003	1,017	1,023	1,027	1,038
Construction	4,070	4,295	4,282	4,326	3,847	3,933	3,974	4,014	4,040	4,089
Manufacturing	18,504	18,889	19,148	19,195	18,358	18,582	18,733	18,783	18,876	19,040
Production workers	12,505	12,873	13,133	13,182	12,368	12,615	12,756	12,803	12,867	13,036
Durable goods	10,738	10,996	11,204	11,286	10,585	10,844	10,961	11,022	11,084	11,227
Production workers	7,039	7,290	7,498	7,574	6,992	7,169	7,278	7,329	7,383	7,520
Lumber and wood products	614.1	723.4	726.8	723.1	603	679	688	699	704	712
Furniture and fixtures	430.9	455.9	464.7	469.6	426	450	459	457	459	464
Stone, clay, and glass products	576.1	596.8	600.9	601.1	565	573	577	582	585	589
Primary metal industries	832.8	841.6	854.5	851.0	840	830	839	840	849	861
Fabricated metal products	1,386.1	1,405.4	1,428.8	1,439.0	1,378	1,384	1,391	1,410	1,412	1,430
Machinery, except electrical	2,114.2	2,083.7	2,114.7	2,128.9	2,122	2,066	2,084	2,108	2,113	2,135
Electric and electronic equipment	1,985.1	2,041.3	2,093.9	2,118.7	1,976	2,030	2,047	2,043	2,081	2,110
Transportation equipment	1,705.9	1,765.9	1,829.7	1,853.8	1,691	1,762	1,794	1,807	1,803	1,839
Instruments and related products	704.1	693.6	697.5	700.6	703	687	687	692	696	701
Miscellaneous manufacturing	388.8	388.6	390.6	398.1	377	383	385	383	380	386
Non-durable goods	7,764	7,893	7,944	7,909	7,473	7,738	7,772	7,771	7,792	7,813
Production workers	5,466	5,583	5,635	5,608	5,376	5,446	5,478	5,474	5,484	5,516
Food and kindred products	1,696.2	1,720.9	1,733.8	1,670.5	1,636	1,643	1,638	1,627	1,633	1,611
Tobacco manufactures	70.2	65.2	68.1	68.5	66	65	65	62	63	64
Textile mill products	737.8	754.3	760.0	763.0	733	745	746	752	752	758
Apparel and other textile products	1,164.1	1,182.0	1,196.5	1,207.7	1,148	1,159	1,180	1,175	1,178	1,191
Paper and allied products	554.2	663.4	665.0	667.5	553	657	658	659	661	666
Printing and publishing	1,263.7	1,283.5	1,287.6	1,294.6	1,265	1,281	1,284	1,289	1,290	1,298
Chemicals and allied products	1,064.3	1,062.5	1,061.9	1,060.1	1,066	1,056	1,059	1,056	1,061	1,062
Petroleum and coal products	203.0	198.9	197.4	197.0	201	198	197	195	195	194
Rubber and misc. plastics products	693.1	741.4	732.1	737.4	688	721	732	739	742	752
Leather and leather products	219.4	221.1	221.3	220.6	216	213	213	217	217	217
Service-producing	65,890	65,383	66,655	67,162	65,651	66,326	66,428	65,905	66,810	66,906
Transportation and public utilities	5,077	4,354	5,077	5,079	5,033	4,992	4,984	4,341	5,027	5,034
Wholesale and retail trade	20,421	20,673	20,747	20,752	20,344	20,494	20,529	20,580	20,613	20,669
Wholesale trade	5,259	5,265	5,284	5,305	5,237	5,222	5,229	5,249	5,273	5,284
Retail trade	15,162	15,408	15,463	15,447	15,107	15,272	15,300	15,331	15,340	15,385
Finance, insurance, and real estate	5,334	5,348	5,501	5,484	5,350	5,451	5,465	5,488	5,496	5,501
Services	19,193	19,954	19,961	20,084	19,144	19,668	19,770	19,835	19,921	20,024
Government	15,863	14,854	15,369	15,763	15,780	15,721	15,680	15,661	15,753	15,678
Federal government	2,721	2,766	2,708	2,713	2,742	2,742	2,738	2,733	2,741	2,732
State and local government	13,142	12,088	12,661	13,050	13,038	12,979	12,942	12,928	13,012	12,946

p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1982	Aug. 1983	Sept. 1983 p	Oct. 1983 p	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983 p	Oct. 1983 p
Total private.....	34.7	35.4	35.3	35.3	34.7	35.1	35.0	35.0	35.2	35.2
Mining.....	41.9	42.7	43.1	43.4	(2)	(2)	(2)	(2)	(2)	(2)
Construction.....	37.1	38.0	37.9	37.2	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing.....	39.0	40.2	40.8	40.7	38.9	40.1	40.2	40.3	40.8	40.6
Overtime hours.....	2.3	3.2	3.5	3.4	2.3	2.9	3.0	3.1	3.3	3.3
Durable goods.....	39.2	40.7	41.3	41.3	39.2	40.5	40.8	40.8	41.4	41.2
Overtime hours.....	2.1	3.1	3.6	3.5	2.1	2.8	3.0	3.1	3.4	3.4
Lumber and wood products.....	38.3	40.8	40.6	40.4	38.1	40.0	39.9	39.7	40.2	40.4
Furniture and fixtures.....	38.0	40.1	40.3	40.6	37.5	39.6	39.7	39.7	40.1	40.0
Stone, clay, and glass products.....	40.6	42.1	42.3	42.2	40.2	41.6	41.7	41.7	42.0	41.8
Primary metal industries.....	37.8	40.6	41.4	41.2	38.2	40.3	40.8	40.9	41.2	41.7
Fabricated metal products.....	39.1	40.8	41.4	41.4	39.0	40.5	40.7	40.9	41.6	41.3
Machinery, except electrical.....	39.1	40.3	41.1	41.0	39.3	40.4	40.7	40.7	41.2	41.2
Electric and electronic equipment.....	39.2	40.5	41.1	41.1	39.2	40.5	40.8	40.7	41.2	41.1
Transportation equipment.....	40.5	41.2	42.8	42.6	40.4	41.9	42.0	41.8	43.5	42.5
Instruments and related products.....	39.6	40.3	40.8	40.5	39.6	40.1	40.7	40.4	40.8	40.5
Miscellaneous manufacturing.....	39.0	39.1	39.5	39.9	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods.....	38.6	39.7	40.1	39.9	38.5	39.6	39.5	39.5	40.0	39.7
Overtime hours.....	2.7	3.3	3.5	3.3	2.6	3.0	3.0	3.1	3.1	3.1
Food and kindred products.....	39.6	40.0	40.5	39.9	39.5	39.8	39.4	39.6	40.0	39.8
Tobacco manufactures.....	39.0	37.7	38.5	38.3	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products.....	38.7	41.1	41.4	41.1	38.3	40.7	40.7	40.9	41.3	40.7
Apparel and other textile products.....	35.3	36.6	36.8	36.7	35.1	36.1	35.8	36.2	36.8	36.4
Paper and allied products.....	41.7	42.8	43.4	43.1	41.7	42.8	42.9	42.9	43.2	43.1
Printing and publishing.....	37.1	37.7	38.0	38.0	37.1	37.6	37.7	37.5	37.8	38.0
Chemicals and allied products.....	40.8	41.4	42.0	41.5	40.8	41.9	41.8	41.6	41.8	41.5
Petroleum and coal products.....	4.2	43.5	44.3	44.1	43.8	(2)	(2)	(2)	(2)	(2)
Rubber and misc. plastics products.....	39.3	41.2	41.9	41.8	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products.....	35.2	37.5	37.6	37.0	35.4	36.8	37.4	37.2	37.8	37.3
Transportation and public utilities.....	38.8	39.5	39.4	39.4	38.8	38.9	38.9	39.3	39.4	39.4
Wholesale and retail trade.....	31.8	32.4	31.9	31.9	31.9	32.0	31.9	31.8	31.7	31.9
Wholesale trade.....	36.5	38.7	38.7	38.7	38.4	38.7	38.6	38.5	38.7	38.6
Retail trade.....	29.8	30.5	29.8	29.8	29.9	29.9	29.8	29.7	29.6	29.9
Finance, insurance, and real estate.....	36.2	36.1	36.0	36.5	(2)	(2)	(2)	(2)	(2)	(2)
Services.....	32.5	33.1	32.7	32.7	32.6	32.7	32.6	32.7	32.8	32.8

<sup>1</sup> Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

<sup>2</sup> This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.  
p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Oct. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Oct. 1982	Aug. 1983	Sept. 1983	Oct. 1983
	Total private	37.79	37.94	38.11	38.15	2720.31	2821.08	2788.29
Seasonally adjusted	7.76	7.98	8.08	8.13	249.27	279.30	284.42	286.18
Mining	10.96	11.28	11.35	11.35	459.22	481.66	489.19	492.59
Construction	11.88	11.84	12.00	12.03	440.75	449.92	454.80	447.52
Manufacturing	8.56	8.79	8.90	8.91	333.04	355.36	363.12	362.64
Durable goods	9.13	9.34	9.48	9.47	357.90	380.14	391.52	391.11
Lumber and wood products	7.57	7.83	7.84	7.83	289.93	319.46	316.30	316.33
Furniture and fixtures	6.40	6.67	6.73	6.73	243.20	267.47	271.22	273.24
Stone, clay, and glass products	8.03	8.31	8.42	8.37	346.62	391.95	398.47	395.41
Primary metal industries	11.41	11.28	11.31	11.29	431.30	457.97	460.23	464.74
Fabricated metal products	8.85	9.12	9.22	9.20	346.04	372.10	381.71	380.88
Machinery, except electrical	9.36	9.61	9.71	9.76	365.98	387.28	398.08	400.16
Electric and electronic equipment	8.41	8.64	8.74	8.72	328.67	349.82	359.21	358.59
Transportation equipment	11.79	11.53	11.81	11.82	457.25	475.04	505.47	503.53
Instruments and related products	8.26	8.53	8.61	8.57	327.10	343.76	351.29	347.09
Miscellaneous manufacturing	6.50	6.81	6.85	6.87	255.50	266.27	270.58	274.11
Nonurable goods	7.60	8.05	8.10	8.12	301.08	319.59	324.81	323.99
Food and kindred products	7.68	8.12	8.13	8.15	312.05	324.80	329.27	325.19
Tobacco manufactures	9.30	10.24	9.86	9.79	370.50	386.05	379.41	374.96
Textile mill products	5.88	6.19	6.23	6.24	227.56	234.41	237.92	236.46
Apparel and other textile products	5.21	5.35	5.39	5.40	183.91	195.81	198.35	198.18
Paper and allied products	9.53	10.02	10.09	10.07	397.40	428.86	437.91	434.02
Printing and publishing	8.49	9.14	9.25	9.29	329.82	344.38	351.50	353.02
Chemicals and allied products	10.22	10.61	10.67	10.73	416.98	439.25	448.14	445.30
Petroleum and coal products	12.57	13.16	13.35	13.35	555.59	572.46	591.41	598.74
Rubber and misc. plastics products	7.74	8.03	8.08	8.10	304.18	330.84	338.55	338.58
Leather and leather products	5.39	5.50	5.57	5.57	189.73	204.25	209.43	206.09
Transportation and public utilities	10.48	10.48	10.97	11.00	406.62	421.86	432.22	433.40
Wholesale and retail trade	6.27	6.47	6.54	6.56	199.39	209.63	208.63	209.26
Wholesale trade	8.13	8.41	8.48	8.54	313.01	325.47	328.18	330.50
Retail trade	5.53	5.71	5.77	5.77	184.79	174.18	171.95	171.95
Finance, insurance, and real estate	6.97	7.25	7.33	7.43	252.31	261.73	263.88	271.20
Services	7.04	7.18	7.31	7.40	228.60	237.46	239.04	241.98

<sup>1</sup> See footnote 1, table B-2.

p = preliminary.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry (1977 = 100)

Industry	Not seasonally adjusted				Seasonally adjusted								Percent change from: Oct. 1982
	Oct. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Oct. 1982	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Sept. 1983	
	Total private nonfarm:					100	100	100	100	100	100	100	
Current dollars	150.8	154.6	154.2	156.9	4.1	150.7	154.8	155.7	155.0	155.9	156.8	156.8	0.5
Constant (1977) dollars	93.2	93.7	94.3	94.8	(2)	93.1	94.8	94.7	94.0	94.2	94.2	94.2	(3)
Mining	142.1	147.3	148.1	148.4	3.9	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	144.6	144.8	146.9	148.9	1.6	147.9	144.8	144.0	144.1	145.3	145.0	145.0	-2
Manufacturing	134.7	137.6	138.4	138.7	2.6	134.7	137.8	138.2	138.1	138.3	138.7	138.7	2
Transportation and public utilities	131.6	135.5	139.0	139.7	5.4	131.6	136.8	137.9	135.4	138.0	139.2	139.2	6
Wholesale and retail trade	146.7	152.0	153.2	153.5	6.6	147.1	151.6	152.2	152.3	153.0	153.9	153.9	6
Finance, insurance, and real estate	132.0	138.2	139.8	142.0	6.5	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	120.4	124.7	126.9	128.1	5.2	120.6	123.9	123.6	123.7	127.1	128.8	128.8	1.0

1 See footnote 1, table B-2.

2 Percent change was 1.3 percent from September 1982 to September 1983, the latest month available.

3 Percent change was 0.5 percent from August 1983 to September 1983, the latest month available.

4 These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

N.A. = not available.

p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1982	Aug. 1982	Sept. 1983 P	Oct. 1983 P	Oct. 1982	June 1983	July 1983	Aug. 1983	Sept. 1983 P	Oct. 1983 P
	Total private .....	104.0	107.5	109.0	109.3	102.9	105.7	106.1	105.7	107.5
Goods-producing .....	90.1	95.7	98.2	98.2	87.4	91.8	93.0	93.5	95.2	95.6
Mining .....	120.9	116.2	117.4	118.9	119.0	112.5	114.0	115.0	116.8	118.4
Construction .....	106.5	115.9	115.3	114.7	97.0	102.0	103.5	104.5	106.1	104.5
Manufacturing .....	55.4	60.9	61.0	61.0	54.9	58.8	60.0	60.4	62.1	62.8
Durable goods .....	81.0	87.0	91.0	91.8	79.9	85.4	87.2	87.8	89.8	91.1
Lumber and wood products .....	78.6	100.9	101.1	99.7	76.1	92.2	93.5	93.6	96.9	97.6
Furniture and fixtures .....	66.9	97.5	100.3	102.0	64.3	94.8	97.2	97.0	98.5	99.3
Stone, clay, and glass products .....	40.7	87.9	89.2	88.9	74.2	82.5	83.4	84.5	85.5	85.9
Primary metal industries .....	60.5	67.1	69.9	69.3	60.9	65.2	67.0	67.6	68.7	70.9
Fabricated metal products .....	79.3	84.6	88.4	88.7	77.9	82.8	83.7	85.2	87.0	87.8
Machinery, except electrical .....	82.0	82.9	84.9	87.7	82.3	82.4	84.6	85.6	87.0	88.4
Electric and electronic equipment .....	93.1	100.0	105.5	107.4	92.3	99.6	101.6	101.1	104.0	107.1
Transportation equipment .....	77.4	82.4	90.5	91.9	75.2	84.2	86.8	86.9	90.1	90.6
Instruments and related products .....	192.9	102.1	105.0	104.8	103.0	100.4	101.9	102.2	104.8	105.1
Miscellaneous manufacturing .....	54.6	64.8	66.5	69.6	60.9	62.7	64.5	63.4	62.9	65.2
Nondurable goods .....	92.0	96.6	98.5	97.4	90.1	95.2	94.2	94.2	95.4	95.4
Food and kindred products .....	101.2	104.2	106.3	100.1	96.4	97.4	96.2	95.5	96.6	94.9
Tobacco manufactures .....	100.0	87.4	94.5	94.8	87.8	88.3	87.3	82.1	83.9	84.7
Textile mill products .....	76.7	83.7	85.0	85.1	75.5	81.8	81.8	83.1	83.9	83.5
Apparel and other textile products .....	86.3	91.1	92.9	93.7	84.4	88.1	89.0	89.6	91.2	91.4
Paper and allied products .....	91.4	95.3	97.4	97.2	91.2	94.6	95.4	95.0	96.3	97.0
Printing and publishing .....	105.7	108.8	110.3	111.3	105.6	108.7	109.0	108.9	109.8	111.3
Chemicals and allied products .....	93.8	94.9	96.5	95.5	93.9	95.5	95.8	95.1	95.9	95.9
Petroleum and coal products .....	96.5	93.7	94.3	95.3	93.4	92.9	92.7	91.5	90.1	92.9
Rubber and misc. plastics products .....	91.0	103.8	107.4	108.0	89.8	100.6	102.7	103.5	105.8	106.5
Leather and leather products .....	50.1	86.4	86.6	85.2	78.4	91.2	82.6	84.0	85.3	84.2
Service-producing .....	111.7	113.9	114.9	115.4	111.5	113.3	113.4	111.8	114.3	115.1
Transportation and public utilities .....	101.7	85.6	103.1	103.1	100.6	99.9	99.7	85.0	101.9	102.2
Wholesale and retail trade .....	104.6	107.5	106.6	106.6	104.3	105.3	105.3	105.3	105.3	106.2
Wholesale trade .....	108.4	109.0	109.5	110.0	107.7	108.1	107.9	108.1	109.3	109.1
Retail trade .....	103.1	107.4	105.5	105.2	103.0	104.4	105.3	104.2	103.8	105.1
Finance, insurance, and real estate .....	116.4	121.1	119.5	120.6	116.7	118.9	119.1	119.0	119.4	120.8
Services .....	122.4	129.4	127.9	128.9	122.5	124.1	126.3	127.1	128.1	128.7

<sup>1</sup> See footnote 1, table B.2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment<sup>1</sup> increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981 .....	57.8	52.4	52.2	65.4	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982 .....	28.5	45.4	34.0	39.0	47.6	32.8	38.4	37.1	34.1	29.3	32.0	42.2
	1983 .....	34.5	45.7	62.4	69.1	71.0	64.5	68.5	68.0	61.0p	67.2p		
Over 3-month span	1981 .....	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	33.3	30.1	24.5	23.4
	1982 .....	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983 .....	45.4	53.1	65.6	75.8	76.1	77.2	73.9	79.3p	79.3p			
Over 6-month span	1981 .....	68.5	65.3	63.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982 .....	20.2	23.7	25.3	29.8	25.1	26.1	23.4	19.1	21.2	26.1	26.6	35.8
	1983 .....	50.5	63.2	73.4	76.3	79.3	83.1p	82.8p					
Over 12-month span	1981 .....	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	25.3	23.1
	1982 .....	22.0	20.7	18.0	19.4	18.3	20.7	20.7	22.8	24.2	31.5	37.6	44.1
	1983 .....	48.9	58.3	62.4p	73.4p								

<sup>1</sup> Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 100 private nonagricultural industries.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

p = preliminary.

Representative WYLIE. Thank you very much, Ms. Norwood. That is indeed very good news for us this morning.

You have stated before that employment growth in this recovery has been relatively robust. How does the current increase in total civilian employment compare with the first 11 months of the other recoveries? There is a chart over there I think that you might want to refer to.

Ms. NORWOOD. Yes; as you can see from the chart, it compares quite favorably. We have had about the same percentage change in the 11 months of this recovery that we had in 1975-76, 2.8 now and about 2.9 in 1975-76. That is generally higher than at any time since 1949-50.

Representative WYLIE. In my own State of Ohio, I notice, referring to table A-13 in the press release, the drop has been from 11.5 percent in September to 11 percent in October, which is indeed very good news for us.

Have you any information on forecasts by State as to unemployment figures? What I have in mind there is, as you know, Ohio is a State which had unemployment because of declines in the automobile industry particularly and the steel industry. Do you have any statistics to indicate what the prognosis might be in those industries?

Ms. NORWOOD. We do know that autos and rubber manufacturing, both of which are important industries in Ohio, have had employment increases, and the data for Ohio this month show some increase in employment.

The steel industry, as we all know, is not showing yet any very real improvement.

Representative WYLIE. So the situation in Ohio, although it is good, it's still 2 percentage points above the Nation's unemployment rate. Is it likely to stay about that figure for the next year or do you have any way of knowing anything like that? We're looking for good news.

Ms. NORWOOD. I would hope not, Congressman, but I really have no way of knowing. As I'm sure you're aware, the estimates for individual States are made from much smaller samples than for the Nation as a whole and it takes a much larger change for it to be statistically significant.

So I think we need some more months to really see where that is going.

Representative WYLIE. I'm also on the Veterans' Affairs Committee and we have various veterans' groups come before us to testify on a regular basis expressing concern about veterans and their ability to find employment, especially Vietnam era veterans.

Do you have any statistics to indicate how veterans are doing during this recovery period compared to adult males as a whole?

Ms. NORWOOD. We do have data on veterans, Congressman. We do find some problem sometimes in interpreting them since we are using definitions given to us by the Veterans' Administration for Vietnam era veterans and as we get further away from that period the definition becomes a little bit less relevant.

But I'd like to ask Mr. Plewes to tell you about this.

Mr. PLEWES. Congressman, I think that the group that we probably want to look at is those who are 25 to 39 years old. That's the

bulk of the Vietnam era veterans. We compare them with nonveterans in the same age group.

Over the last year—that is from October 1982 to this October—the rate for this group of veterans dropped from 9.1 percent to 7.4 percent. Their rate continues to be about the same now as the nonveterans' rate, which moved down from 9.2 to 7.3 percent over the year. Some of the older group veterans in fact do better than the nonveterans. For example, the group that's 35 to 39 years old, who generally have been out of the military for some time had an unemployment rate in October of 5.9 percent, whereas the nonveterans had an unemployment rate of 6.5 percent. So time seems to also improve their chances.

Representative WYLIE. So we have a reason to be optimistic as far as veterans are concerned?

Mr. PLEWES. We certainly hope so.

Representative WYLIE. Thank you.

From your experience, Ms. Norwood, as a labor market analyst, can you give the committee your best estimate of the annual rate of growth or real GNP that is needed to bring the unemployment rates down another percentage point?

The reason I think that's a good question is because Chairman Volcker was before the Joint Economic Committee and he indicated that economic growth is increasing at a better figure than was first estimated. It was first estimated back in January that gross national product would increase by about 4 percent, and he now says for this year it will increase about 5 percent, which could result in a reduction in the deficit and an increase in revenues.

How does that translate into the unemployment?

Ms. NORWOOD. Clearly, if GNP goes up, we would expect as production increases that there would be increases in employment. I think we have seen over the last 11 months some strong employment growth. That has occurred, of course, at the same time as we have had this extraordinary increase in output.

I do not believe that the relationship of GNP to employment or to unemployment is very easily discernible and I would be reluctant to come up with some pat formula based upon the past.

We have, as you know, some considerable structural change going on in the economy and there is growth in some of the more sophisticated services sector industries. There is a long-term general structural decline in some of our smokestack industries, and I am inclined to think that the relationships of the past should be looked at with great care; they may not continue in the future.

So that's about all I would like to say about that, I'm afraid.

Representative WYLIE. I understand that retail sales are up. Apparently there are some early Christmas shoppers out there. Is that the fact?

Ms. NORWOOD. Yes. I've noted that. The retail sales data do look quite good. We have had an increase in retail sales employment in October. I believe I did point out to the committee last month that I thought that in the month of September there might be some slight correction in the retail trade figures. That has occurred as we got in more data to adjust the preliminary figures. The retail trade figures have been adjusted upward for the month of September and they have continued to increase in October.

Representative WYLIE. We're glad you're the bearer of good tidings this morning.

Congressman Lungren.

Representative LUNGREN. Thank you, Congressman.

Madam Commissioner, what was the change in civilian employment growth on a percentage basis in the 1975-76 recovery? As I understand it, you make the measurement from the trough of the recovery and extend it through 11 months and then make a similar measurement for the current recovery.

Ms. NORWOOD. The growth in total civilian employment from the household survey was 2.9 percent from March 1975 to February 1976 and it's 2.8 percent from November 1982 to October 1983.

Representative LUNGREN. In a recent article by Mr. Robert Samuelson that appeared in one of the newspapers, I think it was back home, caused me a little concern. Although I don't claim to be an expert on this, sitting through these employment hearings on a monthly basis I think I'm at least as well informed as other Members of Congress on it. Furthermore, I had thought you had given us a pretty good idea that the household survey and the establishment survey are basically two different methodologies for attempting to look at the same phenomena, one sort of acts as a check against the other. As long as you can see some consistent patterns they allow us to see if in fact we're gauging what is happening.

But in that article it suggested that there was an overstatement of employment growth in the household survey, meaning that the real rate of unemployment was much higher than indicated by the Bureau of Labor Statistics. And the statement appeared in that article, "The statistics from the payroll survey imply a September unemployment rate of 10.2 percent, not the 9.3 percent reported."

As you can imagine, in trying to explain that to constituents and other interested people back home, it put me in a bit of a bind. And so I'm soliciting your assistance in trying to interpret this apparent discrepancy or discrepancy that was pointed to, not just in this article but also by others who have questioned it as well.

Could you comment on that, please?

Ms. NORWOOD. Yes, I would be delighted to. I think Mr. Samuelson was right about one part of the discussion in his article, and that was that there was until this month what appeared to be a discrepancy between the payroll employment figures and the household employment figures of a million.

Now all of that million was not a discrepancy. There are differences in definition between the household survey and the establishment survey. The establishment survey is based on payrolls. It is nonagricultural only. The household survey includes agriculture; it includes self-employed people; it includes people who are on unpaid absences from their jobs who would not be on the payrolls. It includes private household workers. So we expect that there will be differences between those two surveys.

But Mr. Samuelson was quite right that for several months during the recession the two series were not tracking very well. I do not agree with his analysis that the unemployment rate was understated.

I think one needs to understand that in the household survey we estimate employment as a separate, discrete item and then there is an estimation of unemployment. The labor force is actually the two added together, employment and unemployment, which gives us the labor force. The labor force is not estimated separately.

People are asked about their activity in a whole battery of questions about employment before they get to unemployment. If employment were overstated—and I believe it was and I've said so in my statement today. I've said before that I believe there was some overstatement in the household survey of employment because it tends to move in sharp changes from 1 month to the next. But over a longer period of time, as in any sample survey that is a good one, it tends to correct itself.

If employment had been overstated and were corrected, then those people who were not in employment would show up not in unemployment but would decrease the size of the labor force, and I think that's part of what happened in October.

We had in the data we released this morning relatively unchanged employment in the household survey and we had a drop in the labor force of 550,000. Now a good part of that drop in the labor force was the correction of this overstatement of employment and had nothing to do with unemployment.

I think had we had this happening in two separate months, it might have been a little bit easier to understand. We had in the first place some correction—I don't know exactly how much, but we had some correction for the overstatement of the employment which showed up in a reduction in the labor force. And one could say if nothing else had happened it would have shown up as a decline in total employment.

But at the same time, the labor market was improving, and so we had a decline in unemployment and many of the people who left unemployment found jobs, so you had an increase in employment. And these two employment occurrences in a sense, offset each other.

Representative LUNGREN. If I could paraphrase what you have been telling us all along as we looked at these various figures, it is that they are two separate means of trying to look at the same phenomena and you have cautioned that one may go slightly off one way or the other, but by tracking both of them we are able to establish trends; is that correct?

Ms. NORWOOD. I think that's right, and I would underscore my view that our having two totally independent surveys of essentially the same phenomena is tremendously important because we can get a better handle on employment developments.

You know, there is no absolute perfection in any statistic. In the payroll survey, we go out actually to payroll records; in the household survey, people are asked questions. So we are able to look at these two, and they are both showing strong growth during this recovery period. I think that's very important.

Representative LUNGREN. That's the bottom line. Thank you.

Representative WYLIE. Representative Mitchell.

Representative MITCHELL. Thank you, Congressman, and good morning, Ms. Norwood and so forth.

Only a knave or fool would be displeased by the drop in unemployment and I hope that I'm neither, but I do want to try to keep the unemployment problem in perspective.

There are presently 9.9 million people unemployed?

Ms. NORWOOD. Yes, sir.

Representative MITCHELL. Does that include the part-time workers who are not part time by their own choosing, but involuntarily unemployed.

Ms. NORWOOD. No, it does not.

Representative MITCHELL. So we would add 5.7 million persons, right?

Ms. NORWOOD. Yes, that's right, if you wanted to do that.

Representative MITCHELL. That puts the number of unemployed at about 15.6 million; is that correct?

Ms. NORWOOD. Well, if you add 9.9 and 5.7, yes.

Representative MITCHELL. And then, are we counting the discouraged workers?

Ms. NORWOOD. They are not counted in the unemployment rate.

Representative MITCHELL. What is the number of discouraged workers?

Ms. NORWOOD. Well, for the third quarter of 1983, it was 1.6 million.

Representative MITCHELL. 1.6 million. So, despite the prattle, the euphoric prattle about the drop in unemployment, we are still dealing with the harsh reality of some 17.2 million Americans out of work or on part-time work involuntarily. Is that accurate?

Ms. NORWOOD. Your figures add up, yes. I think that it is certainly true that there are many people who would like to have full-time jobs who do not have them.

Representative MITCHELL. 5.7 million.

Ms. NORWOOD. Yes, that's true. That's down, of course, considerably during this recovery period. It's also true that many people tell us that they are not in the labor force at all, that they are not engaging in job search because they believe no job would be available, and those are the discouraged workers.

Representative MITCHELL. So that adds up to my 17.2 million American citizens. I wanted to make that calculation because I think we've got to keep things in perspective. When we wax euphoric about a drop in unemployment—and there has been a drop in unemployment—it's almost the same as if we're saying that there's been a drop in the crime rate and only 4,000 people were murdered, as if 4,000 murders didn't count. It's almost the same as if we're saying, well, Americans' health has improved, only 8,000 people died of cancer last year, a drop of 1,000.

So whatever else we do, we've got to keep the problem in its proper perspective.

What disturbs me the most is that when we go off on tangents about the drop in unemployment we're talking about social Darwinism philosophy that dominated this country at the turn of the century, survive somehow, the fit will survive. And while we're talking about 17.2 million people who want full-time work, and would like to work, our Government sits by and does absolutely nothing, depending exclusively on the private sector to generate

jobs. I think that is a serious mistake. I think we're going to pay a penalty for that.

I think each month, each 2 months, each 3 months, that we keep 17.2 million people who want to work out of work, we seriously erode the work ethic in a number of those people and that work ethic is an integral part, it seems to me, of the Judeo-Christian ethic and the Protestant ethic, which dominates this country.

You report that the total civilian employment rate did not grow in October. The size of the labor force declined by 550,000 people.

Does this mean that the October reduction in unemployment primarily reflects people withdrawing from the labor force as opposed to people finding jobs?

Ms. NORWOOD. I do not believe so.

Representative MITCHELL. You think it is a matter of more of them finding jobs?

Ms. NORWOOD. I think it's clear that the decline in unemployment has been accompanied by strong employment growth. One can see that in several ways. First, as I indicated earlier, we did believe—and we have discussed this many, many times—that the total employment figures in the household survey may have been somewhat overstated and that at some time in the future there would be a statistical correction of that. When that happened, employment would decline; the total employment would be lower because it was overstated, and the labor force would also be lower.

So that is the statistical issue. But more important, there is a very strong showing in the establishment survey, as payroll jobs have grown by 320,000. There is strong growth in all the durable manufacturing industries and in the services industry.

Second, when we look beneath the overall numbers in the household survey—and we should always look at the disaggregated data—we find that the employment situation for workers 25 years and over has improved. There has been an increase in employment of that group.

There's also a drop of a quarter of a million or so in part time for economic reasons and a drop in long-term unemployed. There also is a drop in the number of people who were unemployed because they had lost their last jobs in October.

So, putting all of that together, I think what we have had is a drop in unemployment and an increase in employment.

Representative MITCHELL. All right. Thank you.

Now let's talk about the group whose unemployment rate has been and continues to be a national disgrace, and that is the black unemployment rate.

You indicate that the jobless rate for blacks fell by almost 2 percent, which is not terribly exciting to me. It still leaves black unemployment at 18.1 percent, still close to one out of every five.

This drop that occurred, was it widespread? Was it across the board in the black community? Was the drop for both black adults and black youth? Is it also evidence of any sustained improvement in the employment situation for blacks and other minorities?

Let's do the first one. This 2 percent, is that across the board, equally distributed?

Ms. NORWOOD. In the 2 months really, September and October, it is generally widespread among the various groups of blacks.

Representative MITCHELL. So if we broke it out by category, we might say that if we had a 2-percent drop and it's pretty widespread, that would mean a 2-percent drop in black youth unemployment, maybe bringing it down to about 48 percent, again a national disgrace.

Ms. NORWOOD. Yes, sir.

Representative MITCHELL. Do you have time to answer the other part of my question? Does the drop in unemployment, in your opinion, reflect any sustained improvement in the employment situation for minorities?

Ms. NORWOOD. We certainly hope that it does. There is some evidence that there has been in the last 11 months, particularly in the last couple of months, some increase in employment of black workers. It is still not enough obviously to bring that rate down further. Their employment-population ratios are still considerably below the levels for the white population and I think for our minority groups we really need to look at the employment-population ratio as well as the unemployment rate.

Representative MITCHELL. Thank you. The ratio doesn't surprise me. That has persisted for almost 35 years. My time is up.

Representative WYLIE. Thank you very much.

Representative MITCHELL. I do have some additional questions.

Representative WYLIE. All right. We're in a vote situation, if you want to go over and vote.

Representative MITCHELL. What is the purpose of the vote?

Representative WYLIE. On approval of the journal.

Representative MITCHELL. It's foolish. I won't bother to go over to vote.

Representative WYLIE. All right. We're all in agreement that the unemployment rate is still too high. Any unemployment rate, I suppose, is too high. And we could find reason to be pessimistic if the unemployment rate were down to 3 or 2 percent. The fact remains that, as you indicated, the economic recovery which we're in now has been accompanied by strong employment growth, which you have pointed out, and we can see from the chart which I pointed to a little earlier that more Americans have found jobs in the last 11 months than at any time at the same stage in any economic recovery since 1950.

So it seems to me as if we do have reason to be optimistic.

Congresswoman Snowe is going to come back from the floor after her vote and she wants to ask a few questions. Congressman Mitchell, if you're not going for the vote, I will leave you in charge for a little bit and I'll go and make the vote and come back, if that's all right.

Representative MITCHELL. That might be a serious mistake.

Representative WYLIE. Well, I'm going to take the chance. [Laughter.]

Representative MITCHELL [presiding]. Ms. Norwood, I do have several other questions which I want to raise with you.

The seasonally adjusted unemployment rate is 9.9 million, and without the seasonal adjustment, what is the figure?

Ms. NORWOOD. The figure is 9.4 million.

Representative MITCHELL. Now let's go back to the involuntary part-time workers. We agree that that figure is about 5.7 million, which is down from last month?

Ms. NORWOOD. Yes, sir.

Representative MITCHELL. But as you look over past recoveries and at this point in the economic recovery, how do you explain the fact that so many people who want to work full time have to settle for part-time work? The 5.7 million who want full-time jobs must settle for part-time work, and they're talking about an enormous "recovery." How do you explain that fact?

Ms. NORWOOD. Well, I think that we have had strong employment growth. We have also, of course, had an increase in the working-age population and we have also had an increase over the years in labor force participation. So we have more people who are looking for work.

Representative MITCHELL. But that flies in the face of the statements made by the President and his administration that more jobs are being created than ever before and therefore we ought to be able to absorb that increase and not force people to work part time.

Ms. NORWOOD. No; it's a different point, really. The labor force tends to increase over time and therefore we need, as a country, to create more jobs just in order to stand still.

I just came back from a meeting in Paris of an OECD Working Party on Employment and Unemployment Statistics, and in looking at the situation in Europe, one of the things that is really worrying them a great deal is their inability to create jobs. They are looking to the United States to see what it is that made it possible in the 1970's to create about 20 million jobs. Even now in this recovery we seem to be increasing jobs, whereas in Europe that is not yet occurring.

Representative MITCHELL. You say the rate of increase in new jobs is not sufficiently great to permit involuntary part-time workers to get full-time work. It's just a sort of standstill, a holdoff.

Ms. NORWOOD. I think that what we need to look at is, first, people who are engaging in job search. We still have 9.9 million people who want jobs who don't have any jobs. Now that's much less than we had before, but it is a sizable number.

You pointed to the people who are working part time who have some work but who would like more work. That's another group. It's somewhat different, I think, from the group who is fully unemployed. Then there are, as you pointed out, the discouraged workers.

Representative MITCHELL. All right. I recently purchased a pair of American-made shoes. I went to the store to purchase the shoes and there were the Christmas trees and indeed there was a rather emaciated-looking Santa Claus over in one section of the store. I'm assuming that the Christmas shopping started a little earlier, at least the preparation for it has started a little earlier.

Do the October figures reflect whether employers have begun hiring for the Christmas season?

Ms. NORWOOD. There seems to be some evidence that in the retail trade sector there is some increase in sales and therefore some increase in employment. Of course, that should be taken ac-

count of through our seasonal adjustment process so that we shouldn't see a big bulge. On the other hand, as you and I have often discussed, seasonal adjustment is not a perfect art and so we may see some of it.

Representative MITCHELL. You're quite right. The seasonal adjustment factors heavily influence the experience of recent years. During the last couple of Christmases we were mired deeply in a recession/depression.

If we're talking about a seasonal adjustment based upon a situation almost significantly different from the past 2 years, will that seasonal adjustment really be reliable, say in the retail trade sector?

Ms. NORWOOD. I hope so. We have processes which put weight on the more recent periods but which take account of other developments. If we look at the not seasonally adjusted data for retail trade, we find that over the year it has gone up considerably and that it has gone up some since the summer before seasonal adjustment.

Representative MITCHELL. Before?

Ms. NORWOOD. Yes. That's one reason why we publish both seasonally adjusted and unadjusted data, so people can use both sets of data.

Representative MITCHELL. But am I safe in assuming that because of the state of the retail industry in the last couple of Christmases the seasonal adjustment might be less reliable than it has been in the past? Would that be a reasonable assumption to make?

Ms. NORWOOD. Yes; I think so. It could be exaggerated which might mean that it would overcorrect.

Representative MITCHELL. Mr. Plewes.

Mr. PLEWES. That's actually correct. We may indeed have a higher level of employment than otherwise would be expected because we have a lower expectation, and thus a smaller adjustment factor—

Ms. NORWOOD. For retail trade.

Mr. PLEWES. For retail trade.

Ms. NORWOOD. Which, of course, is a fairly small group, about 15 million people.

Representative MITCHELL. Each time we're taking a little bit of the luster off in terms of the drop in unemployment, just a smidgeon.

Ms. NORWOOD. I don't think it's a question of luster. I think what we're trying to do, Congressman Mitchell, is to understand a comprehensive body of data that we have put out. There are many, many evidences of improvement, but we're not there yet. We still have high unemployment rates. We still have almost 10 million people who are without jobs. We still have problems, particularly I think in the minority area.

So I think it's all there, but when we look at this from month to month we ought to look at what has happened, and I think there has been considerable improvement.

Representative MITCHELL. All right. I have one question and maybe if the other members are not back by that time we can stop and have a bloody mary or something.

Accordingly to your report, the number of long-term unemployed declined for the very first time in several months, and we are happy about that. Despite that, the long-term unemployed figure remains at 2.25 million people, or 22.8 percent of the present jobless people are long-term unemployed. They've been without work for 6 months.

I know that you don't like to make predictions, but I think I'm safe in asking you this question.

What are the prospects that these people will find jobs in the same field that are comparable, in terms of pay, to the ones that they lost after such lengthy spells of unemployment? Is anyone doing any research? Are there studies from previous recessions that would indicate the extent of earnings lost that can occur in a situation like this?

Let me make one other statement. That's my question. On the way over, one of the police officers said to me, "Yes, they say things are getting better and maybe they are, but a whole lot of people haven't even gotten out of the debt they incurred when they were unemployed." And that's the kind of thinking that's behind my question, not only did heavy indebtedness incur, but what are the prospects for future employment? Will these people be shocked, in your opinion, in the near future because they cannot obtain comparable work in job field and pay? That's the long-term unemployed. That's the 2.25 million people. That's the 22.8 percent of persons of the total jobless rate.

Ms. NORWOOD. I think you're quite right that this is a group that has the most difficulty in the labor market. They do need help, and there are a variety of programs, as I understand it, which the administration and the Congress have determined should be used for job training and so on.

There are really several groups of people who are unemployed and I think it's very important for us to distinguish among them.

Representative MITCHELL. May I interrupt you for just a moment, which is something I don't generally do, but I'm really concerned about that long-term unemployed group.

The question I want answered is, What are their prospects for returning to work comparable in nature and comparable in wage? If you'll answer that, then I'll be delighted to hear about the other categories.

Ms. NORWOOD. Well, obviously, the longer they are unemployed, the less chance there is for them to get back to the particular jobs that they had before. I think that's quite clear.

Also, we know that among the long-term unemployed is a larger percentage of people who have a harder time in the labor markets—minorities, women, youth, and so on.

So I think you're quite right in saying that this is a group that needs help. There's no question about that.

Representative MITCHELL. I'm not honestly sure you answered my question, but that's all right.

Ms. NORWOOD. Well, I think I did. I said you are right, I think, that the longer one is unemployed—and this is the long-term unemployed group—the harder it is to go back to the kind of job and the kind of salary and wages they had.

Representative MITCHELL. And the prospect of returning to jobs comparable in nature and wages is not very good the longer they are unemployed; is that correct?

Ms. NORWOOD. Certainly. The longer one is unemployed and looking for work, the more difficult it becomes.

Representative MITCHELL. Thank you for putting up with an irascible old man's questions.

Ms. NORWOOD. It's always a pleasure.

Representative WYLIE [presiding]. Congresswoman Snowe.

Representative SNOWE. Ms. Norwood, with the expansion in the economy and with an expanding recovery as well, could you tell us the nature and the composition of the discouraged workers, how many there are, and how many we could expect to attempt to reenter the work force?

Ms. NORWOOD. We measure discouraged workers once a quarter and so I have data for the last quarter, the third quarter of 1983. There were at that time about 1.6 million. Women and blacks are disproportionately represented among the discouraged workers.

Discouragement is really a state of mind and at times it's difficult to measure. The people who are measured as discouraged are those who tell us in the survey that they are not working, that they are available for work but that they are not looking for work because they believe no jobs are available. They are not engaged in any job search activity and for that reason we do not count them among the unemployed.

It is really very difficult to measure a state of mind of that kind with precision. Clearly, there are a lot of discouraged workers out there and I think we can expect that as the months go on many of them will come back into the labor force.

Representative SNOWE. So do you have any expectation that that would certainly impact on the unemployment rate, that it either remains static or has virtually no decline in the unemployment rate?

Ms. NORWOOD. Well, the larger the labor force, of course, the harder the economy has to work to create jobs to take care of them. So we have so far had, I believe, a rather slow labor force growth compared to prior situations, and there may be reasons for that.

We have fewer teenagers in the population and so our labor force should reflect the dropoff in the number of teenagers coming into the labor force.

The very strong rapid growth of female participation rates in the 1960's and 1970's will probably slow down. I happen to believe that it will continue to grow, but it will certainly not grow at the rates of increase that we've had before.

So if we take that, I think it will be probably several months before we can see really what is happening. We had a growth of 1.3 million in the labor force over the last year, from October to October, and that's a bit lower than we would expect.

Representative SNOWE. Can you review the key industries which are still short of their prerecession employment levels and has there been any improvement in them over the past several months?

Ms. NORWOOD. Of course, there is the whole metals group, particularly steel, which is still very far below the prerecession level. Machinery is still quite low and things like instruments, food manufacturing, tobacco, and textile products, apparel products, paper products, chemicals, and petroleum. Some of these are industries which were not hit by the recession until toward the end of the period and so they haven't quite had much chance to turn around. But others, particularly in durable manufacturing, are industries which have been some declines over a longer period of time.

Representative SNOWE. So there isn't anything unusual about the slow growth in these particular industries as the unemployment rate improves? Do you see anything unusual about these industries?

Ms. NORWOOD. I don't know that I would characterize it as unusual, but I think there is a change going on and the change that's going on is that there are some industries which are since the late 1970's declining. There is a structural change of that kind.

There are other industries, like the services industry, which are really increasing employment rapidly and increasing employment even during the recession.

Representative SNOWE. What about the auto industry?

Ms. NORWOOD. With 806,000 persons employed in October, the auto industry is now pretty much where it was, in terms of employment, in June of 1981, when the level was 825,000. So it's not quite up there, but almost, in terms of employment. It is, of course, far below the peak levels of employment in 1979.

Representative SNOWE. And what would that be?

Ms. NORWOOD. That was about 240,000 more than we have employed now.

Representative SNOWE. Are there any figures on the overtime schedules?

Mr. PLEWES. Our latest count is that we have 18 auto plants on overtime.

Representative SNOWE. Finally, can you tell us anything about the indicators of average workweek in overtime and could you tell us something about the state of the economy as a whole and what is the significance of the October data concerning overtime and the added workweek?

Ms. NORWOOD. The manufacturing workweek has always been considered a leading indicator and for many months during this recovery we had increases steadily each month in working hours and sometimes in overtime. Last month we had an increase in factory hours of five-tenths of an hour, half an hour, which is very large. This month, factory hours declined two-tenths. That's not an unusual kind of juxtaposition.

I think what has been happening is that employers have been very reluctant to add to their work forces. We've had a lot of bankruptcies and we've had a lot of problems with cost situations, and so, I think that employers have been attempting to develop increased productivity, increased efficiency, and are waiting to be certain that the orders are really there before adding people to their payroll. So they've added hours first.

There seems to be some evidence now, when we compare the hours of work with the employment growth, that perhaps they are

now beginning to add more workers to their payroll. But I think we'll need some more months to see.

Representative SNOWE. Thank you, Ms. Norwood. Thank you, Congressman Wylie.

Representative WYLIE. Thank you very much, Representative Snowe.

Ms. Norwood, you may not be able to answer this question with certainty or finality, but if you could give us a guesstimate I think we'd all be glad to have it.

Now that the recovery is fully underway apparently and cyclical unemployment is coming down, what do we have to look forward to as a bottom line on unemployment after a couple more years of economic growth, and as we approach full employment, where will unemployment be?

What I'm really asking is, is there a normal rate of unemployment? Will we ever see 6 percent again or 5 percent?

Ms. NORWOOD. Well, there probably is a normal rate, but I don't know what it is. The way I'd like to answer that question, if I might, is to say that I really think we need to look at the pool of people who are unemployed by separating out the different groups.

The United States has a labor market that is really quite dynamic. People move through it. They move into employment, get a job, they leave a job, they lose a job, they go into unemployment, they go out of the labor force, they come back into the labor force. There is always a great deal of churning going on.

What is really important is to separate out those people in some way who will help themselves, who will find jobs, and those people who really need help. That latter group can then be separated into two groups; those people who are essentially self-starters who, if there are opportunities, would select themselves to make use of those opportunities; and then those people who really need a great deal of basic help.

And we have all kinds in this pool of unemployed.

Representative WYLIE. Well, you didn't indicate what you thought a guesstimate might be of what our natural rate of unemployment might be.

Ms. NORWOOD. No; I didn't.

Representative WYLIE. OK. I guess that's about as far as I'm going to get on that one.

Ms. NORWOOD. I'd be glad to submit for the record, Congressman Wylie, a review that the Bureau of Labor Statistics staff did a few years ago reviewing all of the different estimates of the so-called full employment-unemployment rate or the non-inflationary-unemployment rate.

Representative WYLIE. I'll ask unanimous consent that that be submitted for the record.

[The information referred to follows:]

# What is a current equivalent to unemployment rates of the past?

*The results of various attempts to quantify how much changes in the labor force, unemployment insurance, and minimum wages have affected unemployment rates are reasonably close; but no total effect on jobless rates can be determined*

JOSEPH ANTOS, WESLEY MELLOW,  
AND JACK E. TRIPLETT

The economic recovery which began in 1975 focused attention once more on the "full employment" target for U.S. macroeconomic policy. During the mid-1950's, economists generally believed that when 3 percent of the labor force was unemployed the economy had used up the slack in resources and further stimulation would risk breeding inflation. By the early 1960's, the generally accepted full employment goal was changed to 4 percent on the belief that this figure represented "frictional" unemployment, and thus the practical minimum level of unemployment that could be reached with conventional fiscal and monetary policy. Recently, however, a number of economists have argued that various changes in the economy have pushed the "full-employment unemployment rate" to values higher than the traditional 4 percent.

A number of articles have appeared which have attempted to quantify the effects on the unemployment rate of one or more of the economic changes which have occurred over the past 15 or 20 years. We have surveyed the major articles on this subject, and review their findings and methodologies in this article. Before going into this analysis, the following interpretive points must be made.

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36  
Reprinted from March 1979  
*Monthly Labor Review*

1. Computing the current unemployment rate that is comparable to (say) a 4-percent rate 15 or 20 years ago is *not* the same thing as determining the noninflationary rate in today's economy, even if 4 percent was the noninflationary rate in the earlier period. The reason is that inflation depends on a number of factors in addition to the wage-cost pressures embodied in traditional Phillips curve analysis, including pressures on capacity (which may generate upward movement in nonlabor costs), external shocks (such as energy or agricultural shortages), and inflationary expectations. If decisionmakers, buyers, and so forth, build into contracts, purchase orders, and other decisions some expected inflation rate, then the unemployment rate corresponding to price stability will be higher than it would be if inflationary expectations were absent. Thus the noninflationary unemployment rate will shift with changes in expectations (as well as the other factors mentioned above); accordingly, one cannot determine the noninflationary unemployment rate solely from analysis of labor market effects. Some recent literature acknowledges this point by speaking of the full-employment unemployment rate as the rate which will not *accelerate* the rate of inflation.

2. In the absence of a comprehensive, integrated study of the comparability question, it is necessary to combine the results of independent studies on factors such as changes in labor force composition, unemployment insurance, minimum wages, and so

U.S. DEPARTMENT OF LABOR  
Bureau of Labor Statistics

forth. Interaction effects, however, cause serious analytic problems. There are two categories of these effects:

First, there are interactions among the variables studied (as, for example, when a change in a social or governmental program also influences labor force composition, and separate estimates are computed for the impact on unemployment of the program change and the change in the composition of the labor force). In these cases, the whole may not be equal to the sum of the separately estimated effects.

Second, there are interactions between the variables studied and cyclical unemployment. Several of the factors discussed later in this article have a greater impact on the unemployment rate at less than full employment than they do at full employment. In these cases, finding the 1979 unemployment rate that is comparable to a 4-percent rate in earlier years is not the same thing as accounting for changes in the *actual* rates between those dates.

Unfortunately, it is seldom possible to extricate interaction effects from existing studies. In the absence of a research design that would account for interaction effects, we have grave reservations about adding up individual estimates obtained from independent studies in the attempt to compute a point estimate of a current unemployment rate which would be comparable to those of some past period. We believe the combined total would be considerably less accurate than the degree of accuracy the components would suggest.

3. Many relevant studies were not set up to permit translation of results into effects on the unemployment rate. For example, Edward Gramlich's minimum wage study, discussed later, estimates employment *elasticities* (to changes in the minimum) not estimates of *effects* on the unemployment rate. Accordingly, results of some studies on relevant variables were not incorporated in this article. In addition, some factors mentioned in various studies as contributing to the noncomparability question have not been analyzed in such a way as to permit their survey here.

#### Labor force composition effects

*Conceptual and methodological considerations.* Compositional effects have frequently been estimated by computing "weighted" unemployment rates; that is, applying the labor force proportions of some base period to the actual unemployment rates of various demographic groups in the comparison period. Such weighting exercises have been carried out by, among others, the Council of

Economic Advisers, Phillip Cagan, and Paul O. Flaim.<sup>1</sup> All the researchers used age-sex demographic groups, and Flaim included race as well. Results of the computations differ because of time spans covered and also because of varying degrees of disaggregation (from 10 demographic groups in Cagan's computation to 22 groups in Flaim's). Perhaps of more importance, however, the results were originally reported on different bases, because researchers have made different decisions with respect to the interaction term inherent in a weighted unemployment rate analysis.

To clarify this point, consider the following definition. The change in the overall unemployment rate between some initial base year (*b*) and some other year (*t*) is composed of the factors in the following expression:

$$(1) U^t - U^b + \sum_i (w_i^b \Delta u_i + u_i^b \Delta w_i + \Delta u_i \Delta w_i),$$

$$\text{or (1.a) } U^t - U^b = \sum_i (w_i^b \Delta u_i + u_i^b \Delta w_i + \Delta u_i \Delta w_i),$$

where  $U^b$  and  $U^t$  are overall unemployment rates,  $w_i$  is the labor force proportion of the *i*th demographic group,  $u_i$  is the unemployment rate for that same group, and  $\Delta$  indicates the change in the appropriate variable between periods *b* and *t*. Of course, the two unemployment rates  $U^b$  and  $U^t$  are defined by:

$$(2) U^b = \sum_i w_i^b u_i^b$$

$$U^t = \sum_i w_i^t u_i^t$$

In most of the literature on this subject, the "weighted" unemployment rate that has been computed to analyze the compositional question consists of:

$$(3) \text{"weighted" } U \equiv \sum_i w_i^b u_i^t = U^b + \sum_i (w_i^b \Delta u_i),$$

that is, a computation incorporating only the first term from the bracketed terms of equation (1). However, as a measure of the effect of the change in labor force composition, this is strictly correct only if the interaction term ( $\Delta u_i \Delta w_i$ ), the last bracketed term in equation (1), is close to zero and empirically it is not. The importance of this is indicated by the following economic interpretation of the separate terms of equation (1.a).

The first term ( $\sum_i w_i^b \Delta u_i$ ) gives the change in the overall unemployment rate that would have occurred had labor force proportions remained unchanged and had unemployment rates applicable to specific age-sex groups changed as they actually did. We refer to this as the "pure cyclical effect."

Of course, part of the change in actual age-sex specific unemployment rates was probably caused

## MONTHLY LABOR REVIEW March 1979 • A Current Equivalent to Past Unemployment Rates?

by changing labor force composition (for example, a larger cohort of young workers implies a "crowding" effect in that grouping, and a consequent rise in the youth unemployment rate, unless the number of entry-level jobs expands sufficiently).<sup>2</sup> Therefore, in the real economy, labor force proportions and specific unemployment rates are interrelated. This change in demographic unemployment rates associated with changing labor force proportions is part of the interaction term.

The second term of equation (1.a) —  $\sum u_i^b \Delta w_i$  — may be interpreted as the change in the overall unemployment rate that would have occurred if demographic unemployment rates had remained unchanged when labor force proportions changed. In table 1, this is referred to as the "direct compositional effect." This computation does not measure any change in labor force proportions caused by changes in demographic unemployment rates, an effect which would be introduced through labor force participation rates via what is usually referred to as the "discouraged worker" effect. This effect (or rather, the relative sizes of the discouraged worker effects for different demographic groups) is also a portion of the interaction term.

Thus, the final term in equation (1.a), the interaction term ( $\sum \Delta u_i \Delta w_i$ ) is composed of the

"crowding" effect on age-specific unemployment rates and the discouraged worker effect on labor force participation rates (and hence on labor force proportions). Disentangling the two effects cannot be done through a mechanical procedure such as equation (1), which is simply a mathematical truism, but requires a more sophisticated investigation of economic behavior than has so far been carried out.

Two further observations are appropriate. First, the interaction term is large, relative to the other terms of equation (1.a), so the above discussion is of considerable importance in interpreting the results: Empirically, the interaction term seems to be half or more the size of the "direct" composition effect computed from equation (1.a). Thus, the way the interaction term is handled makes a great amount of difference in the determination of the "comparable" unemployment rate.

Second, there is no absolutely correct way to handle the interaction term, precisely because it is an interaction effect attributable to both changes in labor force proportion and changes in age-sex specific unemployment rates. Some computations of "weighted" unemployment rates have ignored it, which is equivalent to the economic assumption that there is no "crowding" and there are no "discouraged workers." On the other hand, the

Table 1. Estimates of the effect of changes in labor force composition on the unemployment rate, various periods

Researcher and period	Number of age-sex groups	Direct compositional effect <sup>1</sup>	Interaction term <sup>2</sup>	Difference between actual and standardized rates (sum of column 3 and column 4)	Change in computed rate over the period	Comments	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
CEA <sup>3</sup>	1956-73 ..	14	...	0.72	(*)	No estimate of the interaction term. These estimates were taken from the "CEA" series presented in Wachter, table 10 (because the latter has more information than does the CEA Report). Figure obtained by subtraction; thus, the estimate implicitly assumes that the entire interaction term is associated with "crowding" effects. (See text.) From 1977 Annual Report, p. 51. Details of the calculation not reported. Presents interaction term in a footnote, does not add it to the direct effect. Author's preferred computation obtained by adding one-half of the interaction term to the direct effect, giving 0.8 as the total effect.	
	1956-75 ..	14	...	1.01	(*)		
1955-76 ..	14	...	...	.9	(*)		
Cagan <sup>4</sup>	1956-73 ..	10	0.46	0.22	.68		(*)
	1967-73 ..	22	...	...	.75		(*)
Flain <sup>5</sup>	1967-73 ..	22	...	...	1.04		(*)
	1967-76 ..	22	.55	.49	...		
Perry (UPF)	1956-75 ..	14	...	...	1956 = 3.5 1975 = 7.1		None
Wachter (UNP)	1956-75 ..	14	...	...	1956 = 4.0 1975 = 5.5		None

<sup>1</sup>Direct compositional effect =  $\sum u_i^b \Delta w_i$

(See equation 1 in the text.)

<sup>2</sup>Interaction term =  $\sum \Delta u_i \Delta w_i$ . (See equation 1 in the text.)

<sup>3</sup>Comparable methodologies used.

<sup>4</sup>Not applicable.

<sup>5</sup>Other methodologies used.

whole interaction effect cannot be added in to either of the two weighted unemployment rates that could be computed from the first two terms of equation (1.a) precisely because it belongs, in undetermined proportions, to both. Arbitrarily splitting the interaction term among the two rates is not appropriate either. The only appropriate way to present the results is to report direct compositional effects and interactions terms separately, and this is the way it is handled in table 1.

*The estimates.* Table 1 summarizes several estimates of the effect of changes in labor force composition using fixed-weight unemployment rates. Entries in the table indicate the magnitude of the effects of changes in labor force composition over the designated period. For example, Cagan estimates that the direct compositional effect added 0.46 percentage points to the full-employment unemployment rate between 1956 and 1973. Allowing for different periods covered by the estimates, agreement appears close. All three estimates of the "sum" (col. 3) for the year 1973 lie around 0.7 percentage points.

We prefer, however, to focus on the separate estimates of direct compositional and interaction effects because of the preceding analysis which argued that the sum of the two is undoubtedly an overstatement of the impact of labor force composition on the overall rate. The two estimates of the direct compositional effect put it at around half a point with the difference between the two undoubtedly attributable to the continued change in labor force composition between 1973 and 1976.

The only anomaly in table 1 relates to the size of the interaction term, which is considerably larger in Flaim's estimate than in Cagan's. The reason for this may be the fact that Flaim used more demographic groups, thus giving more leeway for interaction effects to show up. On the other hand, higher 1976 unemployment rates may show up disproportionately in the interaction term.

Taking account of the interpretative problems posed by the interaction term, application of the "fixed-weight" unemployment rate methodology leads to the following tentative conclusion: Changes in labor force composition appear to have added from one-half (the direct compositional effect) to one percentage point (the outside limit if the full interaction term is included) to the unemployment rate for 1976, compared to its value 20 years earlier.

*Alternative methodologies.* A major motivation for computing fixed-weight unemployment rates is a desire to obtain a better *summary measure* of excess

supply in labor markets than is provided by the official BLS rate. Though the concept of a *measure* of excess supply or excess demand is not very well defined in economics (at either the operational or theoretical levels), and methods for aggregating excess supply measures for individual labor markets into a *simple* summary measure for the economy are even less well understood, it is still appropriate to try to sharpen the notion of aggregate labor market excess supply by making reference to a more tightly defined concept. This, in our interpretation, is what George Perry and Michael Wachter attempt to do.

Perry adjusts a measure of lost hours for estimated hourly earnings (both expressed relative to the values applicable to prime-age males). Thus, his unemployment measure ( $U^P$ ) is closely related (though not precisely equivalent) to a measure of earnings lost by unemployed labor. Though a measure of the economic loss due to unemployment is valuable, and may be defended as a better measure for the purpose Perry puts it to, the published BLS unemployment rate has never measured economic loss due to unemployment, so we cannot use changes in Perry's measure to evaluate the comparability of changes in the official BLS unemployment rate over time. As presented in Wachter,  $U^P$  moved from 3.5 in 1956 to 7.1 in 1975, but that does not imply that the equivalent BLS unemployment rate was 7.1.<sup>3</sup>

Perry's unemployment measure has been used as a proxy for excess demand in wage equations of the Phillips curve type, but it requires strong assumptions to argue that a wage-weighted measure of excess labor supply is the best construction for this purpose. Wachter's normalized unemployment rate ( $U_N$ ) was constructed explicitly to meet this need.

Wachter's rate ( $U_N$ ) is built up from age-sex groups' specific rates which are estimated from a statistical analysis, rather than from a weighting scheme. A regression is used to establish the relation between actual age-sex specific rates and the rate for prime-age males, at the same time controlling for changes in the age distribution of the population. (The objective is to capture the impact on age-sex specific rates of factors such as the postwar baby boom coming into the labor market.) Then, on the twin assumptions that the "noninflationary" or "full-employment" rate for prime-age males is 2.9 and constant over time, "normalized" unemployment rates are computed for each age-sex group by plugging the 2.9 value back into the regression. The estimated age-sex specific rates are then aggregated into the overall

$U_N$  figure, using current labor force proportions for each year.

The procedure has been criticized<sup>4</sup> but a detailed presentation of these criticisms would depart from the purpose of this article. However, three points should be made:

1. Wachter refers to his  $U_N$  as a "full employment unemployment rate" in the sense that it permits developing a figure which "denotes the same labor market tightness over time." Such an objective (a better measure of "labor market tightness") undoubtedly lies behind other attempts to adjust the unemployment rate in some fashion, so Wachter's  $U_N$  may be regarded as a relatively sophisticated attempt to get around the economic inadequacy of mechanical procedures such as fixed-weighting schemes.

2. Whether the measure is successful in doing what Wachter intends it to do is clearly debatable. He is duly cautious: "Unfortunately, few of the variables that are likely to affect the normalized unemployment rate can be easily quantified with the precision needed to estimate their impact on it . . . Hence the  $U_N$  measure of this paper is a crude proxy."<sup>5</sup>

3. Though  $U_N$  is developed as a measure to determine a noninflationary unemployment rate for analyzing wage inflation, there is no reason to believe that this measure defines uniquely an unemployment rate that can be used to target economic policy, essentially for the reason noted earlier in this article and stressed so often by Milton Friedman, Edmund Phelps, Phillip Cagan, and others.<sup>6</sup> The noninflationary unemployment rate depends crucially on price expectations, as well as other economic factors.

#### Unemployment insurance

Many researchers have studied the impact that the unemployment insurance (UI) system has on unemployment, particularly duration of unemployment. Hamermesh analyzed 12 empirical studies on the topic and concluded that for those receiving UI benefits duration of unemployment is longer by about 2.5 weeks, and concluded that the UI system "induces an extra 0.51 percentage points of unemployment, through its effect on duration."<sup>7</sup> Other researchers reach similar conclusions. In his study for the Joint Economic Committee, Martin Feldstein calculated that the total impact of the UI system increased the unemployment rate by 1.25 percentage points—0.75 as a result of increased duration.<sup>8</sup>

However, for present purposes the relevant question is: "What effect have changes in the UI

Table 2. Estimates of the effects of changes in the Unemployment insurance system on the noncyclical unemployment rate, 1956-77

Source of change	Change in rate
Increased coverage . . . . .	+ .14
Change in magnitude of benefits . . . . .	0
Supplemental Insurance Assistance Program (inclusion of seasonal workers) . . . . .	+ .20
1974-75 extension of maximum weeks benefits may be paid . . . . .	(?)
Total effect . . . . .	+ .34

<sup>4</sup> Not applicable to noncyclical computation.

SOURCE: Philip Cagan, "The Reduction of Inflation and the Magnitude of Unemployment," Contemporary Economic Problems (Washington: American Enterprise Institute for Public Policy Research, 1977), p. 38.

system had on the unemployment rate?" and not, "What is the total effect of the UI system on the unemployment rate?" This is so because the 1956 unemployment rate was higher than it would have been had the UI system not existed then. Since 1956, the ratio of average UI benefits to average weekly earnings has increased by only 2.7 percentage points, so that a major part of the effect of the UI system on unemployment rates probably occurred prior to 1956.<sup>9</sup>

One study that does investigate the effect of changes in the UI system on the unemployment rate is that of Cagan (summarized in table 2). Cagan analyzes the following changes in the UI system since 1956: (1) Increases in the percentage of workers in the labor force who are covered by the UI system. He calculates the increase in covered workers over the period, applies typical estimates of the effect UI has on duration, and concludes that increased coverage increased the unemployment rate by 0.14 percentage point through its effect on duration. He made no allowance for any effect on unemployment incidence. (2) Increases in the magnitude of benefits could affect both the duration and incidence of unemployment. The increase in benefit levels since the late 1950's has been extremely modest—the ratio of benefits to average earnings increased only 2.7 percentage points. Consequently, Cagan ignores this as a source of possible influence on unemployment. (3) The Supplemental Insurance Assistance Program enacted in 1975 which extended coverage to many workers in seasonal industries (such as schoolteachers). Here, Cagan cites Alfred Tella's rough estimate that the program resulted in a 0.20-percentage-point increase in the unemployment rate. (4) Finally, Cagan ignores the 1974 and 1975 extensions of the time for receiving benefits, arguing that since such extensions occur only in times of high unemployment their effect on the rate when unemployment is low would be minor.

To summarize, Cagan estimates that changes in the UI system over the past 20 years have increased the noncyclical unemployment rate 0.34 percentage point. However, as Cagan<sup>10</sup> points out, changes in the UI system may also increase the incidence of unemployment, but "there exists no accurate estimate of how much they increase it."

#### Minimum wages

Among the large number of studies of the economic effect of minimum wage laws, three studies (Jacob Mincer, Hyman B. Kaitz, and James F. Ragan, Jr.)<sup>11</sup> have used similar methodologies to estimate the effect of changes in minimum wages on the unemployment rates for demographic groups. (See table 3.) All have explicitly allowed for effects of withdrawal from the labor force (as well as disemployment impacts) and all used an "effective minimum wage" variable originally constructed by BLS.<sup>12</sup> The effective minimum wage expresses the minimum wage relative to a measure of average hourly earnings which is weighted for the proportion of employment covered under the minimum wage law.

Mincer's study found effects for young workers which substantially increased their unemployment rates (largest impacts were for men age 20-24 and for teenagers) with little impact on older workers. Cagan used Mincer's equations, combined with values for the effective minimum wage for 1974, to estimate that changes in the minimum wage from 1956 to 1974 contributed 0.63 percentage point to unemployment rates.

Kaitz and Ragan ran regressions not dissimilar to Mincer's for more detailed categories within the

teenage group. Ragan's more disaggregated regressions imply smaller estimates of unemployment among teenagers than one would obtain from Mincer's regressions. (Hence, plugging Ragan's equations into the calculation performed by Cagan would have decreased Cagan's estimate of the effect of minimum wage changes on the overall unemployment rate to about 0.35 percentage point.) By comparison, the earlier study by Kaitz found very little effect. We feel that the Kaitz conclusion is probably less in disagreement with the others than may at first appear because of the following:

1. There was very little trend in the effective minimum wage variable between the 1956 minimum wage changes and those that went into effect in 1967 and 1968. Therefore, the period studied by Kaitz (1954-68) ends at about the time the effects estimated by Ragan begin to show up.

2. Kaitz recognized that Government training programs had an effect on teenage unemployment that offset, to a great degree, the 1967 and 1968 minimum wage changes. Kaitz also recognized econometric problems with his approach, and we believe Ragan's procedure for handling this problem is better than that of Kaitz. Accordingly, Ragan's estimates are preferable.

3. Kaitz found large withdrawal effects. Ragan handles part of the withdrawal from the labor force problem by running separate regressions for teenagers enrolled in school. Again, Ragan's later work is an improvement on the pioneering effort by Kaitz.

Thus, these three studies are in rough agreement on the size of the effect of minimum wage changes on the unemployment rate, though Cagan's com-

Table 3. Studies<sup>1</sup> of the effect of increases in the minimum wage on the unemployment rate, various periods 1954-74

Name	Period	Groups for which results computed	Range of estimates	Comments
Mincer	1954-69	10 demographic groups	4.5 to 11.3 for teens and young workers -1.4 to 1.9 for older workers	Computed from separate regressions for employment and labor force effects. No overall estimate.
Cagan	1956-74	overall rate	0.63 overall	Extrapolated Mincer's results to 1974 and combined the impacts for most affected groups (youth) to form an estimate of the impact on the overall unemployment rate.
Kaitz	1954-68	9 teenage demographic groups	Net effect is "essentially no change"	Estimated separate employment and labor force equations (as did Mincer), but estimated unemployment effects directly from another regression. Found substantial labor force withdrawals, which offset disemployment effects.
Ragan	1963-72	16 teenage demographic	-1.8 to 21.8 for 16 groups 3.8 for total teenagers (implies an increase in overall unemployment rate of about 0.36)	Measures only the effect of 1966 minimum wage changes on 1972 teenage unemployment rates (However, there was very little change in effective minimum wage rates from 1956 to 1966, so may be taken as an estimate of the effect from 1956 to 1972 on teenage unemployment rates.) Computed from regressions similar to those of Kaitz, improved specification, and separate regressions for teenagers enrolled in school may account for difference in findings.

<sup>1</sup>Using comparable methodologies

putation of the effect on the overall rate may be a little high in the sense that his 0.63 would have been smaller had he substituted Ragan's (more recent) teenage estimates for those of Mincer (but retaining Mincer's finding of large unemployment effects for men age 20-24, a group which was not studied by Ragan).

A different kind of study was done by Edward Gramlich<sup>13</sup> who, as noted, estimated employment elasticities, rather than effects on the unemployment rate. However, if persons disemployed by the minimum wage withdraw from the labor force, employment elasticities cannot be used to estimate the effect on the unemployment rate. Moreover, Gramlich's minimum wage variable is the ratio of the statutory minimum to a *price* measure (real minimum wages), rather than relating the nominal minimum to other wages. If the minimum wage causes substitution of high wage for low wage workers (which Gramlich's own regressions suggest), then surely the minimum wage should have been related to a measure of other wages. Nevertheless, taking all of his regressions together, Gramlich finds that young workers are losers from minimum wage increases, not primarily because they are disemployed, but mainly because they are moved into part-time employment. This and his other findings are broadly consistent with the magnitudes and directions of the effects found in the Mincer study cited earlier.

A final, and quite different, study of the effect of minimum wages, is one done by Marvin Kosters and Finis Welch,<sup>14</sup> who emphasize the distinction between cyclical unemployment and other types. It is well known that employment of teenagers and low-skilled workers fluctuates more than does that of skilled adult male workers. Kosters and Welch found that the minimum wage exacerbated these differing cyclical patterns:

Our evidence indicates that increases in the effective minimum wage over the period 1954-68 have had . . . the effect of . . . increasing vulnerability to cyclical changes in employment for the group most "marginal" to the work force—teenagers. . . . And a disproportionate share of these unfavorable employment effects appears to have accrued to nonwhite teenagers.<sup>15</sup>

Applying their conclusions to the other studies cited in table 3 suggests that the minimum wage impact estimated by Cagan may be too *high* partly because those studies do not fully allow for the stage of the business cycle (or unemployment level) effects; that is, they estimate what is (roughly) an average effect over the cycle. Because recent unemployment rates are so much higher than those

experienced over the 1954-72 period covered in those studies, their results imply a substantially higher impact on the 1978 unemployment rate of minimum wage changes, though also implying that at low rates of overall unemployment, the minimum wage effect on unemployment would be much lower than Cagan's estimate given in table 3. As we are concerned with the comparability of the *full-employment* rate, Kosters and Welch's findings suggest that Cagan's estimate is too high.

At this point it is worth noting once again the role of the interaction effects emphasized at the beginning of the article.

1. If minimum wage changes cause withdrawals from the labor force, this obviously affects labor force composition, the effects of which were studied separately. Because in this case minimum wage-induced withdrawal serves to *reduce* the labor force composition estimates below what they would otherwise be (because the worker groups most affected have grown relative to other population groups), we infer that the combined effect of changes in minimum wages and in labor force composition would probably be greater than the separately estimated effects.

2. Kosters and Welch argue that the minimum wage serves to increase the cyclical swings in teenage unemployment. This interaction between a public policy and business cycle developments makes it difficult to specify precisely what "comparability" in unemployment rates would encompass.

Another factor not considered in any of the studies discussed thus far is J. Wilson Mixon's suggestion<sup>16</sup> that offsetting adjustments in fringe benefits and working conditions may reduce the direct employment effects of the minimum wage, so that the ultimate effect shows up in a more complex way—through changes in turnover rates, as one instance—than envisioned in other existing studies. Differences in turnover rates among different demographic groups have often been cited as the reasons for differences in age and sex specific unemployment rates.<sup>17</sup> The Mixon hypothesis about the economic impact of the minimum wage thus suggests an interaction effect with the demographic composition effects surveyed earlier. There is no existing information on the magnitude of this effect.

Considering results of all the minimum wage studies, plus probable interaction effects, we conclude that there are both upward and downward biases operating on the 0.6-percentage point estimate of the effect of the minimum wage that Cagan compiled, based on Mincer's work. We can

thus have no great confidence in the accuracy of this number, because we are unable at present to quantify these biases in order to take them into account in the estimate.

#### Other factors

As part of this review, we need to discuss certain factors influencing changes in the overall rate that have been mentioned in a variety of sources.

*Multiworker families.* An unemployed person may have less financial pressure and thus take longer to accept a new job if other members of his family are employed. Because the proportion of multiworker families has risen over the past 20 years, this factor has been hypothesized as contributing to a rise in measured unemployment. We can get a rough idea of the size of this effect by examining the influence of other family members' earnings on an unemployed individual's job search behavior.

In a recent study, John M. Barron and Wesley Mellow<sup>18</sup> used data taken from the May 1976 Current Population Survey supplement on the jobseeking behavior of the unemployed to estimate a model of intensity of search effort; that is, hours spent looking for work. Their model includes as explanatory variables demographic characteristics, reason for unemployment, and unemployment insurance benefits, as well as variables indicating family income from welfare payments and the earnings of other family members. It is estimated that unemployed workers in families containing another employed member spend about 10 percent fewer hours per week looking for work.<sup>19</sup>

To translate an effect on time spent searching into an unemployment rate impact, we need to know how job search affects the probability of finding work. As an upper bound estimate, we assume that a given percent increase in hours per week spent searching for work implies an equivalent percent increase in the probability of becoming employed. In other words, if hours per week spent searching increases by 10 percent, we assume the probability of finding a job also increases by 10 percent. This yields an estimate of 0.42 percentage points for the *total* impact of multiworker families on the 1976 unemployment rate.<sup>20</sup>

What we want, of course, is an estimate of the impact of *change* in the proportion of multiworker families over the 1956-76 period. As this proportion has moved from 38.3 percent of families with members in the labor force in 1956 to 52.9 percent in 1976, we adjust the 0.42 figure for this change. This results in an estimate that an increasing proportion of multiworker families was responsible for only 0.12 percentage points of the higher

unemployment rate of 1976. Thus, the multiworker family effect on the overall unemployment rate appears to be modest. Of course, the increase in multiworker families over the period may have increased the *incidence* of unemployment as well as its duration. We have no direct evidence on this.

*Social programs.* Increased welfare payments of various kinds might make not working more attractive than working at low-paying jobs, and thereby increase the number of people who are counted as unemployed. We know of no estimates of the effects of welfare programs, as such, on the unemployment rate. Most of the discussion about the unemployment rate effect of these programs has focused instead on the fact that some of them (Aid to Families with Dependent Children and Food Stamps) have recently instituted mandatory work registration of some kind (at least for some participants).

Mandatory work registration might change the *measured* unemployment rate because it forces people who were not previously looking for work to begin looking (in which case the change in the measured unemployment rate is correct, although for the purposes of the present inquiry we would still want to eliminate the effect to maintain comparability over time). Alternatively, it might induce people who were not really interested in working to report themselves to the Current Population Survey (CPS) as looking for work because they were afraid that correct reporting would somehow jeopardize their eligibility for welfare payments. The latter idea seems at the root of most of the discussion of the subject; that is, the idea that registration requirements have not produced changes in economic behavior (labor force participation), only a measurement error in the official unemployment series. Obviously, evaluation of this probability requires information on how mandatory work registration influences *the way people respond to the CPS survey*, but no studies have produced direct information on survey response.

In its 1976 *Annual Report*, the Council of Economic Advisers reported that when welfare mothers were required to register for work, their specific unemployment rate increased by 5.8 points (from 5.7 percent to 11.5 percent);<sup>21</sup> Cagan translated this into a 0.2 increase in the overall unemployment rate.

The Council's estimate, however, was obtained from administrative records of the Aid to Families with Dependent Children (AFDC) program and refers to the number of program recipients reclassified from "out of the labor force" to "unem-

ployed" status by welfare administrators after passage of the work registration requirement. The legislation itself required welfare administrators to determine which welfare recipients were capable of holding jobs; one would expect this more careful examination, alone, to result in transfers out of the "not in the labor force" status, even in the absence of work registration (simply because it focused attention on making a more precise definition of potential employability and labor market status). In some cases, for example, mothers might have already regarded themselves as looking for work (hence, unemployed), so that the change in AFDC records reflects more accuracy in recording labor market status in those records, rather than a change in the welfare recipient's own perception of her status, or any change in the measured unemployment rate. Moreover, having decided that a welfare recipient was capable of working, and hence should be forced to register for work, the only consistent labor force classification for the administrator to make is "unemployed."

The question for the measured unemployment rate, however, is not the welfare administrator's response to mandatory work registration, but the effect of the registration on the welfare recipient's own perception of her labor market status, and its effect on her response to the CPS query. It is reasonable to presume that work registration will produce *some* change in survey response, but it is extremely doubtful that *all* persons reclassified by administrators will reclassify themselves when they are included in the Current Population Survey. (Indeed, the 11.5-percent unemployment rate reported in the AFDC administrative records is really a count of the number of employable, but not currently working, mothers receiving AFDC.) For this reason, we believe that Cagan's 0.2-percent point estimate for the effect of AFDC work requirements on the unemployment rate is too high.

In a widely circulated study, Kenneth W. Clarkson and Roger E. Meiners reached a far higher figure (2.4 percentage points) for the effect of all welfare program work registration requirements.<sup>22</sup> The authors essentially jumped to this conclusion from observing the size of the change in the unemployment rate in the past several years (years in which work registration requirements were instituted), buttressing the argument with counts of persons in the affected programs. Their data have little, if anything, to say about the measured unemployment rate, and amount to little more than unsubstantiated speculation, which (as shown in analyses by the Bureau of Labor

Statistics and the Congressional Budget Office) is far from convincing. Cagan cites the study but does not use its results, a judgment which we follow in the present article.

*Government training programs.* A training program can have several impacts on the unemployment rate. It is well known that more highly skilled workers have lower unemployment rates, so a training program which succeeds in raising the skill level above what it otherwise would have been might be expected to lower unemployment rates of participants throughout their lifetimes, thereby producing a permanent reduction in the aggregate unemployment rate. The long-run effect of existing and past government training programs has been the subject of some debate, and we know of no studies which indicate whether they have reduced the long-run unemployment rate.

There is also a short-run impact. Some persons who are in training programs (and, therefore, classified as out of the labor force) would otherwise have been in the labor force and those who did not find employment would raise the unemployment rate. Attempts to examine the short-run impact have been done by Malcolm Cohen, Sylvia S. Small, and Ralph E. Smith.<sup>23</sup> All take the *previous labor market status* of program participants to define their *probable status* were they not in the program (though Smith, as noted later, modified this approach). Cohen and Small come up with a decrease in the unemployment rate of about 0.3 percentage point.

However, using this approach to estimate the effect on the overall unemployment rate assumes that when a worker leaves his job to enter a training program, *the number of jobs in the economy falls*. We assume, instead, that the total number of jobs in the economy is determined by conventional macroeconomic forces and is independent of whether a group of individuals enters into training programs (or, put another way, that when a worker enters into a training program his job is taken by someone else who would otherwise have been unemployed). Under this line of reasoning, the number of unemployed is reduced by the *entire number* of participants who were previously in the labor force—not just those who were previously unemployed—with appropriate adjustments (if any) for probable changes in labor force participation rates. This recalculation would *raise* the estimated impact on the unemployment rate substantially. Thus, Smith's downward adjustment to Small's estimate—for probable length of unemployment—is inappropriate, and adjusts the estimate in the wrong direction.

*Changes in measurement and response.* Changes in the Current Population Survey in 1967 and 1970 have been evaluated by the Bureau of Labor Statistics and the Bureau of the Census. Paul O. Flaim judged the effects of the two changes to be offsetting, resulting in no net change in the overall unemployment rate.

Cagan quoted Alfred Tella<sup>24</sup> as arguing that survey response error has changed over time, and that this factor has lowered the unemployment rate by 0.1 points. Thus, the net effect of measurement and response changes is very small, with a possible small downward error being the best estimate.

#### Is there a current equivalent?

We have carried out a critical review of available research on factors which affect the comparability of recent unemployment rates with those of earlier periods. It is tempting to add up the quantitative results discussed and to treat the sum as an estimate of the change in the full-employment unemployment rate over the past two decades. Though we believe the results of the various studies cited are enlightening, it is not valid to combine these results to obtain an unemployment rate "comparable" to some earlier rate. Present research simply does not permit a very precise estimate of the total influence of all the factors discussed in this article. There are two compelling reasons for an agnostic position on this question: (1) A lack of confidence in the precision of estimated effects for the individual factors, and (2) major problems with the validity of *summing* the separate estimates of individual factors (primarily, unmeasured interaction effects among the various separate estimates).

*Precision of estimates.* For most of the factors which have been studied, we have reservations about the accuracy, precision, or validity of existing estimates. These reservations are summarized in Exhibit A, which lists two sources of imprecision: (1) Known errors in available estimates which tend to overstate the estimated effect of the particular factor studied; and (2) important aspects of some factors on the list have not been investigated in a setting which permits using research results to estimate comparable unemployment rates.

Source	Direction of and reason for probable bias or error in estimates
1. Labor force composition	Uncertain interaction term from fixed weight unemployment rate calculation cannot be partitioned accurately, and other methodologies do not yield estimates precisely comparable with the measured unemployment rate.
2. UI benefits	Uncertain; probable upward bias for factors listed in table 2, but other UI influences on unemployment have not been studied.
3. Minimum wage	Estimated effect too large, for reasons specified in text.
4. Other factors: Multworker family Welfare programs Government training programs Measurement	Uncertain; incomplete data. Estimates effect incomplete, and therefore possibly too low. Estimated effect too small, for reasons discussed in text. None, so far as known.

Because we have no estimates of the size of the errors, nor of the extent to which they may or may not offset each other—we do not know the sign of the aggregate error or bias. We feel that adding up the existing factor estimates from the separate parts of this article would produce an aggregate figure in whose precision we would have little confidence.

*Imprecision of summed totals.* We have argued throughout this article that a number of factors that have been identified as affecting unemployment rate comparability interact with each other. Thus, for example, if the minimum wage affects the unemployment rate partially through the effects it has on the labor force for impacted groups, then it is proper to include those effects if the objective is to estimate only the minimum wage effect; it would be quite improper, however, to add such an estimate to an estimate of labor force composition effects obtained independently, because simple summation would in this case count part of the effect of the minimum wage rate twice.

We feel that labor market interactions are pervasive among the factors discussed in this article, so that *simple summation* of the separately estimated effects would lead to serious error. However, we do not rule out some form of combination, if the necessary information were available on the size of interaction effects. It is not at the present time. □

#### FOOTNOTES

<sup>1</sup> See Annual Report of the Council of Economic Advisers, 1976, and Annual Report, 1977; Phillip Cagan, "The Reduction of Inflation and the Magnitude of Unemployment," *Contemporary Economic Problems, 1977* (Washington, American Enterprise Institute for Public Policy Research, 1977), pp. 15–52; and Paul O. Flaim, "The effect of

demographic changes on the Nation's unemployment rate," *Monthly Labor Review*, March 1979, pp. 13–23.

<sup>2</sup> Michael Wachter, "The Demographic Impact on Unemployment: Past Experience and the Outlook for the Future," *Demographic Trends and Full Employment*, Special Report 12 (Washington, National

## MONTHLY LABOR REVIEW March 1979 • A Current Equivalent to Past Unemployment Rates?

Commission for Manpower Policy, 1976), pp. 27-99.

<sup>2</sup> In its original 1970 form, U<sup>1</sup> was not a fixed-weight measure, as it incorporated current hours and earnings. In a 1977 article, George L. Perry introduced a "potential" unemployment rate, which differs from that of his 1970 article (though he also indicates using the 1970 version in some of his calculations). See George L. Perry, "Changing Labor Markets and Inflation," *Brookings Papers on Economic Activity: 3: 1970*, pp. 411-41; and George L. Perry, "Potential Output and Productivity," *Brookings Papers on Economic Activity: 1: 1977* (Washington, The Brookings Institution), pp. 11-47.

<sup>4</sup> See, for example, the Brookings Panel discussion accompanying Wachter's article, "The Changing Cyclical Responsiveness of Wage Inflation," *Brookings Papers on Economic Activity: 1: 1976* (Washington, The Brookings Institution, 1976), pp. 115-59.

<sup>5</sup> Wachter, "Changing Cyclical Responsiveness," pp. 126-27.

<sup>6</sup> Milton Friedman, "The Role of Monetary Policy," *The American Economic Review*, March 1968, pp. 1-17; Edmund S. Phelps, "Money Wage Dynamics and Labor Market Equilibrium," in Edmund S. Phelps, ed., *Microeconomic Foundations of Employment and Inflation Theory* (New York, W.W. Norton & Co., Inc., 1970), pp. 124-66; and Cagan, "The Reduction of Inflation."

<sup>7</sup> Daniel S. Hamermesh, *Jobless Pay and the Economy* (Baltimore, The Johns Hopkins University Press, 1977), p. 49.

<sup>8</sup> Martin Feldstein, *Lowering the Permanent Rate of Unemployment* (Washington, Joint Economic Committee of the Congress, September 1973).

<sup>9</sup> Some studies, as well as some press reports, have failed to distinguish between the two questions and have taken Feldstein's 0.75 percentage point as an estimate of the impact that changes in unemployment insurance have had on the unemployment rate by way of increasing duration.

<sup>10</sup> Cagan, "Reduction of Inflation," p. 34.

<sup>11</sup> Jacob Mincer, "Unemployment Effects of Minimum Wages," *Journal of Political Economy*, August 1976 (part 2), pp. 87-104; Hyman B. Kaiz, "Experience of the Past: The National Minimum," in *Youth Unemployment and Minimum Wages*, Bulletin 1657 (Bureau of Labor Statistics, 1970), pp. 30-54; and James F. Ragan, Jr., "Minimum Wage Legislation and the Youth Labor Market," *Review of Economics and Statistics*, May 1977, pp. 129-36.

<sup>12</sup> Thomas W. Gavett, "Introduction" to *Youth Unemployment and Minimum Wages*, Bulletin 1657 (Bureau of Labor Statistics, 1970), pp. 1-29.

<sup>13</sup> Edward Gramlich, "Impact of Minimum Wages on other Wages, Employment, and Family Incomes," *Brookings Papers on Economic Activity: 2: 1976* (Washington, The Brookings Institution, 1976), pp.

409-51.

<sup>14</sup> Marvin Kosters and Finis Welch, "The Effects of Minimum Wages on the Distribution of Changes in Aggregate Employment," *American Economic Review*, June 1972, pp. 323-32.

<sup>15</sup> Kosters and Welch, op. cit., p. 30.

<sup>16</sup> J. Wilson Mixon, *The Minimum Wage and the Job Package* (Bureau of Labor Statistics Working Paper 32, January 1975).

<sup>17</sup> Robert E. Hall, "Turnover in the Labor Force," *Brookings Papers on Economic Activity: 3: 1972* (Washington, The Brookings Institution, 1972), pp. 709-56.

<sup>18</sup> John M. Barron and Wesley Mellow, "Search Effort in the Labor Market," forthcoming in the *Journal of Human Resources*.

<sup>19</sup> The search intensity regression contains as an independent variable, the dollar value of weekly income received during the prior month net of any wage and unemployment insurance benefits received by the individual. A major component of this variable is the weekly earnings of other family members. The estimated coefficient on the income variable is .004 (Barron and Mellow, table 1). Multiplying this estimate by average weekly earnings in 1976 of \$175 yields a reduction of 0.7 hours per week in time spent looking for work. Because mean search time for the sample is 7.1 hours, this translates into approximately a 10-percent reduction in search time.

<sup>20</sup> The 1976 unemployment rate was 7.7 percent and in the jobseeking activities supplement, 55 percent of the unemployed reported other family members were working. The implied reduction in the 1976 rate is thus: [the reduction in the unemployment rate— .10] × [the percent of unemployed with another family member working—55] × [the 1976 unemployment rate—7.1] = .42.

<sup>21</sup> Council of Economic Advisors, *Annual Report*, 1976, p. 68.

<sup>22</sup> Kenneth W. Clarkson and Roger E. Meiners, *Inflated Unemployment Statistics: The Effect of Welfare Work Registration Requirements*, (Miami, University of Miami School of Law, Law and Economics Center, March 1977).

<sup>23</sup> Malcolm S. Cohen, "The Direct Effects of Federal Manpower Programs in Reducing Unemployment," *The Journal of Human Resources*, Fall 1969, pp. 491-507; Sylvia S. Small, "Statistical Effect of Work-Training Programs on the Unemployment Rate," *Monthly Labor Review*, September 1972, pp. 7-13; and Ralph E. Smith, "Manpower programs and unemployment statistics," *Monthly Labor Review*, April 1973, pp. 63-65.

<sup>24</sup> Alfred Tella, "Analyzing Joblessness," *The New York Times*, Oct. 27, 1976, Op-Ed page; and Cyclical Behavior of Bias-Adjusted Unemployment, Methods for Manpower Analysis 11 (W.E. Upjohn Institute for Employment Research, April 1976).

Representative WYLIE. Some experts have testified before this committee that labor costs have outpaced productivity gains in recent years.

Will you bring the committee up to date on the impact of the 1981-82 recession and the unemployment rate on recent wage and salary settlements affected over the next several years?

What I have in mind is, has the recession frightened labor into more wage settlements in return for job security?

Ms. NORWOOD. Well, Congressman, I'm not sure that there has been any frightening. I think we have seen some reduction in wage and salary changes in some of the collective-bargaining settlements. In some of the major collective-bargaining settlements there's been a lot of discussion of what have been called give-backs. But I think there are some other things that are going on there.

One is, of course, that inflation has decelerated and since inflation has decelerated we really have had a reduced effect of cost-of-living adjustments. In addition, because inflation has decelerated, workers and unions are negotiating against a background that is very different from the background that we had over the 1979-80 period when we had double-digit inflation.

There is a clear deceleration in the rate of wage and salary increases and even in compensation. There's also a shift going on, I believe, in the proportions of agreements that bear salaries or wages and on fringe benefits.

Representative WYLIE. Well, demands for increased wages have declined, but you attribute that more to a reduction in inflation rather than the fact of insecurity?

Ms. NORWOOD. No. What I'm saying is that when management and labor sit down at the collective bargaining table they take into account the entire atmosphere in which they are operating. In many cases plants have been shutting down and reducing their work forces and so that is certainly a very important element to be considered by both sides.

The other element, however, is that the need for strong increases is somewhat lessened because we have had a deceleration in prices.

Representative WYLIE. Congressman Lungren, do you have any questions?

Representative LUNGREN. Thank you, Congressman.

I wish my friend from Maryland hadn't left because I sort of made a promise to him in the last hearing that if he wouldn't be too pessimistic I wouldn't be too optimistic, and I was going to apologize for being unable to contain my optimism about the statistics you've given us this time.

It seems to me you've said that for the 11th month in a row that the employment situation has been positive. The good news is that the unemployment rate has dropped 2 full percentage points since last December. In addition, the data shows the drop in unemployment to be one of the most significant in recent decades. And aside from this last July when we had a drop of one-half of 1 percent in 1 month, as I recall your testimony last time around, we have to go back to 1959 for a comparable drop in unemployment for this October.

I'm sorry if I'm happy about that and I think that's positive, but I think we ought to state that and state that rather loudly, and that brings me to a question.

Could you tell the committee when the last time was that we had such a significant reduction in unemployment in 1 year? When was the last time we had a drop of 2 percentage points in unemployment in a single year?

Ms. NORWOOD. It's a long way back.

Representative WYLIE. I notice it isn't on this chart, so it must be before 1954.

Ms. NORWOOD. We'll check it for the record. We may not have had that large a drop, but I would also point out that we have much higher unemployment rates now than we had.

[The following information was subsequently supplied for the record:]

Between August of 1958 and 1959 the unemployment rate dropped from 7.4 to 5.2 percent.

Representative LUNGREN. I understand that, but it's the old question of is the glass half-full or half-empty, and I can imagine how many television cameras we'd have here today if you were bringing us the news that we added 2 percentage points of unemployment since December and we were talking about a 12.8-percent unemployment rate instead of an 8.8-percent unemployment rate. I'm not unconcerned about those people who are unemployed. Obviously, as we get the unemployment rate down lower and lower, those who remain in that unemployment category give us the greatest challenge.

How do we create economic conditions such that those people can become employed? Nonetheless, we get closer to dealing with that essential problem the lower that rate is, and I just get a little tired of the gloom and doom around here all the time when we've got some good news.

We've talked about the discouraged worker and how you count that on a quarterly basis. Do we have any data on the encouraged workers, those who have gone from the discouraged category to the encouraged category; that is, who are looking for work who were not looking for work when we were in the trough or just coming out of the trough?

Ms. NORWOOD. They would show up, of course, in those who gain employment. So they would show up in our employment numbers, but we don't have any special category.

As I indicated earlier, I think we do need to recognize that discouragement is difficult to measure. We may be not measuring it at all or we may be overmeasuring it. It's a state of mind and that's the reason that we don't include those workers in the unemployment rate.

We do have a table in the BLS release which includes some seven—really eight—different methods of calculating the unemployment rate going from a very restrictive definition to a broader one.

Representative LUNGREN. I guess one of the ways of looking at that would be, as you suggest, the number that we have that actually have jobs and are looking for jobs. As I understand from the figures we have in the household data, the civilian population,

we're talking about 102,659,000 nonseasonally adjusted, and 101,928,000 seasonally adjusted.

Now as I understand it, the seasonally adjusted is not the highest we've ever had, but are we approaching the highest that we've ever had in terms of total seasonally adjusted civilian employment?

Ms. NORWOOD. Yes.

Representative LUNGREN. What would be the historic high?

Ms. NORWOOD. Well, as you can see, last month in September and then in October, the numbers are very, very similar, and if you take those two together, that's the highest we've had.

Representative LUNGREN. So we are at that highest level. I guess there are two ways of looking at it. One is the participation rate and the other one is the employment-population ratio, and I know there's a difference between the two, but as I understand it, the former gives us some idea of the number of people who are actually participating in employment out of the population in the age group that we would believe would be of working age; is that correct?

Ms. NORWOOD. Yes; those figures are relatively high. I'm not sure, however, that they are the highest. Of course, they differ for different groups of the population.

Representative LUNGREN. Sure. Well, one of the things I think that we have as policymakers to keep looking at is, even though we are near historic highs in those areas, we still have higher unemployment than we had with comparable rates of participation on an employment-population ratio, which suggests that we have some different challenges that are facing us now than we were a number of years ago. And just comparing where we are in terms of employment or unemployment may not be the total answer in comparison to where we were a number of years ago.

With respect to the discouraged worker, you mentioned that they're disproportionately black and women. What about Hispanics? Are they disproportionately in the discouraged worker category?

Ms. NORWOOD. I would expect so, because Hispanics have tended to experience disproportionately high unemployment.

Representative LUNGREN. This is a consistent phenomenon, is it not, that women and blacks have been disproportionately in the discouraged category in other recessions and even in good times?

Ms. NORWOOD. Sure. You would expect really that those people who have a harder time in finding employment are people who would end up as being discouraged more easily.

Representative LUNGREN. Well, I just wanted to make sure that that wasn't some specific phenomenon coming out of this recession as opposed to other recessions.

Ms. NORWOOD. No.

Representative LUNGREN. Last, let me get a little parochial here. Your staff was kind enough to give me the data on California unemployment which shows the rate fell from 8.8 percent in September to 8.4 percent in October, with the number of unemployed falling from 1.096 million to 1.033 million in California.

You have cautioned all of us, rightly so, in the past to be very careful about looking at data for any single State, for any 1 month period of time, and you've suggested that we look at trends.

Have we established a trend for California? Is, in fact, unemployment on its way down such that you could say honestly that that is not just a statistical quirk for one month for California?

Ms. NORWOOD. Well, if you look at the data for California over the last year, there's been a significant decline, from 10.7 percent a year ago to 8.4 percent this month. The data for this month are very close to the margin of error, but I think over a period of several months there's been a clear change.

Representative LUNGREN. So it appears that California is tracking the national trend and doesn't appear to be going against it in any way?

Ms. NORWOOD. Yes.

Representative LUNGREN. That's good news for my folks back home and I like to be parochial at least once every hearing.

Thank you, Congressman Wylie.

Representative WYLIE. There's nothing wrong with being parochial at least once every hearing. Thank you very much.

Senator PROXMIRE, welcome to the hearing.

Senator PROXMIRE. Thank you, Mr. Chairman. I told the chairman that he was the best looking chairman we've had in years. I was the chairman of this committee several years ago. [Laughter.]

I'm sure you've been asked about this, Ms. Norwood, but I think it's very critical that we have an understanding of it because it seems like such a contradiction.

Here we have in October a drop of 17,000 in the number of jobs available in this country. The number of jobs diminished, according to the statistics which you've given us. We had a very big drop in the work force, according to the figures that you've given us, a half a million.

Those drops, it seems to me, are hardly consistent with the situation where we claim that the situation is improving and that unemployment is falling, which I guess it is technically because the work force just went down, even though the number of jobs diminished too.

It seems to me that's the most striking and dramatic contradiction here. Could you explain that in nontechnical terms?

Ms. NORWOOD. I can try. I believe that employment increased and unemployment declined. I think we have a number—

Senator PROXMIRE. You believe that employment increased?

Ms. NORWOOD. Yes, sir.

Senator PROXMIRE. So you believe that the figures you've given us here are wrong; is that right?

Ms. NORWOOD. No.

Senator PROXMIRE. Well, let me read them. September 1983, total employment, 103,640,000; October, 103,623,000. That's a drop of 17,000 employed, according to the figures that you've given us here.

Ms. NORWOOD. Yes, sir. If you look a little further, you will find that there was an increase in employment of adult men. You will find that there was an increase of 320,000 in the establishment survey.

Senator PROXMIRE. When you say an increase in the employment of adult men, you're talking about the rate or you're talking about—

Ms. NORWOOD. I'm talking about the level.

Senator PROXMIRE. The number, the actual number?

Ms. NORWOOD. Yes.

Senator PROXMIRE. In the household survey?

Ms. NORWOOD. In the household survey. And you will also find that in the establishment survey there was an increase of 320,000.

As you well know, the two surveys do not always track exactly and at times the household survey has a sharp movement in a particular month. You will recall that we had an increase in the month from May to June of 1,229,000 in the household survey.

I believe that one of the things that has been occurring here between September and October is a correction of that overstatement. If employment were overstated and a correction occurred, there would be a concurrent drop in the labor force since employment and unemployment are estimated separately.

Senator PROXMIRE. But the data that you give us here is from the household survey; correct?

Ms. NORWOOD. Yes.

Senator PROXMIRE. That's survey in which you go to 60,000 households and inquire whether people are looking for work or not, an extraordinarily, probably the biggest sample of any statistical figures that we have anywhere.

Ms. NORWOOD. No; that's not quite right.

Senator PROXMIRE. Well, compared to the Gallup poll which is considered accurate, they ask 1,700 people. You ask 60,000.

Ms. NORWOOD. Yes, sir, but they ask different—

Senator PROXMIRE. What do we have that's more exhaustive than that?

Ms. NORWOOD. Pardon me?

Senator PROXMIRE. What do we have that's more comprehensive than that?

Ms. NORWOOD. Well, we have an establishment survey that covers several hundred thousand establishments in this country and that are based upon payroll records.

Senator PROXMIRE. Yes; but the household survey, doesn't that go beyond that in the sense that it covers all people, where the establishment survey does not?

Ms. NORWOOD. Yes, but, of course, it's a sample survey and from time to time it will show large increases or decreases. We have had a big disparity between those surveys until this month and I think that we had an overstatement of employment in the household survey.

I've discussed that with the committee many times before and I think there has been some correction of that overstatement. That's why at least part of that labor force decline came from that.

Representative WYLIE. If the gentleman would yield on that point—

Senator PROXMIRE. Yes.

Representative WYLIE. Which is the largest survey, the household survey or the so-called establishment survey?

Ms. NORWOOD. Well, the establishment survey covers several hundred thousand establishments. However, the household survey is statistically a rather good survey. It is currently being redesigned, I'm very pleased to say, to represent the 1980 census distribution of the population. But it is a sample survey and from time

to time we have observed, as you do in any good sample survey, that there are spurts—there are changes that may be larger in 1 month and then sort of settle down over other months.

For example, if you take the household survey data and you average them for 3 months, if you take for example May, June, and July, you have a labor force of 111,519,000 for the average for those 3 months and then if you look at August, September, and October and average them, you get 112,148,000. So that you have an increase of 629,000, when you compare an average of the last 3 months to the prior 3 months. And if you do the same thing with employment, you have an increase of those 3-month averages of 2 million.

Representative WYLIE. Is it still correct that payroll employment increased by 320,000 during the month?

Ms. NORWOOD. Yes, that's correct.

Representative WYLIE. Thank you.

Senator PROXMIRE. Of course, the unemployment includes people who are not included in establishment; isn't that correct?

Ms. NORWOOD. Certainly.

Senator PROXMIRE. So that it's much more comprehensive in that sense.

What proportion of our work force would be included in establishments overall? The household survey includes everybody. You don't question every household, but it includes, by implication from the household that everybody belongs to some kind of household, so it includes everybody. The establishments do not. Right?

Ms. NORWOOD. That's right, but if we take the payroll survey level and add to it the groups that are not covered by the payroll survey that are covered in the household survey, we get really to about the same amount of change over the past 11 months.

There has been a 2.4 million increase in the payroll survey during the recovery since December, and there has been a 2.8 million increase in the household survey since last December, and that 400,000 difference is just about fully made up by people in agriculture, the self-employed, unpaid family workers, private household workers, and people who are on unpaid absences.

Senator PROXMIRE. So are you telling us really that the figures that we have for October—I might interpret them as being good figures, but not quite as good as the improvement between September and October suggests? In other words, September might have overstated the unemployment and perhaps October understates it; is that right?

Ms. NORWOOD. I guess my feeling is that there has been some overstatement of employment in the household survey over a period of many months. I think it goes back to last summer, as a matter of fact, when we had a big increase of 1,229,000 in a single month, and I think what we're seeing is some correction. And that's why we have that big drop in the labor force.

Now I would also say that the labor force in the last 11 months has been increasing relatively slowly. We have had about a 1,300,000 increase in the labor force in the last year from October to October.

Senator PROXMIRE. Which is quite unusual under circumstances where you have a strong recovery; isn't that right?

Ms. NORWOOD. Well, it's slower in comparison to past recoveries; that is true. There may be some forces going on there. One of them we know, of course, is that there are fewer young people in the population. Their population is declining, so we are not getting the kinds of increases of youngsters that we had in 1975-76.

Women's participation rates are not going up as strongly as they did in the sixties and seventies. That may pick up or it may not.

Senator PROXMIRE. Now many of us are concerned about high interest rates and the fact interest rates are likely to go higher in view of the colossal deficits we're suffering. They have gone up somewhat in housing, for example, and I note that housing starts declined by 13 percent between August and September. Housing is such an enormous employer in this country, it employs literally millions of people, how soon might reduced levels of housing starts affect employment in construction and related-supplier industries?

Ms. NORWOOD. I can't tell you that. I don't know.

Senator PROXMIRE. You don't know about the lag involved there?

Ms. NORWOOD. No; we have had an increase in construction employment over the last 11 months and we have had an increase this month and last month in employment in construction.

Senator PROXMIRE. But I would think that housing starts—because a typical house takes several months to construct, that it might be some time before that reduction would be felt. Would that be reasonable?

Ms. NORWOOD. It's possible, yes.

Senator PROXMIRE. And then following a 6-month period of virtually stable prices, the Consumer Price Index has been increasing at a 5-percent annual rate since April. In which sectors are prices rising most rapidly and are inflationary bottlenecks developing in any industries?

Ms. NORWOOD. Well, prices have been going up for food, for housing. Medical care has stayed up and a few other products which we can see in some of the producer price area.

Senator PROXMIRE. In your performance of wholesale prices, do you expect the Consumer Price Index might continue or would be likely to continue to rise?

Ms. NORWOOD. Well, it's hard to predict. We do know that we have had a drought, that has affected things like grain prices. The Agriculture Department is projecting an increase in food prices. So that I think is something that one can expect on the horizon just because of natural events.

There does not appear to be much pressure on oil prices as of yet. That depends on conditions in the Middle East I would expect. Perhaps Mr. Dalton has something more to add to that.

Mr. DALTON. I think part of the acceleration we're seeing is the absence of the weakness in energy prices that we had earlier.

Senator PROXMIRE. So energy prices have been falling and now they're no longer falling.

Mr. DALTON. Right.

Senator PROXMIRE. What do wage settlements indicate?

Ms. NORWOOD. Wage settlements are coming in at somewhat lower levels and, as our employment cost index shows, there is a reduction in the rate of change for both wages, and salaries, and compensation.

Senator PROXMIRE. A lot of us are very concerned about unemployment compensation benefits running out and people who are unemployed no longer being eligible because they've been unemployed so long.

What proportion of jobless workers are collecting unemployment insurance benefits?

Ms. NORWOOD. If we take the total unemployment as measured in the household survey, there are about 32.2 percent—roughly one-third are covered. If, however, we look at the regular unemployment insurance benefits as a percentage of the people who have lost their jobs who would be most likely to be covered, weeding out the entrants and the reentrants, we're up to about 49 percent.

Senator PROXMIRE. So that less than half are covered by either measure, but almost half are covered by the people who have lost their jobs?

Ms. NORWOOD. Yes, and it has been declining.

Senator PROXMIRE. That seems to be a very low proportion since we put so much stock and spent so much money on unemployment compensation. During previous recessions has the proportion of workers protected by unemployment insurance been as low as now?

Ms. NORWOOD. No.

Senator PROXMIRE. They have not been?

Ms. NORWOOD. No, they haven't been. In 1975, for example, we had 67 percent. In 1980, it was 44.5 percent. It is extraordinarily low.

Senator PROXMIRE. Why?

Ms. NORWOOD. I don't know.

Senator PROXMIRE. Are there any policies that we have adopted or failed to adopt that have affected that?

Ms. NORWOOD. Well, the law has been changed several times and there are more careful tests for eligibility. There are more restrictive definitions that are now being applied than were applied many years ago. That's one possibility.

It's very hard to quantify any of that or the effect of it.

Mr. PLEWES. One of the speculations, of course, is that the length of the recession has meant that many persons would just no longer be eligible.

Senator PROXMIRE. Has this recession been longer than most recessions? I had the impression that it has not been.

Ms. NORWOOD. Yes.

Senator PROXMIRE. It has been longer?

Ms. NORWOOD. Yes.

Mr. PLEWES. The recession up until December.

Senator PROXMIRE. We've been in a recovery period since December.

Ms. NORWOOD. yes.

Mr. PLEWES. But the recession up until then was longer.

Senator PROXMIRE. I thought the recession of 1982 was one of the shortest recessions we've ever had. Am I wrong?

Ms. NORWOOD. The recession of 1980, but not of 1982.

Mr. PLEWES. It started in July 1981.

Senator PROXMIRE. People who were unemployed from the recession in 1980 are still unemployed.

Ms. NORWOOD. Well, you see, we had this back-to-back situation.

Senator PROXMIRE. The recovery period was the shortest then?

Ms. NORWOOD. Yes, and that may be an important factor.

Senator PROXMIRE. Now according to an analysis by the Center on Budget and Policy Priorities, in many States the percentage of jobless workers receiving benefits are well below the national average. For example, in Florida, only 18.6 percent of the unemployed receive benefits. In Michigan, 21.9; Texas, 16.6; in Virginia, 20.5; in South Dakota, 19.5 percent. Only four States are able to provide unemployment insurance to more than half of their jobless workers.

What explains such a big difference among the States and differences in numbers of long-term unemployed who are likely to have exhausted their coverage?

Ms. NORWOOD. Each State, of course, as you know, has different unemployment insurance law and the coverage requirements are different. The administration of each law is different. Each State also has a different industrial base. That's one of the problems we have in trying to use administrative data in this country to develop national information. The unemployment insurance data are affected enormously by the differences in each State law.

Senator PROXMIRE. Well, maybe we can do something about those colossal differences because it's obviously unjust.

Well, my time is up and I understand there's a vote in the House.

Representative WYLIE. Thank you very much, Senator Proxmire, for your contribution.

While I have the opportunity, Ms. Norwood, I want to publicly express my appreciation for running a really good operation. When we need information in our office we are always able to get it expeditiously and I, for one, want to thank you for that.

I also want to thank you very much for your impressive appearance here this morning—another impressive appearance—and for the good news on the employment scene.

We all thank you; and the committee stands adjourned.

[Whereupon, at 11:10 a.m., the committee adjourned, subject to the call of the Chair.]

# EMPLOYMENT-UNEMPLOYMENT

FRIDAY, DECEMBER 2, 1983.

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 9:30 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Dan Lungren (member of the committee) presiding.

Present: Representative Lungren and Senator Proxmire.

Also present: James K. Galbraith, deputy director; Charles H. Bradford, assistant director; and Mary E. Eccles, Christopher J. Frenze, and Paul B. Manchester, professional staff members.

## OPENING STATEMENT OF REPRESENTATIVE LUNGREN, PRESIDING

Representative LUNGREN. Welcome, Madam Commissioner, to our monthly effort to try and understand what these figures mean. We appreciate your appearance here. It has been said in interpreting economic statistics that perhaps 1 month is a fluke, 2 months may be an indication, and 3 months is a trend. But a full year of economic recovery can mean only one thing—America is working again.

It now has been 12 months since the business cycle reached its trough and the economic recovery began. By all measures, the recovery has been strong, far stronger than even the most optimistic expert would have dared to predict at this time last year.

While all economic indicators have improved markedly, perhaps the most robust, but certainly the most satisfying, has been the growth in employment. In fact, for the American worker, this is the best economic recovery, apparently, that we've had in 30 years.

The number of unemployed Americans has declined by 2.3 million in the last 12 months—more than in any recovery since World War II.

The seasonally adjusted increase of 3.6 million in civilian employment is the largest employment growth in any recovery since President Truman left office. And according to the raw data that you have given us, 5.7 million more Americans have jobs now than at the beginning of 1983.

November brought another large decline in the unemployment rate, which has fallen 2.3 percentage points in the past year, an improvement evidently matched only once in the last three decades.

The leading economic indicators increased for the 14th consecutive month in October, suggesting that employment growth will continue.

Following exceptional growth in gross national product in the second and third quarters, some now suggest that the economic growth this year will reach or top 6 percent.

Just as important is the fact that this economic growth is occurring in a low inflation economy. For the last 5 months, inflation has been 2.9 percent or less on an annual basis.

It has been 10 years since we've had a 12-month rate of inflation that low. The CPI increased 2.9 percent from August 1971 to August 1972.

We've certainly made significant progress in attacking inflation which the previous administration termed as "the Nation's No. 1 economic problem."

But not only is this good news for consumers making purchases, but lower inflation also should mean lower interest rates, spurring production and allowing the economic recovery to gather more strength.

In retrospect, it's clear that last December few forecasters could see through the gloom to the boom year that we have had in 1983. In fact, the administration projected an average annual unemployment rate of 10.7 percent for this year. Even without having the December data, it's apparent that the annual rate is likely to fall well below that forecast.

We can remember that the administration wasn't alone in their modest forecast for economic recovery. Few economists foresaw the strength and breadth of the economic expansion in job growth that we witnessed during the last 12 months.

I must say that I am particularly happy to see that in California, we are within the national trend. The figures that your office has given us indicate that, seasonally adjusted, over the month, the unemployment rate in California declined slightly in November from 8.4 percent to 8.3 percent, bringing it to our lowest rate since November, 1981, when we were at 8 percent. Total employment rose significantly over the month in California from 11,265,000 to 11,384,000 in all major work groups. And if I can get parochial for a moment, it evidently is the case that the unemployment rate, nonseasonally adjusted for Los Angeles County, the Los Angeles-Long Beach area, declined sharply, 2.7 percentage points over the year, from 10.5 percent in November of 1982 to 7.8 percent in November of 1983.

And this is the largest over-the-year decrease in Los Angeles County that we've had since August 1978.

The vigorously expanding economy should bring us good tidings during the Christmas season. Some retailers have been reported as anticipating a record year in Christmas sales. My wife and I have gone out trying to find Cabbage Patch dolls and have been notably unsuccessful, as has most of America. The expected big Christmas retail boom will provide another shot in the arm for the economy and this should help set the stage for continued growth in jobs and the economy in 1984.

While it's certainly true that we all would like to see the unemployment rate drop further, I believe one would have to be a Scrooge to criticize the dramatic and historical drop in unemployment which we've witnessed during the past year.

And I would invite Senator Proxmire, if you have an opening statement.

#### OPENING STATEMENT OF SENATOR PROXMIRE

Senator PROXMIRE. Well, as Senator Scrooge, I'm happy to make my little contribution here. [Laughter.]

You know, what amazes me, Ms. Norwood, is the fact that we haven't had a bigger recovery. When you consider the colossal size of the deficit—talk about pump priming. I mean, this makes the Roosevelt administration look like pikers. In the worst year of the Depression of the thirties the deficit was something like 4½ percent of the gross national product. This year, the deficit is 6½ percent of the gross national product. I mean, of course, these extravagant Republicans with their irresponsible tax cuts and the colossal increase in military spending of course has a terrific effect on California, where you have so much of that military spending going on, it's bound to have a stimulative effect on the economy.

The question, it seems to me, and I don't think we've had a chance to pursue this question with you and maybe it's out of your jurisdiction, but the question is what really threatens this economy? I think there's a feeling on the part of many economists, all of whom may be wrong, who feel that this is a very, very uneasy recovery. The recovery certainly is bounding along, as I say, as you'd expect it to do when you're running a colossal deficit. It takes less out of the economy in taxes and puts more in spending.

But the question is what effect will this overhanging deficit, with the colossal amount of borrowing that the Federal Government is going to do this year, next year, the year after that, what is that going to do to slow down the economy and to distort the economy so that the credit-sensitive industries are going to have heavy unemployment; whereas, the service industries and others may not.

So I think that this isn't quite as everything-coming-up-roses and with only poor old Scrooge left with the kind of an outlook we have now.

We have a situation which I think is going to require some very painful and tough congressional policies, if we can do it, to increase revenues and to cut spending. And if we don't, I feel that we're going to be in for a terrific inflation within a couple of years. And I think that we ought to be prepared to consider what we, as Members of Congress, can do to have as responsible and reasonable an approach to this problem as possible.

Thank you, Congressman Lungren.

Representative LUNGREN. Thank you, Senator.

Senator PROXMIRE. Tiny Tim. [Laughter.]

Representative LUNGREN. Well, with a little bit of humbug, then, let's go forward. [Laughter.]

Madam Commissioner, we're pleased to have you again, you and your colleagues, and you may proceed as you wish.

**STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER,  
BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, AC-  
COMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSION-  
ER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATIS-  
TICS; AND KENNETH V. DALTON, ASSOCIATE COMMISSIONER,  
OFFICE OF PRICES AND LIVING CONDITIONS**

Ms. NORWOOD. Thank you very much, Congressman Lungren and Senator Proxmire. First, I'd like to remind you that I have with me Mr. Plewes on my left and Mr. Dalton on my right, who are our experts in employment and prices.

We are, of course, always very pleased to be here this morning to try to interpret a little bit further the data which were released this morning.

The employment situation continued to show strong improvement in November. Employment rose and the unemployment rate dropped sharply for the second consecutive month. The overall jobless rate, which includes the resident Armed Forces, was 8.2 percent, down half a point from October. The rate for civilian workers fell from 8.8 to 8.4 percent. So far this year, the level of unemployment is down by 2.7 million to about 9.4 million.

Employment from the household survey rose 740,000 over the month, after showing no change in October. Adult men dominated this employment gain, as they have throughout most of the recovery. Of course, they also had been hit the hardest during the recession. Since December, their employment has risen by nearly 2 million, compared with 1.6 million among adult women.

Payroll employment, as measured in the business survey, also rose in November—by 370,000. Strong gains continued in manufacturing, primarily in the durable goods sector. The largest growth was posted by the machinery and electrical equipment industries. Over the past year, factory jobs have increased by almost a million. Employment in manufacturing, however, was still 1.2 million below the July 1981 prerecession peak and 2 million below the alltime high achieved in 1979.

The other large November payroll gain occurred in services, 150,000. While employment gains in that industry group were widespread, they were paced by business services. Like manufacturing, the services industry has gained almost a million jobs since December, and together, these two industries, services and manufacturing, have accounted for over two-thirds of the overall gain in payroll jobs.

Factory hours have declined by 0.3 hour over the past 2 months, following a period of sustained rise. This may actually be a good sign, since employers tend to increase hours before hiring additional workers early in a recovery, when employer confidence is still low. The switch from increased hours to new hiring or rehiring may well be a sign that optimism is growing among employers.

The jobless declines that occurred in November were shared by most worker groups, especially those who work full time and those who had lost their last job. Also, the number of newly unemployed—less than 5 weeks—was down substantially.

Since the recovery began, we've seen dramatic improvement for most worker groups. The proportion of the population employed—

the employment-population ratio—has risen considerably to 58.7 percent. Unemployment has declined by 2.7 million, with about half of the reduction and joblessness occurring among adult men. The jobless situation of black adult men has improved substantially during the past year. It should be noted, however, that black teenagers have yet to make significant gains. The labor market situation for black teens remains particularly serious. A white teenager is still 2½ times more likely to have a job than is a black teenager.

Last month, I discussed briefly with this committee the sizable October fall in the civilian labor force figure which was somewhat puzzling to many analysts. In November, the labor force rose slightly. For a more complete understanding of what is happening to the labor force, I think it is useful to examine labor force trends over a longer timespan. From month to month, labor force numbers can be very volatile. Examined over a longer period of time, however, labor force growth is an important part of the job market picture.

Over the past year, from November to November, the civilian labor force grew by about 1.3 million. This growth has been lower than the growth we saw in previous recovery periods and some analysts have suggested that the slower growth reflects an underlying weakness in the economy. However, other factors, such as demographic trends, should be considered in assessing the meaning of this slowdown.

The pace of labor force growth has been declining quite steadily since the late 1970's, when annual growth of 2½ to 3 million was the rule. A very important factor in the slower growth has been a dramatic decline in the population of teenagers and, to a lesser extent, of young adults. This, of course, produces a strong downward pressure on labor force levels. For example, while 16- to 24-year-olds increased their labor force by over 700,000 in the year ending November 1978, in the past 12 months, their numbers dropped by half a million.

Increases in the labor force of women between ages 25 and 54 are only slightly below their earlier levels—about 1 million now compared to about 1.2 million a year in the late 1970's. Also, the labor force growth for adult men, except for those 55 years and over, has remained quite constant, at around 800,000 a year. In summary, there are a number of changes in the demographic composition of the labor force that go a long way to explaining why we have seen a slowdown in the rate of labor force growth.

The economic recovery, in terms of employment and unemployment developments, compares quite favorably to past recoveries. The November statistics reported today continue to show strong and widespread employment gains and further declines in unemployment.

Congressman Lungren, my colleagues and I would now be glad to try to answer any questions you may have.

[The table attached to Ms. Norwood's statement, together with the press release referred to, follows:]

UNEMPLOYMENT RATES OF ALL CIVILIAN WORKERS BY ALTERNATIVE SEASONAL ADJUSTMENT  
METHODS

Month and year	Unad- justed rate	X-11 ARIMA method						X-11 method (official method before 1980)	Range (cols. 2-8)
		Official proce- dure	Concur- rent	Stable	Total	Residu- al	12- month extrapo- lation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1982:									
November.....	10.4	10.7	10.7	10.9	10.7	10.6	10.7	10.8	0.3
December.....	10.5	10.8	10.8	11.1	10.9	10.8	10.8	11.1	.3
1983:									
January.....	11.4	10.4	10.4	10.2	10.4	10.7	10.4	10.3	.5
February.....	11.3	10.4	10.4	10.1	10.4	10.8	10.4	10.3	.7
March.....	10.8	10.3	10.4	10.2	10.3	10.5	10.3	10.3	.3
April.....	10.0	10.2	10.3	10.3	10.4	10.1	10.2	10.2	.3
May.....	9.8	10.1	10.3	10.6	10.2	10.0	10.1	10.2	.6
June.....	10.2	10.0	10.1	9.9	9.8	10.0	10.0	9.9	.3
July.....	9.4	9.5	9.5	9.4	9.3	9.3	9.4	9.3	.2
August.....	9.2	9.5	9.6	9.4	9.5	9.5	9.5	9.4	.2
September.....	8.8	9.3	9.4	9.2	9.3	9.1	9.3	9.2	.3
October.....	8.4	8.8	8.9	9.0	8.9	8.9	8.9	8.9	.2
November.....	8.1	8.4	8.4	8.6	8.4	8.4	8.4	8.5	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, December 1983.

EXPLANATION OF COLUMN HEADS

(1) *Unadjusted rate*.—Unemployment rate for all civilian workers, not seasonally adjusted.

(2) *Official procedure (X-11 ARIMA method)*.—The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1967 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. A prior adjustment for trend is applied to the extended series for adult male unemployment before seasonal adjustment. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of *Employment and Earnings*.

(3) *Concurrent (X-11 ARIMA method)*.—The Official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data from the period January 1967 through January 1980.

(4) *Stable (X-11 ARIMA method)*.—Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure,

factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(5) *Total (X-11 ARIMA method)*.—This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(6) *Residual (X-11 ARIMA method)*.—This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) *12-month extrapolation (X-11 ARIMA method)*.—This approach is the same as the official procedure except that the factors are extrapolated in 12-month intervals. The factors for January-December of the current year are computed at the beginning of the year based on data through the preceding year. The values for January through June of the current year are the same as the official values since they reflect the same factors.

(8) *X-11 method (official method before 1980)*.—The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

*Methods of Adjustment*.—The X-11 ARIMA method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in *X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

# News

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Department  
of Labor



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USDL 83-512  
TRANSMISSION OF MATERIAL IN THIS RELEASE IS  
EMBARGOED UNTIL 8:30 A.M. (EST), FRIDAY,  
DECEMBER 2, 1983

## THE EMPLOYMENT SITUATION: NOVEMBER 1983

Unemployment continued its marked decline in November and employment rose sharply, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate, 8.2 percent, and the rate for civilian workers, 8.4 percent, both fell by about half a percentage point for the second straight month and were about two-and-a-half points below last December's recessionary highs.

Total civilian employment--as measured by the monthly survey of households--rose by 740,000 over the month to 102.7 million, seasonally adjusted, after showing little change in October. The number of employees on nonagricultural payrolls--as measured by the monthly survey of establishments--was up by 370,000 in November, following a smaller advance in the prior month. Since December, total civilian employment and nonfarm payroll employment have increased by 3.6 million and 2.8 million, respectively.

### Unemployment (Household Survey Data)

The number of unemployed persons fell by 520,000 in November to a seasonally adjusted level of 9.4 million, and the civilian worker unemployment rate declined from 8.8 to 8.4 percent. Since December 1982, the jobless total has fallen by nearly 2.7 million, and the unemployment rate has dropped by 2.4 percentage points.

The over-the-month improvement was shared by nearly all of the major demographic groups. Jobless rates for adult men (7.8 percent) and adult women (7.1 percent) both posted sharp declines for the second month in a row. The unemployment rate for teenagers, which had shown little recovery from recessionary high levels until recent months, fell by 1.7 percentage points to 19.9 percent in November. Over-the-month decreases also occurred in the rates for whites (7.3 percent) and blacks (17.3 percent). The rate for black workers has declined by 2.7 percentage points since August, with most of the improvement among adult men. (See tables A-2 and A-3.)

The jobless rate for workers in durable goods manufacturing industries, at 9.1 percent, was down 1.1 percentage points from October and was substantially below the December 1982 high of 17.1 percent. There was also an over-the-month drop in the rate for wholesale and retail trade workers. Unemployment among full-time workers decreased by half a point over the month to 8.2 percent. (See table A-6.)

The number of newly unemployed--those jobless for less than 5 weeks--fell sharply for the second straight month, while there was little over-the-month change in the other duration categories. Both measures of the average duration of unemployment--the mean and median--were about unchanged in November at 20.2 and 9.4 weeks, respectively. (See table A-7.)

\*\*\*\*\*  
\*  
\* In accordance with usual practice, the Employment Situation \*  
\* release of December data, scheduled for January 6, will incorporate \*  
\* annual revisions in seasonally adjusted unemployment and other labor \*  
\* force series. Seasonally adjusted data for the most recent 5 years \*  
\* are subject to revision. \*  
\*  
\*\*\*\*\*

Unemployment declined sharply in November among persons who lost their last jobs, principally those who were permanently separated from their jobs. There was also an over-the-month decline in the number of persons looking for work after a period of absence from the labor force. Although there was little over-the-month change in the number of workers on layoff, this total has declined by nearly 1.2 million since last December, accounting for more than two-fifths of the unemployment drop during the recovery. (See table A-8.)

**Civilian Employment and the Labor Force (Household Survey Data)**

The number of employed civilians rose by 740,000 in November to 102.7 million, seasonally adjusted. Over-the-month gains occurred among each of the three major age-sex groups--adult men, adult women, and teenagers. Since last December, total employment has risen by 3.6 million; in addition to strong growth among private sector nonagricultural wage and salary workers, this also included a gain of half a million among the self-employed. (See tables A-2 and A-4.)

**Table A. Major indicators of labor market activity, seasonally adjusted**

Category	Quarterly averages			Monthly data			Oct.- Nov. change
	1982		1983	1983.			
	III	II	III	Sept.	Oct.	Nov.	
<b>HOUSEHOLD DATA</b>							
	Thousands of persons						
Labor force <sup>1/</sup> .....	112,307	112,825	113,849	114,063	113,510	113,721	211
Total employment <sup>1/</sup> .....	101,283	101,603	103,278	103,640	103,623	104,356	733
Civilian labor force.....	110,629	111,156	112,168	112,368	111,815	112,036	221
Civilian employment.....	99,605	99,933	101,598	101,945	101,928	102,671	743
Unemployment.....	11,025	11,222	10,571	10,423	9,886	9,364	-522
Not in labor force.....	61,893	62,801	62,281	62,234	62,965	62,916	-49
Discouraged workers.....	1,638	1,709	1,605	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers <sup>1/</sup> .....	9.8	9.9	9.3	9.1	8.7	8.2	-0.5
All civilian workers.....	10.0	10.1	9.4	9.3	8.8	8.4	-0.4
Adult men.....	9.1	9.4	8.8	8.7	8.2	7.8	-0.4
Adult women.....	8.4	8.5	7.9	7.8	7.4	7.1	-0.3
Teenagers.....	23.9	23.3	22.5	21.8	21.6	19.9	-1.7
White.....	8.8	8.8	8.2	8.1	7.7	7.3	-0.4
Black.....	19.3	20.7	19.5	19.0	18.1	17.3	-0.8
Hispanic origin.....	14.4	14.1	12.8	13.1	12.3	12.3	0
	ESTABLISHMENT DATA						
	Thousands of jobs						
Nonfarm payroll employment.....	89,316	89,452	90,250	90,851	91,055p	91,425p	370p
Goods-producing industries.....	23,682	23,341	23,830	23,935	24,164p	24,309p	145p
Service-producing industries.....	65,635	66,110	66,421	66,916	66,891p	67,116p	225p
	Hours of work						
Average weekly hours:							
Total private nonfarm.....	34.8	35.0	35.1	35.2	35.3p	35.2p	-0.1p
Manufacturing.....	39.0	40.1	40.4	40.8	40.6p	40.5p	-0.1p
Manufacturing overtime.....	2.3	2.8	3.1	3.3	3.4p	3.3p	-0.1p

<sup>1/</sup> Includes the resident Armed Forces.

N.A.=not available.

p=preliminary.

The civilian labor force rose slightly in November but was up by 1.3 million over the year. The number of adult men and women rose by 800,000 and 900,000, respectively, from their year-earlier levels, while there was a 420,000 reduction in the teenage labor force. This reduction stemmed both from their declining population and rate of labor force participation. The participation rate for adult women continued to move upward, though at a somewhat slower pace than in the 1970's, while adult men's participation sustained its slow long-term decline. (See table A-2.)

#### Industry Payroll Employment (Establishment Survey Data)

Total nonagricultural payroll employment rose by 370,000 in November to 91.4 million, seasonally adjusted. As in the past several months, growth was particularly strong in durable goods manufacturing, services, and construction. The November gains were widespread, as three-fifths of the 186 industries in the BLS index of diffusion registered increases. The diffusion index of over-the-month changes has exceeded 60 percent in each of the past 9 months. (See tables B-1 and B-6.)

The services industry was the biggest gainer in November, with an increase of 150,000 jobs. Manufacturing employment continued to advance (115,000), led by machinery and electrical equipment, and there was also an increase in finance, insurance, and real estate. Mining was the only industry division to post a decline.

Total nonfarm employment has risen by 2.8 million since last December's recessionary low and was only 60,000 short of the July 1981 pre-recession high. Most of this growth occurred in manufacturing (980,000), services (905,000), retail trade (315,000), and construction (285,000). Manufacturing employment, however, remained 1.2 million below its July 1981 level.

#### Weekly Hours (Establishment Survey Data)

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls edged down 0.1 hour from October to 35.2 hours, seasonally adjusted, the same level as in September. Weekly hours in manufacturing declined 0.1 hour as well, to 40.5 hours. Overtime hours in manufacturing also were off a tenth to 3.3 hours. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers rose 0.2 percent, seasonally adjusted, to 108.4 (1977=100), reflecting the increase in employment. The November index was at its highest level since August 1981. The index for manufacturing advanced 0.8 percent to 93.5 and was 12.5 percent above last December's low. (See table B-5.)

#### Hourly and Weekly Earnings (Establishment Survey Data)

Average hourly earnings edged down 0.1 percent in November, and average weekly earnings decreased 0.4 percent, seasonally adjusted. Prior to adjustment for seasonality, average hourly earnings fell 1 cent in November to \$8.14, and average weekly earnings declined by \$1.17. Since November 1982, average hourly earnings have risen by 33 cents and average weekly earnings by \$15.52. (See table B-3.)

#### The Hourly Earnings Index (Establishment Survey Data)

The Hourly Earnings Index (HEI) was 156.7 (1977=100) in November, seasonally adjusted, essentially unchanged from October. For the 12 months ended in November, the increase (before seasonal adjustment) was 3.7 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements—fluctuations in overtime in manufacturing and interindustry employment shifts. In dollars of constant purchasing power, the HEI increased 1.4 percent during the 12-month period ended in October. (See table B-4.)

## Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 189,000 establishments employing about 36 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

### Coverage, definitions and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Also included among the unemployed are persons not looking for work because they were laid off and waiting to be recalled and those expecting to report to a job within 30 days.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special

grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

----The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

----The household survey includes people on unpaid leave among the employed; the establishment survey does not;

----The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

----The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

### Seasonal adjustment

Over a course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all

employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

#### Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence—the confidence limits used by BLS in its analyses—the error for the monthly change in total employment is on the order of plus or minus 335,000; for total unemployment it is 240,000; and, for the overall unemployment rate, it is 0.21 percentage point. These figures do not mean that the sample results are off by these

magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .29 percentage point; for teenagers, it is 1.28 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks—comprehensive counts of employment—against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

#### Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for \$6.00 per issue or \$39.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

*Employment and Earnings* also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

(Numbers in thousands)

Employment status and sex	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>TOTAL</b>									
Noninstitutional population <sup>2</sup>	174,718	176,474	176,636	174,718	175,970	176,122	176,297	176,474	176,536
Labor force <sup>3</sup>	112,513	113,737	113,832	112,702	113,539	113,743	114,063	113,510	113,721
Participation rate <sup>4</sup>	64.6	64.4	64.6	64.5	64.5	64.7	64.7	64.3	64.4
Total employed <sup>5</sup>	101,039	104,354	104,703	100,796	102,949	103,245	103,640	103,623	104,356
Employment-population ratio <sup>6</sup>	57.8	59.1	59.3	57.7	58.5	58.6	58.8	58.7	59.1
Resident Armed Forces	1,660	1,695	1,683	1,660	1,664	1,682	1,695	1,699	1,685
Civilian employed	99,379	102,659	103,018	99,136	101,285	101,563	101,945	101,928	102,671
Agriculture	3,360	3,407	3,332	3,466	3,527	3,489	3,290	3,202	3,232
Nonagricultural industries	96,019	99,252	99,686	95,670	97,758	98,074	98,655	98,726	99,440
Unemployed	11,476	9,383	9,129	11,906	10,590	10,699	10,423	9,886	9,364
Unemployment rate <sup>7</sup>	10.2	8.2	8.0	10.6	9.3	9.4	9.1	8.7	8.2
Not in labor force	62,203	62,737	62,804	62,016	62,431	62,379	62,234	62,965	62,916
<b>Men, 16 years and over</b>									
Noninstitutional population <sup>2</sup>	83,402	84,344	84,423	83,402	84,099	84,173	84,261	84,344	84,423
Labor force <sup>3</sup>	63,883	64,444	64,350	64,114	64,864	64,814	64,944	64,690	64,865
Participation rate <sup>4</sup>	76.6	76.4	76.3	77.2	77.1	77.0	77.1	76.7	74.9
Total employed <sup>5</sup>	57,223	59,236	59,323	57,408	58,625	58,370	58,856	58,912	59,336
Employment-population ratio <sup>6</sup>	68.6	70.2	70.3	68.8	69.7	69.6	69.8	69.3	70.4
Resident Armed Forces	1,316	1,363	1,354	1,316	1,323	1,330	1,349	1,343	1,336
Civilian employed	55,707	57,893	57,789	55,892	57,104	57,032	57,277	57,369	57,904
Unemployed	6,660	5,208	5,227	7,006	6,238	6,244	6,118	5,778	5,447
Unemployment rate <sup>7</sup>	10.4	8.1	8.1	10.9	9.6	9.6	9.4	8.9	8.4
<b>Women, 16 years and over</b>									
Noninstitutional population <sup>2</sup>	91,316	92,129	92,214	91,316	91,871	91,949	92,036	92,129	92,214
Labor force <sup>3</sup>	48,632	49,292	49,282	48,288	48,675	49,130	49,119	48,819	48,836
Participation rate <sup>4</sup>	53.5	53.5	53.4	52.9	53.0	53.6	53.4	53.0	53.0
Total employed <sup>5</sup>	43,816	45,118	45,360	43,388	44,324	44,675	44,814	44,712	44,914
Employment-population ratio <sup>6</sup>	48.0	49.0	49.2	47.5	48.2	48.6	48.7	48.5	48.7
Resident Armed Forces	144	152	151	144	143	144	146	152	151
Civilian employed	43,672	44,966	45,209	43,244	44,181	44,531	44,668	44,560	44,763
Unemployed	4,816	4,174	3,902	4,900	4,351	4,455	4,305	4,108	3,937
Unemployment rate <sup>7</sup>	9.9	8.5	7.9	10.1	8.9	9.1	8.8	8.4	8.0

<sup>1</sup> The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Includes members of the Armed Forces stationed in the United States.

<sup>3</sup> Labor force as a percent of the noninstitutional population.

<sup>4</sup> Total employment as a percent of the noninstitutional population.

<sup>5</sup> Unemployment as a percent of the labor force (including the resident Armed Forces).

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
	(Numbers in thousands)								
<b>TOTAL</b>									
Civilian noninstitutional population	173,058	174,779	174,951	173,058	174,306	174,440	174,402	174,779	174,951
Civilian labor force	110,855	112,042	112,147	111,042	111,875	112,261	112,366	111,815	112,036
Participation rate	64.1	64.1	64.1	64.2	64.2	64.4	64.4	64.0	64.0
Employed	99,379	102,659	103,018	99,136	101,285	101,563	101,945	101,928	102,671
Employment-population ratio <sup>2</sup>	57.4	58.7	58.9	57.3	58.1	58.2	58.4	58.3	58.7
Unemployed	11,476	9,383	9,129	11,906	10,590	10,699	10,423	9,885	9,364
Unemployment rate	10.4	8.4	8.1	10.7	9.5	9.5	9.3	8.8	8.4
<b>Men, 20 years and over</b>									
Civilian noninstitutional population	74,094	75,216	75,327	74,094	74,927	75,012	75,115	75,216	75,327
Civilian labor force	58,193	58,919	58,996	58,454	59,016	59,945	59,053	58,947	59,103
Participation rate	78.5	78.3	78.3	78.9	78.8	78.6	78.6	78.4	78.5
Employed	52,670	54,580	54,631	52,589	53,808	53,771	53,928	54,121	54,503
Employment-population ratio <sup>2</sup>	71.1	72.6	72.5	71.0	71.8	71.7	71.8	72.0	72.4
Agriculture	3,460	2,511	2,343	3,434	2,544	2,496	2,431	2,362	2,319
Nonagricultural industries	50,210	52,069	52,289	50,155	51,264	51,275	51,497	51,758	52,185
Unemployed	5,523	4,339	4,365	5,865	5,208	5,174	5,125	4,826	4,600
Unemployment rate	9.5	7.4	7.4	10.0	8.8	8.8	8.7	8.2	7.8
<b>Women, 20 years and over</b>									
Civilian noninstitutional population	83,385	84,443	84,553	83,385	84,122	84,224	84,333	84,443	84,553
Civilian labor force	44,566	45,505	45,475	44,112	44,685	45,003	45,132	44,930	44,936
Participation rate	53.4	53.9	53.8	52.9	53.1	53.4	53.5	53.2	53.1
Employed	40,820	42,088	42,294	40,123	41,164	41,394	41,614	41,583	41,765
Employment-population ratio <sup>2</sup>	48.7	49.8	50.0	48.1	48.9	49.1	49.3	49.2	49.4
Agriculture	352	635	596	390	607	630	574	581	643
Nonagricultural industries	40,088	41,453	41,698	39,733	40,557	40,764	41,040	41,002	41,122
Unemployed	3,946	3,417	3,180	3,989	3,521	3,609	3,516	3,347	3,170
Unemployment rate	8.9	7.5	7.0	9.0	7.9	8.0	7.8	7.4	7.1
<b>Both sexes, 16 to 19 years</b>									
Civilian noninstitutional population	15,579	15,120	15,072	15,579	15,257	15,204	15,154	15,120	15,072
Civilian labor force	8,095	7,618	7,677	8,476	8,173	8,313	8,184	7,938	7,997
Participation rate	52.0	50.4	50.9	54.4	53.6	54.7	54.0	52.5	53.1
Employed	6,089	5,991	6,093	6,424	6,313	6,397	6,404	6,225	6,403
Employment-population ratio <sup>2</sup>	39.1	39.6	40.4	41.2	41.4	42.1	42.3	41.2	42.5
Agriculture	348	261	215	442	376	362	285	259	270
Nonagricultural industries	5,741	5,730	5,879	5,982	5,937	6,035	6,119	5,966	6,133
Unemployed	2,007	1,627	1,584	2,052	1,860	1,916	1,780	1,713	1,594
Unemployment rate	24.6	21.4	20.6	24.2	22.8	23.0	21.8	21.6	19.9

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>WHITE</b>									
Civilian noninstitutional population	149,887	151,175	151,324	149,887	150,959	151,003	151,021	151,175	151,324
Civilian labor force	96,593	97,526	97,705	98,719	97,341	97,602	97,605	97,700	97,631
Participation rate	64.4	64.5	64.6	64.5	64.5	64.6	64.6	64.6	64.5
Employed	87,672	90,532	90,793	87,435	89,382	89,573	89,719	89,788	90,552
Employment-population ratio <sup>2</sup>	58.5	59.9	60.0	58.3	59.2	59.3	59.4	59.4	59.8
Unemployed	8,921	6,994	6,912	9,284	7,959	8,029	7,885	7,912	7,079
Unemployment rate	9.2	7.2	7.1	9.4	8.2	8.2	8.1	8.1	7.3
Men, 20 years and over									
Civilian labor force	51,247	51,867	51,919	51,531	51,919	51,888	51,913	51,902	52,090
Participation rate	78.9	78.8	78.8	79.4	79.0	79.0	79.0	78.9	79.0
Employed	46,859	48,534	48,527	46,937	47,935	47,892	47,964	48,101	48,479
Employment-population ratio <sup>2</sup>	72.2	73.8	73.6	72.1	73.0	72.9	72.9	73.1	73.6
Unemployed	4,389	3,333	3,391	4,594	3,984	3,997	4,049	3,801	3,611
Unemployment rate	8.5	6.4	6.5	9.1	7.7	7.7	7.8	7.3	6.9
Women, 20 years and over									
Civilian labor force	38,208	38,933	39,033	37,762	38,242	38,433	38,540	38,427	38,513
Participation rate	53.0	53.4	53.5	52.4	52.6	52.8	52.9	52.9	52.8
Employed	35,194	36,484	36,700	34,749	35,688	35,843	35,987	36,016	36,229
Employment-population ratio <sup>2</sup>	48.8	50.0	50.3	48.2	49.1	49.3	49.4	49.4	49.6
Unemployed	3,014	2,450	2,332	3,013	2,554	2,590	2,553	2,411	2,284
Unemployment rate	7.9	6.3	6.0	8.0	6.7	6.7	6.6	6.3	5.9
Both sexes, 16 to 19 years									
Civilian labor force	7,137	6,736	6,734	7,426	7,180	7,281	7,151	6,971	7,028
Participation rate	55.3	54.0	54.4	57.5	57.1	58.0	57.2	56.0	56.4
Employed	5,579	5,515	5,565	5,849	5,779	5,839	5,868	5,681	5,844
Employment-population ratio <sup>2</sup>	43.2	44.3	44.8	45.9	46.2	46.5	46.7	45.8	46.2
Unemployed	1,558	1,221	1,168	1,577	1,401	1,442	1,283	1,300	1,184
Unemployment rate	21.8	18.0	17.6	21.2	19.3	19.8	17.9	18.5	16.8
Men	24.1	21.2	18.8	22.6	20.4	21.1	16.7	20.1	17.2
Women	19.5	16.7	16.3	19.8	18.5	18.4	17.1	16.7	16.4
<b>BLACK</b>									
Civilian noninstitutional population	18,723	19,026	19,057	18,723	18,942	18,966	18,994	19,026	19,057
Civilian labor force	11,447	11,582	11,580	11,475	11,764	11,745	11,729	11,502	11,582
Participation rate	61.2	60.9	60.8	61.3	62.1	61.9	61.9	60.5	60.8
Employed	9,210	9,302	9,629	9,159	9,469	9,398	9,305	9,420	9,574
Employment-population ratio <sup>2</sup>	49.2	49.9	50.3	48.9	50.0	49.6	50.0	49.5	50.3
Unemployed	2,237	2,080	1,950	2,316	2,295	2,347	2,424	2,082	2,005
Unemployment rate	19.5	18.0	16.8	20.2	19.5	20.0	19.0	18.1	17.3
Men, 20 years and over									
Civilian labor force	5,476	5,515	5,566	5,488	5,611	5,584	5,541	5,461	5,564
Participation rate	75.4	74.4	74.9	73.6	76.1	75.6	74.9	73.6	74.8
Employed	4,462	4,668	4,743	4,437	4,564	4,556	4,603	4,585	4,724
Employment-population ratio <sup>2</sup>	61.5	62.9	63.8	61.1	61.9	61.7	62.2	61.8	63.5
Unemployed	1,014	847	823	1,051	1,047	1,028	938	876	840
Unemployment rate	18.5	15.4	14.8	19.2	18.7	18.4	16.9	16.0	15.1
Women, 20 years and over									
Civilian labor force	5,188	5,356	5,271	5,157	5,328	5,322	5,372	5,238	5,235
Participation rate	56.2	57.0	55.9	55.9	57.0	56.8	57.2	55.9	55.6
Employed	4,365	4,487	4,302	4,305	4,677	4,467	4,508	4,439	4,431
Employment-population ratio <sup>2</sup>	47.3	47.7	47.8	48.6	47.9	47.3	48.0	47.1	47.0
Unemployed	823	868	969	852	851	874	864	828	804
Unemployment rate	15.9	16.2	14.6	16.5	16.0	16.4	16.1	15.8	15.4
Both sexes, 16 to 19 years									
Civilian labor force	782	712	743	830	825	839	816	783	783
Participation rate	35.0	32.2	33.7	37.2	37.1	37.8	36.9	35.5	35.6
Employed	383	347	385	417	428	394	392	405	421
Employment-population ratio <sup>2</sup>	17.2	15.7	17.5	18.7	19.2	17.8	17.7	18.3	19.1
Unemployed	400	365	358	413	397	445	424	378	362
Unemployment rate	51.1	51.3	48.2	49.8	48.1	53.0	52.0	48.3	46.2
Men	34.9	45.6	45.9	33.0	47.6	36.8	34.8	45.9	45.4
Women	46.9	37.6	50.9	46.2	48.8	48.9	48.7	33.3	49.8
<b>HISPANIC ORIGIN</b>									
Civilian noninstitutional population	9,355	9,745	9,677	9,355	9,640	9,690	9,700	9,745	9,677
Civilian labor force	5,919	6,187	6,193	5,923	6,079	6,124	6,200	6,142	6,222
Participation rate	63.3	63.5	64.0	63.3	63.1	63.2	63.9	63.0	64.3
Employed	5,020	5,477	5,433	5,012	5,331	5,333	5,390	5,385	5,455
Employment-population ratio <sup>2</sup>	53.7	56.2	56.1	53.6	55.3	55.0	55.6	55.3	56.4
Unemployed	899	710	760	911	748	790	811	756	767
Unemployment rate	15.2	11.5	12.3	15.4	12.3	12.9	13.1	12.3	12.3

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

NOTE: Data for the above race 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.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Selected employment indicators

Category	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>CHARACTERISTIC</b>									
Civilian employed, 16 years and over .....	99,379	102,659	103,018	99,136	101,285	101,563	101,945	101,928	102,671
Married men, spouse present .....	37,748	38,700	38,521	37,641	38,293	38,308	38,253	38,241	38,406
Married women, spouse present .....	24,430	25,445	25,534	23,985	24,640	24,972	24,986	24,971	25,083
Women who maintain families .....	5,042	5,208	5,263	5,025	5,088	5,104	5,124	5,187	5,258
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>									
<b>Agriculture:</b>									
Wage and salary workers .....	1,516	1,571	1,392	1,584	1,663	1,644	1,585	1,481	1,456
Self-employed workers .....	1,615	1,584	1,551	1,628	1,583	1,566	1,475	1,514	1,559
Unpaid family workers .....	229	252	210	241	259	245	237	224	220
<b>Nonagricultural industries:</b>									
Wage and salary workers .....	88,327	91,073	91,594	87,936	89,765	89,995	90,813	90,663	91,129
Government .....	15,668	15,703	15,790	15,514	15,615	15,697	15,549	15,594	15,618
Private industries .....	72,658	75,370	75,805	72,422	74,150	74,298	75,265	75,069	75,511
Private households .....	1,254	1,295	1,227	1,221	1,286	1,290	1,295	1,291	1,197
Other industries .....	71,404	74,075	74,578	71,201	72,864	73,009	73,969	73,778	74,314
Self-employed workers .....	7,338	7,772	7,822	7,349	7,598	7,658	7,660	7,703	7,846
Unpaid family workers .....	554	408	449	382	320	376	376	415	480
<b>PERSONS AT WORK<sup>1</sup></b>									
Nonagricultural industries .....	92,451	95,011	96,356	90,238	92,253	91,986	93,737	93,324	94,042
Full-time schedules .....	72,765	76,219	76,837	71,442	74,004	73,495	74,883	75,167	75,553
Part time for economic reasons .....	6,142	5,430	5,700	6,413	5,636	5,789	6,106	5,670	5,893
Usually work full time .....	4,041	3,923	4,040	4,183	3,826	4,071	4,309	4,095	4,156
Part time for noneconomic reasons .....	13,544	13,362	13,819	12,385	12,614	12,701	12,748	12,488	12,597

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

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Measure	Quarterly average				Monthly data			
	1982		1983		1983			
	III	IV	I	II	III	Sept.	Oct.	Nov.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force .....	3.3	4.0	4.2	4.0	3.7	3.4	3.2	3.1
U-2 Job losers as a percent of the civilian labor force .....	6.0	6.6	6.1	6.0	5.5	5.3	5.0	4.6
U-3 Unemployed persons 25 years and over as a percent of the civilian labor force .....	7.6	8.3	8.1	7.9	7.3	7.3	6.8	6.5
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force .....	9.8	10.6	10.3	9.9	9.3	9.2	8.7	8.2
U-5a Total unemployed as a percent of the labor force, including the resident Armed Forces .....	9.8	10.5	10.2	9.9	9.3	9.1	8.7	8.2
U-5b Total unemployed as a percent of the civilian labor force .....	10.0	10.7	10.3	10.1	9.4	9.3	8.8	8.4
U-6 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons as a percent of the civilian labor force less 1/2 of the part-time labor force .....	12.6	13.8	13.5	12.9	12.2	12.2	11.5	11.1
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/2 total on part time for economic reasons plus discouraged workers less 1/2 of the civilian labor force plus discouraged workers less 1/2 of the part-time labor force .....	14.2	15.3	15.0	14.3	13.5	N.A.	N.A.	N.A.

N.A. = not available.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Selected unemployment indicators, seasonally adjusted

Category	Number of unemployed persons (In thousands)			Unemployment rates <sup>1</sup>					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>CHARACTERISTIC</b>									
Total, 16 years and over .....	11,906	9,886	9,364	10.7	9.5	9.5	9.3	8.8	8.4
Men, 16 years and over .....	7,006	5,778	5,447	11.1	9.8	9.9	9.7	9.2	8.6
Men, 20 years and over .....	5,865	4,826	4,600	10.0	8.8	8.8	8.7	8.2	7.8
Women, 16 years and over .....	4,900	4,108	3,917	10.2	9.0	9.1	8.8	8.4	8.0
Women, 20 years and over .....	3,989	3,347	3,170	9.0	7.9	8.0	7.8	7.4	7.1
Both sexes, 16 to 19 years .....	2,052	1,713	1,594	24.2	22.8	23.0	21.8	21.6	19.9
Married men, spouse present .....	3,115	2,338	2,233	7.6	6.1	6.3	6.1	5.8	5.5
Married women, spouse present .....	2,156	1,665	1,565	8.2	7.0	6.9	6.8	6.3	5.9
Women who maintain families .....	717	650	604	12.3	11.6	11.6	12.2	11.1	10.3
Full-time workers .....	10,127	8,355	7,856	10.6	9.4	9.4	9.2	8.7	8.2
Part-time workers .....	1,794	1,550	1,526	11.3	10.2	10.1	10.0	9.8	9.4
Labor force time lost <sup>2</sup> .....	--	--	--	12.4	10.4	10.6	10.6	10.0	9.8
<b>INDUSTRY</b>									
Nonagricultural private wage and salary workers ..	9,337	7,419	7,027	11.4	9.6	9.8	9.4	9.0	8.5
Mining .....	197	112	130	15.1	14.6	14.8	17.2	11.3	12.5
Construction .....	1,147	832	841	21.8	18.0	18.1	18.2	15.2	15.0
Manufacturing .....	3,286	2,061	1,972	14.8	10.5	11.2	10.2	9.5	9.0
Durable goods .....	2,264	1,316	1,197	17.0	11.2	11.6	10.9	10.2	9.1
Non-durable goods .....	1,022	745	776	11.4	9.6	10.6	9.2	8.5	8.7
Transportation and public utilities .....	484	420	375	8.3	7.0	8.0	7.4	7.4	6.6
Wholesale and retail trade .....	2,217	2,106	1,907	10.6	9.7	9.8	9.6	9.9	9.1
Finance and services industries .....	2,026	1,888	1,802	7.7	7.3	7.2	7.1	6.9	6.6
Government workers .....	828	821	790	5.1	5.5	5.0	4.9	5.0	4.8
Agricultural wage and salary workers .....	293	305	269	15.6	14.2	14.6	16.1	17.1	15.6

<sup>1</sup> Unemployment as a percent of the civilian labor force.<sup>2</sup> Aggregate hours lost by the unemployed and persons on part time for economic

reasons as a percent of potentially available labor force hours.

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>DURATION</b>									
Less than 5 weeks .....	3,908	3,477	3,287	3,863	3,498	3,640	3,774	3,512	3,274
5 to 14 weeks .....	3,330	2,600	2,661	3,549	2,794	3,026	2,810	2,746	2,619
15 to 26 weeks .....	4,038	3,306	3,181	4,324	4,617	4,020	3,850	3,613	3,527
27 weeks and over .....	1,914	1,200	1,231	2,191	1,830	1,573	1,344	1,265	1,369
Average (mean) duration, in weeks .....	16.9	19.8	19.6	17.3	21.7	19.9	20.2	20.1	20.2
Median duration, in weeks .....	9.5	8.5	8.9	10.0	9.9	8.9	9.1	9.3	9.4
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	34.1	37.1	36.0	32.9	32.7	34.2	36.2	35.6	34.8
5 to 14 weeks .....	30.8	27.7	29.1	29.5	26.1	28.3	26.9	27.8	27.8
15 to 26 weeks .....	35.2	35.2	34.8	37.6	41.2	37.5	36.9	36.6	37.4
27 weeks and over .....	16.7	12.8	13.3	18.2	17.1	14.7	12.9	13.8	14.3
	18.5	22.4	21.6	19.4	24.2	22.9	24.0	22.8	22.9

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>NUMBER OF UNEMPLOYED</b>									
Job losers	7,029	4,971	5,007	7,369	6,193	6,202	6,002	5,542	5,157
On layoff	2,261	1,098	1,228	2,531	1,719	1,658	1,591	1,373	1,313
Other job losers	4,768	3,873	3,779	4,838	4,474	4,545	4,411	4,169	3,843
Job leavers	795	935	874	794	758	767	866	889	881
Reentrants	2,502	2,432	2,193	2,546	2,429	2,524	2,351	2,375	2,213
New entrants	1,149	1,045	1,055	1,244	1,225	1,214	1,247	1,102	1,134
<b>PERCENT DISTRIBUTION</b>									
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	61.3	53.0	54.8	61.6	58.5	57.9	57.3	55.9	54.9
On layoff	19.7	11.7	13.4	21.2	16.2	15.5	15.2	13.9	14.0
Other job losers	41.6	41.3	41.4	40.5	42.3	42.4	42.1	42.1	41.0
Job leavers	6.9	10.0	9.6	6.6	7.0	7.2	8.3	9.0	9.4
Reentrants	21.8	25.9	24.0	21.3	22.9	23.6	22.5	24.0	23.6
New entrants	10.0	11.1	11.6	10.4	11.6	11.3	11.9	11.1	12.1
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers	6.3	4.5	4.5	6.6	5.5	5.5	5.3	5.0	4.6
On layoff	.7	.8	.8	.7	.7	.7	.8	.8	.8
Other job losers	2.3	2.2	2.0	2.3	2.2	2.2	2.1	2.1	2.0
Job leavers	1.0	.9	.9	1.1	1.1	1.1	1.1	1.0	1.0
New entrants	1.0	.9	.9	1.1	1.1	1.1	1.1	1.0	1.0

Table A-6. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates <sup>1</sup>					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
<b>Total, 16 years and over</b>	11,906	9,886	9,364	10.7	9.5	9.5	9.3	8.8	8.4
16 to 24 years	4,485	3,902	3,661	19.0	16.8	17.4	16.5	16.3	15.3
16 to 19 years	2,052	1,713	1,594	24.2	22.8	23.0	21.8	21.6	19.9
18 to 17 years	866	700	628	26.3	25.3	24.7	23.9	23.9	21.1
18 to 18 years	1,174	1,015	960	22.8	21.1	22.0	20.4	20.3	19.1
20 to 24 years	2,433	2,189	2,067	16.3	13.8	14.5	13.8	13.7	12.9
25 years and over	7,194	5,968	5,683	8.3	7.4	7.5	7.3	6.8	6.5
25 to 34 years	4,330	3,217	4,939	8.9	7.8	7.8	7.7	7.2	6.8
35 years and over	862	755	742	5.7	5.3	5.1	5.1	5.0	4.9
<b>Men, 16 years and over</b>	7,006	5,778	5,447	11.1	9.8	9.9	9.7	9.2	8.6
16 to 24 years	2,697	2,214	2,019	20.6	18.4	18.8	17.6	17.4	15.8
16 to 19 years	1,161	952	847	25.7	23.8	24.7	22.9	22.7	19.9
18 to 17 years	493	364	330	28.2	27.9	26.2	23.5	24.0	21.0
18 to 18 years	642	586	515	24.1	21.2	23.7	22.5	21.9	19.2
20 to 24 years	1,556	1,262	1,172	18.0	15.7	15.9	15.0	14.8	13.7
25 years and over	4,292	3,551	3,411	8.6	7.6	7.5	7.6	7.4	7.0
25 to 34 years	3,750	3,073	2,910	9.2	8.1	8.0	8.1	7.4	7.0
35 years and over	560	484	497	6.2	5.4	5.3	5.4	5.4	5.3
<b>Women, 16 years and over</b>	4,900	4,108	3,917	10.2	9.0	9.1	8.8	8.4	8.0
16 to 24 years	1,988	1,688	1,642	17.2	14.9	15.9	15.2	15.1	14.7
16 to 19 years	911	761	747	22.6	21.6	21.2	20.5	20.4	19.9
18 to 17 years	373	336	298	24.2	22.3	23.1	24.3	23.8	21.1
18 to 18 years	532	429	445	21.4	21.0	20.3	17.9	18.5	19.0
20 to 24 years	1,077	927	895	14.4	11.5	13.0	12.5	12.5	12.0
25 years and over	1,902	2,417	2,273	7.9	7.2	7.0	6.8	6.4	6.1
25 to 34 years	1,380	2,144	2,029	8.5	7.6	7.5	7.3	6.8	6.5
35 years and over	502	271	245	4.9	5.3	4.7	4.4	4.4	4.0

<sup>1</sup> Unemployment as a percent of the civilian labor force.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Nov. 1982	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
Civilian noninstitutional population	23,171	23,604	23,627	23,171	23,347	23,437	23,381	23,604	23,627
Civilian labor force	14,262	14,516	14,442	14,315	14,573	14,608	14,754	14,493	14,450
Participation rate	61.6	61.5	61.1	61.8	62.4	62.3	62.6	61.4	61.2
Employed	11,707	12,127	12,225	11,668	11,986	11,966	12,217	12,094	12,164
Employment-population ratio <sup>2</sup>	50.5	51.4	51.7	50.4	51.3	51.0	51.8	51.2	51.5
Unemployed	2,555	2,389	2,217	2,647	2,607	2,644	2,537	2,399	2,286
Unemployment rate	17.9	16.3	15.4	18.2	17.9	18.2	17.2	16.6	15.8
Not in labor force	8,908	9,088	9,185	8,856	8,774	8,829	8,927	9,111	9,177

<sup>1</sup> The population figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Nov. 1982	Nov. 1983	Nov. 1982	Nov. 1983	Nov. 1982	Nov. 1983
Total, 16 years and over <sup>1</sup>	99,379	103,018	11,476	9,129	10.4	8.1
Managerial and professional specialty	23,573	24,146	869	673	3.6	2.7
Executive, administrative, and managerial	10,420	10,951	444	355	4.0	3.1
Professional specialty	12,954	13,214	425	318	3.2	2.3
Technical, sales, and administrative support	31,017	31,491	2,229	1,852	6.7	5.5
Technicians and related support	3,015	3,047	152	146	6.8	4.8
Sales occupations	11,542	12,017	818	769	6.6	6.0
Administrative support, including clerical	16,460	16,427	1,259	937	7.1	5.3
Service occupations	13,578	14,141	1,708	1,549	11.2	9.9
Private household	1,119	990	85	75	7.0	7.1
Protective service	1,672	1,706	127	93	7.0	5.2
Service, except private household and protective	10,786	11,444	1,497	1,381	12.2	10.6
Precision production, craft, and repair	11,611	12,956	1,551	1,117	11.7	7.9
Mechanics and repairers	3,802	4,276	354	258	8.5	5.7
Construction/traides	5,981	4,468	746	520	15.8	10.0
Other precision production, craft, and repair	3,828	4,012	452	338	10.1	7.8
Operators, fabricators, and laborers	15,950	16,733	3,549	2,436	18.2	12.7
Machine operators, assemblers, and inspectors	7,437	8,109	1,785	1,135	19.4	12.3
Transportation and material moving occupations	4,149	4,342	671	470	13.9	9.8
Construction laborers	4,364	4,272	1,093	831	20.0	16.3
Other handlers, equipment cleaners, helpers, and laborers	604	665	198	167	24.7	20.1
Other handlers, equipment cleaners, helpers, and laborers	3,759	3,608	895	664	19.2	15.5
Farming, forestry, and fishing	3,622	3,342	442	403	10.9	10.6

<sup>1</sup> Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
	Nov. 1982	Nov. 1983	Nov. 1982	Nov. 1983	Nov. 1982	Nov. 1983	Number		Percent of labor force	
							Nov. 1982	Nov. 1983	Nov. 1982	Nov. 1983
<b>VETERANS</b>										
Total, 25 years and over .....	8,263	7,896	7,774	7,390	7,056	6,870	718	520	9.2	7.0
25 to 29 years .....	6,643	5,744	6,349	5,514	5,727	5,091	622	423	9.8	7.7
30 to 34 years .....	1,016	607	845	561	797	495	148	66	15.7	11.8
35 to 39 years .....	2,655	2,000	2,492	1,915	2,265	1,739	227	176	9.1	9.2
40 years and over .....	3,002	3,137	2,912	3,038	2,665	2,857	247	181	8.5	6.0
	1,620	2,152	1,425	1,876	1,329	1,779	96	97	6.7	5.2
<b>NONVETERANS</b>										
Total, 25 to 39 years .....	19,042	20,369	18,035	19,209	16,240	17,756	1,795	1,453	10.0	7.6
25 to 29 years .....	8,399	8,783	7,910	8,207	6,979	7,489	931	718	11.8	8.7
30 to 34 years .....	6,333	6,993	6,007	6,636	5,499	6,195	508	441	8.5	6.6
35 to 39 years .....	4,310	4,593	4,118	4,366	3,762	4,072	356	294	8.6	6.7

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Arm-

ed Forces; published data are limited to those 25 to 39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Employment status of the civilian population for ten large States

(Numbers in thousands)

State and employment status	Not seasonally adjusted <sup>1</sup>			Seasonally adjusted <sup>2</sup>					
	Nov. 1962	Oct. 1963	Nov. 1963	Nov. 1962	July 1963	Aug. 1963	Sept. 1963	Oct. 1963	Nov. 1963
<b>California</b>									
Civilian noninstitutional population	18,576	18,884	18,913	18,576	18,801	18,926	18,954	18,884	18,913
Civilian labor force	12,296	12,338	12,438	12,286	12,294	12,331	12,408	12,298	12,411
Employed	10,950	11,343	11,414	10,925	11,147	11,128	11,312	11,265	11,384
Unemployed	1,347	995	1,024	1,361	1,147	1,203	1,096	1,033	1,027
Unemployment rate	11.0	8.1	8.2	11.1	9.3	9.8	8.8	8.4	8.3
<b>Florida</b>									
Civilian noninstitutional population	3,205	8,422	8,443	8,205	8,363	8,382	8,402	8,422	8,443
Civilian labor force	4,899	5,003	5,064	4,877	4,926	5,034	5,093	4,927	5,020
Employed	4,435	4,771	4,656	4,424	4,511	4,612	4,696	4,525	4,627
Unemployed	464	432	408	453	415	422	397	402	393
Unemployment rate	9.5	8.6	8.1	9.3	8.4	8.4	7.8	8.2	7.8
<b>Illinois</b>									
Civilian noninstitutional population	8,538	8,554	8,556	8,538	8,550	8,550	8,552	8,554	8,556
Civilian labor force	5,340	5,501	5,544	5,323	5,341	5,342	5,349	5,493	5,530
Employed	4,838	4,987	5,030	4,807	4,902	4,895	4,990	4,959	5,007
Unemployed	702	515	513	716	639	647	561	534	523
Unemployment rate	12.7	9.4	9.3	13.0	11.5	11.7	10.1	9.7	9.5
<b>Massachusetts</b>									
Civilian noninstitutional population	4,489	4,522	4,525	4,489	4,513	4,515	4,519	4,522	4,525
Civilian labor force	3,028	3,033	3,064	3,007	2,999	3,006	3,037	3,005	3,039
Employed	2,832	2,838	2,884	2,783	2,723	2,832	2,818	2,797	2,838
Unemployed	195	195	171	224	176	174	219	208	201
Unemployment rate	6.5	6.4	5.6	7.4	5.9	5.8	7.2	6.9	6.6
<b>Michigan</b>									
Civilian noninstitutional population	6,739	6,718	6,717	6,739	6,724	6,721	6,719	6,718	6,717
Civilian labor force	4,231	4,229	4,185	4,219	4,333	4,300	4,293	4,224	4,145
Employed	3,539	3,702	3,678	3,501	3,764	3,684	3,709	3,651	3,651
Unemployed	694	528	487	718	569	616	584	573	494
Unemployment rate	16.4	12.5	11.7	17.0	13.1	14.3	13.6	13.6	11.9
<b>New Jersey</b>									
Civilian noninstitutional population	5,718	5,763	5,767	5,718	5,751	5,754	5,758	5,763	5,767
Civilian labor force	3,672	3,651	3,687	3,658	3,652	3,700	3,699	3,643	3,674
Employed	3,127	3,433	3,444	3,103	3,345	3,369	3,394	3,396	3,422
Unemployed	345	218	243	355	307	331	305	247	252
Unemployment rate	9.4	6.0	6.6	9.7	8.4	8.9	8.2	6.8	6.9
<b>New York</b>									
Civilian noninstitutional population	13,543	13,613	13,620	13,543	13,594	13,598	13,605	13,613	13,620
Civilian labor force	7,914	8,048	8,017	7,995	8,183	8,290	8,348	8,105	8,116
Employed	7,160	7,433	7,433	7,214	7,485	7,580	7,538	7,457	7,497
Unemployed	754	615	584	781	698	700	710	648	619
Unemployment rate	9.5	7.6	7.3	9.8	8.5	8.5	8.6	8.0	7.6
<b>Ohio</b>									
Civilian noninstitutional population	8,063	8,077	8,079	8,063	8,073	8,074	8,075	8,077	8,079
Civilian labor force	5,088	5,176	5,164	5,063	5,132	5,126	5,088	5,132	5,145
Employed	4,378	4,626	4,598	4,355	4,588	4,559	4,504	4,565	4,590
Unemployed	710	550	566	708	544	567	584	567	555
Unemployment rate	14.0	10.6	11.0	14.0	10.9	11.1	11.5	11.0	10.8
<b>Pennsylvania</b>									
Civilian noninstitutional population	9,143	9,166	9,169	9,143	9,160	9,161	9,163	9,166	9,169
Civilian labor force	5,351	5,368	5,401	5,314	5,355	5,344	5,313	5,308	5,344
Employed	4,907	5,038	5,051	4,851	4,938	4,907	4,937	4,961	4,973
Unemployed	644	530	550	663	617	637	576	547	571
Unemployment rate	11.6	9.5	9.8	12.0	11.1	11.5	10.4	9.9	10.3
<b>Texas</b>									
Civilian noninstitutional population	11,062	11,361	11,389	11,062	11,280	11,305	11,333	11,361	11,389
Civilian labor force	7,457	7,686	7,673	7,445	7,655	7,636	7,726	7,689	7,657
Employed	6,891	7,134	7,152	6,885	7,039	7,081	7,067	7,098	7,141
Unemployed	566	532	521	560	616	555	659	571	516
Unemployment rate	7.6	6.9	6.8	7.5	8.0	7.3	8.5	7.4	6.7

<sup>1</sup> These are the official Bureau of Labor Statistics estimates used in the administration of Federal fund allocation programs.<sup>2</sup> The population figures are not adjusted for seasonal variation; however, seasonal numbers appear in the unadjusted and the seasonally adjusted columns.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted					Seasonally adjusted				
	Nov. 1982	Sept. 1983	Oct. 1983	Nov. 1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
Total	89,466	91,213	91,693	92,128	88,785	90,152	89,748	90,851	91,055	91,425
Goods-producing	23,348	24,454	24,547	24,540	23,131	23,724	23,830	23,935	24,154	24,309
Mining	1,065	1,030	1,038	1,036	1,066	1,017	1,023	1,026	1,043	1,036
Construction	3,988	4,280	4,297	4,251	3,843	3,974	4,014	4,038	4,051	4,099
Manufacturing	18,289	19,184	19,212	19,253	18,222	18,733	18,793	18,871	19,060	19,178
Production workers	12,319	13,125	13,188	13,220	12,252	12,756	12,803	12,858	13,043	13,150
Durable goods	10,610	11,203	11,288	11,388	10,577	10,961	11,022	11,081	11,231	11,312
Production workers	6,326	7,494	7,574	7,619	6,900	7,278	7,329	7,378	7,521	7,591
Lumber and wood products	606.6	726.3	720.4	711.5	608	688	699	703	710	718
Furniture and fixtures	431.9	464.5	470.1	472.8	427	459	457	459	465	468
Stone, clay, and glass products	565.2	600.9	601.0	599.2	559	577	582	585	589	592
Primary metal industries	815.3	855.4	858.4	857.4	823	839	840	849	866	866
Fabricated metal products	1,371.2	1,428.3	1,438.8	1,447.7	1,362	1,391	1,410	1,411	1,430	1,439
Machinery, except electrical	2,084.1	2,114.7	2,125.1	2,157.2	2,088	2,094	2,109	2,115	2,131	2,162
Electric and electronic equipment	1,977.3	2,096.1	2,115.2	2,133.3	1,975	2,077	2,043	2,082	2,107	2,129
Transportation equipment	1,675.1	1,828.2	1,862.6	1,867.8	1,661	1,794	1,807	1,801	1,888	1,853
Instruments and related products	700.3	697.6	696.5	695.6	700	687	692	696	695	700
Miscellaneous manufacturing	382.8	390.8	398.2	397.6	374	385	383	380	386	389
Non-durable goods	7,689	7,941	7,928	7,909	7,645	7,772	7,771	7,760	7,828	7,862
Production workers	5,393	5,631	5,614	5,601	5,352	5,478	5,474	5,481	5,522	5,559
Food and kindred products	1,652.6	1,731.5	1,689.8	1,656.2	1,632	1,638	1,627	1,630	1,630	1,635
Tobacco manufactures	66.6	67.9	68.0	68.9	63	65	62	63	63	62
Textile mill products	730.9	760.1	763.0	763.1	727	746	752	753	758	759
Apparel and other textile products	1,149.6	1,196.3	1,208.0	1,210.2	1,181	1,180	1,175	1,171	1,191	1,201
Paper and allied products	655.2	665.5	667.2	670.0	654	658	659	662	666	669
Printing and publishing	1,266.6	1,287.8	1,295.0	1,305.9	1,263	1,284	1,289	1,290	1,296	1,302
Chemicals and allied products	1,060.9	1,061.8	1,058.6	1,059.5	1,064	1,059	1,056	1,060	1,051	1,057
Petroleum and coal products	200.9	197.3	196.1	193.4	200	197	195	195	194	192
Rubber and misc. plastics products	686.1	751.3	757.3	763.0	685	732	739	742	752	761
Leather and leather products	219.2	221.6	220.6	222.4	216	213	217	218	217	219
Service-producing	66,118	66,759	67,146	67,588	65,654	66,428	65,918	66,916	66,891	67,116
Transportation and public utilities	5,051	5,081	5,065	5,048	5,019	4,984	4,981	5,031	5,020	5,018
Wholesale and retail trade	20,549	20,746	20,738	20,901	20,320	20,529	20,580	20,612	20,656	20,665
Wholesale trade	5,231	5,285	5,309	5,306	5,212	5,229	5,249	5,274	5,298	5,285
Retail trade	15,318	15,461	15,429	15,595	15,108	15,300	15,331	15,338	15,368	15,380
Finance, insurance, and real estate	5,335	5,504	5,487	5,500	5,356	5,465	5,488	5,499	5,504	5,522
Services	19,180	19,953	20,032	20,121	19,187	19,770	19,835	19,913	19,972	20,121
Government	16,003	15,475	15,824	16,018	15,772	15,680	15,674	15,861	15,739	15,790
Federal government	2,726	2,745	2,749	2,752	2,746	2,738	2,746	2,778	2,759	2,771
State and local government	13,277	12,730	13,075	13,266	13,026	12,942	12,928	13,083	12,971	13,019

p = preliminary.

c = corrected.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Nov. 1982	Sept. 1983	Oct. 1983 P	Nov. 1983 P	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983 P	Nov. 1983 P
Total private.....	34.7	35.3	35.3	35.2	34.7	35.0	35.0	35.2	35.3	35.2
Mining.....	41.6	43.1	43.2	42.7	(2)	(2)	(2)	(2)	(2)	(2)
Construction.....	36.1	37.9	37.2	36.1	(2)	(2)	(2)	(2)	(2)	(2)
Manufacturing.....	39.3	40.8	40.7	40.8	39.0	40.2	40.3	40.8	40.6	40.5
Overtime hours.....	2.4	3.5	3.4	3.4	2.3	3.0	3.1	3.3	3.4	3.3
Durable goods.....	39.6	41.4	41.2	41.4	39.3	40.8	40.8	41.5	41.2	41.1
Overtime hours.....	2.2	3.6	3.5	3.5	2.1	3.0	3.1	3.4	3.4	3.4
Lumber and wood products.....	38.6	40.7	40.5	40.0	38.7	39.9	40.2	40.5	40.3	40.1
Furniture and fixtures.....	38.0	40.3	40.3	40.0	37.6	39.7	39.7	40.1	39.7	39.6
Stone, clay, and glass products.....	40.5	42.4	42.1	41.8	40.2	41.7	41.7	42.1	41.7	41.5
Primary metal industries.....	38.3	41.4	41.2	41.7	38.3	40.6	40.9	41.2	41.7	41.7
Fabricated metal products.....	39.4	41.4	41.3	41.6	39.2	40.7	40.9	41.6	41.2	41.4
Machinery, except electrical.....	39.6	41.1	41.0	41.5	39.3	40.7	40.7	41.2	41.2	41.2
Electric and electronic equipment.....	39.6	41.0	41.0	41.3	39.3	40.6	40.7	41.1	41.3	41.0
Transportation equipment.....	41.2	42.8	42.5	42.7	40.9	42.0	41.8	43.5	42.4	42.3
Instruments and related products.....	39.9	41.0	40.6	40.8	39.4	40.7	40.4	41.0	40.6	40.4
Miscellaneous manufacturing.....	35.1	39.5	39.8	39.7	(2)	(2)	(2)	(2)	(2)	(2)
Nondurable goods.....	38.8	40.1	39.9	40.0	38.6	39.5	39.5	39.9	39.7	39.7
Overtime hours.....	2.6	3.5	3.4	3.3	2.5	3.0	3.1	3.1	3.2	3.2
Food and kindred products.....	39.7	40.4	39.8	40.0	39.4	39.4	39.6	39.9	39.7	39.7
Tobacco manufactures.....	38.0	36.8	38.6	39.2	(2)	(2)	(2)	(2)	(2)	(2)
Textile mill products.....	39.1	41.4	41.2	41.2	38.8	40.7	40.9	41.3	40.8	40.9
Apparel and other textile products.....	35.3	36.8	36.8	36.6	35.0	35.8	36.2	36.8	36.5	36.3
Paper and allied products.....	41.9	43.5	43.1	43.0	41.7	42.9	42.9	43.3	43.1	42.8
Printing and publishing.....	37.3	38.0	38.0	38.2	37.1	37.7	37.5	37.8	38.0	38.0
Chemicals and allied products.....	41.0	41.9	41.7	42.3	40.7	41.8	41.6	41.7	41.7	42.0
Petroleum and coal products.....	44.5	44.3	43.8	44.1	44.1	43.7	43.5	43.2	43.5	43.8
Rubber and misc. plastics products.....	39.6	41.9	41.8	41.9	(2)	(2)	(2)	(2)	(2)	(2)
Leather and leather products.....	35.9	37.5	37.2	37.3	35.8	37.4	37.2	37.7	37.5	37.2
Transportation and public utilities.....	39.0	39.4	39.5	39.3	38.9	38.9	39.3	39.4	39.5	39.2
Wholesale and retail trade.....	31.7	32.0	32.0	31.9	31.8	31.9	31.8	31.8	32.1	32.1
Wholesale trade.....	38.5	38.7	38.7	38.8	38.4	38.4	38.5	38.7	38.6	38.7
Retail trade.....	29.4	29.9	30.0	29.8	29.8	29.8	29.1	29.7	30.1	30.0
Finance, insurance, and real estate.....	36.2	36.0	36.4	36.1	(2)	(2)	(2)	(2)	(2)	(2)
Services.....	32.5	32.7	32.8	32.7	32.6	32.6	32.7	32.8	32.3	32.8

<sup>1</sup> Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

<sup>2</sup> This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.  
p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Nov. 1982	Sept. 1983	Oct. 1983 <sup>2</sup>	Nov. 1983 <sup>3</sup>	Nov. 1982	Sept. 1983	Oct. 1983 <sup>2</sup>	Nov. 1983 <sup>3</sup>
Total private	\$7.51	\$8.11	\$8.15	\$8.14	\$271.01	\$286.28	\$287.70	\$286.53
Seasonally adjusted	7.78	8.08	8.12	8.11	269.77	284.82	286.64	285.37
Mining	11.01	11.35	11.32	11.30	459.02	489.19	489.02	482.51
Construction	11.72	12.02	12.02	11.95	423.09	455.94	447.14	427.79
Manufacturing	8.61	9.90	9.91	9.97	330.37	363.12	362.64	365.98
Durable goods	9.17	9.00	9.49	9.53	363.13	392.47	390.99	394.54
Lumber and wood products	7.57	7.88	7.87	7.76	292.92	320.72	317.93	310.40
Furniture and fixtures	6.43	6.73	6.75	6.75	244.34	271.22	271.22	270.00
Stone, clay, and glass products	9.00	9.43	9.78	9.36	346.12	399.83	394.90	392.08
Primary metal industries	11.49	11.77	11.77	11.35	440.07	469.06	454.32	473.30
Fabricated metal products	8.90	9.21	9.21	9.26	350.65	381.29	380.37	385.22
Machinery, except electrical	7.29	7.71	7.72	7.91	371.45	399.08	399.75	407.12
Electric and electronic equipment	6.45	6.78	6.73	6.77	334.62	358.75	357.93	362.20
Transportation equipment	11.34	11.60	11.66	11.93	447.21	505.04	504.05	509.41
Instruments and related products	8.31	8.61	8.59	8.59	331.57	373.01	348.75	350.47
Miscellaneous manufacturing	6.56	6.95	6.85	6.85	256.50	270.58	272.63	271.95
Non-durable goods	7.88	8.11	8.11	8.17	305.74	325.21	323.59	326.80
Food and kindred products	8.00	8.14	8.12	8.23	317.60	328.95	323.57	329.20
Tobacco manufactures	10.16	9.90	9.77	10.73	385.08	380.16	377.12	420.62
Textile mill products	5.92	6.23	6.24	6.25	231.47	257.92	257.09	257.50
Apparel and other textile products	5.24	5.39	5.40	5.43	184.97	198.25	198.72	198.74
Paper and allied products	9.60	10.11	10.10	10.18	402.28	439.79	435.31	437.74
Printing and publishing	8.92	9.25	9.26	9.24	332.72	351.50	354.88	354.88
Chemicals and allied products	10.26	10.49	10.78	10.85	420.66	487.91	449.53	458.96
Petroleum and coal products	12.68	13.36	13.37	13.47	544.26	591.85	584.73	594.03
Rubber and misc. plastics products	7.81	8.08	8.12	8.07	309.28	336.55	339.42	336.13
Leather and leather products	5.43	5.56	5.55	5.57	194.22	208.50	204.46	207.76
Transportation and public utilities	10.59	10.50	10.94	10.97	413.01	429.48	432.13	431.12
Wholesale and retail trade	6.30	6.54	6.57	6.58	197.01	209.28	210.24	209.90
Wholesale trade	8.14	8.48	8.53	8.53	313.39	328.16	330.11	330.94
Retail trade	5.56	5.77	5.78	5.80	164.58	172.52	173.40	172.84
Finance, insurance, and real estate	7.00	7.33	7.43	7.39	253.40	263.68	270.45	266.78
Services	7.00	7.31	7.39	7.39	230.10	239.04	242.39	241.55

<sup>1</sup> See footnote 1, table B-2.

p = preliminary.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry (1977 = 100)

Industry	Not seasonally adjusted				Seasonally adjusted							Percent change from: Nov. 1983	
	Nov. 1982	Sept. 1983	Oct. 1983 <sup>2</sup>	Nov. 1983 <sup>3</sup>	Percent change from: Nov. 1982-1983	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983 <sup>2</sup>	Nov. 1983 <sup>3</sup>		Oct. 1983
Total private nonfarm:													
Current dollars	151.2	156.2	156.8	156.8	3.7	151.1	155.2	155.0	155.9	156.7	156.7	156.7	(3)
Constant (1977) dollars	93.6	94.3	94.5	H.A.	(2)	93.4	94.7	94.0	94.2	94.4	H.A.	94.4	(3)
Mining	162.9	168.3	168.3	168.6	3.5	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	142.3	147.1	146.7	144.5	1.5	141.9	144.0	144.1	145.5	144.8	144.0	144.0	-0.6
Manufacturing	155.4	158.5	158.8	159.6	2.7	155.3	158.2	158.1	158.3	158.8	159.5	159.5	-4
Transportation and public utilities	153.2	158.1	159.0	159.4	4.0	152.1	157.9	155.4	157.2	158.5	158.3	158.3	-2
Wholesale and retail trade	147.2	152.2	153.6	153.7	4.4	147.3	152.2	152.3	153.1	153.9	154.0	154.0	-1
Finance, insurance, and real estate	152.7	159.8	161.9	161.2	5.6	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	151.0	154.9	158.3	158.0	4.7	150.7	155.6	155.9	157.1	158.5	157.7	157.7	-5

<sup>1</sup> See footnote 1, table B-2.<sup>2</sup> Percent change was 1.4 from October 1982 to October 1983, the latest month available.<sup>3</sup> Percent change was 0.2 from September 1983 to October 1983, the latest month available.<sup>4</sup> These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.<sup>5</sup> Percent change is less than .05 percent.

H.A. = not available.

p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers' on private nonagricultural payrolls by industry

(1977 = 100)

Industry	Not seasonally adjusted					Seasonally adjusted				
	Feb. 1982	Sept. 1983	Oct. 1983	Nov. 1983 <sup>p</sup>	Nov. 1982	July 1983	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983
Total private .....	103.5	104.0	109.2	109.1	102.5	106.1	105.3	107.5	108.2	108.4
Goods-producing .....	83.6	98.2	98.1	97.7	86.8	93.0	93.5	95.1	95.5	95.1
Mining .....	113.7	117.6	115.2	117.0	117.5	114.0	115.0	117.0	115.7	116.2
Construction .....	123.9	115.1	113.7	108.7	87.2	103.5	104.5	106.0	103.8	104.7
Manufacturing .....	81.8	94.0	94.1	94.6	83.3	90.0	90.4	92.0	92.8	93.5
Durable goods .....	80.5	91.0	91.7	92.6	79.0	87.7	87.8	89.8	90.9	91.7
Lumber and wood products .....	73.1	101.2	94.9	97.2	78.1	93.5	95.6	97.0	97.7	98.0
Furniture and fixtures .....	67.1	100.3	101.5	101.8	84.5	97.2	97.0	98.2	98.6	99.4
Stone, clay, and glass products .....	73.9	89.4	88.9	86.1	76.7	83.8	84.5	85.7	85.9	85.7
Primary metal industries .....	59.8	70.0	70.0	70.7	59.6	67.0	67.6	68.9	71.4	71.6
Fabricated metal products .....	73.9	87.7	88.5	85.7	77.0	83.7	85.2	86.9	87.4	88.6
Machinery, except electrical .....	81.3	87.0	87.4	90.2	80.4	84.6	85.6	87.0	88.1	89.9
Electric and electronic equipment .....	93.4	105.5	106.9	108.5	91.8	101.6	101.4	104.7	106.3	107.8
Transportation equipment .....	75.9	90.3	92.3	93.3	74.6	86.8	86.9	89.0	90.9	91.1
Instruments and related products .....	102.9	105.2	104.7	105.4	101.2	101.9	102.2	105.0	105.1	104.3
Miscellaneous manufacturing .....	83.2	86.5	89.3	89.0	79.4	84.5	83.4	82.9	85.0	84.9
Non-durable goods .....	91.2	98.4	97.5	97.5	89.7	94.2	94.2	95.3	95.6	96.2
Food and kindred products .....	97.4	106.0	101.1	98.8	95.5	96.2	95.5	96.3	95.9	96.5
Tobacco manufactures .....	92.6	93.8	94.6	89.7	82.1	87.3	82.1	83.6	85.4	81.2
Textile mill products .....	76.7	85.3	85.1	85.2	75.2	81.8	83.1	83.9	83.6	84.0
Apparel and other textile products .....	85.3	92.8	93.7	93.4	83.9	89.0	89.6	91.2	91.6	92.0
Paper and allied products .....	92.1	97.6	97.1	97.7	91.2	95.4	95.0	109.8	111.1	111.9
Printing and publishing .....	105.6	113.4	110.9	112.9	105.6	109.0	108.9	106.5	106.8	106.9
Chemicals and allied products .....	94.1	96.3	95.4	97.3	93.5	95.8	95.1	95.5	95.9	97.0
Petroleum and coal products .....	95.6	98.4	92.8	91.5	93.9	92.7	91.5	90.1	89.9	89.9
Rubber and misc. plastics products .....	93.7	107.0	108.0	105.1	89.3	102.7	103.5	105.7	106.5	103.4
Leather and leather products .....	81.5	86.8	85.7	87.1	79.9	82.6	84.0	85.6	85.1	85.4
Service-producing .....	111.7	115.0	115.3	115.4	111.3	113.4	111.8	114.8	115.2	115.1
Transportation and public utilities .....	101.5	103.0	103.1	102.3	100.7	99.7	85.0	102.0	102.0	101.2
Wholesale and retail trade .....	104.9	106.7	106.8	107.3	103.5	105.3	105.3	105.6	106.6	106.4
Wholesale trade .....	107.9	109.6	110.2	110.1	107.2	107.9	108.1	109.3	109.3	109.4
Retail trade .....	103.7	105.6	105.5	106.2	102.1	104.3	104.2	104.1	105.6	105.3
Finance, insurance, and real estate .....	116.3	119.5	120.1	119.2	116.8	119.1	119.0	119.5	120.5	119.8
Services .....	122.3	128.0	128.6	128.8	122.8	126.3	127.1	128.0	128.8	129.2

<sup>p</sup> See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment<sup>1</sup> increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981 .....	57.8	52.4	52.2	65.6	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982 .....	28.5	45.4	36.0	39.0	47.6	32.8	38.4	37.1	34.1	29.3	32.0	42.2
	1983 .....	56.5	45.7	62.4	69.1	71.0	64.5	68.5	68.0	60.8	70.2p	60.3p	
Over 3-month span	1981 .....	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	33.3	30.1	24.5	23.4
	1982 .....	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983 .....	45.4	55.1	65.6	75.8	76.1	77.2	73.9	79.6	79.0p	72.0p		
Over 6-month span	1981 .....	68.5	65.3	65.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982 .....	20.2	23.7	25.3	29.8	26.1	26.1	23.4	19.1	21.2	26.1	24.6	35.8
	1983 .....	50.5	63.2	73.4	76.3	79.3	83.6	83.3p	80.9p				
Over 12-month span	1981 .....	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	25.3	23.1
	1982 .....	22.0	20.7	18.0	19.4	18.3	20.7	22.8	24.2	24.2	31.5	37.6	44.1
	1983 .....	48.9	58.3	62.6	72.8p	75.3p							

<sup>1</sup> Number of employees, seasonally adjusted for 1, 3, and 6-month spans, on payrolls of 100 private nonagricultural industries.

p = preliminary.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

Representative LUNGREN. Well, thank you, Madam Commissioner. Let me go a little bit into what you addressed in the final part of your statement, and that is the question of labor force growth.

Last month, as you suggested, we had what appeared to be a drop of 500,000. This month, we see an increase of 200,000, I believe it is. And yet, you have suggested to us that this is not something—when we put all the figures together—that ought to surprise us because, in fact, we have had some major demographic changes. The postwar baby boom crest is over as far as entrants to the job market.

Is this a phenomenon that we will see for some extended period of time and that we ought to anticipate as we go forward?

Ms. NORWOOD. Well, we expect, certainly, that there will be a slowdown in the rate of labor force growth throughout the 1980's, and that there will be a change in the composition of the labor force. There will be fewer young people entering the labor force purely because there are fewer young people. There were fewer of them born to grow up to enter the labor force. And probably, the other important demographic change in the future will be that because of comparative birth rates, a larger proportion of the labor force will be made up of minority workers.

Representative LUNGREN. Now you mention in your statement about the fact that we had increases, major increases, in both manufacturing and in services; yet, the employment in manufacturing is still below the alltime high in the prerecession peak.

My question on that is: Is that consistent with the changes in the makeup of our employment composition that we ought to expect? That is, there has been a lot of far-ranging forecasting about the makeup of our economy in the future with respect to movement away from the great reliance we had on manufacturing to a greater reliance on services.

I guess what I'm asking you is are these figures anything that we ought to be surprised at or are they consistent, as I say, with the developments that we have seen projected?

Ms. NORWOOD. It's hard to know what we should be surprised at, Congressman. It's clear that there is a structural change going on in the United States, as well as, as a matter of fact, in many other countries. Many of the so-called smokestack industries which had peak levels of employment in the late 1970's have had rather steady periods of decline since that time, exacerbated, of course, by the recession. Some of those industries have recovered. The auto industry, for example, is now just about back to its prerecession level, but still considerably below the peak levels of 1979.

Other industries have recovered more—lumber and wood products, for example—spurred probably by construction and housing, to a level of employment that is higher than they had in July 1981. On the other hand some industries, like steel, still have a very reduced employment level and so far have shown little sign of picking up. There are other industries, such as machinery, which were somewhat slower to pull out of the recession but which now are beginning to improve.

So I think the answer to your question, really, is, yes; there is some change going on. How much of the employment in manufacturing will no longer be there and how much of it is just a question of time to come back, I can't say.

Representative LUNGREN. Out of the wealth of good, positive signs that you've given us is one rather strong caution, and that is in the area of black teenage unemployment. It's something that we've talked about at previous hearings.

You indicate that a white teenager is still 2½ times more likely to have a job than is a black teenager. How does that compare with that opportunity ratio, if you will, if I can coin a phrase, in previous postwar recovery periods?

The reason I ask that is I've seen some work done by Mr. Walter Williams and others that indicate that shortly after the Korean war experience, we had rather comparable rates between black and white teenagers. And I just wondered how different is what we have now from what we've seen in other postwar recoveries, as one means of trying to define the problems and see if there are trends that have developed in the succeeding postwar recoveries that we have had.

Ms. NORWOOD. Well, of course, the first point of importance is that there are many fewer teenagers than there have been in the last several years. Their population is declining, as I have indicated earlier. But if you go back to the previous recession, we were in a period of having the baby boom generation growing up. So the teenage population was increasing.

It's quite clear that the minority population of this country has almost always had a harder time in the labor force than the white population has. I'm not sure that I have any specific information here on black teenagers compared to previous recessions. There seems to be a growth in employment for black men. Black women seen, during this recession, to be just about even, perhaps up slightly in employment.

There has also been, and I think we need to take account of the sociological changes, a very large increase in the number of single parent families; a large number of those are black and a large number of those families are living in poverty. So, some of these unemployed black teenagers are living in rather poor economic circumstances.

Representative LUNGREN. Perhaps I could ask you at sometime in the future to submit to the committee some comparisons of the ratio of unemployment between black and white teenagers in our past postwar recoveries.

Ms. NORWOOD. Yes.

Representative LUNGREN. I'd really like to take a look at that and see if we can glean anything out of that that might give us both some questions and some answers to those questions.

Senator PROXMIRE.

I think among the other happy notes here, that we have in this past month, in November, the highest level of employment that we have ever had in the history of our country in any month.

Is that correct?

Ms. NORWOOD. Yes, sir.

Senator PROXMIRE. And that's both in absolute terms and seasonally adjusted terms.

Ms. NORWOOD. Before seasonal adjustment, the number was higher during this past July and August because of the summertime influx of schoolage youth.

Senator PROXMIRE. And in absolute terms, we can certainly expect that December, on the basis of all past experience, will be even better because December is a high employment month.

Is that right?

Ms. NORWOOD. Well, historically we have found little difference from November to December in the unadjusted data as there are offsets between reduced outdoor activities and the seasonal growth in trade.

Senator PROXMIRE. Now, you're a fine economist, Ms. Norwood. I realize that you're not a prognosticator or a predictor. But let me make you a little uncomfortable by asking, shouldn't we expect that this beautiful nirvana will grind to a halt late next year or early in 1985 with a clash between immense Federal borrowing and the needs of the growing private sector, so that interest rates are likely to go up and construction and homebuilding and the automobile purchasing and so forth, all of which depend very heavily on credit, are likely to be retarded?

Would that be a likely expectation, in your view?

Ms. NORWOOD. Well, I know, Senator Proxmire, that you, especially, have paid a great deal of attention to the need to reduce budget deficits, and I would hope that you're successful. [Laughter.]

Senator PROXMIRE. I appreciate that.

Representative LUNGREN. The spirit of Christmas. [Laughter.]

Senator PROXMIRE. Would you expect, with a deficit of \$200 billion, roughly, and with every indication that we will have a deficit of roughly the same size in the coming year, that would tend to put pressure on interest rates if the recovery continues in 1984 as it did in 1983.

What I am really asking is whether you or your colleagues have any view as to whether we're approaching the limits of capacity utilization, the limits of skilled manpower, availability, and so forth, is going to begin to put pressure on the economy from the standpoint of inflation or from the standpoint of credit needs?

Ms. NORWOOD. I really don't have any way to respond to that. Capacity utilization is up, but it is still not as high as it could be. We don't see really so much a problem of shortage of labor force in the years ahead, as much as, perhaps, a mismatch of the skills of people and the need for jobs and the training that is required. I think that that's a very real problem that we need to address.

Senator PROXMIRE. So one problem, obviously, from what you say that the Congress might follow to help the situation is to provide more for technical training, vocational training, the kind of skills that will be in demand?

Ms. NORWOOD. Well, I think that attention needs to be given to the fact that there are dislocations going on in the economy and that there are shifts going on. Some of the smokestack industries are tending to decline in employment and some of the service industries are increasing. The skills needed are different. I believe there are some programs that Congress has already passed to try to deal with some of those dislocations.

Senator PROXMIRE. So you think a level of 8.2 percent overall unemployment leaves plenty of leeway, at least for the foreseeable future, so that there shouldn't be much wage pressure on prices. Right?

Ms. NORWOOD. I don't know what the future will bring. As of now, I think that the capacity utilization figures suggest that there is still some room for expansion.

I don't know about the future.

Senator PROXMIRE. Over the last year, the civilian labor force increased by 1.3 million. You've noted that this growth is slower than in previous recovery periods, partly due to a smaller youth population and other demographic changes.

In addition to the 1.6 million people counted as discouraged workers, how many of those currently outside the labor force indicate intentions to look for work in the near future?

Ms. NORWOOD. I don't believe we have any information on that, Senator Proxmire. You're right about the discouraged workers, of course. They are out there.

Senator PROXMIRE. They're not asked whether they intend to look for work in the future, near future?

Mr. PLEWES. I'm sorry. We don't have those figures here. We can submit them for the record.

Senator PROXMIRE. Will you supply those for the record?

Mr. PLEWES. Yes.

Ms. NORWOOD. Yes.

[The following information was subsequently supplied for the record:]

**HOUSEHOLD DATA  
NOT SEASONALLY ADJUSTED  
QUARTERLY AVERAGES**

**A-58. Work-seeking intentions of persons not in the labor force and work history of those who intend to seek work within the next 12 months by sex, age, and race**

(In thousands)

Work-seeking intentions, work history, and sex	Total		Age						Race			
	III 1982	III 1983	16 to 24 years		25 to 59 years		60 years and over		White		Black	
			III 1982	III 1983	III 1982	III 1983	III 1982	III 1983	III 1982	III 1983	III 1982	III 1983
	<b>TOTAL</b>											
Do not intend to seek work .....	51,850	52,019	6,000	5,709	18,143	18,087	27,908	28,243	45,442	45,514	5,300	6,405
Intend to seek work in the next 12 months .....	8,818	9,177	4,562	4,471	3,895	4,138	461	567	6,917	7,032	1,717	2,146
Never worked .....	1,575	1,551	1,429	1,387	138	180	8	4	1,065	1,035	428	516
Last worked over 5 years ago .....	1,106	1,168	43	75	945	912	118	180	813	888	287	300
Last worked 1 to 5 years ago .....	2,344	2,634	778	865	1,409	1,565	159	203	1,736	1,962	543	672
Worked during previous 12 months .....	3,893	3,824	2,312	2,165	1,403	1,480	178	179	3,303	3,168	481	658
<b>Men</b>												
Do not intend to seek work .....	15,286	15,408	2,232	1,991	2,649	2,797	10,403	10,619	13,101	13,272	1,628	2,138
Intend to seek work in the next 12 months .....	3,017	3,087	1,859	1,935	829	882	229	230	2,251	2,355	552	712
Never worked .....	648	688	603	650	42	37	-	-	440	478	186	210
Last worked over 5 years ago .....	161	192	5	16	102	108	54	67	113	135	40	57
Last worked 1 to 5 years ago .....	656	692	285	254	320	381	71	77	461	506	175	188
Worked during previous 12 months .....	1,554	1,495	1,068	1,034	384	378	104	88	1,337	1,238	170	259
<b>Women</b>												
Do not intend to seek work .....	36,684	36,611	3,787	3,719	15,494	15,270	17,403	17,624	32,341	32,342	3,472	4,269
Intend to seek work in the next 12 months .....	5,901	6,111	2,602	2,517	3,068	3,257	232	337	4,686	4,677	1,165	1,434
Never worked .....	929	963	828	714	98	143	8	4	825	851	280	308
Last worked over 5 years ago .....	945	978	38	59	842	803	64	113	700	733	227	243
Last worked 1 to 5 years ago .....	1,668	1,842	514	610	1,088	1,205	87	127	1,275	1,456	389	488
Worked during previous 12 months .....	2,339	2,329	1,226	1,133	1,039	1,104	74	93	1,966	1,930	310	399

Senator PROXMIRE. What would happen to unemployment if the labor force grows more rapidly? For example, more in line with the pattern of previous recoveries?

Ms. NORWOOD. Well, it would depend on whether that was accompanied by an increase in employment and, of course, the extent of that increase. If it were accompanied by an equal increase in employment, nothing much would happen to unemployment. If it happened without any increase in employment, then, clearly, there would be an increase in the unemployment rate. And if the employment gain exceeded the growth in the labor force, unemployment would decline.

Senator PROXMIRE. Well, I guess what I'm really asking is how much of this sharp improvement in the unemployment rate is attributable to a slow growth in the labor force compared to past recoveries? How much of it is due to the strength of the recovery?

Ms. NORWOOD. I'm not sure that I can answer that question, really, because, in many ways, there are, as I indicated, some changes in the structure of the population. Perhaps a better way to look at it would be to look at the employment-population ratios. And the employment-population ratio—that is, the percentage of the population who are employed—is relatively high by historic standards. It's not the highest ever, certainly. It was higher in 1979.

Senator PROXMIRE. Well, the reason it's high, of course, is because women are coming into the labor force as never before, and that's a long-term trend that has gone on since the 1950's, isn't it?

Ms. NORWOOD. Yes.

Senator PROXMIRE. And if you can correct for that, then it seems to me that the situation isn't quite that—

Ms. NORWOOD. I'm not sure why you would want to correct for that, Senator Proxmire. [Laughter.]

Senator PROXMIRE. Well, I'm not sure that it can continue, because women are in the labor force now to an extent that may reach saturation.

Ms. NORWOOD. Well, some countries have as much as 60 percent labor force participation of women. I'm not suggesting that that's going to occur in the United States, but I think that the patterns of labor force participation of women suggests that women are in the labor force to stay. And it is true that we can standardize and look back and see what would have happened had conditions been different. But they are not. The women are there. The youth were there. The youth population is beginning to be reduced in total, in absolute numbers. And the minority population is clearly going to be a larger proportion of the labor force. I think that's the way we ought to be looking at it. That suggests that there may be some problems.

Senator PROXMIRE. In November, 3 of the 10 largest States—Michigan, Ohio, and Pennsylvania—still had double-digit unemployment rates, even though the national average was 8.4 percent. How many States still have jobless rates above 10 percent? And which ones?

[Pause.]

Mr. PLEWES. Nine States in September.

Senator PROXMIRE. Nine States. Is Wisconsin one of them?

Mr. PLEWES. No, sir.

Senator PROXMIRE. Good. [Laughter.]

Do a relatively small number of hard hit States account for a large proportion of current employment, or is unemployment still relatively disbursed?

Ms. NORWOOD. If we think about where the changes in employment are occurring, it's quite clear that a relatively small number of States still have a very high proportion of durable manufacturing industries and that although employment in durable manufacturing has been improving considerably in the last couple of months, it still has some way to go.

Employment in durable goods manufacturing, for example, has only recovered about 45 percent of the jobs lost between July 1981—the pre-recession peak—and the end of 1982. And those States which are dependent on particular durable manufacturing industries that have not recovered very much, still suffer serious difficulty.

On the other hand, there has been a tremendous increase in the service-producing sector, particularly in the services industry. And that tends to be spread in different places.

Senator PROXMIRE. Now your report shows that 5.9 million people, or 200,000 more than in October, were considered part time for economic reasons, working part time for economic reasons in November.

Why does the number on involuntary part-time schedules remain so high?

Ms. NORWOOD. I don't know.

Senator PROXMIRE. Can you give us some guesses; educated? Well educated?

Ms. NORWOOD. There has been a decline of 600,000 over the year. It's coming down very slowly. I just really do not know.

Senator PROXMIRE. Well, from your report, it appears that in November, several hundred thousand jobless persons found work in manufacturing and service industries. Does your survey indicate how much of this work was full time or whether the new jobs pay wages comparable to what workers had previously earned?

Ms. NORWOOD. Well, we cannot isolate the new jobs from other jobs. Nor can we compare a worker's current wage with a previous wage in our regular monthly survey.

Senator PROXMIRE. Well, about all you can do in that—I guess you can assume that there are some industries that are obviously better paid than others. Manufacturing is much better paid than retail, for example. Isn't that right?

Ms. NORWOOD. Yes, that's quite right. But, on the other hand, some of the establishments included in the services industry are quite sophisticated, require quite a lot of training, and are quite high paying.

Senator PROXMIRE. Let me ask you about the auto industry. We have a lot of it in our State and it's very important in the Middle West. Auto inventories have fallen sharply and employment in the industry has been increasing. Because factories have been closed, will this industry reach production capacity limits unless new plants are opened? And are auto plants making extensive use of overtime to meet production standards?

Mr. PLEWES. I know that overtime is increasing. We're now seeing about 13 of the roughly 24 assembly plants on overtime. The average overtime hours for a production worker in the auto industry right now is nearly 6 hours. There's a good bit of overtime being worked.

On the capacity utilization, I don't think we have any particular—

Senator PROXMIRE. You made the statement, in general, that we weren't that close to full utilization of capacity in this country. On the other hand, are there other industries that are operating close to capacity besides auto?

Ms. NORWOOD. There may well be.

Senator PROXMIRE. You don't have any record of that? Will you check it out and let us know?

Ms. NORWOOD. Yes; we'd be glad to.

Senator PROXMIRE. Some indication of whether or not there will be inflationary pressures.

Your report shows unemployment in the construction industry at 15 percent, which is still very, very high by any measure and well above the averages in most occupations. Is growth tapering off in this sector at a relatively early stage of the economy's recovery because of interest problems?

Ms. NORWOOD. There still seems to be growth in construction. There was, for example, a 38,000 increase, which is, for a small industry—there are only some 4 million people employed—what we would expect.

Obviously, it depends upon housing starts. And there has been some reduction in housing starts in the last month or so.

Senator PROXMIRE. During this business cycle, overall unemployment rose from 7.2 percent to 10.8 percent before falling to 8.4 percent this November—or 8.2 percent, depending on which measure you take. Which worker groups had the largest rises in unemployment during the 18 months in which joblessness was increasing and which groups experienced the most rapid reemployment since last December?

Ms. NORWOOD. Clearly, the most rapid increase in unemployment was among adult men. And that's because of the concentration of the focus of the recession in durable goods manufacturing and construction which tend to have a large number of men in their work forces.

Women also had increases in unemployment, but not nearly of the magnitude that men had. In the recovery, the reduction in unemployment has been sharper for men than for women.

The black population always has a harder time in the labor market and they have had a large increase in unemployment, although it wasn't really so much a part of this past recession. They never showed much improvement after the 1980 recession and only lately has the overall black unemployment rate begun to come down a little.

Senator PROXMIRE. So the blacks have not had an opportunity to recover the way whites have.

Ms. NORWOOD. Not as much as the whites—that's true; yes.

Senator PROXMIRE. And how about men as compared with women? Have they been able to recover? It seems to me that it was

only a few months ago that the unemployment rate for women fell below that of men. And now, it's sharply below. It's 7.8 compared to 7.1, or something like that.

Ms. NORWOOD. It was fairly early in the recession that the unemployment rate for men became higher than the unemployment rate for women. It stayed there. The gap between them increased, with the men having a higher rate, and it's still with us. The unemployment rate for adult men is 7.8 in November and for women it's 7.1.

Senator PROXMIRE. Let me ask you just one technical question before I yield back to Congressman Lungren. Because seasonal adjustment factors are heavily influenced by the experience of recent years, the last 3 of which were recessions, will there be some bias in this season's adjustment and what is the magnitude of that bias?

Ms. NORWOOD. As you well know, Senator Proxmire, seasonal adjustment is a very imperfect statistical technique. And you quite rightly suggest that it is dependent upon past developments.

We know that in the last several years, particularly the most recent past, not just this period, but the last, say, 2 or 3 years before, that there were declines because we were in recessions. And so it is entirely possible that there may be some exaggeration of the 740,000 employment gain this month.

I don't see any evidence, and we have looked at this with some care, that the exaggeration is an enormous one.

Senator PROXMIRE. Let me put that a little more precisely in terms of the figures that we have out today. Before seasonal adjustment in these figures, employment grew by 359,000 in the household survey. Could some of the large seasonally adjusted gain of 740,000 be explained by the process having anticipated a weaker situation was likely to occur?

Ms. NORWOOD. Some of it, yes. Some of it could be a question of seasonal adjustment.

Senator PROXMIRE. How much of it, roughly?

Ms. NORWOOD. I really don't know, but I'd be surprised if it would be more than a tenth or two.

Senator PROXMIRE. Thank you, Congressman Lungren.

Representative LUNGREN. Seasonal adjustments are something that we have discussed many other times and it's difficult for us to understand. It's difficult for constituents to understand.

But as I understand the raw data, we have approximately 4.2 million Americans working today who were not working in December. Is that correct? In other words, the nonseasonally adjusted figures show a growth of 4.2 million.

[Pause.]

Ms. NORWOOD. There has been an increase of 4.2 million in the level of employment between December 1982 and November 1983, before adjustment for seasonality.

Representative LUNGREN. It seems to me that we can talk about seasonal adjustments and so forth, but the drop that we have had the last 2 months at least surprised me. In trying to talk with people before we have these sessions, no one was willing to venture a guess that we would have the drops that we have had. And if you add the two together over the last 2 months, it's almost a full percent. It's nine-tenths of a percent.

I went through the data and it appeared that the last time we had such a large 2-month decline was back in 1949. Is that consistent with what your review of the data shows?

Mr. PLEWES. We found another 2-month span in 1958. But that's essentially correct. It's been a good long time.

Representative LUNGREN. In going through that material, someone suggested to me, however, there is some problem in evaluating the 1949 statistics. Can you tell us what that is?

Mr. PLEWES. That's correct. That's when the survey was relatively new, and we had some problems in the classification of workers during a large coal strike in October 1949.

We understand that many strikers were misclassified as unemployed rather than as employed.

So the data is, I guess, hazy for that period.

Representative LUNGREN. At least with that one 2-month period in 1958, this is the best we've had, perhaps 1958, but going all the way back to 1949.

Is that right?

Mr. PLEWES. That's correct.

Representative LUNGREN. I wonder if, Ms. Norwood, you could briefly explain a little bit more fully the usefulness of the employment population ratio. What does that really tell us? Why is that an indicator that we should pay some attention to?

Ms. NORWOOD. The employment population ratio merely tells us what proportion of the population is employed. It's important, I think, in looking at a number of issues. First, of course, it looks at employment without getting into the problems of the volatility of the labor force. Also, it takes the growing population into account. For those reasons, I think it is quite important.

The employment population ratio was 58.7 percent in November. As I've said before, that's a relatively high figure by historical standards. It has been as high as 60.1 percent, however, in some earlier years.

Representative LUNGREN. We have had—

Ms. NORWOOD. I think, however, that we need to look at the employment-population ratio in particular for those groups of the population who tend to have less labor force participation, particularly the minorities. For the minorities, I think, if you just look at the unemployment rates, you are losing something because so many of them tend to be out of the labor force entirely. And so for our black population, particularly for black teenagers, the employment-population ratio is really an extraordinarily important figure and, I think, makes it possible to analyze better their problems than if we just focused on their unemployment rate.

Representative LUNGREN. We have had an overall increase from the trough of this recession to the present time in this ratio, have we not?

Ms. NORWOOD. The series low was 57.1 in February and March. The recession trough as designated by the NBER, was November 1982, when the ratio was 57.3 percent. The ratios had risen to 58.7 percent by November 1983.

Representative LUNGREN. The reason I wanted to look at that a little bit is that, as you suggested, it is an important measure of strength of employment. But it also brings me to some questions of

analysis. I've got your data here on yearly ratios rather than monthly ratios, but in 1978, the ratio was 58.6. It was pretty close to what we have now, 58.7. Yet, the corresponding unemployment rate at that time was 6.1 percent. We now have a 58.7-percent employment-population ratio and even though we have good news on unemployment, our unemployment rate is obviously above 6.1 percent.

Does that suggest to you any major differences in the composition of the work force that we have today?

Ms. NORWOOD. Well, I think it suggests, of course, that the economy has to create jobs because there are more people continually born and who grow up and go into the labor force. The population and labor force keep increasing and it is, therefore, important for us to look at the job creation potential of the economy.

If we look back to the period of the 1970's, when we had very large increases in the labor force, we created over that decade, more than 20 million jobs in this country.

In the 1980's, we should have a slower growth in the labor force, and therefore, the problem of putting those people to work may be somewhat more manageable. The demographics are with us.

I might point out, as you and I have discussed before, that that is a reverse of the situation that is facing many of the countries of Western Europe.

Representative LUNGREN. I appreciate those comments and those are things that we have discussed in the past and hopefully, we can continue to discuss. On this point, one of the things that just strikes me as a public policymaker is that even if we get to the historical high in the employment-population ratio, that does not necessarily mean that we will get to the comparable unemployment rate that we saw in the past. At least my review of the data would suggest that.

Ms. NORWOOD. That's right. That's because labor force participation is increasing.

Representative LUNGREN. That's right.

Ms. NORWOOD. And has been steadily for many years.

Representative LUNGREN. And all I'm trying to do is to suggest that that may not be the fault or to the credit of any particular administration or set of circumstances that we have created as far as decisionmakers here. It's a new phenomenon that we have to deal with. It's, perhaps, a greater challenge than we've had in the past.

I understand by looking at the data that the average decline in the unemployment rate in postwar recoveries is something over 2 percent. And one of the problems in trying to look at this recession and recovery is that we sometimes, at least in my estimation, forget to look at what preceded it.

We talk about having had a recession fairly close to this one, and the recovery that took place in July 1980, and I just wonder, what happened between July 1980 and July 1981? How much did the civilian unemployment rate decline?

Ms. NORWOOD. It declined six-tenths of 1 percentage point. Of course, there was much less of an increase in the unemployment rate during that recessionary period.

Representative LUNGREN. But didn't we leave that recovery with a higher unemployment rate than we had the previous recovery?

Ms. NORWOOD. Yes, sir, in the majority of cases that has been true.

Representative LUNGREN. In postwar years.

Ms. NORWOOD. In the postwar period, typically, we have entered each recession with a higher unemployment rate than the previous one.

Representative LUNGREN. One of the things that we talked about in the past has been the question of the duration of those who were unemployed. On the one hand, we see that in the recovery, the more essential laid off workers would be the first rehired. And I suppose another way of stating it is that the last laid off would most likely be the earliest rehired.

What kinds of patterns in average duration of unemployment would we look for that would be consistent with that hypothesis?

That is, do we tend to see a lengthening of the duration of unemployment in the midstages of the recession and then as we go into the recovery, do we see that duration actually lengthening as the ones that have been laid off earliest and, presumably, the toughest to get back, are the last ones that you have to deal with as the recovery really gains some steam?

Ms. NORWOOD. Yes; that does happen. As we move into recovery, clearly, we have fewer people who lose their jobs that particular month. And so you have nothing on the shortrun side pulling the average duration figure down.

In addition, you're quite right, those people who are hardest to employ, including those who were laid off first, are generally the ones who are the last to be rehired.

The average duration of unemployment continued to rise for 6 months after unemployment reached its high. It peaked in June at 22 weeks. It's down a bit now, but it is going down rather slowly.

We still have a sizable group, roughly 2.2 million, who have been unemployed 6 months or more, although that's down over the year.

Representative LUNGREN. Have the changes in the average duration of unemployment in this recovery been consistent with what we've seen in previous postwar recoveries? Is there anything that's significantly different here?

Ms. NORWOOD. Pretty much the same. It's a general pattern.

Senator PROXMIRE. I just have three questions that I'd like to ask. One refers to this chart over here [indicating] that the Republicans put together, the job growth in economic recoveries. It looks terrific, like 1982, 1983 is really something else.

Isn't it true that when you recognize that we have a bigger labor force, we have more people at work, obviously, the job growth in 1982-83, if you can compare it with 1976 and with the previous periods, you ought to put it in relationship to the size of the work force at that time. And if you do that, isn't it true that the recovery in 1982-83 is about the same as 1975-76? Is that right or wrong?

Ms. NORWOOD. Well, first, let me say that I believe that that chart does not use seasonally adjusted data. I'm not sure about that, but I think that that's so. Therefore, since we're using different months for the beginning and the end of the recession, you

might get a somewhat different pattern. In addition, you're quite right, that there are differences in the labor force size and so it might be better to look at this in terms of percentage change. If you do that, and we look at employment, for example, we do find that the total civilian employment in the household survey is a bit higher. It's 3.7 percent in this recovery. That compares with 3.4 percent in 1975-76 for the same length of time and 3.4 percent in 1958-59. And if you go back to 1949-50, it was 4.6 percent.

Senator PROXMIRE. Of course, it also depends on the level from which you begin. The unemployment level was quite high this time.

Now, one disturbing aspect that very few people seem to get into, but it does have a profound effect on jobs and employment, is the effect of the deficit on trade, the fact that the very, very high deficit has attracted capital from abroad, made the dollar very strong, and, as a result, has cut our exports.

For example, in the period from 1980 to 1982, when we were beginning to borrow money at a heavy rate, the dollar gained compared to the yen 21 percent. And our balance of trade with the Japanese went from \$10 billion adverse to \$17 billion adverse.

The Secretary of Commerce has indicated that this year the balance of trade will be \$70 billion adverse. Next year, \$100 billion adverse. Each billion dollars is 25,000 jobs. This means that we are likely to have a \$2½ billion job loss compared to what we would have if we had no adverse balance of trade. Since the deficits play such an important part in this, it seems to me that any recovery in the import and export businesses—that is, the businesses that are affected by imports from abroad or those that, of course, depend on exports abroad—are likely also to be sensitive to the deficit and suffer.

Do you have any data that shows what's happened to export industries, for example? I notice in the latest period, the last quarter, I think, that our exports dropped by several billion dollars.

Ms. NORWOOD. We don't have anything very specific, Senator Proxmire. We did have a program to identify at least those industries which had increasing imports and the employment levels of those industries. That program really was never funded and we have struggled through to try just to relate these two things. I don't think that one can put a casual relationship—

Senator PROXMIRE. How much would you need in funding to give us a consistent study of that?

Ms. NORWOOD. I really don't know.

Senator PROXMIRE. Will you let us know?

Ms. NORWOOD. Well, we can take a look at what our past experience has been with that program. I do want to emphasize that the problem is that what people want is something that we can't produce, and that is the causal relationship.

We do have a program, actually, and are working with the Census Bureau to identify trade movements and then to associate those with the employment in those industries and we will have—

Senator PROXMIRE. Well, obviously, when you have a situation in which what we buy from the Japanese drops by 21 percent in 2 years, what we buy from the European Common Market drops by

30 percent in that period, what they buy from us goes up by a corresponding amount, clearly, that has a causal effect on imports and exports.

Doesn't that follow?

Ms. NORWOOD. It certainly has some relationship. I'm not sure quite what that relationship is in terms of jobs. I do know, of course, that some of those imports are having a downward effect on the price levels.

Senator PROXMIRE. Now I have just one other question and that relates to the effect of the illegals. We have, as you know, varying estimates as to the number of illegals. Some people say that we have 2 or 3 million. Some people say we have over 10 million. Many of them work. I would think that it would be extremely hard for you to reflect their position. Since they're not counted, I presume, in the population, we have no basis for doing that. And I would think that that might also distort the picture if we have had a big influx of illegals in recent years, and many people feel that we have.

Under those circumstances, the figures that we receive, it seems to me, might be distorted and might be more optimistic than they would otherwise be, inasmuch as you're counting the jobs that the illegals have, but not counting them in the work force. Am I wrong or right?

Ms. NORWOOD. It is always possible that there can be some error in the data. In the household survey, however, though we cannot break out the number of people who are here illegally, we think we do a pretty good job in covering the people who are living in this country, whether they are here illegally or otherwise.

Senator PROXMIRE. Well, now, I wonder about that. Consider, when a person taking a household survey raps on the door and the illegals might happen to live there, do you think that the person answering the door would say, yeah, we've got people here, and give you as accurate a report as they would if they were not illegal aliens?

Ms. NORWOOD. All that I can say to that, Senator Proxmire, is that we and the Census Bureau, who work with us in this area, since they do the survey, think that the interviewers are extraordinarily well trained. They are in many cases conversant with the language of the respondent. And we find that we get rather good response rates. The Current Population Survey has very high response rates as surveys go.

I, obviously, cannot assert here that the data are perfect. All statistical series have some kind of error. That is something that we have some concern about. In fact, there is another issue that's associated with that which is the question of whether people report work that is performed, but not reported, for tax purposes; that is, so-called off-book work.

Senator PROXMIRE. Well, that's a colossal part of the economy, according to some people.

Ms. NORWOOD. That's right.

Senator PROXMIRE. The off-book economy. That could be—and, of course, the people that work in gambling, prostitution, and any number of other illegal activities. But the off-book is probably a lot bigger than the illegal activities, isn't it?

Ms. NORWOOD. We've just completed a study, Senator Proxmire, which is going to be published next month in the Monthly Labor Review, which reviews all of the estimates of off-book work that have been made that relate to BLS data. There have been a lot of estimates and some of them are quite wild.

The first thing we found was that those who are making those estimates, and I'm referring only to estimates relating to BLS data—that is, basically, employment and prices, wages and productivity—frequently have not taken the time carefully to review the specific methods that are used in developing the BLS data. Our assessment is that none of those estimates stand up at all in terms of the BLS data. That does not mean that we are suggesting that there is no problem. All that I think we can say from this study is that none of the estimates that have been made make very much sense. My own personal view is that some of the work that is going on in the Bureau of Economic Analysis, to look at the output which may not have been measured in the GNP accounts, is tremendously important. I think it is in the output area that probably the biggest effect of off-book work lies, much more so than in the employment area, because we think that some of our methods probably pick up a good deal of that, especially in the household survey.

Senator PROXMIRE. Thank you. Thank you, Congressman Lungren.

Representative LUNGREN. If we do have some people that are working who are not indicating that, or are part of the underground or off-book economy, that would understate employment and overstate unemployment.

Senator PROXMIRE. Well, the jobs are there. We know the jobs—for instance, if an illegal works in an outfit that makes clothing in New York City, the establishment survey would identify the job.

Ms. NORWOOD. Yes, that's for illegal aliens.

Senator PROXMIRE. What's that?

Ms. NORWOOD. That's for people who are here illegally. The other issue is people who, whether they're here illegally or legally, are not reporting their employment and they could be out of the establishment survey, but we think they are reported in the household survey.

Representative LUNGREN. Another thing, Senator. I just appreciate you bringing up the question of illegal immigration. It's something that I have worked on for 5 years. You folks in the Senate have done a better job than we have in the House. I hope we're going to do something about it in the next couple of months.

I, again, want to thank you, Ms. Norwood, and your associates, for being here. I just note that when you have bad news, we have more cameras than you can shake a stick at. So my hope is that when we see you in January, maybe no cameras will be here because the news will be so good. Thank you.

Ms. NORWOOD. Thank you very much.

[Whereupon, at 10:40 p.m., the committee adjourned, subject to the call of the Chair.]

# EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JANUARY 6, 1984

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, D.C.*

The committee met, pursuant to notice, at 9:30 a.m., in room SD-106, Dirksen Senate Office Building, Hon. Dan Lungren (member of the committee) presiding.

Present: Representative Lungren.

Also present: Christopher J. Frenze and Mary E. Eccles, professional staff members.

## OPENING STATEMENT OF REPRESENTATIVE LUNGREN, PRESIDING

Representative LUNGREN. Good morning, Madam Commissioner. It is a privilege and a pleasure to welcome you here today with your colleagues. I just have a brief opening statement and then I will be happy to hear some more good news from you and hopefully we can go into some questions and answers to get some details on some of this information.

Madam Commissioner, for each month of 1983 that you have appeared before this committee to report on the unemployment statistics for the country you were able to bring positive news on the employment growth for the Nation. I am hopeful that in 1984 you will be able to continue this trend.

This month's news is that unemployment has dropped to 8.2 percent for the civilian rate, but more importantly, this decline in unemployment appears to have been concentrated among long-term unemployed workers. I think this confirms what we have known for a long time now: America is working again.

Reviewing the job performance of the economy for 1983, there is little doubt in my mind that the dramatic growth in employment during the past year has created a new industry. We might call it economic reforecasting.

No economist at the beginning of last year forecasted that the unemployment rate would drop 2½ percentage points in 1 year or that this was to be one of the largest employment gains on record for any single year.

The other night, watching the television program Nightline, I thought it was kind of ironic that Jimmy the Greek had a better batting average than most of the professional economist, in predicting the strength of this years recovery. And for those who are interested, I might just say that the Greek is forecasting a perform-

ance for the economy in 1984 that will continue to be just as well and maybe even better than 1983.

As a result of the historic decline in employment this past year many are now predicting what was only unthinkable just a few months ago, and that is an unemployment rate at or below 8 percent in 1984. I think we have reason to believe that 1984 may match and possibly surpass the incredible performance in job growth we have had in 1983.

According to the information that you bring us today, the raw data show that 5.5 million jobs were created in 1983, and that is the second highest number of jobs ever created in a calendar year, a fact that none of even us bullish politicians dared to predict 1 year ago.

In the first 13 months of this recovery, and taking into consideration seasonal adjustments, almost 4 million new jobs have been generated. This appears to be the best performance of any recovery since the Korean war.

While this good news on employment will not deter our attempts to bring down the unemployment rate, the data also show that the number of unemployed has dropped 2.6 million in the last 13 months, for the best performance of any recovery since World War II.

Even more encouraging is the outlook for continued improvement in 1984, and I would like to mention two key factors which might suggest sustained economic recovery for the next year.

The best jobs program, I found, is provided by a healthy and expanding private sector. The American economy has been growing rapidly for the last 13 months and is still expanding briskly. The expected real increase in the Nation's gross national product for 1984 should bring with it increases in productivity as well as employment growth.

Second, the dramatic reduction in inflation in 1983 is another positive development. Unlike recent years, wages and salaries were not seriously eroded by inflation during the past year, thus preserving the standard of living of working Americans. The sum of inflation and unemployment rates, sometimes called the misery index that seems to crop up every 4 years, is about half its peak level in 1980.

The Bureau of Labor Statistics figures presented before the Joint Economic Committee show that 1983 was a good year, a banner year for employment growth as well as price stability. This is the best economic expansion the American workers have seen in many decades.

And as I do every once in a while, if I can just be a little parochial and point out some good news we had back home, the seasonally adjusted over-the-month unemployment rate that you bring us for California declined in December from 8.3 percent to 7.9 percent, bringing the rate to the lowest point since September 1981, when it was 7.5 percent. And even closer to my home, the unemployment rate, nonseasonally adjusted, for Los Angeles County, the Los Angeles-Long Beach area, declined 3.4 percent year-over-year from 10.4 percent in December 1982 to 7 percent in December of 1983, and that a review of the statistics suggests, is the largest over-the-year decrease in the Los Angeles County unemployment rate

shown in the current data base that began collecting data in 1976. That's awfully good news for those of us from our area.

So, Madam Commissioner, as I said, we welcome your testimony; we appreciate the time that you spend with us every month; and we await your testimony.

**STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY THOMAS J. PLEWES, ASSOCIATE COMMISSIONER, OFFICE OF EMPLOYMENT AND UNEMPLOYMENT STATISTICS; AND KENNETH V. DALTON, ASSOCIATE COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS**

Ms. NORWOOD. Thank you very much, Congressman Lungren. I would like to introduce Mr. Kenneth Dalton, who is our Associate Commissioner for Prices and Living Conditions, on my right; and Thomas Plewes, our Associate Commissioner for Employment and Unemployment Statistics, on my left.

I am, of course, always very pleased to be here and to give you a few comments to supplement the press release issued by the Bureau of Labor Statistics this morning.

The employment situation continued to improve in December as the recovery entered its 13th month. Both the household and the business surveys recorded employment increases over the month, and the unemployment rate dropped to its lowest point in more than 2 years. The overall jobless rate, which includes the resident Armed Forces in the labor force, was 8.1 percent in December, and the civilian worker rate was 8.2 percent. Both measures are now 2.5 percentage points below their 1981-82 recession highs.

The number of unemployed persons dropped by about 230,000 to 9.2 million in December, as there was a substantial decline in the number of workers permanently separated from their former jobs. The number of jobless individuals who had been laid off and were awaiting recall to their former jobs changed little in December. Over the past year, however, each of these groups declined by about 1 million.

Nearly all of the over-the-month improvement was among adult men, whose jobless rate dropped from 7.8 to 7.4 percent. Prior to the 1981-82 recession, the rate for men was consistently lower than that for women. The rate for men rose much more sharply than the rate for women during the recession, and early in 1983 was more than 1 full percentage point higher. The employment situation for men has shown greater improvement during the recovery, however, and by December their unemployment rate was only three-tenths of 1 point above that of adult women.

The employment situation for most worker groups has improved during the recovery period, but patterns have been somewhat uneven. Among whites, the drop in unemployment during the December 1982-83 period occurred among all three age-sex groups—adult men, adult women, and teenagers. Among blacks, however, the improvement was concentrated among black men. Their jobless rate dropped by more than 5 percentage points over the year to 15.1 percent. Even more important, the proportion of black adult

men who were employed rose by about 3.5 percentage points over the year.

The employment situation for black adult women changed little over the year, and the jobless rate for black teens has continued to hover close to 50 percent, nearly three times higher than that of white teens. The employment situation for Hispanics, the other minority group for whom data are regularly published, improved over the year. Their employment-population ratios rose and their jobless rates declined.

Both measures of average duration of unemployment—the mean and the median—declined over the month to 19.6 and 9.0 weeks, respectively. Movements in these measures tend to lag behind unemployment rate reductions during a recovery period. However, the number of very long-term unemployment, that is, people who are jobless for 27 weeks or more, has declined by about 800,000 since last June.

The civilian labor force was little changed in December, at 112.1 million. The labor force was about 1.3 million higher than 1 year ago. As I have indicated in previous discussions with this committee, labor force growth during the present recovery has been somewhat slower than in previous recovery periods. This should have been expected. The reason, as I pointed out last month, is that the youth population is now declining rather than increasing, as it did through most of the 1970's. The labor force participation rates for women have also been rising less rapidly.

Despite this slowdown in labor force growth, the number of discouraged workers, that is, those who report that they would like to work but are not seeking jobs because they believe they cannot find work, declined by 350,000 over the year, as job opportunities expanded.

Civilian employment, as measured by the household survey, rose by 2335,000 in December. Since December 1982 civilian employment has risen by about 4 million.

Nonagricultural payroll employment, as measured in our business survey, also rose in December by 230,000. Large gains continued in manufacturing and in services, and there were also increases in mining, whoselsale trade, finance, insurance, and real estate.

The increase in factory employment was concentrated in the durable goods industries. Employment in electrical equipment and transportation equipment each advanced by more than 15,000, continuing the strong job recovery in those industries which has been in evidence throughout 1983. Employment in services was up 70,000 over the month, continuing the strong gains which have occurred throughout 1983. As in recent months, much of the improvement was in business services.

Over the past year, the payroll survey has registered an increase of 3 million jobs. The bulk of the job growth during the recovery has been in the service-producing sector, although 1 million of the increase was in factory jobs. Within the manufacturing division, several industries, especially those related to housing and transportation, are now near or have already surpassed their prerecession employment levels. However, about half of the individual manufacturing industries for which data are published in the monthly re-

lease have regained less than 50 percent of the job loss sustained during the recession. In contrast, employment in the service-producing sector has increased by 1.6 million during the recovery period. Two-thirds of this job growth occurred in the services and finance, insurance and real estate industries, which had continued to grow throughout the recession period. Large increases also occurred in retail trade employment, which is now considerably above its prerecession peak level.

In summary, the overall labor market continues to show marked improvement. Employment has risen sharply, and the unemployment rate has continued its steady decline. Improvement has been widespread, affecting almost all worker groups. A review of specific industry developments suggests, however, that some problems continue to exist in matching the skills and the geographic location of the unemployed with the jobs created during the recovery.

Congressman Lungren, I would also like to point out that this month's release of data reflects new seasonal factors for the year. It is our custom, as you know, to revise the seasonally adjusted data and develop new seasonal factors at the end of each year.

In general the revisions this year are really very small, and I don't think it is necessary for me to go into them any further; revised numbers for major series may be found in tables B and C of this morning's press release.

I should perhaps take this opportunity to point out to those who are looking at my prepared statement that there is one slight error in it. On the first page the unemployment rate was 8.1 percent in November, it says; it was really December. I apologize for that. We are very proud of our record of never making errors. But at least it was not in the number.

[The table attached to Ms. Norwood's statement, together with the press release referred to, follows:]

UNEMPLOYMENT RATES OF ALL CIVILIAN WORKERS BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method					X-11 method (official method before 1980)	Range (cols. 2-7)
		Official procedure	Concurrent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1982:								
December .....	10.5	10.7	10.7	10.9	10.8	10.7	10.7	0.2
1983:								
January .....	11.4	10.4	10.4	10.3	10.5	10.6	10.4	.3
February .....	11.3	10.4	10.4	10.2	10.5	10.6	10.4	.4
March .....	10.8	10.3	10.3	10.2	10.4	10.4	10.3	.2
April .....	10.0	10.2	10.2	10.2	10.3	10.2	10.3	.1
May .....	9.8	10.1	10.1	10.2	10.1	10.1	10.1	.1
June .....	10.2	10.0	10.0	10.0	9.8	10.0	10.0	.2
July .....	9.4	9.5	9.5	9.4	9.5	9.5	9.5	.1
August .....	9.2	9.5	9.5	9.4	9.5	9.5	9.5	.1
September .....	8.8	9.2	9.2	9.2	9.2	9.1	9.3	.2
October .....	8.4	8.8	8.8	9.0	8.8	8.8	8.9	.2
November .....	8.1	8.4	8.4	8.5	8.4	8.4	8.4	.1
December .....	8.0	8.2	8.2	8.4	8.2	8.2	8.2	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, January 1984.

## EXPLANATION OF COLUMN HEADS

(1) *Unadjusted rate.*—Unemployment rate for all civilian workers, not seasonally adjusted.

(2) *Official procedure (X-11 ARIMA method).*—The published seasonally adjusted rate for all civilian workers. Each of the 3 major civilian labor force components—agricultural employment, nonagricultural employment and unemployment—for 4 age-sex groups—males and females, ages 16-19 and 20 years and over—are seasonally adjusted independently using data from January 1974 forward. The data series for each of these 12 components are extended by a year at each end of the original series using ARIMA (Auto-Regressive, Integrated, Moving Average) models chosen specifically for each series. Each extended series is then seasonally adjusted with the X-11 portion of the X-11 ARIMA program. The 4 teenage unemployment and nonagricultural employment components are adjusted with the additive adjustment model, while the other components are adjusted with the multiplicative model. The unemployment rate is computed by summing the 4 seasonally adjusted unemployment components and calculating that total as a percent of the civilian labor force total derived by summing all 12 seasonally adjusted components. All the seasonally adjusted series are revised at the end of each year. Extrapolated factors for January-June are computed at the beginning of each year; extrapolated factors for July-December are computed in the middle of the year after the June data become available. Each set of 6-month factors are published in advance, in the January and July issues, respectively, of *Employment and Earnings*.

(3) *Concurrent (X-11 ARIMA method).*—The official procedure for computation of the rate for all civilian workers using the 12 components is followed except that extrapolated factors are not used at all. Each component is seasonally adjusted with the X-11 ARIMA program each month as the most recent data become available. Rates for each month of the current year are shown as first computed; they are revised only once each year, at the end of the year when data for the full year become available. For example, the rate for January 1984 would be based, during 1984, on the adjustment of data from the period January 1974 through January 1984.

(4) *Stable (X-11 ARIMA method).*—Each of the 12 civilian labor force components is extended using ARIMA models as in the official procedure and then run through the X-11 part of the program using the stable option. This option assumes that seasonal patterns are basically constant from year-to-year and computes final seasonal factors as unweighted averages of all the seasonal-irregular components for each month across the entire span of the period adjusted. As in the official procedure, factors are extrapolated in 6-month intervals and the series are revised at the end of each year. The procedure for computation of the rate from the seasonally adjusted components is also identical to the official procedure.

(5) *Total (X-11 ARIMA method).*—This is one alternative aggregation procedure, in which total unemployment and civilian labor force levels are extended with ARIMA models and directly adjusted with multiplicative adjustment models in the X-11 part of the program. The rate is computed by taking seasonally adjusted total unemployment as a percent of seasonally adjusted total civilian labor force. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(6) *Residual (X-11 ARIMA method).*—This is another alternative aggregation method, in which total civilian employment and civilian labor force levels are extended using ARIMA models and then directly adjusted with multiplicative adjustment models. The seasonally adjusted unemployment level is derived by subtracting seasonally adjusted employment from seasonally adjusted labor force. The rate is then computed by taking the derived unemployment level as a percent of the labor force level. Factors are extrapolated in 6-month intervals and the series revised at the end of each year.

(7) *X-11 method (official method before 1980).*—The method for computation of the official procedure is used except that the series are not extended with ARIMA models and the factors are projected in 12-month intervals. The standard X-11 program is used to perform the seasonal adjustment.

*Methods of adjustment.*—The X-11 ARIMA Method was developed at Statistics Canada by the Seasonal Adjustment and Times Series Staff under the direction of Estela Bee Dagum. The method is described in *The X-11 ARIMA Seasonal Adjustment Method*, by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, February 1980.

The standard X-11 method is described in *X-11 Variant of the Census Method II Seasonal Adjustment Program*, by Julius Shiskin, Allan Young and John Musgrave (Technical Paper No. 15, Bureau of the Census, 1967).

# News

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Department  
of Labor



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USDL 84-5

TRANSMISSION OF MATERIAL IN THIS RELEASE IS

EMBARGOED UNTIL 8:30 A.M. (EST), FRIDAY,

JANUARY 6, 1984

## THE EMPLOYMENT SITUATION: DECEMBER 1983

Unemployment continued to decline and employment rose in December, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate, 8.1 percent, and the rate for civilian workers, 8.2 percent, each fell two-tenths of a percentage point in December and were two-and-a-half points below the 1982 recession highs.

Total civilian employment--as measured by the monthly survey of households--rose by 335,000 over the month, and the number of employees on nonagricultural payrolls--as measured by the monthly survey of establishments--rose by 230,000. Over the past year, total civilian employment has risen by 4 million, and nonfarm payroll jobs have increased by 3 million. Measurement and coverage differences in the two surveys account for a large part of this growth difference.

### Unemployment (Household Survey Data)

The number of unemployed persons fell by 230,000 in December to 9.2 million, seasonally adjusted, continuing the year-long decline. The unemployment rate for all civilian workers dropped to 8.2 percent from November's 8.4 percent rate. Over the year, the jobless total has declined by more than 2.6 million, and the rate has fallen by 2.5 percentage points. (See table A-1.)

The December decline was concentrated largely among adult men (20 years and over), whose jobless rate fell by 0.4 percentage point to 7.4 percent. There was also a sizable drop in the rate for young adult women (20 to 24 year-olds), from 12.0 to 11.0 percent. Unemployment among full-time workers also continued to decline. Jobless rates for most other major worker groups were little changed in December. Over the year, however, there were declines in both the number and rate of unemployment for most worker groups except for black women and black teenagers. Adult men accounted for more than half the decline in the jobless level. (See tables A-2, A-3, and A-9.)

The unemployment rate for manufacturing workers continued its downtrend with a 0.6 percentage point drop to 8.3 percent in December. Compared with December 1982, workers in all industries except government and agriculture showed substantial improvements in their unemployment rates. The decline was sharpest in the durable goods industries, which had been severely impacted by the recession. (See table A-6.)

The decline in unemployment was concentrated among the long-term unemployed, as both measures of the average duration of unemployment--the mean and median--declined in December to 19.6 and 9.0 weeks, respectively. (See table A-7.)

As in November, the unemployment decline occurred primarily among persons who had been permanently separated from their last job. The number of persons who had been unemployed because of other reasons--those on layoff, job leavers, and new entrants and reentrants to the labor force--were all essentially unchanged in December. Over the past year, more than

\*\*\*\*\*  
\* This release incorporates annual revisions in seasonally adjusted \*  
\* unemployment and other labor force series derived from the household survey. \*  
\* The revisions slightly altered the overall unemployment rate in 6 months of \*  
\* 1983 and the rate for civilian workers in only 2 months. The 1983 rates as \*  
\* first computed and as revised, plus additional information on the revisions, \*  
\* appear on page 4. \*  
\*\*\*\*\*

four-fifths of the overall reduction in joblessness took place among job losers (those on layoff as well as those permanently separated from their jobs). (See table A-8.)

#### Civilian Employment and the Labor Force (Household Survey Data)

The number of employed civilians increased by 335,000 in December to 102.9 million, seasonally adjusted. This followed an even larger increase in the previous month, bringing the 2-month employment gain to almost 1 million. Slightly over half of the 2-month increase was among adult men. Since the December 1982 low, employment has grown by 4 million. This included increases totaling nearly half a million among groups not covered by the survey of establishments—the nonagricultural self-employed, unpaid family workers, and private household workers. (See tables A-2 and A-4.)

In terms of occupational groups, over-the-year employment gains were widespread. The largest increase occurred among precision production, craft, and repair workers. (See table A-11.)

Table A. Major indicators of labor market activity, seasonally adjusted

Category	Quarterly averages			Monthly data			Nov.- Dec. change
	1982		1983	1983			
	IV	III	IV	Oct.	Nov.	Dec.	
<b>HOUSEHOLD DATA</b>							
	Thousands of persons						
Labor force 1/.....	112,493	113,737	113,702	113,561	113,720	113,824	104
Total employment 1/.....	100,718	103,209	104,195	103,665	104,291	104,629	338
Civilian labor force.....	110,829	112,057	112,012	111,866	112,035	112,136	101
Civilian employment.....	99,054	101,528	102,506	101,970	102,606	102,961	335
Unemployment.....	11,775	10,529	9,507	9,896	9,429	9,195	-234
Not in labor force.....	62,217	62,392	62,938	62,913	62,916	62,985	69
Discouraged workers.....	1,813	1,610	1,457	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
<b>Unemployment rates:</b>							
All workers 1/.....	10.5	9.3	8.4	8.7	8.3	8.1	-0.2
All civilian workers.....	10.6	9.4	8.5	8.8	8.4	8.2	-0.2
Adult men.....	9.9	8.7	7.8	8.2	7.8	7.4	-0.4
Adult women.....	9.0	7.9	7.2	7.5	7.2	7.1	-0.1
Teenagers.....	24.1	22.4	20.6	21.6	20.2	20.1	-0.1
White.....	9.5	8.1	7.4	7.7	7.3	7.1	-0.2
Black.....	20.6	19.4	17.9	18.3	17.7	17.8	0.1
Hispanic origin.....	15.3	12.8	12.1	12.4	12.3	11.6	-0.7
	<b>ESTABLISHMENT DATA</b>						
	Thousands of jobs						
Nonfarm payroll employment.....	88,796	90,250	91,381	91,087	91,413	91,644	231p
Goods-producing industries.....	23,160	23,830	24,308	24,168	24,322	24,434	112p
Service-producing industries.....	65,636	66,421	67,073	66,919	67,091	67,210	119p
	Hours of work						
<b>Average weekly hours:</b>							
Total private nonfarm.....	34.7	35.1	35.2p	35.3	35.2p	35.2p	0p
Manufacturing.....	39.0	40.4	40.6p	40.6	40.6p	40.5p	-0.1p
Manufacturing overtime.....	2.3	3.1	3.3p	3.3	3.3p	3.4p	0.1p

1/ Includes the resident Armed Forces.

N.A.=not available.

p=preliminary.

NOTE: Household data in this table have been revised. See note on page 4.

The civilian labor force, at 112.1 million, seasonally adjusted, was virtually unchanged in December. Over the past year, the labor force has grown by 1.3 million—about 730,000 adult men and 875,000 adult women. The number of teenagers who were in the labor force declined by 290,000.

#### Discouraged Workers (Household Survey Data)

The number of discouraged workers—persons who report that they want a job but are not looking for work because they believe they could not find any—declined in the fourth quarter of 1983 to 1.5 million; this was 350,000 below the recession high posted in the final quarter of 1982. Blacks continued to make up a disproportionately large share of all discouraged workers—31 percent in the fourth quarter of 1983. (See table A-13.)

#### Industry Payroll Employment (Establishment Survey Data)

Total nonagricultural payroll employment rose by 230,000 in December to 91.6 million, seasonally adjusted, continuing the strong job gains in evidence during 1983. Manufacturing and the services industry continued to register substantial growth. As in the past several months, job gains were widespread, with nearly two-thirds of the 186 industries in the BLS index of diffusion registering increases over the month. (See tables B-1 and B-6.)

Manufacturing job increases totaled 90,000 in December, with gains concentrated in several of the durable goods industries—electrical and electronic equipment, transportation equipment, and fabricated metals. The electrical and transportation equipment industries have both made strong recoveries from their recessionary low levels. In contrast, job recovery has been weak in fabricated metals. Nondurable goods employment increases over the month were essentially limited to apparel and rubber and plastic products.

Elsewhere, employment in the services industry increased by 70,000. There were also small gains in mining, wholesale trade, and finance, insurance, and real estate. Employment in construction remained near November's level but was up by 350,000 since its recessionary low of last March.

The number of payroll jobs has risen by 3 million since the December 1982 recession low and now exceeds the July 1981 pre-recession employment high, by 160,000. Employment grew by approximately 1 million each in manufacturing and services over the past year. Factory employment, however, remained about 1 million below its pre-recession level.

#### Weekly Hours (Establishment Survey Data)

The average workweek of production or nonsupervisory workers on private nonfarm payrolls was unchanged in December at 35.2 hours, seasonally adjusted, and has remained at about this level since September. Weekly hours in manufacturing edged down 0.1 hour to 40.5 hours, while factory overtime was up a tenth to 3.4 hours, the highest since 1979. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls rose by 0.4 percent in December to 108.7 (1977=100). The manufacturing index was also up 0.4 percent to 94.0 and was 13.1 percent above last December's low. (See table B-5.)

#### Hourly and Weekly Earnings (Establishment Survey Data)

Average hourly and weekly earnings each rose by 0.5 percent in December, seasonally adjusted. Before adjustment for seasonality, average hourly earnings, at \$8.16, were up 1 cent over the month and 34 cents over the year. Weekly earnings increased by \$3.61 over the month to \$289.68, \$15.98 above a year earlier. (See table B-3.)

The Hourly Earnings Index (Establishment Survey Data)

The Hourly Earnings Index (HEI) was 157.6 (1977=100) in December, seasonally adjusted, an increase of 0.5 percent from November. For the 12 months ended in December, the increase (before seasonal adjustment) was 3.7 percent. The HEI excludes the effects of two types of changes unrelated to underlying wage rate movements--fluctuations in overtime in manufacturing, and interindustry employment shifts. In dollars of constant purchasing power, the HEI increased 1.0 percent during the 12-month period ended in November. (See table B-4.)

Revisions of Seasonally Adjusted Household Survey Data

At the end of each calendar year, the BLS routinely revises the seasonally adjusted labor force series derived from the Current Population Survey (household survey) to incorporate the experience of that year. As a result of the recalculation of the seasonal factors, seasonally adjusted data for the most recent 5 years are subject to revision.

Table B summarizes the effects of the revisions on the overall and civilian worker unemployment rates in 1983. The 1983 annual averages, 9.5 percent for all workers and 9.6 percent for civilian workers, are not affected by seasonal adjustment revisions. Table C presents revised seasonally adjusted data for major civilian labor force series for December 1982 through December 1983.

The January 1984 issue of Employment and Earnings will contain the new seasonal adjustment factors to be used to calculate the civilian labor force and other major series for January-June of 1984, a description of the current seasonal adjustment methodology, and revised data for the most recent 13 months or calendar quarters for all regularly published tables containing seasonally adjusted household survey data. Revised data for the entire 1979-83 revision period for 438 labor force series will be published in the February 1984 issue. Historical data (monthly and quarterly) from the time of the inception of the various series may be obtained from the Bureau upon request. (Contact Gloria P. Green, 202-523-1944.)

Table B. Seasonally adjusted unemployment rates in 1983 and change due to revision

Month	As first computed		As revised		Change due to revision	
	Overall	Civilian	Overall	Civilian	Overall	Civilian
January.....	10.2	10.4	10.3	10.4	0.1	0
February.....	10.2	10.4	10.2	10.4	0	0
March.....	10.1	10.3	10.2	10.3	.1	0
April.....	10.1	10.2	10.1	10.2	0	0
May.....	10.0	10.1	9.9	10.1	-.1	0
June.....	9.8	10.0	9.8	10.0	0	0
July.....	9.3	9.5	9.3	9.5	0	0
August.....	9.4	9.5	9.3	9.5	-.1	0
September.....	9.1	9.3	9.1	9.2	0	-0.1
October.....	8.7	8.8	8.7	8.8	0	0
November.....	8.2	8.4	8.3	8.4	.1	0
December.....	8.0*	8.1*	8.1	8.2	.1	.1

\* Not published.

Table C. Employment status of the civilian noninstitutional population by sex and age, seasonally adjusted  
(Numbers in thousands)

Employment status, sex, and age	1982				1983											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			
<b>TOTAL</b>																
Civilian noninstitutional population/.....	117,199	117,334	117,505	117,656	117,794	117,952	118,125	118,306	118,440	118,602	118,779	118,951	119,121			
Civilian labor force.....	110,875	110,677	110,688	110,755	110,975	110,950	111,905	111,825	111,712	112,229	111,866	112,051	112,136			
Percent of population	64.0	63.8	63.8	63.8	63.9	63.8	64.3	64.2	64.3	64.3	64.0	64.0	64.0			
Employed.....	98,979	99,154	99,172	99,316	99,606	99,762	100,743	101,225	101,484	101,876	101,970	102,606	102,961			
ratio/.....	57.1	57.2	57.2	57.2	57.3	57.3	57.9	58.1	58.2	58.3	58.3	58.6	58.8			
Unemployed.....	11,894	11,523	11,516	11,419	11,369	11,188	11,162	10,600	10,633	10,353	9,896	9,429	9,195			
Unemployment rate.....	10.7	10.4	10.4	10.3	10.2	10.1	10.0	9.5	9.5	9.2	8.8	8.4	8.2			
<b>Men, 20 years and over</b>																
Civilian noninstitutional population/.....	74,236	74,339	74,434	74,528	74,611	74,712	74,814	74,927	75,012	75,115	75,216	75,327	75,433			
Civilian labor force.....	58,319	58,131	58,225	58,268	58,512	58,546	58,844	58,882	58,954	59,012	58,969	59,052	59,050			
Percent of population	78.6	78.2	78.2	78.2	78.4	78.4	78.7	78.7	78.7	78.6	78.6	78.4	78.4			
Employed.....	52,483	52,508	52,508	52,675	52,830	52,963	53,492	53,765	53,804	53,967	54,140	54,457	54,658			
ratio/.....	70.7	70.6	70.5	70.7	70.8	70.9	71.5	71.8	71.7	71.8	72.0	72.3	72.5			
Agriculture.....	2,419	2,436	2,402	2,425	2,421	2,440	2,497	2,521	2,475	2,431	2,376	2,326	2,374			
Nonagricultural industries.....	50,064	50,072	50,106	50,248	50,409	50,522	50,995	51,244	51,329	51,516	51,764	52,121	52,284			
Unemployed.....	6,836	5,623	5,717	5,593	5,682	5,583	5,352	5,217	5,150	5,065	4,809	4,396	4,392			
Unemployment rate.....	0.0	9.7	9.8	9.6	9.7	9.5	9.1	8.8	8.7	8.6	8.2	7.8	7.4			
Not in labor force.....	1,917	16,208	16,209	16,260	16,099	16,166	15,970	15,945	16,058	16,103	16,267	16,274	16,303			
<b>Women, 20 years and over</b>																
Civilian noninstitutional population/.....	83,363	83,490	83,580	83,699	83,794	83,899	84,008	84,122	84,228	84,333	84,443	84,553	84,666			
Civilian labor force.....	44,188	44,234	44,264	44,259	44,311	44,333	44,548	44,644	44,696	44,802	44,936	45,122	45,026			
Percent of population	53.0	53.0	52.9	52.9	52.9	52.8	53.2	53.1	53.3	53.4	53.2	53.2	53.2			
Employed.....	40,162	40,255	40,315	40,368	40,511	40,583	40,847	41,123	41,298	41,550	41,570	41,738	41,863			
ratio/.....	48.2	48.2	48.2	48.2	48.4	48.4	48.6	48.9	49.0	49.3	49.2	49.4	49.4			
Agriculture.....	610	617	640	632	621	605	634	613	627	581	597	638	630			
Nonagricultural industries.....	39,552	39,638	39,675	39,736	39,910	39,978	40,213	40,510	40,671	40,969	40,973	41,100	41,190			
Unemployed.....	4,026	3,979	3,923	3,891	3,780	3,748	3,671	3,538	3,598	3,512	3,366	3,215	3,181			
Unemployment rate.....	9.1	9.0	8.9	8.8	8.5	8.5	8.6	7.9	8.0	7.8	7.5	7.2	7.1			
Not in labor force.....	39,195	39,256	39,345	39,440	39,483	39,568	39,324	39,475	39,328	39,271	39,507	39,600	39,642			
<b>Both sexes, 16 to 19 years</b>																
Civilian noninstitutional population/.....	15,500	15,525	15,478	15,429	15,389	15,342	15,303	15,257	15,204	15,154	15,120	15,072	15,022			
Civilian labor force.....	8,366	8,321	8,235	8,208	8,152	8,075	8,377	8,196	8,267	8,155	7,981	8,029	8,062			
Percent of population	53.7	53.5	53.1	53.2	53.0	52.6	54.7	53.7	54.4	53.8	52.8	53.3	53.7			
Employed.....	6,334	6,391	6,349	6,275	6,245	6,216	6,404	6,337	6,382	6,379	6,260	6,411	6,440			
ratio/.....	40.7	41.2	41.0	40.7	40.6	40.5	41.8	41.5	42.0	42.1	41.4	42.5	42.9			
Agriculture.....	400	367	371	329	350	329	348	365	347	296	267	283	329			
Nonagricultural industries.....	5,934	6,024	5,978	5,946	5,895	5,887	6,056	5,972	6,035	6,083	5,993	6,128	6,111			
Unemployed.....	2,032	1,921	1,886	1,933	1,907	1,857	1,973	1,859	1,885	1,776	1,721	1,618	1,622			
Unemployment rate.....	24.3	23.1	22.7	23.6	23.4	23.0	23.6	22.7	22.8	21.8	21.6	20.3	20.1			
Not in labor force.....	7,214	7,213	7,263	7,221	7,237	7,269	6,926	7,061	6,937	6,999	7,139	7,063	6,960			

1/ The population figures are not adjusted for seasonal variation.

2/ Civilian employment as a percent of the civilian noninstitutional population.

## Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 60,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 189,000 establishments employing about 36 million people.

For both surveys, the data for a given month are actually collected for and relate to a particular week. In the household survey, unless otherwise indicated, it is the calendar week that contains the 12th day of the month, which is called the survey week. In the establishment survey, the reference week is the pay period including the 12th, which may or may not correspond directly to the calendar week.

The data in this release are affected by a number of technical factors, including definitions, survey differences, seasonal adjustments, and the inevitable variance in results between a survey of a sample and a census of the entire population. Each of these factors is explained below.

### Coverage, definitions and differences between surveys

The sample households in the household survey are selected so as to reflect the entire civilian noninstitutional population 16 years of age and older. Each person in a household is classified as employed, unemployed, or not in the labor force. Those who hold more than one job are classified according to the job at which they worked the most hours.

People are classified as *employed* if they did any work at all as paid civilians; worked in their own business or profession or on their own farm; or worked 15 hours or more in an enterprise operated by a member of their family, whether they were paid or not. People are also counted as employed if they were on unpaid leave because of illness, bad weather, disputes between labor and management, or personal reasons. Members of the Armed Forces stationed in the United States are also included in the employed total.

People are classified as *unemployed*, regardless of their eligibility for unemployment benefits or public assistance, if they meet all of the following criteria: They had no employment during the survey week; they were available for work at that time; and they made specific efforts to find employment sometime during the prior 4 weeks. Also included among the unemployed are persons not looking for work because they were laid off and waiting to be recalled and those expecting to report to a job within 30 days.

The *labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the labor force (civilian plus the resident Armed Forces). Table A-5 presents a special

grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The overall unemployment rate is U-5a, while U-5b represents the same measure with a civilian labor force base.

Unlike the household survey, the establishment survey only counts wage and salary employees whose names appear on the payroll records of nonagricultural firms. As a result, there are many differences between the two surveys, among which are the following:

----The household survey, although based on a smaller sample, reflects a larger segment of the population; the establishment survey excludes agriculture, the self-employed, unpaid family workers, private household workers, and members of the resident Armed Forces;

----The household survey includes people on unpaid leave among the employed; the establishment survey does not;

----The household survey is limited to those 16 years of age and older; the establishment survey is not limited by age;

----The household survey has no duplication of individuals, because each individual is counted only once; in the establishment survey, employees working at more than one job or otherwise appearing on more than one payroll would be counted separately for each appearance.

Other differences between the two surveys are described in "Comparing Employment Estimates from Household and Payroll Surveys," which may be obtained from the BLS upon request.

### Seasonal adjustment

Over a course of a year, the size of the Nation's labor force and the levels of employment and unemployment undergo sharp fluctuations due to such seasonal events as changes in weather, reduced or expanded production, harvests, major holidays, and the opening and closing of schools. For example, the labor force increases by a large number each June, when schools close and many young people enter the job market. The effect of such seasonal variation can be very large; over the course of a year, for example, seasonality may account for as much as 95 percent of the month-to-month changes in unemployment.

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of labor force, employment, and unemployment contain components such as age and sex. Statistics for all

employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the labor force is the sum of eight seasonally adjusted civilian employment components, plus the resident Armed Forces total (not adjusted for seasonality), and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the overall unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the labor force.

The numerical factors used to make the seasonal adjustments are recalculated regularly. For the household survey, the factors are calculated for the January-June period and again for the July-December period. The January revision is applied to data that have been published over the previous 5 years. For the establishment survey, updated factors for seasonal adjustment are calculated only once a year, along with the introduction of new benchmarks which are discussed at the end of the next section.

#### Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence--the confidence limits used by BLS in its analyses--the error for the monthly change in total employment is on the order of plus or minus 335,000; for total unemployment it is 240,000; and, for the overall unemployment rate, it is 0.21 percentage point. These figures do not mean that the sample results are off by these

magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .29 percentage point; for teenagers, it is 1.28 percentage points.

In the establishment survey, estimates for the 2 most current months are based on incomplete returns; for this reason, these estimates are labeled preliminary in the tables. When all the returns in the sample have been received, the estimates are revised. In other words, data for the month of September are published in preliminary form in October and November and in final form in December. To remove errors that build up over time, a comprehensive count of the employed is conducted each year. The results of this survey are used to establish new benchmarks--comprehensive counts of employment--against which month-to-month changes can be measured. The new benchmarks also incorporate changes in the classification of industries and allow for the formation of new establishments.

#### Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for \$6.00 per issue or \$39.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

*Employment and Earnings* also provides approximations of the standard errors for the household survey data published in this release. For unemployment and other labor force categories, the standard errors appear in tables B through J of its "Explanatory Notes." Measures of the reliability of the data drawn from the establishment survey and the actual amounts of revision due to benchmark adjustments are provided in tables M, O, P, and Q of that publication.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-1. Employment status of the population, including Armed Forces in the United States, by sex

(Numbers in thousands)

Employment status and sex	Not seasonally adjusted			Seasonally adjusted <sup>a</sup>					
	Dec. 1962	Nov. 1963	Dec. 1963	Dec. 1962	Aug. 1963	Sept. 1963	Oct. 1963	Nov. 1963	Dec. 1963
<b>TOTAL</b>									
Noninstitutional population <sup>b</sup>	174,864	176,636	176,809	174,884	176,122	176,297	176,474	176,636	176,609
Labor force <sup>c</sup>	112,182	113,632	113,483	112,538	113,799	113,924	113,261	113,720	113,624
Participation rate <sup>d</sup>	64.1	64.4	64.2	64.4	64.6	64.6	64.4	64.4	64.4
Total employed <sup>e</sup>	100,514	104,703	104,491	100,644	103,186	103,571	103,665	104,291	104,629
Employment-population ratio <sup>f</sup>	57.5	59.3	59.1	57.6	58.6	58.7	58.7	59.0	59.2
Resident Armed Forces	1,665	1,665	1,688	1,665	1,662	1,695	1,695	1,685	1,688
Civilian employed	98,849	103,038	102,803	98,979	101,484	101,876	101,970	102,606	102,941
Agriculture	3,011	3,152	2,950	3,429	3,489	3,308	3,240	3,257	3,256
Nonagricultural industries	95,838	99,886	99,852	95,550	98,035	98,568	98,730	99,349	99,685
Unemployed	11,628	9,129	6,992	11,894	10,613	10,353	9,996	9,429	9,195
Unemployment rate <sup>g</sup>	10.4	8.0	7.9	10.6	9.3	9.1	8.7	8.3	8.1
Not in labor force	62,722	62,804	63,326	62,326	62,323	62,373	62,913	62,916	62,985
<b>Men, 16 years and over</b>									
Noninstitutional population <sup>b</sup>	83,581	84,423	84,506	83,581	84,173	84,261	84,344	84,423	84,506
Labor force <sup>c</sup>	63,817	64,550	64,406	64,263	64,807	64,877	64,709	64,846	64,838
Participation rate <sup>d</sup>	76.4	76.5	76.2	76.9	77.0	77.0	76.7	76.8	76.7
Total employed <sup>e</sup>	56,809	59,323	59,096	57,298	58,607	58,828	58,950	59,389	59,500
Employment-population ratio <sup>f</sup>	68.0	70.3	69.9	68.5	69.6	69.8	69.9	70.3	70.5
Resident Armed Forces	1,529	1,538	1,537	1,529	1,530	1,569	1,563	1,538	1,537
Civilian employed	55,280	57,789	57,559	55,769	57,069	57,279	57,407	57,851	57,963
Unemployed	7,009	5,227	5,310	6,969	6,200	6,049	5,799	5,467	5,286
Unemployment rate <sup>g</sup>	11.0	8.1	8.2	10.8	9.6	9.3	8.9	8.4	8.1
<b>Women, 16 years and over</b>									
Noninstitutional population <sup>b</sup>	91,283	92,214	92,302	91,283	91,949	92,036	92,129	92,214	92,302
Labor force <sup>c</sup>	48,325	49,282	49,077	48,275	48,992	49,047	48,852	48,774	48,786
Participation rate <sup>d</sup>	52.9	53.4	53.2	52.9	53.3	53.3	53.0	53.0	53.1
Total employed <sup>e</sup>	43,706	45,380	45,395	43,350	44,599	44,743	44,715	44,902	45,049
Employment-population ratio <sup>f</sup>	47.9	49.2	49.2	47.5	48.5	48.6	48.5	48.7	48.8
Resident Armed Forces	136	151	151	136	144	144	152	151	151
Civilian employed	43,570	45,229	45,244	43,214	44,455	44,599	44,563	44,751	44,898
Unemployed	4,619	3,902	3,683	4,925	4,403	4,304	4,157	3,972	3,937
Unemployment rate <sup>g</sup>	9.6	7.9	7.5	10.2	9.0	8.8	8.5	8.1	8.0

<sup>1</sup> The population and Armed Forces figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Includes members of the Armed Forces stationed in the United States.

<sup>3</sup> Labor force as a percent of the noninstitutional population.

<sup>4</sup> %

<sup>5</sup> %

<sup>6</sup> Total employment as a percent of the noninstitutional population.

<sup>7</sup> Unemployment as a percent of the labor force (including the resident Armed Forces).

NOTE: Seasonally adjusted data in this table have been revised. See note on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-2. Employment status of the civilian population by sex and age

(Numbers in thousands)

Employment status, sex, and age	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>TOTAL</b>									
Civilian noninstitutional population	173,199	174,951	175,121	173,199	174,440	174,602	174,779	174,951	175,121
Civilian labor force	110,477	112,147	111,795	110,873	112,117	112,229	111,464	112,025	112,146
Participation rate	63.8	64.1	63.8	64.0	64.3	64.3	64.0	64.0	64.0
Employed	98,589	101,018	102,403	98,979	101,484	101,476	101,970	102,406	102,561
Employment-population ratio <sup>2</sup>	57.1	58.9	58.7	57.1	58.2	58.4	58.4	58.6	58.6
Unemployed	11,628	9,129	8,992	11,894	10,633	10,753	9,494	9,429	9,195
Unemployment rate	10.5	6.1	8.0	10.7	9.5	9.2	8.8	8.4	8.2
<b>Men, 20 years and over</b>									
Civilian noninstitutional population	74,234	75,327	75,433	74,234	75,012	75,115	75,216	75,327	75,433
Civilian labor force	58,186	58,994	58,915	58,319	58,954	59,012	58,948	59,054	59,050
Participation rate	78.4	78.3	78.1	78.6	78.6	78.6	78.4	78.4	78.3
Employed	52,790	54,631	54,452	52,483	53,804	53,947	54,140	54,457	54,638
Employment-population ratio <sup>2</sup>	70.4	72.5	72.2	70.7	71.7	71.0	72.0	72.4	72.5
Agriculture	2,240	2,342	2,188	2,419	2,475	2,433	2,474	2,446	2,474
Nonagricultural Industries	50,049	52,289	52,265	50,064	51,329	51,514	51,764	52,011	52,164
Unemployed	5,496	4,365	4,481	5,836	5,150	5,065	4,808	4,597	4,412
Unemployment rate	10.1	7.4	7.6	10.0	8.7	8.6	8.2	7.8	7.6
<b>Women, 20 years and over</b>									
Civilian noninstitutional population	83,383	84,553	84,666	83,383	84,229	84,344	84,483	84,553	84,666
Civilian labor force	44,371	45,475	45,244	44,188	44,894	45,062	44,936	44,933	45,026
Participation rate	53.2	53.8	53.4	53.0	53.2	53.2	53.2	53.2	53.2
Employed	40,522	42,284	42,191	40,182	41,298	41,550	41,570	41,738	41,843
Employment-population ratio <sup>2</sup>	48.6	50.0	49.8	48.2	49.0	49.3	49.2	49.4	49.4
Agriculture	514	596	554	610	627	581	597	628	653
Nonagricultural Industries	40,008	41,688	41,637	39,572	40,671	40,969	40,973	41,110	41,190
Unemployed	3,849	3,180	3,055	4,024	3,596	3,512	3,366	3,215	3,181
Unemployment rate	8.7	7.0	6.8	9.1	8.0	7.8	7.5	7.2	7.1
<b>Both sexes, 16 to 19 years</b>									
Civilian noninstitutional population	15,580	15,072	15,022	15,580	15,204	15,154	15,120	15,072	15,022
Civilian labor force	7,920	7,477	7,433	8,386	8,267	8,155	7,981	8,029	8,062
Participation rate	50.8	50.9	50.8	53.7	54.4	53.8	52.8	53.3	53.7
Employed	6,037	6,093	6,159	6,334	6,382	6,379	6,260	6,411	6,440
Employment-population ratio <sup>2</sup>	38.7	40.4	41.0	40.7	42.0	42.1	41.4	42.5	42.9
Agriculture	257	215	209	400	347	296	287	293	329
Nonagricultural Industries	5,780	5,879	5,951	5,934	6,035	6,083	5,973	6,118	6,111
Unemployed	1,883	1,584	1,474	2,032	1,885	1,776	1,721	1,618	1,622
Unemployment rate	23.6	20.6	19.3	24.3	22.8	21.8	21.6	20.2	20.1

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Seasonally adjusted data in this table have been revised. See notes on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-3. Employment status of the civilian population by race, sex, age, and Hispanic origin

(Numbers in thousands)

Employment status, race, sex, age, and Hispanic origin	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1993	Nov. 1983	Dec. 1983
<b>WHITE</b>									
Civilian noninstitutional population	150,056	151,324	151,484	150,056	151,003	151,021	151,175	151,324	151,484
Civilian labor force	96,198	97,705	97,352	96,613	97,498	97,207	97,439	97,559	97,728
Participation rate	64.1	64.6	64.3	64.4	64.6	64.6	64.4	64.5	64.5
Employed	87,172	90,793	90,628	87,292	89,503	89,493	89,452	90,430	90,779
Employment-population ratio <sup>2</sup>	58.1	60.0	59.8	58.2	59.3	59.4	59.4	59.8	59.9
Unemployed	9,022	6,912	6,724	9,321	7,995	7,814	7,987	7,129	6,945
Unemployment rate	9.4	7.1	6.9	9.6	8.2	8.0	7.7	7.3	7.1
<b>Men, 20 years and over</b>									
Civilian labor force	51,218	51,919	51,854	51,430	51,878	51,881	51,902	52,021	52,063
Participation rate	78.7	78.8	78.6	79.1	78.9	79.0	78.9	78.9	78.9
Employed	46,590	48,527	48,387	46,710	47,886	47,908	48,128	48,416	48,589
Employment-population ratio <sup>2</sup>	71.6	73.6	73.3	71.9	72.9	72.9	73.1	73.5	73.6
Unemployed	4,624	3,391	3,468	4,660	3,992	3,973	3,774	3,607	3,474
Unemployment rate	9.0	6.5	6.7	9.1	7.7	7.7	7.3	6.9	6.7
<b>Women, 20 years and over</b>									
Civilian labor force	38,004	39,033	38,756	37,849	38,356	38,466	36,430	38,889	38,536
Participation rate	52.7	53.5	53.0	52.5	52.7	52.8	50.2	52.7	52.8
Employed	35,078	36,700	36,593	34,774	35,767	35,928	34,016	36,177	36,292
Employment-population ratio <sup>2</sup>	48.6	50.3	50.1	48.2	49.2	49.3	48.4	49.6	49.7
Unemployed	2,926	2,332	2,162	3,075	2,589	2,542	2,414	2,712	2,244
Unemployment rate	7.7	6.0	5.6	8.1	6.7	6.6	6.5	6.0	5.9
<b>Both sexes, 18 to 19 years</b>									
Civilian labor force	6,976	6,758	6,748	7,134	7,268	7,158	6,999	7,049	7,105
Participation rate	54.1	54.4	54.3	57.9	57.9	57.3	56.2	56.7	57.2
Employed	5,504	5,565	5,609	5,748	5,850	5,857	5,707	5,439	5,498
Employment-population ratio <sup>2</sup>	42.7	44.8	45.5	44.6	44.6	44.9	44.8	44.5	44.5
Unemployed	1,472	1,193	1,095	1,586	1,418	1,301	1,292	1,610	1,207
Unemployment rate	21.1	17.6	16.2	21.6	19.5	18.2	18.5	21.2	17.0
Men	24.3	18.8	18.7	22.8	20.7	18.9	19.6	17.6	17.5
Women	17.7	16.3	13.6	20.4	18.2	17.4	16.9	16.8	16.5
<b>BLACK</b>									
Civilian noninstitutional population	18,740	19,057	19,086	18,740	18,966	18,994	19,026	19,057	19,086
Civilian labor force	11,652	11,580	11,561	11,547	11,724	11,720	11,565	11,623	11,650
Participation rate	62.1	60.8	60.6	61.6	61.8	61.7	60.8	61.0	61.0
Employed	9,136	9,629	9,589	9,128	9,408	9,308	9,489	9,584	9,582
Employment-population ratio <sup>2</sup>	48.8	50.5	50.2	48.7	49.6	50.0	49.7	50.2	50.2
Unemployed	2,516	1,950	1,973	2,419	2,316	2,216	2,116	2,080	2,068
Unemployment rate	20.2	16.8	17.1	20.9	19.8	18.9	18.3	17.7	17.6
<b>Men, 20 years and over</b>									
Civilian labor force	5,467	5,566	5,584	5,491	5,578	5,553	5,501	5,580	5,565
Participation rate	75.6	74.9	74.4	75.7	75.6	75.1	74.2	74.9	74.8
Employed	4,340	4,743	4,706	4,353	4,563	4,613	4,607	4,701	4,722
Employment-population ratio <sup>2</sup>	59.8	63.8	63.2	60.0	61.8	62.4	62.1	63.2	63.4
Unemployed	1,126	823	838	1,138	1,015	940	894	887	843
Unemployment rate	20.6	14.8	15.1	20.7	18.2	16.9	16.3	15.6	15.1
<b>Women, 20 years and over</b>									
Civilian labor force	5,214	5,271	5,294	5,225	5,312	5,358	5,277	5,270	5,404
Participation rate	56.5	55.9	56.1	56.6	56.7	57.1	56.1	55.9	56.2
Employed	4,398	4,502	4,507	4,352	4,480	4,495	4,438	4,488	4,481
Employment-population ratio <sup>2</sup>	47.7	47.8	47.7	47.2	47.4	47.9	47.2	47.2	47.3
Unemployed	816	769	787	873	872	863	839	822	842
Unemployment rate	15.6	14.6	14.9	16.7	16.4	16.1	15.9	15.6	15.9
<b>Both sexes, 18 to 19 years</b>									
Civilian labor force	771	743	723	831	824	809	787	785	782
Participation rate	34.1	33.7	32.9	36.8	37.6	36.6	35.6	35.6	35.6
Employed	397	385	375	423	405	396	408	414	399
Employment-population ratio <sup>2</sup>	17.6	17.5	17.1	18.7	18.3	17.9	18.1	18.0	18.2
Unemployed	373	358	348	408	429	413	483	471	483
Unemployment rate	48.4	48.2	48.1	49.1	51.4	51.1	48.7	47.2	49.0
Men	54.6	45.9	47.9	52.1	53.7	52.7	45.8	44.8	44.4
Women	42.2	50.9	48.3	45.8	48.8	49.2	52.2	50.0	51.9
<b>HISPANIC ORIGIN</b>									
Civilian noninstitutional population	9,301	9,677	9,735	9,301	9,690	9,700	9,745	9,677	9,735
Civilian labor force	5,029	6,193	6,156	5,538	6,145	6,202	6,165	6,232	6,267
Participation rate	62.7	64.0	63.2	63.8	63.4	63.9	63.3	64.4	64.4
Employed	4,949	5,433	5,466	5,016	5,350	5,392	5,398	5,463	5,440
Employment-population ratio <sup>2</sup>	53.2	56.1	56.1	53.9	55.2	55.6	55.4	56.5	56.9
Unemployed	4,880	760	690	4,222	795	810	767	769	727
Unemployment rate	15.1	12.3	11.2	15.5	12.9	13.1	12.4	12.3	11.6

<sup>1</sup> The population figures are not adjusted for seasonal inflation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Detail for the above race 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. Seasonally adjusted data in this table have been revised. See note on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Selected employment indicators

(Numbers in thousands)

Category	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>CHARACTERISTIC</b>									
Civilian employed, 16 years and over .....	98,849	103,018	102,803	98,979	101,484	101,876	101,970	102,606	102,941
Married men, spouse present .....	37,419	38,521	38,393	37,492	38,281	38,232	38,240	38,388	38,494
Married women, spouse present .....	26,422	25,534	25,433	26,129	26,905	26,923	26,953	25,057	25,140
Women who maintain families .....	5,032	5,263	5,298	4,985	5,096	5,124	5,172	5,236	5,284
<b>MAJOR INDUSTRY AND CLASS OF WORKER</b>									
<b>Agriculture:</b>									
Wage and salary workers .....	1,303	1,392	1,268	1,567	1,628	1,572	1,505	1,481	1,512
Self-employed workers .....	1,539	1,551	1,508	1,609	1,544	1,515	1,527	1,556	1,572
Unpaid family workers .....	170	210	199	224	240	236	227	224	265
<b>Nonagricultural industries:</b>									
Government .....	68,179	91,594	91,754	87,827	90,032	90,743	90,617	91,094	91,422
Private industries .....	15,495	15,790	15,888	15,486	15,471	15,540	15,378	15,585	15,481
Private households .....	72,483	75,805	76,066	72,341	74,361	75,184	75,049	75,309	75,941
Private households .....	1,174	1,227	1,230	1,181	1,270	1,279	1,278	1,216	1,241
Other industries .....	71,307	74,578	74,836	73,160	73,691	73,904	74,761	74,293	74,700
Self-employed workers .....	7,314	7,822	7,461	7,355	7,441	7,656	7,695	7,800	7,714
Unpaid family workers .....	345	449	417	373	375	400	405	474	450
<b>PERSONS AT WORK*</b>									
Nonagricultural industries .....	92,377	96,356	96,603	90,064	91,953	93,322	93,273	93,836	94,173
Full-time schedules .....	72,911	76,837	77,312	71,670	72,499	74,666	75,047	75,398	75,802
Part time for economic reasons .....	6,154	5,700	5,524	6,107	5,966	6,027	5,724	5,888	5,712
Usual work full time .....	2,100	1,660	1,674	2,103	1,742	1,771	1,617	1,719	1,672
Usual work part time .....	4,054	4,040	3,850	4,264	4,124	4,256	4,107	4,129	4,040
Part time for noneconomic reasons .....	13,312	13,819	13,757	12,227	12,368	12,629	12,502	12,588	12,659

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

NOTE: Seasonally adjusted data in this table have been revised. See note on page 4.

Table A-5. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Measure	Quarterly averages					Monthly data		
	1982		1983			1983		
	IV	I	II	III	IV	Oct.	Nov.	Dec.
U-1 Persons unemployed 15 weeks or longer as a percent of the civilian labor force .....	4.0	4.2	4.0	3.7	3.1	3.3	3.1	3.0
U-2 Job losers as a percent of the civilian labor force .....	6.4	6.2	6.0	5.4	4.7	5.0	4.7	4.5
U-3 Unemployed-persons 25 years and over as a percent of the civilian labor force .....	8.3	8.1	7.9	7.3	6.6	6.8	6.5	6.4
U-4 Unemployed full-time jobseekers as a percent of the full-time civilian labor force .....	10.6	10.3	10.0	9.3	8.1	8.7	8.2	8.0
U-6a Total unemployed as a percent of the labor force, including the resident Armed Forces .....	10.5	10.2	10.0	9.3	8.4	8.7	8.3	8.1
U-6b Total unemployed as a percent of the civilian labor force .....	10.6	10.4	10.1	9.4	8.5	8.8	8.4	8.2
U-8 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/4 total on part time for economic reasons as a percent of the civilian labor force less 1/4 of the part-time labor force .....	13.7	13.4	12.9	12.2	11.2	11.5	11.1	10.8
U-7 Total full-time jobseekers plus 1/2 part-time jobseekers plus 1/4 total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less 1/4 of the part-time labor force .....	15.2	14.9	14.4	13.5	12.4	N.A.	N.A.	N.A.

N.A. = not available.

NOTE: Data in this table have been revised. See note on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-6. Selected unemployment indicators. Seasonally adjusted

Category	Number of unemployed persons (in thousands)			Unemployment rates <sup>1</sup>					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>CHARACTERISTIC</b>									
Total, 16 years and over .....	11,898	9,829	9,195	10.7	9.5	9.2	8.8	8.8	8.2
Men, 16 years and over .....	6,969	5,857	5,258	11.1	9.8	9.6	9.1	8.6	8.3
Men, 20 years and over .....	5,836	4,596	4,392	10.0	8.7	8.6	8.2	7.8	7.6
Women, 16 years and over .....	4,925	3,972	3,937	10.2	9.1	8.8	8.5	8.2	8.1
Women, 20 years and over .....	4,026	3,215	3,161	9.1	8.0	7.8	7.5	7.2	7.1
Both sexes, 16 to 19 years .....	2,932	1,616	1,622	26.3	22.6	21.8	21.6	20.2	20.1
Married men, spouse present .....	3,082	2,228	2,112	7.5	6.3	6.1	5.7	5.5	5.2
Married women, spouse present .....	2,116	1,607	1,636	6.1	6.3	6.8	6.3	6.0	6.1
Women who maintain families .....	768	613	645	13.3	11.8	12.0	11.4	10.5	10.9
Full-time workers .....	10,171	7,900	7,658	10.7	9.1	9.1	8.7	8.2	8.0
Part-time workers .....	1,750	1,554	1,561	11.1	10.2	10.1	10.0	9.8	9.8
Labor force time lost <sup>2</sup> .....	--	--	--	12.2	10.7	10.5	10.0	9.7	9.4
<b>INDUSTRY</b>									
Nonagricultural private wage and salary workers .....	9,361	7,076	6,899	11.5	9.8	9.4	9.0	8.6	8.3
Mining .....	199	132	125	18.2	14.9	16.9	12.1	12.8	12.4
Construction .....	1,131	866	910	21.6	17.9	18.1	15.8	13.8	16.3
Manufacturing .....	3,155	1,957	1,821	14.2	11.2	10.2	9.6	8.9	8.3
Durable goods .....	2,127	1,179	1,075	16.1	11.7	10.9	10.2	9.0	8.3
Nondurable goods .....	1,028	778	746	11.4	10.5	9.3	8.7	8.7	8.2
Transportation and public utilities .....	458	379	378	8.0	7.7	7.4	7.2	6.7	6.5
Wholesale and retail trade .....	2,311	1,824	1,860	11.1	9.8	9.5	9.8	9.1	8.8
Finance and service industries .....	2,107	1,818	1,809	8.0	7.2	7.0	6.9	6.7	6.6
Government workers .....	859	806	815	5.3	5.1	5.0	5.1	4.9	5.0
Agricultural wage and salary workers .....	306	276	279	16.3	15.1	16.5	16.2	15.7	15.6

<sup>1</sup> Unemployment as a percent of the civilian labor force.

NOTE: Data in this table have been revised. See note on page 4.

<sup>2</sup> Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.

Table A-7. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>DURATION</b>									
Less than 5 weeks .....	3,611	3,287	3,159	3,898	3,633	3,740	3,508	3,428	3,382
5 to 14 weeks .....	3,588	2,661	2,631	3,419	2,951	2,784	2,725	2,616	2,504
15 to 26 weeks .....	4,429	3,181	3,202	4,660	4,078	3,889	4,655	4,527	4,369
27 weeks and over .....	2,026	1,217	1,254	2,077	1,597	1,381	1,372	1,337	1,288
Average (mean) duration, in weeks .....	2,403	1,970	1,988	2,583	2,481	2,506	2,263	2,190	2,085
Median duration, in weeks .....	18.3	19.6	19.4	18.4	19.9	20.2	20.1	20.2	19.6
.....	10.6	8.9	9.1	10.4	9.4	9.4	9.5	9.4	9.0
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks .....	31.1	36.0	35.1	32.5	36.1	35.9	35.5	35.1	36.5
5 to 14 weeks .....	30.9	29.1	29.3	28.5	27.7	26.7	27.6	27.6	27.1
15 to 26 weeks .....	38.1	34.8	35.6	38.9	38.2	37.3	37.0	37.2	36.4
27 weeks and over .....	17.4	13.3	13.9	17.3	15.0	14.3	14.9	14.1	14.9
.....	20.7	21.6	21.7	21.6	23.3	24.1	23.1	24.1	22.5

NOTE: Seasonally adjusted data in this table have been revised. See note on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-4. Reason for unemployment

(Numbers in thousands)

Reason	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>NUMBER OF UNEMPLOYED</b>									
Job losers .....	7,384	5,007	5,238	7,114	6,133	5,938	5,601	5,226	5,017
On layoff .....	2,519	1,228	1,406	2,335	1,640	1,262	1,192	1,221	1,283
Other job losers .....	4,865	3,779	3,832	4,779	4,493	4,376	4,209	3,905	3,734
Job leavers .....	736	874	766	826	799	858	866	868	855
Reentrants .....	2,392	2,192	2,005	2,684	2,479	2,362	2,322	2,250	2,246
New entrants .....	1,115	1,055	983	1,282	1,218	1,234	1,127	1,158	1,130
<b>PERCENT DISTRIBUTION</b>									
Total unemployed .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers .....	63.5	54.8	58.2	59.8	57.7	57.1	56.5	55.0	54.1
On layoff .....	21.7	13.4	15.4	19.6	15.6	15.0	14.0	13.5	13.8
Other job losers .....	61.8	41.4	42.8	40.1	42.1	42.1	42.4	41.1	40.3
Job leavers .....	6.3	9.6	8.5	6.9	7.5	8.3	8.7	9.1	9.2
Reentrants .....	20.6	24.0	22.3	22.5	23.3	22.7	23.4	22.7	24.2
New entrants .....	9.6	11.6	10.9	10.8	11.4	11.9	11.4	12.1	12.4
<b>UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE</b>									
Job losers .....	6.7	4.5	4.7	6.4	5.5	5.3	5.0	4.7	4.5
Job leavers .....	.7	.8	.7	.7	.7	.8	.8	.8	.8
Reentrants .....	1.1	2.0	1.8	2.0	2.2	2.1	2.1	2.0	2.0
New entrants .....	1.0	.9	.9	1.2	1.1	1.1	1.0	1.0	1.0

NOTE: Seasonally adjusted data in this table have been revised. See note on page 4.

Table A-6. Unemployed persons by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)			Unemployment rates <sup>1</sup>					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>Total, 18 years and over .....</b>	11,890	9,429	9,195	10.7	9.5	9.2	8.8	8.4	8.2
18 to 24 years .....	4,636	3,692	3,568	19.9	17.2	16.5	16.3	15.4	14.9
18 to 19 years .....	2,032	1,618	1,622	24.3	22.8	21.8	21.6	20.2	20.1
18 to 17 years .....	887	653	700	27.5	24.8	24.0	24.0	21.9	22.9
18 to 16 years .....	1,170	972	987	22.7	21.6	20.5	20.3	19.3	19.8
20 to 24 years .....	2,604	2,074	1,942	16.1	14.4	13.8	13.6	13.0	12.2
25 years and over .....	7,288	5,728	5,659	8.4	7.3	7.2	6.8	6.5	6.4
25 to 54 years .....	6,492	5,007	4,938	9.0	7.8	7.7	7.2	6.9	6.8
55 years and over .....	852	741	747	5.7	5.1	5.2	5.0	4.9	4.9
<b>Men, 18 years and over .....</b>	6,969	5,457	5,258	11.1	9.8	9.6	9.1	8.6	8.3
18 to 24 years .....	2,477	2,042	1,998	20.5	18.6	17.8	17.3	15.9	15.6
18 to 19 years .....	1,133	861	866	25.7	24.3	22.8	22.5	20.2	20.4
18 to 18 years .....	493	366	372	28.7	26.0	23.9	24.3	22.0	23.3
18 to 17 years .....	648	528	501	24.2	23.2	22.2	21.6	19.6	19.9
20 to 24 years .....	1,588	1,181	1,132	17.9	15.7	15.0	14.7	13.8	13.3
25 years and over .....	4,319	3,417	3,283	8.7	7.5	7.5	7.0	6.8	6.5
25 to 54 years .....	3,761	2,935	2,799	9.2	8.0	8.0	7.4	7.1	6.7
55 years and over .....	554	490	481	6.2	5.4	5.6	5.4	5.4	5.4
<b>Women, 18 years and over .....</b>	4,925	3,972	3,937	10.2	9.1	8.8	8.5	8.2	8.1
18 to 24 years .....	1,959	1,650	1,566	17.1	15.7	15.2	15.1	14.7	14.0
18 to 19 years .....	899	757	756	22.8	21.1	20.6	20.5	20.1	19.6
18 to 18 years .....	394	309	328	26.1	23.4	24.0	23.6	21.8	22.5
18 to 17 years .....	522	468	446	21.2	19.9	18.5	18.8	19.0	18.7
20 to 24 years .....	1,060	893	810	14.1	12.8	12.5	12.3	12.0	11.0
25 years and over .....	2,969	2,311	2,376	8.1	7.0	6.9	6.5	6.2	6.3
25 to 54 years .....	2,681	2,072	2,139	8.8	7.5	7.3	7.0	6.6	6.6
55 years and over .....	308	251	261	5.1	4.7	4.5	4.4	4.1	4.3

<sup>1</sup> Unemployment as a percent of the civilian labor force.

NOTE: Data in this table have been revised. See note on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-10. Employment status of black and other workers

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted <sup>1</sup>						
	Dec. 1962	Nov. 1963	Dec. 1963	Dec. 1962	Aug. 1963	Sept. 1963	Oct. 1963	Nov. 1963	Dec. 1963	
Civilian noninstitutional population	23,143	23,627	23,637	23,143	23,437	23,381	23,604	23,627	23,637	
Civilian labor force	18,283	18,442	18,442	18,286	18,603	18,692	18,528	18,509	18,539	
Participation rate	61.7	61.1	61.1	62.2	62.3	62.1	61.5	61.4	61.5	
Employed	11,677	12,225	12,174	11,674	11,989	12,156	12,096	12,171	12,171	
Employment-population ratio <sup>2</sup>	50.5	51.7	51.5	50.8	51.2	51.5	51.2	51.5	51.5	
Unemployed	2,606	2,217	2,268	2,712	2,614	2,536	2,432	2,338	2,368	
Unemployment rate	18.2	15.4	15.7	18.9	17.9	17.4	16.7	16.1	16.3	
Not in labor force	8,859	9,185	9,195	8,757	8,834	8,889	9,076	9,118	9,098	

<sup>1</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.

NOTE: Seasonally adjusted data in this table have been revised. See note on page 4.

Table A-11. Occupational status of the employed and unemployed, not seasonally adjusted

(Numbers in thousands)

Occupation	Civilian employed		Unemployed		Unemployment rate	
	Dec. 1962	Dec. 1963	Dec. 1962	Dec. 1963	Dec. 1962	Dec. 1963
Total, 16 years and over <sup>1</sup>	98,849	102,803	11,628	9,992	10.5	8.0
Managerial and professional specialty	23,616	24,185	816	634	3.3	2.6
Executive, administrative, and managerial	10,493	11,094	482	507	4.0	2.9
Professional specialty	12,924	13,091	373	327	2.8	2.4
Technical, sales, and administrative support	31,302	32,038	2,157	1,767	6.8	5.2
Technicians and related support	3,127	3,124	162	106	4.9	3.3
Sales occupations	11,868	12,507	782	723	6.2	5.5
Administrative support, including clerical	16,308	16,407	1,213	938	6.9	5.4
Service occupations	13,443	14,170	1,790	1,512	11.7	9.6
Private household	1,068	1,030	88	101	7.3	6.9
Protective service	1,617	1,692	140	106	8.0	5.9
Service, except private household and protective	10,758	11,449	1,566	1,405	14.7	10.2
Precision production, craft, and repair	11,373	12,741	1,561	1,165	12.1	8.4
Mechanics and repairers	3,033	4,305	386	225	8.7	5.6
Construction trades	3,877	4,400	780	615	14.6	12.3
Other precision production, craft, and repair	3,664	4,036	435	296	10.6	6.9
Operators, fabricators, and laborers	15,885	16,576	3,744	2,467	19.1	13.0
Machine operators, assemblers, and inspectors	7,437	7,917	1,745	1,121	19.0	12.4
Transportation and material moving occupations	4,023	4,313	737	529	15.5	10.9
Handlers, equipment cleaners, helpers, and laborers	4,384	4,346	1,262	817	22.4	15.8
Construction laborers	584	619	243	204	26.4	24.6
Other handlers, equipment cleaners, helpers, and laborers	3,801	3,727	1,019	616	21.1	16.2
Farming, forestry, and fishing	3,230	3,092	449	420	12.2	12.0

<sup>1</sup>Persons with no previous work experience and those whose last job was in the Armed Forces are included in the unemployed total.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-12. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
	Dec. 1982	Dec. 1983	Dec. 1982	Dec. 1983	Dec. 1982	Dec. 1983	Number		Percent of labor force	
							Dec. 1982	Dec. 1983	Dec. 1982	Dec. 1983
<b>VETERANS</b>										
Total, 25 years and over .....	8,265	7,901	7,752	7,382	6,988	6,868	764	514	9.9	7.0
25 to 29 years .....	6,610	5,712	6,305	5,477	5,641	5,072	664	405	10.5	7.4
30 to 34 years .....	993	590	904	561	748	493	156	68	17.3	12.1
35 to 39 years .....	2,585	1,984	2,460	1,867	2,217	1,707	243	160	9.9	8.6
40 years and over .....	3,038	3,158	2,941	3,049	2,476	2,672	265	177	5.0	5.8
	1,655	2,189	1,847	1,905	1,347	1,796	100	109	6.9	5.7
<b>NONVETERANS</b>										
Total, 25 to 39 years .....	19,140	20,456	18,135	19,275	16,187	17,623	1,988	1,452	10.7	7.5
25 to 29 years .....	8,452	8,802	7,981	8,222	6,938	7,500	1,043	722	14.1	8.8
30 to 34 years .....	6,357	7,042	6,039	6,667	5,591	6,213	538	454	8.9	6.8
35 to 39 years .....	4,331	4,612	4,115	4,386	3,748	4,110	367	276	8.9	6.3

NOTE: Male Vietnam-era veterans are men who served in the Armed Forces between August 5, 1964 and May 7, 1975. Nonveterans are men who have never served in the Armed Forces; published data are limited to those 25 to 39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-13. Persons not in labor force by reason, sex, and race, quarterly averages  
(in thousands)

Reason, sex, and race	Not seasonally adjusted		Seasonally adjusted				
	1982	1983	1982	1983			
	IV	IV	IV	I	II	III	IV
<b>TOTAL</b>							
Total not in labor force	62,346	62,956	62,217	62,005	62,680	62,392	62,938
Do not want a job now	55,777	56,953	55,326	56,104	55,986	56,690	56,526
Current activity:							
Going to school	8,233	8,356	6,881	6,607	6,399	6,462	6,540
Ill, disabled	3,962	3,788	3,988	3,975	4,064	4,800	4,818
Keeping house	27,932	28,331	28,134	28,350	28,241	28,267	28,539
Retired	12,282	12,898	12,567	12,987	13,003	12,892	13,196
Other	3,368	3,579	4,196	4,185	4,239	4,265	4,437
Want a job now	6,570	6,003	6,929	6,452	6,540	6,756	6,412
Reason not looking:							
School attendance	1,785	1,481	1,851	1,641	1,518	1,822	1,538
Ill health, disability	756	867	761	656	701	841	868
Home responsibilities	1,266	1,259	1,390	1,390	1,436	1,482	1,484
Think cannot get a job	1,735	1,387	1,813	1,765	1,726	1,610	1,457
Job-market factors <sup>1</sup>	1,291	969	1,393	1,408	1,316	1,197	1,086
Personal factors <sup>2</sup>	485	418	420	357	411	413	611
Other reasons <sup>3</sup>	1,028	1,010	1,113	1,000	1,159	1,032	1,089
<b>Men</b>							
Total not in labor force	19,569	19,958	19,151	19,657	19,455	19,337	19,826
Do not want a job now	17,376	17,934	16,880	17,227	17,187	16,968	17,473
Want a job now	2,193	2,024	2,361	2,187	2,203	2,409	2,173
Reason not looking:							
School attendance	792	792	1,001	889	775	1,079	781
Ill health, disability	300	384	299	289	308	319	380
Think cannot get a job	589	537	683	695	683	607	620
Other reasons <sup>3</sup>	344	312	379	334	436	345	346
<b>Women</b>							
Total not in labor force	42,777	42,998	43,065	43,148	43,226	43,056	43,311
Do not want a job now	38,401	39,019	38,446	38,877	38,799	38,723	39,053
Want a job now	4,377	3,979	4,568	4,265	4,338	4,347	4,162
Reason not looking:							
School attendance	825	609	850	772	783	753	711
Ill health, disability	456	483	463	367	393	462	488
Home responsibilities	1,266	1,259	1,390	1,390	1,436	1,482	1,484
Think cannot get a job	1,147	850	1,131	1,070	1,003	1,003	836
Other reasons <sup>3</sup>	684	598	734	644	723	607	743
<b>White</b>							
Total not in labor force	53,505	53,800	53,406	53,970	53,947	53,574	53,786
Do not want a job now	48,789	49,417	48,477	49,114	49,132	48,849	49,099
Want a job now	4,716	4,383	4,960	4,734	4,775	4,734	4,605
Reason not looking:							
School attendance	1,281	1,042	1,305	1,215	1,109	1,144	1,105
Ill health, disability	537	657	503	486	510	634	613
Home responsibilities	951	947	1,048	1,053	1,003	1,061	1,039
Think cannot get a job	1,196	936	1,252	1,194	1,245	1,076	974
Other reasons <sup>3</sup>	792	601	856	787	907	819	872
<b>Black</b>							
Total not in labor force	7,265	7,482	7,221	7,237	7,210	7,240	7,444
Do not want a job now	5,628	6,030	5,533	5,652	5,644	5,556	5,917
Want a job now	1,638	1,451	1,746	1,570	1,514	1,679	1,555
Reason not looking:							
School attendance	467	409	487	404	330	476	423
Ill health, disability	206	190	210	170	170	207	193
Home responsibilities	287	266	330	311	354	254	308
Think cannot get a job	479	418	522	512	431	473	458
Other reasons <sup>3</sup>	199	168	196	172	230	169	173

<sup>1</sup> Job market factors include "could not find job" and "thinks no job available."

<sup>2</sup> Personal factors include "employers think too young or old," "lacks education or training," and "other personal handicaps."

<sup>3</sup> Includes small number of men not looking for work because of home respon-

sibilities.

NOTE: Seasonally adjusted data in this table have been revised. See note on page 4.

## HOUSEHOLD DATA

## HOUSEHOLD DATA

Table A-14. Employment status of the civilian population for ten large States

(Numbers in thousands)

State and employment status	Not seasonally adjusted <sup>1</sup>			Seasonally adjusted <sup>2</sup>					
	Dec. 1982	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
<b>California</b>									
Civilian noninstitutional population	18,406	18,913	18,942	18,606	18,826	18,954	18,884	18,913	18,942
Civilian labor force	12,305	12,438	12,393	12,300	12,331	12,408	12,298	12,411	12,381
Employed	10,951	11,414	11,400	10,950	11,128	11,312	11,265	11,384	11,404
Unemployed	1,354	1,024	992	1,350	1,203	1,096	1,033	1,027	977
Unemployment rate	11.0	8.2	8.0	11.0	9.8	8.8	8.4	8.3	7.9
<b>Florida</b>									
Civilian noninstitutional population	8,225	8,443	8,463	8,225	8,382	8,402	8,422	8,443	8,463
Civilian labor force	4,798	5,064	5,118	4,819	5,034	5,093	4,927	5,020	5,130
Employed	4,343	4,656	4,735	4,360	4,612	4,696	4,525	4,627	4,748
Unemployed	455	408	383	459	422	397	402	393	382
Unemployment rate	9.5	8.1	7.5	9.5	8.4	7.8	8.2	7.8	7.4
<b>Illinois</b>									
Civilian noninstitutional population	8,540	8,556	8,558	8,540	8,550	8,552	8,554	8,556	8,558
Civilian labor force	5,544	5,544	5,496	5,538	5,542	5,548	5,493	5,520	5,531
Employed	4,845	5,030	4,978	4,829	4,895	4,988	4,959	5,007	5,001
Unemployed	699	513	519	709	647	561	534	523	530
Unemployment rate	12.6	9.3	9.4	12.8	11.7	10.1	9.7	9.5	9.6
<b>Massachusetts</b>									
Civilian noninstitutional population	4,492	4,525	4,529	4,492	4,515	4,519	4,522	4,525	4,529
Civilian labor force	2,989	3,064	3,052	2,974	3,006	3,037	3,005	3,039	3,038
Employed	2,777	2,894	2,875	2,744	2,832	2,818	2,797	2,838	2,843
Unemployed	213	171	177	230	174	219	208	201	195
Unemployment rate	7.1	5.6	5.8	7.7	5.8	7.2	6.9	6.6	6.4
<b>Michigan</b>									
Civilian noninstitutional population	6,738	6,717	6,715	6,738	6,721	6,719	6,718	6,717	6,715
Civilian labor force	4,297	4,165	4,202	4,293	4,300	4,293	4,224	4,145	4,225
Employed	3,556	3,678	3,702	3,558	3,684	3,709	3,651	3,651	3,737
Unemployed	741	487	500	735	616	584	573	494	488
Unemployment rate	17.3	11.7	11.9	17.1	14.3	13.6	13.6	11.9	11.6
<b>New Jersey</b>									
Civilian noninstitutional population	5,723	5,767	5,772	5,723	5,754	5,758	5,763	5,767	5,772
Civilian labor force	3,608	3,687	3,758	3,626	3,700	3,699	3,643	3,674	3,779
Employed	3,290	3,444	3,512	3,292	3,369	3,394	3,396	3,422	3,523
Unemployed	318	243	246	334	331	305	247	252	256
Unemployment rate	8.8	6.6	6.5	9.2	8.9	8.2	6.8	6.9	6.8
<b>New York</b>									
Civilian noninstitutional population	13,550	13,620	13,627	13,550	13,598	13,605	13,613	13,620	13,627
Civilian labor force	7,873	8,017	7,967	7,959	8,280	8,248	8,105	8,116	8,051
Employed	7,199	7,433	7,412	7,237	7,590	7,538	7,457	7,497	7,459
Unemployed	674	584	555	722	700	710	648	619	592
Unemployment rate	8.6	7.3	7.0	9.1	8.5	8.6	8.0	7.6	7.4
<b>Ohio</b>									
Civilian noninstitutional population	8,065	8,079	8,081	8,065	8,074	8,075	8,077	8,079	8,081
Civilian labor force	5,058	5,164	5,060	5,116	5,126	5,088	5,132	5,145	5,114
Employed	4,344	4,598	4,530	4,389	4,559	4,504	4,565	4,590	4,584
Unemployed	714	566	530	727	567	584	567	555	530
Unemployment rate	14.1	11.0	10.5	14.2	11.1	11.5	11.0	10.8	10.4
<b>Pennsylvania</b>									
Civilian noninstitutional population	9,146	9,169	9,172	9,146	9,161	9,163	9,166	9,169	9,172
Civilian labor force	7,495	7,673	7,741	7,527	7,636	7,726	7,669	7,657	7,773
Employed	6,823	7,051	7,094	6,842	7,081	7,167	7,098	7,141	7,173
Unemployed	691	550	560	698	637	576	547	516	600
Unemployment rate	12.5	9.8	10.2	12.6	11.5	10.4	9.9	10.3	10.3
<b>Texas</b>									
Civilian noninstitutional population	11,090	11,389	11,417	11,090	11,305	11,333	11,361	11,389	11,417
Civilian labor force	7,495	7,673	7,741	7,527	7,636	7,726	7,669	7,657	7,773
Employed	6,939	7,152	7,192	6,926	7,081	7,067	7,098	7,141	7,173
Unemployed	557	521	549	601	555	659	571	516	600
Unemployment rate	7.4	6.8	7.1	8.0	7.3	8.5	7.4	6.7	7.7

<sup>1</sup> These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

<sup>2</sup> The population figures are not adjusted for seasonal variation; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

NOTE: Revised seasonal factors are not yet available for States. The seasonally adjusted series will be revised for the release of January data on February 3, 1984.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted					Seasonally adjusted				
	Dec. 1982	Oct. 1983	Nov. 1983 P	Dec. 1983 P	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983 P	Dec. 1983 P
<b>Total</b> .....	89,321	91,725	92,118	92,289	88,665	89,748	90,851	91,087	91,413	91,644
<b>Goods-producing</b> .....	22,993	24,550	24,554	24,353	23,061	23,830	23,935	24,168	24,322	24,434
<b>Mining</b> .....	1,050	1,039	1,044	1,051	1,053	1,023	1,026	1,044	1,044	1,053
<b>Construction</b> .....	3,786	4,295	4,248	4,077	3,815	4,014	4,038	4,060	4,096	4,110
<b>Manufacturing</b> .....	18,159	19,216	19,262	19,223	18,193	18,793	18,871	19,064	19,182	19,271
<b>Production workers</b> .....	12,201	13,190	13,218	13,182	12,241	12,803	12,859	13,043	13,150	13,229
<b>Durable goods</b> .....	10,541	11,291	11,359	11,366	10,559	11,022	11,081	11,235	11,326	11,394
<b>Production workers</b> .....	6,873	7,576	7,629	7,634	6,892	7,329	7,378	7,522	7,600	7,661
<b>Lumber and wood products</b> .....	601.7	722.2	712.6	696.0	614	699	703	712	715	712
<b>Furniture and fixtures</b> .....	432.3	470.5	474.9	476.4	429	457	459	465	470	472
<b>Stone, clay, and glass products</b> .....	549.2	601.5	598.0	587.7	554	582	585	590	591	594
<b>Primary metal industries</b> .....	804.6	858.9	867.6	867.3	816	840	849	867	876	881
<b>Fabricated metal products</b> .....	1,559.7	1,438.6	1,446.6	1,447.6	1,559	1,410	1,411	1,430	1,438	1,448
<b>Machinery, except electrical</b> .....	2,069.2	2,124.3	2,135.5	2,173.1	2,066	2,109	2,115	2,131	2,160	2,169
<b>Electric and electronic equipment</b> .....	1,961.8	2,115.8	2,133.5	2,150.5	1,957	2,043	2,082	2,107	2,129	2,146
<b>Transportation equipment</b> .....	1,697.0	1,862.7	1,870.6	1,870.9	1,696	1,807	1,801	1,848	1,856	1,873
<b>Instruments and related products</b> .....	693.7	698.7	701.5	706.0	693	692	696	699	702	705
<b>Miscellaneous manufacturing</b> .....	369.3	398.1	397.8	390.5	373	383	380	386	389	394
<b>Non-durable goods</b> .....	7,618	7,925	7,903	7,859	7,634	7,771	7,790	7,829	7,856	7,877
<b>Production workers</b> .....	5,328	5,614	5,589	5,548	5,349	5,474	5,481	5,521	5,550	5,568
<b>Food and kindred products</b> .....	1,614.7	1,688.0	1,656.0	1,626.7	1,629	1,627	1,630	1,628	1,635	1,638
<b>Tobacco manufactures</b> .....	71.9	68.2	63.8	60.6	69	62	63	64	61	58
<b>Textile mill products</b> .....	730.0	763.9	763.4	764.0	727	752	753	759	759	761
<b>Apparel and other textile products</b> .....	1,129.2	1,208.1	1,209.3	1,198.8	1,140	1,175	1,177	1,191	1,200	1,211
<b>Paper and allied products</b> .....	652.1	666.8	667.6	667.6	653	659	662	665	666	668
<b>Printing and publishing</b> .....	1,272.0	1,295.4	1,304.7	1,310.9	1,263	1,289	1,290	1,297	1,301	1,302
<b>Chemicals and allied products</b> .....	1,055.6	1,059.0	1,059.3	1,058.9	1,059	1,056	1,060	1,061	1,061	1,062
<b>Petroleum and coal products</b> .....	197.6	195.9	194.3	190.9	199	195	195	193	193	192
<b>Rubber and misc. plastics products</b> .....	683.1	738.3	763.5	765.5	685	739	742	753	762	769
<b>Leather and leather products</b> .....	212.0	221.3	221.3	214.7	213	217	218	218	218	216
<b>Service-producing</b> .....	66,326	67,175	67,564	67,936	65,604	65,918	66,916	66,919	67,091	67,210
<b>Transportation and public utilities</b> .....	5,036	5,064	5,057	5,054	5,008	4,341	5,031	5,019	5,027	5,024
<b>Wholesale and retail trade</b> .....	20,824	20,749	20,942	21,298	20,256	20,580	20,612	20,666	20,705	20,732
<b>Wholesale trade</b> .....	5,202	5,308	5,310	5,315	5,192	5,249	5,274	5,287	5,289	5,304
<b>Retail trade</b> .....	15,622	15,441	15,632	15,983	15,064	15,331	15,338	15,379	15,416	15,428
<b>Finance, insurance, and real estate</b> .....	5,349	5,486	5,501	5,520	5,367	5,488	5,499	5,503	5,523	5,537
<b>Services</b> .....	19,149	20,016	20,051	20,062	19,215	19,635	19,913	19,956	20,051	20,122
<b>Government</b> .....	15,968	15,860	16,013	16,002	15,758	15,674	15,861	15,775	15,785	15,795
<b>Federal government</b> .....	2,733	2,745	2,752	2,737	2,747	2,746	2,778	2,764	2,771	2,771
<b>State and local government</b> .....	13,235	13,115	13,261	13,265	13,011	12,928	13,083	13,011	13,014	13,024

p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

Industry	Not seasonally adjusted				Seasonally adjusted						
	Dec. 1982	Oct. 1983	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983	
Total private.....	35.0	35.3	35.1	35.5	34.8	35.0	35.2	35.3	35.2	35.2	
Mining.....	42.2	43.2	42.9	43.2	(2)	(2)	(2)	(2)	(2)	(2)	
Construction.....	36.8	37.3	36.2	37.0	(2)	(2)	(2)	(2)	(2)	(2)	
Manufacturing.....	39.7	40.7	40.8	41.2	39.0	40.3	40.8	40.6	40.6	40.5	
Overtime hours.....	2.5	3.4	3.4	3.6	2.3	3.1	3.3	3.3	3.3	3.4	
Durable goods.....	40.2	41.3	41.5	41.9	39.3	40.8	41.5	41.2	41.2	41.1	
Overtime hours.....	2.4	3.5	3.5	3.9	2.2	3.1	3.4	3.4	3.4	3.6	
Lumber and wood products.....	38.9	40.5	39.7	40.0	38.8	40.2	40.5	40.5	39.8	39.9	
Furniture and fixtures.....	38.7	40.4	40.2	41.4	37.8	39.7	40.0	39.8	39.8	40.5	
Stone, clay, and glass products.....	40.4	42.1	42.0	42.1	40.1	41.7	42.1	41.7	41.7	41.8	
Primary metal industries.....	39.2	41.2	41.6	41.6	38.8	40.9	41.2	41.7	41.6	41.2	
Fabricated metal products.....	40.1	41.3	41.6	42.2	39.2	40.9	41.6	41.2	41.4	41.3	
Machinery, except electrical.....	40.4	41.1	41.7	42.2	39.3	40.7	41.2	41.3	41.4	41.1	
Electric and electronic equipment.....	40.3	41.1	41.4	41.9	39.4	40.7	41.1	41.1	41.1	41.0	
Transportation equipment.....	41.5	42.6	42.8	43.2	40.1	41.8	43.5	42.5	42.4	41.8	
Instruments and related products.....	40.4	40.7	40.9	41.6	39.7	40.4	41.0	40.7	40.5	40.9	
Miscellaneous manufacturing.....	39.0	39.8	39.7	40.3	(2)	(2)	(2)	(2)	(2)	(2)	
Nondurable goods.....	39.1	39.9	40.0	40.2	38.6	39.5	39.9	39.7	39.7	39.7	
Overtime hours.....	2.6	3.3	3.2	3.3	2.5	3.1	3.1	3.1	3.1	3.2	
Food and kindred products.....	39.6	39.8	39.9	39.9	39.1	39.6	39.9	39.7	39.6	39.4	
Tobacco manufactures.....	37.9	38.3	39.0	36.3	(2)	(2)	(2)	(2)	(2)	(2)	
Textile mill products.....	39.2	41.1	41.0	41.3	38.9	40.9	41.3	40.7	40.7	41.0	
Apparel and other textile products.....	35.3	36.8	36.7	36.7	35.1	36.2	36.8	36.5	36.4	36.5	
Paper and allied products.....	42.5	43.2	43.2	43.8	41.7	42.8	43.3	43.2	43.0	43.0	
Printing and publishing.....	37.9	38.0	38.2	38.5	37.1	37.5	37.8	38.0	38.0	37.7	
Chemicals and allied products.....	41.4	41.7	42.2	42.5	40.9	41.6	41.7	41.7	41.9	42.0	
Petroleum and coal products.....	44.3	43.8	44.0	45.5	44.4	43.5	43.2	43.5	43.7	45.6	
Rubber and misc. plastics products.....	40.4	41.9	42.0	42.5	(2)	(2)	(2)	(2)	(2)	(2)	
Leather and leather products.....	36.1	37.2	37.2	37.5	35.8	37.2	37.7	37.5	37.1	37.2	
Transportation and public utilities.....	39.2	39.4	39.3	39.9	38.9	39.3	39.4	39.4	39.2	39.6	
Wholesale and retail trade.....	32.4	32.0	31.9	32.4	32.1	31.8	31.8	32.1	32.0	32.1	
Wholesale trade.....	38.7	38.8	38.8	39.0	38.4	38.5	38.7	38.7	38.7	38.7	
Retail trade.....	30.5	29.9	29.8	30.4	30.1	29.7	29.7	30.0	30.0	30.0	
Finance, insurance, and real estate.....	36.3	36.3	36.0	36.0	(2)	(2)	(2)	(2)	(2)	(2)	
Services.....	32.6	32.8	32.6	32.7	32.6	32.7	32.8	32.9	32.7	32.7	

<sup>1</sup> Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employees on private nonagricultural payrolls.

<sup>2</sup> This series is not published seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.  
p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers on private nonagricultural payrolls by industry

Industry	Average hourly earnings				Average weekly earnings			
	Dec. 1982	Oct. 1983	Nov. 1983 p	Dec. 1983 p	Dec. 1982	Oct. 1983	Nov. 1983 p	Dec. 1983 p
	Total private	\$7.82	\$8.15	\$8.15	\$8.16	\$273.70	\$287.70	\$286.07
Seasonally adjusted	7.82	8.13	8.13	8.17	272.14	286.99	286.18	287.58
Mining	11.03	11.35	11.42	11.42	465.47	490.32	489.92	493.34
Construction	11.96	12.04	11.88	12.02	440.13	449.09	430.06	444.74
Manufacturing	8.68	8.92	8.98	9.05	344.60	363.04	366.38	372.66
Durable goods	9.24	9.49	9.55	9.62	371.45	391.94	396.33	403.08
Lumber and wood products	7.55	7.87	7.79	7.78	293.70	318.74	309.26	311.20
Furniture and fixtures	6.46	6.71	6.73	6.82	250.00	271.08	270.55	282.35
Stone, clay, and glass products	9.08	9.39	9.40	9.44	368.83	395.32	394.80	397.42
Primary metal industries	11.49	11.28	11.35	11.36	450.41	464.74	472.16	472.58
Fabricated metal products	8.96	9.22	9.26	9.35	359.30	380.79	385.22	394.57
Machinery, except electrical	9.43	9.74	9.81	9.90	380.97	400.31	409.08	417.78
Electric and electronic equipment	8.51	8.73	8.77	8.85	342.95	358.80	363.08	370.82
Transportation equipment	11.43	11.88	12.00	12.09	474.35	506.09	513.60	522.29
Instruments and related products	8.38	8.60	8.61	8.75	338.55	350.02	352.15	364.00
Miscellaneous manufacturing	6.67	6.85	6.86	6.92	260.13	272.63	272.34	278.80
Non-durable goods	7.95	8.11	8.17	8.22	310.85	323.59	326.80	330.44
Food and kindred products	8.06	8.13	8.22	8.25	319.18	323.57	327.98	329.18
Tobacco manufactures	9.63	9.67	10.57	10.41	364.98	370.36	412.23	377.88
Textile mill products	6.04	6.24	6.26	6.30	236.77	256.46	256.66	260.19
Apparel and other textile products	5.88	5.43	5.45	5.48	186.38	188.82	200.02	201.12
Paper and allied products	9.65	10.10	10.19	10.17	410.13	436.32	440.21	445.45
Printing and publishing	9.00	9.24	9.27	9.32	341.10	351.12	354.11	358.82
Chemicals and allied products	10.32	10.78	10.85	10.83	427.25	449.53	457.87	460.28
Petroleum and coal products	12.71	13.36	13.47	13.72	563.05	585.17	592.68	624.26
Rubber and misc. plastics products	7.91	8.12	8.08	8.17	319.56	340.23	339.36	347.23
Leather and leather products	5.44	5.55	5.56	5.58	198.38	206.46	206.83	209.25
Transportation and public utilities	10.62	10.93	11.01	11.04	416.30	430.64	432.69	440.50
Wholesale and retail trade	6.27	6.57	6.58	6.55	203.15	210.24	209.90	212.22
Wholesale trade	8.20	8.54	8.53	8.57	317.34	331.35	330.96	334.23
Retail trade	5.54	5.78	5.81	5.78	168.97	172.82	173.14	175.71
Finance, insurance, and real estate	7.01	7.45	7.39	7.42	254.46	270.44	266.04	267.12
Services	7.12	7.39	7.40	7.43	232.11	242.39	241.24	242.96

1 See footnote 1, table B-2.

p = preliminary.

Table B-4. Hourly Earnings Index for production or nonsupervisory workers on private nonagricultural payrolls by industry (1977=100)

Industry	Not seasonally adjusted					Seasonally adjusted					Percent change from: Nov. 1983-1982	
	Dec. 1982	Oct. 1983	Nov. 1983 p	Dec. 1983 p	Percent change from: Dec. 1982	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983 p		Dec. 1983 p
	Total private nonfarm:											
Current dollars	152.0	156.9	157.0	157.6	3.7	151.9	155.0	155.9	156.8	156.8	157.6	0.5
Constant (1977) dollars	94.5	94.5	94.5	N.A.	(2)	94.1	94.0	94.2	94.4	94.3	N.A.	(3)
Mining	163.0	168.7	169.8	170.0	4.3	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Construction	144.5	147.0	144.8	146.0	1.0	144.0	144.1	145.5	145.1	144.4	145.4	-7
Manufacturing	156.2	158.9	159.7	160.9	2.7	155.8	158.1	158.3	158.9	159.6	160.0	.2
Transportation and public utilities	153.9	156.9	159.9	160.4	4.3	153.1	155.4	157.2	158.4	158.8	159.8	.8
Wholesale and retail trade	147.4	153.7	153.8	153.8	4.4	148.1	152.3	153.1	154.1	154.1	154.6	.4
Finance, insurance, and real estate	153.0	162.1	161.1	161.8	5.8	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services	152.0	158.2	158.2	159.1	4.7	152.0	155.9	157.1	158.4	157.9	159.1	-7

1 See footnote 1, table B-2.

2 Percent change was 1.0 percent from November 1982 to November 1983, the latest month available.

3 Percent change was -0.1 percent from October 1983 to November 1983, the latest month available.

4 These series are not seasonally adjusted since the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

N.A. = not available.

p = preliminary.

## ESTABLISHMENT DATA

## ESTABLISHMENT DATA

Table B-5. Indexes of aggregate weekly hours of production of nonsupervisory workers<sup>1</sup> on private nonagricultural payrolls by industry

(1977=100)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Dec. 1982	Oct. 1983	Nov. 1983	Dec. 1983	Dec. 1982	Aug. 1983	Sept. 1983	Oct. 1983	Nov. 1983	Dec. 1983
				P					P	P
Total private .....	104.5	109.2	109.0	110.2	102.6	105.3	107.5	108.1	108.3	108.7
Goods-producing .....	88.0	98.1	97.8	97.9	86.5	93.5	95.1	95.6	96.3	96.9
Mining .....	117.9	118.9	118.7	120.8	116.5	115.0	117.0	118.5	118.1	118.9
Construction .....	96.4	113.8	109.0	105.8	96.5	104.5	106.0	103.9	105.0	106.7
Manufacturing .....	84.9	94.1	94.7	95.3	83.1	90.4	92.0	92.9	93.6	94.0
Durable goods .....	81.0	91.8	92.9	94.0	78.8	87.8	89.8	91.1	91.9	92.4
Lumber and wood products .....	78.1	100.2	96.5	94.7	78.6	95.6	97.0	98.0	97.4	97.0
Furniture and fixtures .....	88.7	102.0	102.7	106.0	85.2	97.0	98.0	99.1	100.4	102.7
Stone, clay, and glass products .....	76.0	89.0	88.2	86.4	75.8	86.5	85.7	85.9	86.3	86.7
Primary metal industries .....	60.3	70.0	71.5	71.5	60.0	67.6	68.9	71.6	72.5	72.1
Fabricated metal products .....	79.6	88.6	89.7	91.1	76.9	85.2	86.9	87.6	88.3	89.0
Machinery, except electrical .....	82.1	87.5	90.6	92.8	79.6	85.6	87.0	88.3	90.3	90.2
Electric and electronic equipment .....	94.0	106.9	108.8	111.6	91.2	101.1	104.7	106.5	108.0	109.0
Transportation equipment .....	79.2	92.4	93.4	94.6	75.0	86.9	89.9	91.1	91.3	91.4
Instruments and related products .....	103.5	104.7	105.9	108.1	100.9	102.2	105.0	105.1	104.8	106.1
Miscellaneous manufacturing .....	79.0	89.3	89.2	88.1	78.4	83.4	82.9	85.0	85.2	88.3
Nondurable goods .....	90.7	97.5	97.3	97.2	89.5	94.2	95.3	95.6	96.0	96.4
Food and kindred products .....	94.6	101.0	98.5	96.1	94.2	95.5	96.3	95.8	96.1	95.8
Tobacco manufactures .....	100.0	93.9	87.9	76.7	93.6	82.1	83.6	84.7	80.8	71.1
Textile mill products .....	76.5	85.0	84.9	85.6	74.6	83.1	83.9	83.4	82.6	84.6
Apparel and other textile products .....	83.6	93.9	93.6	92.5	83.6	89.6	91.2	91.7	92.2	93.1
Paper and allied products .....	92.8	97.2	97.4	99.1	90.8	95.0	96.5	96.8	96.8	97.4
Printing and publishing .....	109.1	111.1	132.9	134.4	105.6	108.9	109.8	111.3	112.1	110.9
Chemicals and allied products .....	94.5	95.5	94.9	98.0	93.9	95.1	95.5	95.9	96.6	97.2
Petroleum and coal products .....	92.5	92.3	91.0	92.2	94.2	91.5	90.1	89.0	89.6	93.2
Rubber and misc. plastics products .....	91.9	108.1	108.9	110.8	90.0	103.5	105.7	106.7	108.0	109.8
Leather and leather products .....	78.3	86.0	85.9	83.7	78.1	84.0	85.6	85.1	84.2	83.5
Service-producing .....	113.6	115.3	115.2	117.1	111.5	111.8	114.4	115.1	114.9	115.3
Transportation and public utilities .....	101.5	102.9	102.3	103.6	100.5	85.0	102.0	101.8	101.3	102.2
Wholesale and retail trade .....	108.9	106.8	107.4	111.1	104.0	105.3	105.6	106.5	106.7	106.7
Wholesale trade .....	107.7	110.3	110.2	110.9	106.7	108.1	109.3	109.5	109.5	109.7
Retail trade .....	109.3	105.5	106.4	111.2	103.0	104.2	104.1	105.4	105.6	105.5
Finance, insurance, and real estate .....	116.7	120.0	119.2	119.6	117.2	119.0	119.5	120.2	119.7	120.1
Services .....	122.7	128.5	128.0	128.3	122.9	127.1	128.0	128.6	128.4	128.8

<sup>1</sup> See footnote 1, table B-2.

p = preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment<sup>1</sup> increased

Time span	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Over 1-month span	1981 .....	57.8	52.4	52.2	65.6	60.2	58.9	62.6	49.5	42.2	33.3	29.3	30.9
	1982 .....	28.5	45.4	36.0	39.0	47.6	32.8	38.4	37.1	34.1	29.3	32.0	42.2
	1983 .....	56.5	45.7	62.4	69.1	71.0	64.5	68.5	68.0	60.8	70.7	64.2p	62.9p
Over 3-month span	1981 .....	58.3	54.6	59.1	65.9	67.5	66.7	60.5	50.5	33.3	30.1	24.5	23.4
	1982 .....	25.3	28.8	32.0	34.1	32.5	33.6	27.2	27.2	26.1	25.5	24.7	40.6
	1983 .....	45.4	55.1	65.6	75.8	76.1	77.2	73.9	79.6	79.6	75.0p	70.4p	
Over 6-month span	1981 .....	68.5	65.3	63.7	69.4	64.2	58.6	45.7	34.4	29.6	24.2	25.0	22.0
	1982 .....	20.2	23.7	25.3	29.8	26.1	26.1	23.4	19.1	21.2	26.1	26.6	35.8
	1983 .....	50.5	63.2	73.4	76.3	79.3	83.6	82.5	82.0p	80.6p			
Over 12-month span	1981 .....	74.5	71.2	70.4	58.1	47.6	41.4	34.9	29.8	27.4	23.7	23.3	23.1
	1982 .....	22.0	20.7	18.0	19.4	18.3	20.7	20.7	22.8	24.2	31.5	37.6	44.1
	1983 .....	48.9	58.3	62.6	73.4	76.3p	80.9p						

<sup>1</sup> Number of employees, seasonally adjusted for 1, 3, and 6 month spans, on payrolls of 100 private nonagricultural industries.  
p = preliminary.

NOTE: Figures are the percent of industries with employment rising. (Half of the unchanged components are counted as rising.) Data are centered within the spans.

Representative LUNGREN. Thank you, Madam Commissioner.

Let me just try and go back to something that we have dealt with on a couple of occasions in the past. It seems to continue to raise its head, but it is something that I think you would probably like to address.

The Washington Post on December 18, published a story on the employment situation, and they stated, "Last month large discrepancies turned up" between the household and establishment surveys. I know, going through the figures, that the discrepancy has been resolved to some extent and that it is no longer a problem, if you can call it that. Have there been serious discrepancies between the surveys in the last 2 months? I know you have given us some reasons in the past, but can we go through that one more time so that maybe we can be clear for the record on that?

Ms. NORWOOD. First, I think it's important to recognize that in any sample survey there are likely to be some variations from 1 month to the next, and since we have two independent surveys, they are likely from time to time to coincide and from time to time to show some difference.

The differences, however, are not as large as would appear when one looks at the raw numbers. There are differences in definitions and of the people covered. The household survey includes many more people than the business survey. The household survey, for example, includes agriculture; it includes all of the self-employed; it includes private household workers; and it includes people who have a job but are absent without pay, whereas the payroll survey includes only those people who are actually on payrolls. So we would expect to see some differences between the two surveys from month to month.

If we look at this over the recovery period, or at least the period from December to December, there is a difference of roughly 1 million between the two surveys. The employment increase in the household survey was 4 million compared with 3 million in the established survey. A good part of that is due to the differences in definition that I have indicated.

Another part of the difference—perhaps several hundred thousand—is due to the fact that in a period of such rapid employment growth we expect that the payroll survey will lag a little because much of this growth is coming from brandnew establishments, and since the basis of the sample of the establishment survey is the unemployment insurance tax system, it takes a little while for the company to make its report and to get into the system.

Representative LUNGREN. What would you say the magnitude of that might be?

Ms. NORWOOD. Oh, perhaps as much as 300,000, at this point.

We therefore have some unexplained difference, perhaps about 300,000. The rest of that million I think we can explain.

Representative LUNGREN. In your statement you said, "In summary, the overall labor market continues to show marked improvement. Employment has risen sharply, and the unemployment rate has continued its steady decline," which I would take to be a rather positive statement about the nature of employment and unemployment. And that brings up a question, because before coming over here I happened to have the radio on prior to the Bureau re-

lease of the employment data, and a network radio reporter indicated that most economists thought that the unemployment rate would remain the same or perhaps go up a small tick or down a small tick. However, the reporter then went on to suggest that the reason we have had good unemployment figures, the primary reason, was because of the large amount of discouraged workers. That basically was the gist of the report, which would lead someone to believe, in my estimation, that in fact we can't rely very much on these figures as good news because in fact they are only hiding bad news, that of the number of the discouraged workers.

In your statement you noted that the number of discouraged workers has declined by about 350,000 this year. How would you respond to a suggestion that in essence what we are talking about really is the large number of discouraged workers as opposed to any real improvement in the employment picture?

Ms. NORWOOD. I think, Congressman, that people are looking at the slowdown in labor force growth and relating that to the discouraged worker numbers, and truly there is some relationship. But as I indicated earlier, we should expect a slowdown in labor force growth.

Insofar as discouraged workers are concerned, there are now about 1½ million of them as of the last quarter of this year, but there has been considerable decline over the recovery period as many have come into the labor force.

Representative LUNGREN. Do you have any handle on how that compares with previous recoveries? This is not a new phenomena. We've had discouraged workers in previous recoveries. Is this consistent with that?

Ms. NORWOOD. It's about the same in other recoveries. There is nothing particularly new. What is different, I think, is that we are having slower labor force growth.

Representative LUNGREN. I understand that. I would just like to isolate this question of the discouraged worker. Insofar as that relates to the figures we have on unemployment and employment growth it's comparable to previous recoveries such that we can look at these unemployment and employment figures as comparing apples and apples with this recovery and previous recoveries. Is that correct?

Ms. NORWOOD. Well, the discouragement, of course, as we all know, is difficult to measure, but insofar as it is measured, you are quite correct that this recovery's experience with discouraged workers is consistent with that of previous recoveries.

Representative LUNGREN. If we could go back to the subject of labor force growth, I know we have talked about this on a number of occasions, but recently it has come up in a Wall Street Journal article, and I do think there is some confusion on this subject. In the past you have given a lot of weight to at least two factors. One is that the postwar baby boom entrance to the job market crescendo is past us, and you've indicated that in fact we had a drop this month—or was it this year—in total teenagers in the work force, which is a literally new phenomenon that we haven't seen for 20 years or so. And you've also mentioned that in the last decade or so we had a rapid acceleration of the percentage of women in the work force, and that perhaps we won't have the continued rate of

acceleration. Those comments that you have made in the past, are those consistent with what you see now in our labor force growth? And do you see anything that would suggest that that might change in the near future?

Ms. NORWOOD. Your comments are quite consistent with what is happening, Congressman. In the late 1970's were experiencing increases of as much as 800,000 per year in the growth of the labor force of young people 16 to 24 years of age. We also were seeing more than 1 million, sometimes 1.8 million women entering the labor force in a year. Over the past year, instead of having such a large increase in young people, we have in fact had, at least for teenagers, a decline of 300,000; we have had an increase of women in the labor force that instead of being over 1 million has been in the neighborhood of about 875,000.

So I think that there are demographic changes. There are just fewer young people to grow up to the 16- to 24-year-age group now than there were before, and the labor force participation rate of women is picking up some, but it is not increasing at as rapid a rate as it did in the 1970's. We have had an almost 900,000 increase this year in the labor force of women. It may pick up even more as we move further into the recovery. But it is unlikely that we will have the very large increases that we had, that surge in the 1960's and particularly in the 1970's.

Representative LUNGREN. Do the current demographic changes that you articulated with respect to the youth population and their entry into the work force suggest in any way that the problem of youth unemployment might be less acute in the near future? Or is there necessarily a correlation that you can draw between those two things?

Ms. NORWOOD. There are fewer young people, so there will be fewer young people to be unemployed. I think the upward pressure on the unemployment rate that comes particularly from the 16 to 19 year age group will be somewhat reduced. There are still serious problems, particularly for black teenagers.

Representative LUNGREN. How would you describe the job creation in this recovery compared to past recoveries? Is it consistent with it? Does it exceed it? Where are we with respect to that?

Ms. NORWOOD. It is higher than in past recoveries. We have had for the last 13 months, if we take the National Bureau of Economic Research identification of the business cycle turning point to be November, a growth of 3.9 percent in total employment in the household survey, and that compares quite favorably with most of the preceding recoveries following recessions since 1949. It's a little more or about the same as the recovery after the 1973-75 recession and more than any other since the early 1950's.

Representative LUNGREN. What about the recovery of 1980-81? And the reason I bring this up is that some argue that we did have by some definition a recovery in 1980 and 1981, but that it was weak and of short duration, so that in essence if you look at it in some ways we had basically a long period of economic stagnation that we are fighting back from. And some would argue that makes it tougher, and so forth, since it was more long lasting. How does this relate to what we refer to as the recovery of 1980-81 in terms of employment growth?

Ms. NORWOOD. It's about twice as fast employment growth as during that period.

Representative LUNGREN. Last year about this time, or maybe it was a little bit before that, there were some stories that appeared in the national media about what appeared to be a consensus at that time, which was of rather poor prospects for jobs for the college graduates of the class of 1983. Recently I ran across an article in the Chicago Tribune carrying a story on a Northwestern University study of job prospects for 1984 college graduates, which was called the Endicott report, and they said job opportunities for college graduates will increase by 20 percent in 1984. That is a tremendous turnaround from what the estimates were a year ago for 1983, and I frankly don't know what the final outcome for the 1983 graduates was. But do you think the optimistic tone of this report is warranted by the data that we have? Or is there a way of really measuring that?

Ms. NORWOOD. It is quite clear that we have an expanding economy and that jobs are being created. Whatever problems exist for young people looking for jobs will depend almost entirely on what the particular geographic and skill match is. There are still some occupations for which there is not enormous demand; there are still other occupations in which there is great need. So I think it is basically a question of fitting the people with the jobs in the particular areas rather than the question of whether the economy is expanding or contracting. It is clear that for the last 13 months we have had significant recovery in the labor market.

Representative LUNGREN. In your statement you said that the improvement has been widespread, affecting almost all worker groups. You do indicate that there are particular problems, as you just said, matching the skills with the geographic location of the unemployed and the geographic location of the unemployed with jobs created during the recovery. In the debate that is swirling in Congress these days about industrial policy and so forth there has been some argument about the declining rates of our basic industries in the manufacturing sector of our economy. Some have even suggested that that decline is so precipitous that we are really suffering job losses in the manufacturing sector.

Given the fact that we are having significant increases in the service sector, what does the employment show us with respect to the manufacturing sector? Although we are not having growth, are we seeing a precipitous drop with respect not just to this month's statistics, but for the year?

Ms. NORWOOD. I think what is happening is a very real shift in employment. We have been talking about the shift from the goods producing sector to the service producing sector for decades. But when you look at the developments over the last 13 months, by individual industries, it is quite clear that industries like lumber and wood products, for example, and furniture and fixtures, electrical and electronic equipment, most of the transportation equipment industries, and rubber and plastics are all doing rather well in regaining jobs lost during the recession. Some of these industries, of course, have not yet returned to their levels of late 1979, while some of them have recovered and surpassed the prerecession peaks.

On the other hand, if you look at primary metals—steel in particular—at fabricated metals, at machinery, and even textiles, chemicals, and a few others, you see very slow recovery of the recession losses. Some of them have recovered less than 20 percent of the jobs lost during the recession. Of course, many of the industries in the service-producing sector, and in particular, the services industry, just didn't drop employment during the recession. So they were chugging along, increasing employment all during the time that manufacturing industries were laying off workers, and they have continued to increase. The services industry itself, for example, in this recovery period has gained almost 1 million jobs.

Representative LUNGREN. In the November issue of the Monthly Labor Review there is an article entitled "The Job Outlook Through 1995: Industry Output and Employment Projections." In the article they indicate that most new jobs in the period would be created by those classified as "miscellaneous service industries." It also indicated that, I think, one in six new jobs would be in manufacturing. So we will still see increases there but the bulk will be in the miscellaneous service industries. They go on to say that the largest portion of the sector is business services, expected to expand employment from 3.7 million in 1982 to 6.2 million in 1995, suggesting that the service industries include business consultants, computer and data processing services, personnel supply, jobs of that nature. What generalizations can be made about the earnings in the business service industries? If we are going to see growth in this area as opposed to manufacturing, what comparisons can we make in terms of average income?

I realize we are not talking about the same person losing a job in the smokestack industry automatically going in this. But in terms of the composition of our work force by 1995, if that is where the growth is, can we generalize as to the type of job that is by income? Would we describe those as average income jobs or expect those to be above average income jobs? Or is there a way of doing that at this point in time?

Ms. NORWOOD. I don't think that we can develop any real average information, but we do need to remember that the services industry includes some very low paying jobs at the minimum wage level, such as number of jobs in the recreation and amusement area, but it also includes business services and medical services. And some of these are rather sophisticated occupations which are fairly high paying. So I think that when people generally hear the word "services" they think of household help and restaurant help, but it really includes also a lot of very sophisticated services.

Representative LUNGREN. In December, from the data we received, it indicates that the employment-population ratio expanded to 58.8 percent. Have we seen a significant improvement in the ratio over the past year? How would that compare with past recoveries?

Ms. NORWOOD. We have had an increase in the employment-population ratio this year from 57.1 to 58.8 percent and that is fairly high by historical standards. We have had some periods when that level was somewhat higher, although not much. In 1979, which was a very good year, we had an employment-population ratio of 60.1 in December.

Representative LUNGREN. I know you are not in the business of forecasting or predicting, but is there anything in the data that you see that suggests to us we ought to expect a change in the trend we have seen over the last 12 months in terms of the unemployment drop and employment growth?

Ms. NORWOOD. That is a difficult question to answer, of course, because none of us have a crystal ball. I think what we can say is that the recovery is strong, that employment growth has continued, and clearly to have a reduction in unemployment we need to have continued employment growth. We have had significant employment growth for many months now.

Representative LUNGREN. In the late 1970's and early 1980's both just as an average citizen, and as a politician, it was obvious to me that inflation perhaps was the No. 1 issue, particularly in the late 1970's. It was my feeling that it wasn't just something people thought of out of their head someplace; it really meant something to them; and when you look at statistics it suggests that they had a reason for it, which was that their take-home pay was actually reduced in terms of their purchasing power.

In 1983 it appears that the inflation is not running at the rate that it has and that perhaps for the first time we have seen some stopping of the erosion of purchasing power. Do you see anything in the data that would suggest that that trend will not continue? In other words, is the distance between the rate of income growth that the average working man and woman is making over the inflation rate something that was consistent through 1983? Or is it something that we might just say we were lucky one year and there is nothing to suggest that that will continue?

Ms. NORWOOD. Clearly what has been happening is both a slowdown in the rate of wage increase and a slowdown in the rate of inflation. Compensation seems to be increasing at somewhere in the 5 percent range, if you look at our employment cost index. The consumer price index is rising at an annual rate of about 3 to 4 percent. Clearly we can expect some up and down movements. I've read in the newspaper about the effect of this current freeze on fruits and vegetables in the East, and we may be seeing some effect of that on food prices in the future.

So I think we should expect that there may be variations, but in general inflation has decelerated markedly, and although wages and wage settlements and even total compensation have been decelerating some, real income has increased.

Representative LUNGREN. Let me just ask you one question that is slightly off the subject but it deals with an article that I ran across from a newspaper this last week.

Over the past year I have been trying to not only look at our data but look at data from some other countries and see what our rate of growth of jobs has been vis-a-vis other countries, Japan and so forth, and it appears that we increased jobs at a greater extent than virtually any major industrial country in the world; Japan appeared to be second. This article, however, suggested that the way that Japan calculates its unemployment rate is very different than ours. They suggested that Japan does not count workers who are actively looking for their first job as among the unemployed. It also indicated that they don't count people who are in the first weeks of

unemployment as being unemployed. Is that an accurate portrayal of the Japanese data? And if it is, when we receive data from the Bureau of Labor Statistics, do you make adjustments to take that into consideration so that we can make comparisons that are, as I like to say, apples and apples as opposed to apples and a hybrid?

Ms. NORWOOD. The answer to the second question is yes, we can, and it's a problem in securing the data. But we do have a program to adjust the data of other countries to the U.S. definition. We have adjusted the data for Japan. The latest data that we have are for November of 1983. The Japanese had an unemployment rate, that is, a total rate, including the armed forces, of 2.6 percent compared to 8.1 for the United States; the Canadians had a rate of 11 percent; France, for whom we only have October data, was somewhat higher than for the United States, 8.4 percent; Germany was 7.1; and the United Kingdom was well over 13 percent.

Representative LUNGREN. I didn't mean to get off on that tangent, but it was an article that I had read and I wanted to make sure that the data I was using wouldn't be thrown off by the fact that they make some rather serious differentiations from what we do in that.

Ms. NORWOOD. Congressman Lungren, some of the other countries of the world do exclude students and young people. We include anyone who is looking for a job within the age categories that we have, and we do that because basically the American definition is an attempt to approximate labor supply: How many people are out there who are looking for work.

Representative LUNGREN. Madam Commissioner, I want to thank you and your colleagues for appearing before us again and bringing us good news. I guess the summation is your summation: The overall labor market continues to show marked improvement; employment has risen sharply; and the unemployment rate has continued its steady decline. That's about as good news as we could ever ask for, and I know that you are in the business of reporting the facts, but I know that you probably share with me the joy that we have when we have good information on a consistent basis.

I want to thank you and your colleagues for appearing before us, not only appearing before us today, but also for your Bureau being very, very open and willing to get information to this committee whenever we have asked for it and for working with us in trying to divine exactly what that information actually means. For all of that I want to thank you very much.

Ms. NORWOOD. Thank you very much.

[Whereupon, at 10:21 a.m., the committee adjourned, subject to the call of the Chair.]